

PORT QASIM AUTHORITY

STANDARD OPERATING PROCEDURES FOR OPERATING LNG CARRIERS

PQA Notice 001/ 15 Dated 11th April 2015

(Addendum to Port Qasim Regulations 1981)

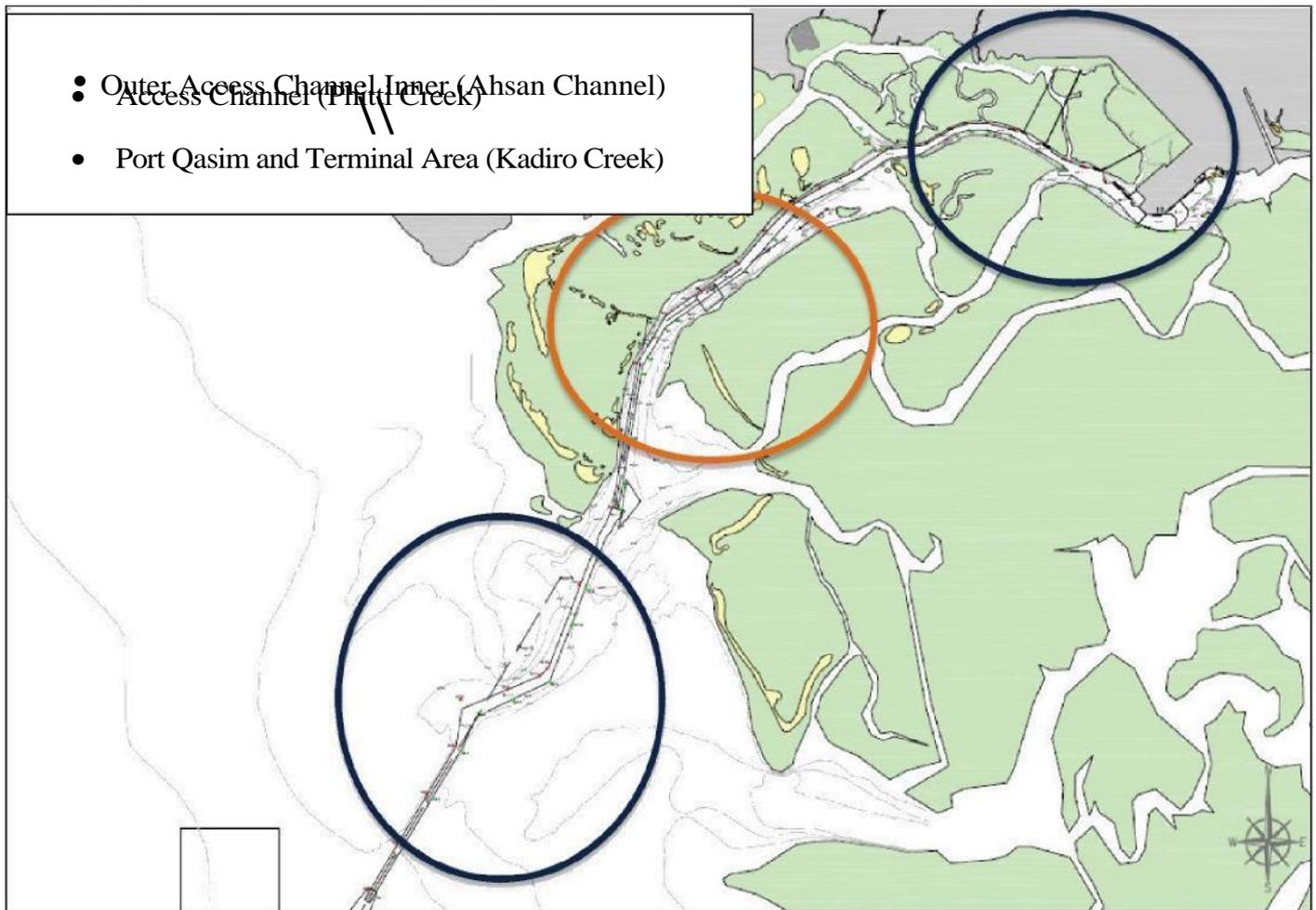
The following Standard Operating Procedures (SOPs) have been developed for the operation of Liquefied Natural Gas (LNG) vessels within the limits of Port Qasim and its approaches.

These SOPs have been developed for LNG carriers calling at Port Qasim. In order to remain compliant with the Pakistan LNG Policy 2011, the LNG carriers with dimensions given in the current Notice to Mariners will be allowed to enter the Port without any dispensation.

In cases where the LNG carriers exceed the given parameters in the current Notice to Mariners, Port Qasim Authority has been authorized to grant dispensations for such vessels from time to time to enter the channel and berth at the LNG Terminals located within the Port.

Based on recommendations of simulation study carried out at “SiPORT 21” in February 2015, the LNG vessels of up to 217,000 m³ cargo capacity having maximum LOA of 315 meters and maximum Beam of 50 meters with arrival laden drafts varying from 10.8 meters to 11.50 meters can be considered. The corresponding wave heights at these drafts are limited between 2.0 meters to 1.2 meters respectively prevailing at the mouth of the channel entrance (Ahsan channel). Other factors including the existing port regulations, practices and traffic patterns of the port are also considered in the development of these SOPs.

These SOPs are to be read in conjunction with the existing Port Qasim Regulations 1981, PQA Act 1973 and current Notice to Mariners. The PQA Regulation 1981 and the PQA Act 1973 are to be incorporated in the comprehensive Operations Handbook to be prepared, duly approved by the PQA and issued by each of the LNG Terminals located within the jurisdiction of Port Qasim Authority.



Masters of all ships' using LNG Terminal will be required to sign a copy of the Conditions of Use (COU) and the Marine Services Certificate (MSC) in acknowledgment of the ship's responsibilities and liabilities whilst using the Tug boats, Pilot boats and Terminal etc. prior transiting the Port channel. Copies of both these documents are attached to this document as Appendix 1 & 2. For tandem tethered towage the vessels will be equipped with adequate bollards and fairleads with the required capacity and configuration for indirect mode of operation of the escort tugs;

1. Upon departure of LNG carriers from the load port the Master shall communicate arrival information to the Port Qasim Control through local Agents according to the following requirements:
 - Name and particulars of the LNG Carrier with arrival draft
 - Loading port of the LNG Carrier
 - Time and date when LNG loading was completed

- The quantity and quality of LNG loaded and the portion of such quantity to be unloaded at the terminal in Port Qasim, if less than the full quantity
 - ETA Notice of the LNG Carrier shall be updated (as the case may be) at intervals of 72, 48, 24, 12& 6 hours prior to vessel's arrival at Port Qasim.
2. If the cargo to be unloaded has been acquired or diverted to the Terminal in Port Qasim, after the departure of the LNG Carrier from the load port or after the relevant time specified above, then the ETA Notice shall be submitted as soon as possible after such acquisition or diversion, but in any event taking into account any applicable requirement for the final time by which the arrival of LNG Carrier shall be notified to the Port Qasim Authority.
 3. When in VHF range of the Port Qasim Control, the LNG Carrier shall contact and maintain a listening watch on the Port Qasim Control VHF Operating Channels.
 4. Upon arrival at Pilot Station: Notice of Readiness (N/R)
The notice of readiness is issued by the Master of the Vessel on behalf of the Shippers, Charters or Owner, when the Vessel has arrived at the Arrival Point, has received all necessary Port Clearances and is ready in all respect to proceed to the berth for unloading operations.
 - Vessel's name and IMO number.
 - Date and Time.
 - All equipment's are in good order.
 - Vessels ready to unload in all points.

5. Communication Information

- All communications between the Ship and shore shall be conducted in the English language.
- All pre-arrival information shall be communicated by the Master of the vessel to the Port Qasim Authority through the local shipping agent of the vessel.
- VHF "Operating Channels" Channel 10 or 16 all round the clock.
Port Qasim Call Sign: PORT QASIM PORT CONTROL
- Harbor Master Office:+92-21-99272172
- Office Hour Phone: +92 21 – 9927 2111-20 Ext. 4294 Mobile No. : 0092-3012490108 for local dialing: 0301-2490108 Dock Master Office: 92-21- 99272111-20 Ext. 4295
- Operation Room Officer(ORO): 92-21-99272174 & 99272111Ext. 4269

- PORT FACILITY SECURITY OFFICER' (PFSO)
 - PFSO Name: Colonel (Retd) Tanveer Farooqui
 - Title: Director Security
 - Address: PQA, Bin Qasim Karachi
 - Telephone: +92 21 99 272 163 (Office),
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Fax: +92 21 3473 0108
[Email: tanveerfarooqui95@gmail](mailto:tanveerfarooqui95@gmail.com)

6. The LNG carriers calling at Port Qasim shall have an International Association of Classification Societies, (IACS) Rating of a minimum Condition Assessment Program (CAP) 2 for vessels 15 years and older. The following checks and tests shall be carried out successfully on board the LNG Carrier according to the specified intervals and duly recorded one day prior to the estimated time of arrival at the Fairway buoy:
 - IMO Water Spray systems.....Within three months prior to vessel's arrival
 - Fire pumpWithin one week prior to vessel's arrival
 - Inert condition of annular space, primary and secondary space if applicable.....At all times
 - Operation of cargo system remote control valves and their position indicators ...Within one week prior to vessel's arrival.
 - Alarm function of fixed gas detection equipment Within one week prior to vessel's arrival
 - Primary custody transfer and alarm set points Within one week prior to vessel's arrival
 - Operation of the ESD system Within 48 hours prior to vessel's arrival
7. Through the vessel's Agents, the Masters are obliged to immediately report to the Harbor Master any defects or deficiencies that may affect the safety or the performance of operations to be conducted while the LNG Carrier is within the Port limits/or when the LNG Carrier is at the Terminal.
8. LNG vessels may arrive at Port Qasim Anchorage at any time of the day or night. If required to await berthing at the anchorage, the vessels

are to drop their anchors at the designated anchorages for LNG vessels at positions shown below:

PETROLEUM WAITING ANCHORAGE

- LAT: 24° 30'.00 N -- LONG: 066° 56'.00 E
- LAT: 24° 30'.00 N -- LONG: 066° 58'.00 E
- LAT: 24° 28'.00 N -- LONG: 066° 56'.00 E
- LAT: 24° 28'.00 N -- LONG: 066° 58'.00 E

GAS TANKER WAITING ANCHORAGE

- LAT: 24° 28'.00 N -- LONG: 066° 56'.00 E
- LAT: 24° 28'.00 N -- LONG: 066° 58'.00 E
- LAT: 24° 26'.00 N -- LONG: 066° 56'.00 E
- LAT: 24° 26'.00 N -- LONG: 066° 58'.00 E

The Master of the LNG ship will tender his Notice of Arrival at the Gas Tanker Anchorage or on boarding of the Pilots – whichever is earlier, for registration with PQA Control. Embarkation of Pilots onboard the LNG carriers will take effect prior to vessel's entry in the Ahsan channel about 2.5 miles SW of the Fairway Buoy. During the South West Monsoon season or in bad weather conditions, the Pilots may board the inbound vessel through Tugboats instead of Pilot Boats.

9. Pilot allocation will be two Pilots for the transit (in and out). A third berthing pilot will embark on the vessel while she approaches the harbor area to safely berth the vessel alongside. Depending on the duration of the stay of Pilots onboard a due consideration will be given to their rest period and if necessary they will be relieved accordingly without causing any delays to the vessel.
10. As shown in the picture on top of this document, the Port Qasim navigation channel is divided in three legs. The outermost leg (Ahsan Channel) starts from the entry in the Port near the Fairway Buoy and connects with the Phitti Creek at Buoy # B-1/B-2. Phitti Creek (Inner channel) ends in the Kadiro Creek at Buoy G-1/G-2, which extends into Gharo Creek where the Terminal, Turning Basins and the berthing areas of the Port are located.
11. LNG vessels shall transit the Channels escorted by a speed boat carrying armed guards and two tugs at speeds up to about 10 knots in the water with the stern tug made fast, the decision as to when and where to make the tugs fast will be made after consultation between the Pilots

and the Master. Preferably, one of the escort tugs to be attached on the stern for inbound and outbound transits of the Port.

12. The following procedures for entering and navigating the three legs of the channel have been developed and are to be complied with:

- a. The LNG carrier to enter the Ahsan channel about two to three hours prior to the top of the High Water provided the transit through the channel to the berth can be completed during daylight hours.
- b. The LNG carrier is allowed to enter the channel all-round the year including the South West Monsoons (approximately 15th May – 15th September) under controlled and closely monitored conditions.
- c. The water density of the PQA channel varies with the location and environment ranging between 1.023 to 1.027.
- d. Draft of the vessels have to be controlled to meet the PIANC guidelines for the channel which gives the guidance for under-keel clearance depending on High Water Level linked to the height of waves that can exceed 2 meters during the SW Monsoon season. After boarding of the Pilots and prior to commencing the passage in Ahsan channel, one escort tug is to be in attendance at the astern. For the tugs to render effectively they have to operate during wave heights limited to 2 meters. A second escort Tug will stay close to the LNGC at a safe distance to render any required assistance in case of emergencies. The draft of the LNG vessel has to be maintained between 11.5 meters to 10.8 meters at the starting point of Ahsan Channel according to the following scale of wave heights:

- i. Wave Height 2.0 Meters Arrival Draft 10.8 meters
- ii. Wave Height 1.2 Meters Arrival Draft 11.5 meter

The speed limit of the vessel at the starting point of the Ahsan Channel is about 10 knots in water. For Ahsan Channel arrival maneuvers the wind is to be 20 knots (mean).

14. LNG vessels will not be handled in weather conditions that make operations hazardous (typically wind speeds in excess of 25 knots and wave heights constantly above 2.0m). The actual weather conditions to

be determined at the time of the maneuver. Initiating of transit is prohibited if the visibility is less than 2 mile.

15. If weather conditions deteriorate in the Channel, where wave exposure is higher (wave conditions greater than Hs 2.0m) such that there is a concern over the safety of tugs, a single escort tug attached to the transom may be deployed with the second tug in passive escort mode. One or more of the following practices shall also be adopted:
 - the speed through the water is reduced to 8 knots or less in the outer channel transit; OR
 - the planned transit of the outer channels will be undertaken on a stemming tide; OR
 - the LNG vessel waits until weather conditions improve.
16. No passing shall take place between an LNG vessel and any vessel other than controlled craft/s during the transit through the Channel area. However, controlled passing with other vessels may be permitted by the PQA under special circumstances provided the LNG vessel is anchored at the side of the channel at passing bay or at turning basin and is attended by tugs.
17. Separation between LNG vessels and other vessels in the Channel in the same direction shall be minimum one (1) hour for all type of vessels throughout the transit. The draft of the vessel and the escort tug assistance allows for the option of safely aborting the transit at either IOCB or QICT turning basins, being the contingency anchorages or waiting in channel with tugs in attendance.
18. LNG vessels to have Electronic Chart Display and Information System (ECDIS).
19. During passage through Phitti Creek the limits of environmental conditions, vessel movement and Tugs assistance is expected to remain as above. However, the senior Pilot and Master will make necessary adjustments depending on the actual conditions prevailing in the channel during passage.

20. On transiting from Phitti Creek to Kadiro Creek the speed will be maintained between 10 to 6 knots at the discretion of the Senior Pilot in conjunction with the Master taking in to account the prevailing weather conditions. The two escort tugs will follow and assist in swinging and berthing the vessel. In addition, two other LNG Tugs will join to assist with the swinging and berthing the vessel as per the requirements of the Pilots.
21. By the time the LNG carrier arrives near the Terminal located within the Gharo Creek, there will be Slack Flood tide running that would be suitable to swing the vessel for bringing her in the required starboard side alongside to the FSRU for discharging her cargo in a ship to ship mode. This is also necessary in order to have the vessel heading in outward bound direction, in case she has to depart during an emergency.
22. The Pilot to make a careful assessment of the prevailing wind, wave, tide and the current condition. If considered safe, the Pilot after consulting with the Master of the ship may decide to swing the vessel in slight ebb tide on arrival at the turning basin. Otherwise, the vessel to be anchored at the turning basin waiting for the Flood tide.
23. Whether the LNG vessel is swung to port or starboard is at the discretion of the ship's Pilot and Master.
24. For normal operations a minimum Under Keel Clearance (UKC) of 10% of the vessel's arrival draft shall be retained throughout vessel arrivals and departures in fair weather. During SW monsoons or bad weather when wave heights 2.0 M, then this requirement will increase to 15% when entering the Ahsan Channel. A UKC of 1.2m is the minimum deemed satisfactory for swinging on arrival and departure for LNG vessels with drafts up to 11.50 meters.
25. A berthing display board (rate, angle, distance off berth) located on wharf shall be provided to be visible from the LNG vessel's bridge in all conditions of daylight and dark. However, since this cannot be arranged on an FSRU for STS operation. The LNG vessel shall carry

reliable PPU or other equipment to assist the Pilot in determining the distance of the berth and the speed of the vessel while approaching the FSRU/Berth for mooring.

26. On departure from the Terminal, two tugs will be released in the vicinity of Turning Basin. The remaining two tugs will escort the vessel outbound.
27. While the FSRU is in operation alongside the Terminal jetty, a Tug with firefighting capabilities will remain stand-by at all times with a 30 minutes response time.
28. An additional tug- Guard tug with full fire-fighting capability will be on station at the Terminal whilst an LNG vessel is at the berth alongside the FSRU Pilots will not be required to remain onboard an LNG vessel whilst alongside the FSRU but must be available within the time specified for the second tug to be in attendance.
29. In the short term, the passing ship's speed is to be managed as per conclusions of the Artelia study* copied below.

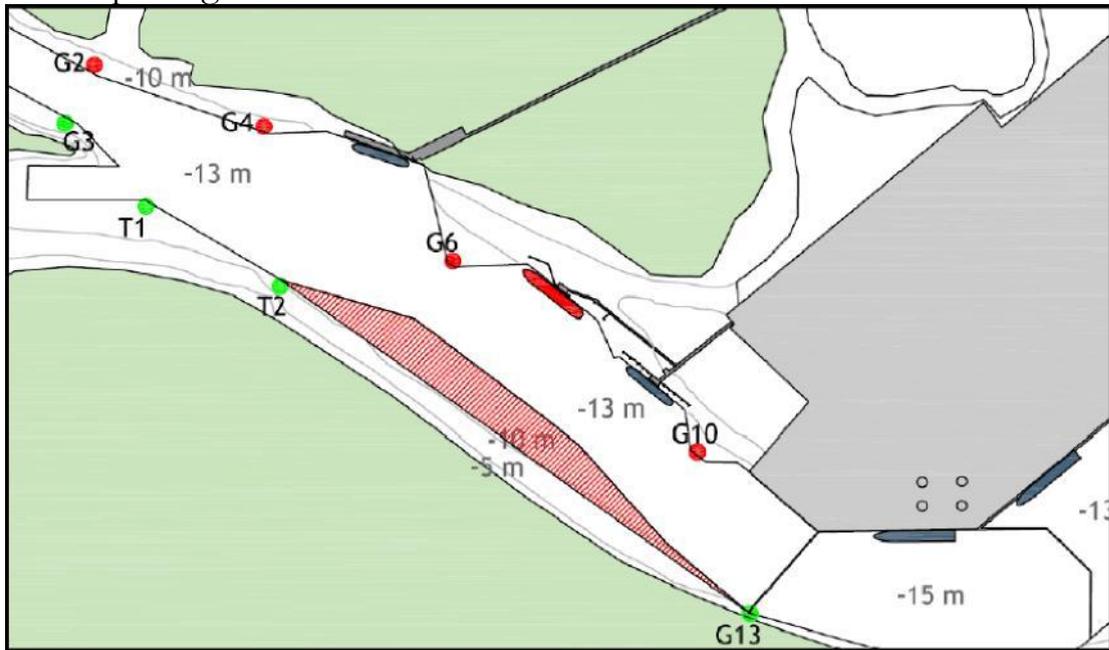
Passing distance (from toe line)	Passing by Speed (Ground Speed)	Differential motion in reference to the berth	Max wind speeds	Remarks
0 meters	6kts	0.6 meters	25kts from SW	-
0 meters	8kts	< 2 meters	25kts from SW	-
0 meters	8kts	< 2 meters	25kts from any direction	-

Passing distance (from toe line)	Passing by Speed (Ground Speed)	Differential motion between the 2 moored vessels	Max wind speeds	Remarks
0 meters	6kts	1 meters	25kts from SW	-
40 meters	6kts	< 2 meters	15kts from any direction including NE	Will be confirmed in final version of study

* Study conclusions received by Qatargas on 16th March'15

This limitation is for the vessel greater than or equal to 310 meters LOA vessel, for smaller vessel (total 85% of Port Operations) results for passing by vessels will be much better.

In the longer term, recommendations are to perform dredging operations opposite of the terminal (Buoy T2 to G13) in order to increase the width of the fairway in front of ETPL jetty. This will allow increased passing distances for vessels in this area.



Recommended channel modifications to increase navigable area

FMBS studies of Feb'15 recommend additional dredging in the longer term to increase the navigable area at the

30. In case where an emergency departure from the berth is necessary, two tugs and a Pilot will be required to un-berth the LNG carrier. Since the vessel will be undergoing cargo operations, she would be pulled away from the FSRU by the two attending tugs after the activation of ERC (to release cargo discharge hoses) and the quick release of mooring hooks on the mooring dolphins and the FSRU, within a short time. The LNG vessel will be removed from the FSRU berth and held in the Turning Basin (contingency anchorage) to await the arrival of additional tugs and Pilots to safely assist her in holding the vessel or for safe departure from the Turning Basin, as necessary. The LNG carrier and the FSRU shall have a dedicated Pilot cabin available for the Pilot at all times.

31. Operating parameters covering LNG vessel e.g. draft/daylight hour, operation/environmental conditions etc. will be set at a restricted level in the early stages of an LNG Operations. These parameters will be reviewed during the 'settling in period'(after monsoon) where the working results can be validated against the simulation results in order to mirror or modify the "operational condition requirements" determined during simulation.
32. Once validation has been completed, then it is expected that LNG vessels will be handled during the hours of darkness subject to suitable weather conditions (simulated first).
33. On departure of LNG Carrier from the Terminal during SW Monsoons or bad weather conditions, the LNG carrier shall provide good lee for the disembarkation of Pilots off the Fairway Buoy. In case, the Pilots are unable to disembark safely from the LNG carrier outbound, then the Pilots will remain onboard and repatriated from the next available disembarkation point with minimal deviation and delay to the vessel on Owner's account. This arrangement, if found necessary, will be made in close coordination between the PQA, the vessels Agents and the Owners of the LNG Carriers.
34. Subject to meeting all the other requirements, the entry of the vessel into the PQA channel on her arrival and the departure from the berth will only commence during daylight hours when it is estimated that the vessel transit will also be completed during daylight hours.
35. Vessel scheduling:
Priority of shipping will remain as per published Port Regulations 1981. Ship scheduling will be carried out as at present by the PQA ship schedulers and in accordance with the following principles:
 - a. LNG Vessels will advise their ETAs 48/24/12 and 6 hours prior to arrival at the Fairway Buoy..
 - b. The ship scheduler will schedule the berthing of the LNG vessel after vessel's ETA is confirmed by the vessel's local agents requesting berth and embarkation of the pilot. This would however depend on the availability of the time slot in consultation with the port and the required environmental conditions.

- c. All vessel movements shall be subject to the approval of the PQA. LNG vessels that miss their time slot will be allocated the next available time slot that fits in with other port movements;
36. Additional parameters may be placed on operations at individual terminals as circumstances dictate.
37. These SOPs will be reviewed on a regular basis as the LNG trade continues to develop and may be varied from time to time as considered necessary.
38. Emergency Procedures: The following Terminal information related to “Emergency Signals and Procedures” should be made available to all personnel, on board, involved in the cargo handling or de-ballasting operations at the LNG terminal:
- (a) Fire in the terminal
 - (b) Major Emergency requiring evacuation of terminal
 - (c) Fire On Board
 - (d) Medical Emergency On-Board
 - (e) Emergency Escape Route
 - (f) Lightening
 - (g) Safety Clothing: All ship’s personnel working on deck must wear the appropriate Personal Protective Equipment
39. Emergency (remote) Mooring Hooks Release: The Terminal Operator is responsible for the operation of the mooring hooks. Under normal circumstances, only manual (local) activation of the hook releases is permitted and this operation is to be conducted by the mooring crew of Terminal Operator. In emergency situations, the mooring hooks may be remotely released by the Terminal. For emergency releases, the following procedure must be complied with:
- The Terminal, after receiving clear instructions from the Master shall immediately request verbal confirmation for the emergency release from the Harbor Authorities, or PQA Operation Room Officer (ORO).
 - The Harbor Authorities or Port Operation Room Officer (ORO) shall confirm emergency release.

- The sequence of hook release indicated by the Ship's Master/Pilot must be strictly adhered to.

40. Emergency Contact Numbers (From Ship to Shore)
Hot line between Ship and shore:

- a. Operations Room Officer: 021-99272174
- b. Jetty Control Room: 021-34730114 & 021-34243230
- c. Fire Station : 021 99272145
- d. Medical Centre : 021 99272111-30 (Ext 4275)
- e. Security (Main Gate) : 021 9927214511-30

PORT QASIM AUTHORITY

Condition of Use for LNG CARRIERS

**Dated 11th April 2015
Annex 1**

to Standard Operating Procedures for LNG Carriers in Port Qasim

CONDITIONS OF USE

All facilities and assistance of any kind whatsoever provided by the Port Qasim Authority (PQA) or its Representative/s to LNG carriers visiting Port Qasim for any purpose whatsoever are subject to the following Conditions of Use (Conditions). These conditions are applicable regardless of whether or not any or all charges/costs are paid or are actually or impliedly due from or on account of any visiting vessels of any flag. Without prejudice to the generality of the foregoing, the following shall be deemed to have been specifically accepted by any vessel visiting Port Qasim regardless of whether such acceptance is specific, in writing or otherwise.

For the purpose of these Conditions, the following definitions or interpretations shall apply:

1. Interpretations and Definitions

- 1.1 “Port” - means Port Muhammed Bin Qasim, Karachi, Pakistan.
- 1.2 “Port Facilities” means all the infrastructure, equipment and installations at the Port which includes, but is not limited to, channels, channel markings, buoys, jetties, berths lines, gangways and bunkering facilities or the unloading facilities at the LNG Terminals in Port Qasim.
- 1.3 “Port Services” means any service rendered by the PQA or by the PQA Representative/s which included, but is not limited to, mooring or unmooring or raising or lowering of the loading lines or loading or discharging or otherwise, but excluding towage services which are covered in attached Annex 2 – Marine Service Certificate.
- 1.4 “Terminal” – means the dedicated LNG Terminal as defined in the respective Implementations Agreements between PQA and LNG Terminal developers/ operators.
- 1.5 “FSRU” - means vessel built as a floating storage and re-gasification unit or LNG Carrier converted to FSRU.
- 1.6 “LNG Carrier” – means LNG Carriers or vessel.
- 1.7 Reference to LNG Carrier(s) includes FSRU(s)

2. Acceptance of LNG Carrier

- 2.1 All LNG Carriers calling at Port or any of the LNG Terminals are subject to acceptance by PQA and must be in compliance with International Standards [which means the standards and practices from time to time in force applicable to the ownership, design, equipment, operation or maintenance of LNG Carriers established by the rules of one of the

International Association of Classification Societies (IACS) member Classification Society with no outstanding Surveys & Condition of Class or as may otherwise be acceptable to PQA, the conventions, rules, guidelines and regulations laid down by the International Maritime Organization (IMO), the Oil Companies International Marine Forum (OCIMF), International Group of Liquefied Natural Gas Importers (GIIGNL), Society of International Gas Carriers and Terminal Operators (SIGTTO) or any successor body of the same and any other internationally recognized agency or organization with whose standards and practices it is customary for international operators of such vessels or terminals to comply, including holding a recent OCIMF Ship Inspection Reporting system (SIRE) report with no adverse observations.]

2.2 PQA's decision whether to allow a LNG Carrier to berth at the Terminal may also depend upon any of the prevailing or forecasted environmental conditions, as well as the size, trim, and handling qualities of the LNG Carrier.

2.3 Should a LNG Carrier be rejected by PQA for any reason, PQA will supply the LNG Carrier's Master or the Ship's Agent with written reasons for the rejection. PQA overridingly reserves the right at all times to direct a LNG Carrier to leave the Port or the Terminal if the Harbor Master determines that the continued presence of the LNG Carrier poses a risk or danger to the Port safety or the environment. In such circumstances, where possible, the LNG Carrier's Master will first be consulted.

3 Master's Responsibility

The Master of an LNG Carrier calling at the Port or Terminal is solely responsible on behalf of its owners, operators or charterers for the safe navigation and operation of their LNG Carrier. Nothing contained in the Port or Terminal Regulations relieves a Master of his responsibilities including taking precautions to prevent:

- fire / LNG release
- tank over pressurization or vacuum
- grounding and damage to Port Facility
- environmental pollution

The Master remains at all times fully responsible for the LNG Carrier and for its complement, including crew and any supernumeraries. The PQA (including its servants, agents and contractors) shall, in any way, not be responsible for the availability or provision of support services contracted by or on behalf of the LNG Carrier with parties other than PQA and not included in the Port Charges.

4. Agency

PQA and its personnel do not perform any LNG Carrier agency functions. The LNG Carrier's owner or the LNG Carrier Operator must arrange for a Ship's Agent or any other local agency services. It is recognized that a representative of the agency may need to board or be onboard the LNG Carrier.

5. Government Officials

It is recognized that Pakistan government officials may need to attend onboard the LNG Carrier within Port or the premises of the Terminal and that these may include:

- Customs Officer, Immigration Officer
- Maritime Authorities' representative / Coast Guard

The LNG Carrier or the Ship's Agent should advise the PQA and the Terminal when such need arises.

6. Anti-Pollution

It is the responsibility of the LNG Carrier's Master to prevent pollution and to ensure that the LNG Carrier complies with all applicable laws and regulations in relation to cargo, bunkers, bilge water, sewage, dirty ballast, plastics, garbage, or any other materials that may cause pollution of the sea or atmosphere. The LNG Carrier must have in place a Shipboard Oil Pollution Emergency Plan (SOPEP) approved by its flag state and have records to substantiate that the personnel onboard have received training and are proficient in responding to emergency situations.

Any fines imposed by any administration or government for pollution arising from or caused by the LNG Carrier or for which the LNG Carrier is liable for under any applicable law, shall be for the account of and remain with the LNG Carrier (including its owner, operator, manager or Master).

7. PQA Hours of Operation

Subject to the prevailing and expected sea and weather conditions, and at the full discretion of the Harbor Master or representative of Port Qasim Authority, all movements of LNG Carriers in the navigation channel and the Terminal is restricted to daylight hours only.

8. Marine Terminal Closure

Port Qasim Authority may direct the suspension of the Port or Terminal operations due to adverse prevailing or expected sea or weather conditions or otherwise based upon the decision by the Harbor Master with consultation of the Terminal Manager. The Terminal will keep the LNG Carrier informed about the times during which the Port or Terminal operations are to remain suspended. LNG Carriers required to leave the Port or Terminal during periods of Terminal closure must maintain contact with the Port and the Terminal via VHF so as to be ready and available when the Terminal becomes operational again. The PQA (including its servants, agents and contractors) shall not be in any way be liable for any financial losses as a result of delay, suspension or refusal to permit cargo operations under this clause .

9. Port Services

9.1 All movements in the navigation channel and the Terminal inclusive of berthing, mooring, and unmooring operations are to be conducted with the PQA Authority's approved Pilot(s) on-board. Notwithstanding the presence of a Pilot, the Master always remains in command of the LNG Carrier and is responsible for its safe navigation and operation. Whilst the PQA shall exercise reasonable care, skill and diligence to ensure the proper rendering of Port Services and provision of Port Facilities to the Ship, the PQA shall not be responsible for any injury or death of personnel, loss or damage to the Ship actual or consequential which is related to the use of the Port Services and Facilities by the Ship regardless of any act omission fault or neglect on the part of the PQA.

9.2 The PQA shall not be responsible for the acts, omissions and neglect of its servants or agents relating to any loss or damage to the Ship or any loss, injury or death suffered by the Master, Officers or Crew.

9.3 The PQA shall not be responsible to the ship for any loss related to strikes or other labor disturbances whether the PQA, its Servants or Agents are parties thereto or not.

9.4 The Master and the Owner shall hold harmless and indemnify the PQA against any claim, cost or expense arising from:

9.4.1 any loss suffered by the PQA with respect to damage to the Port Facilities, Injury or Loss of Life of its personnel which is related

to the use of the Port by the Ship and which involves the fault, wholly or partially, of the Master, officers or crew, including negligent navigation;

9.4.2 any loss suffered by third parties with respect to damage to their property, loss of life or injury to their personnel which is related to the use of the Port by the Ship and which involves the fault, wholly or partially, of the Master, officers or crew, including negligent navigation;

9.4.3 any loss suffered by the PQA with respect to a hazard under paragraph 12 hereof;

9.4.4 any Loss or Damage to the Ship while in Port, including consequential losses and all claims, damages and costs arising therefrom, regardless of any act, omission, fault or neglect on the part of the PQA, and

9.4.5 any Personnel Injury. Loss of Life or Property Loss suffered by the Master: officers or crew: of the Ship while in Port, including consequential losses and all claims, damages and costs arising therefrom, regardless of any act, omission, fault or neglect on the part of the PQA.

10. Drugs and Alcohol

As part of the prequalification requirements before the LNG Carrier is permitted to call at the Port or Terminal the owners or operators of the LNG Carrier must have in place an effective drug and alcohol abuse policy, a copy of which must be posted onboard. This drug and alcohol abuse policy must meet or exceed the standards specified in the OCIMF 'Guidelines for the Control of Drugs and Alcohol Onboard LNG Carrier'. Whilst the LNG Carrier is within the PQA operational limits, this drug and alcohol abuse policy must be strictly observed and the LNG Carrier's Master must ensure that no restricted drugs (other than those in the medical locker) are onboard and that no alcohol is used or is available for use.

Note: the LNG Carrier's crew is reminded that they must have a zero blood alcohol level.

11. Visitors attending the LNG Carrier

The LNG Carrier (including its owners, operator or Master) shall be responsible for ensuring that all visitors attending within the Port or Terminal premises, including representatives of Users, PQA, independent surveyors and Ship's Agents, fully comply with the Port or Terminal

Regulations and other procedures. The PQA personnel that need to attend or remain onboard the LNG Carrier during berthing and off-loading operations shall be provided with food and accommodation of the standard usually provided for the LNG Carrier's senior officers.

12. Removal of Wrecks

If the Ship or any object on board becomes, or is likely to become, an obstruction, threat, or danger to navigation, operations, safety, health, environment or security of the Port (a "hazard"), the Master and the Owner shall, at the option of the Port Management, take immediate action to clear, remove or rectify the hazard as the Port Management may direct, or the Port Management shall be entitled to take such measures as it may deem appropriate to clear, remove or rectify the hazard and the Master and Owner shall be responsible for all costs and expenses associated therewith.

13. Provision of Services

13.1 Compliance with laws: all services, facilities and assistance provided by or on behalf of PQA, its servants or contractors their parent companies, subsidiaries, or affiliates, or its or their servants, agents, or contractors whether or not any charge is made by PQA thereof are provided subject to the Port and Terminal Regulations and all applicable laws and regulations for the time being in force.

13.2 The PQA Representative on LNG Carrier: the services of the PQA Representative are provided to the LNG Carrier with the express understanding and condition that the PQA Representative becomes for such purposes the agents/servant of the LNG Carrier (including its owners, operator and charterers) and the PQA (including its servants, agents and contractors) shall not in any way be liable for any loss, damage or personal injury (of any nature whatsoever including death) incurred by any person whomsoever, resulting from or in any way contributory to or connected with, the advice or assistance given or for any action taken by the PQA , whether negligent or otherwise.

13.3 LNG Carrier Navigation: in all circumstances the Master of the LNG Carrier shall remain solely responsible on behalf of its owners, operators or charterers for the navigation and operation of the LNG Carrier. The PQA (including its servants, agents and contractors) shall in no way whatsoever be responsible or liable for any contribution with respect to any loss, damage, or delay from whatsoever cause arising whether directly or indirectly in consequence of any assistance, advice or instructions whatsoever given or tendered in respect of any vessel whether by way of the provision of navigation facilities (including berthing aids) or otherwise howsoever.

14. Changes to the Conditions of Use

By signing these Conditions of Use, the LNG Carrier including its owners, operator and Master are bound by the Conditions of Use then in force and any changes that:

- were already scheduled to come into force and for which advance notice has been given
- arise from the coming into force of new legal or statutory provisions or regulations issued by the Port Qasim Authority or other competent bodies that have, or may have, a direct or indirect influence on the Port or Terminal or its operation; such new provisions or regulations shall be applied fully from the date of their entry into force.
- Where changes to any part of the Conditions of Use are made no compensation of any sort shall be due.

15. Pollution

The LNG Carrier shall be entered with the International Tanker Owners Pollution Federation Limited (ITOPF). For any oil pollution caused by the LNG Carrier, its Master, or crew, the LNG Carrier and its owners shall protect, defend, indemnify, and hold harmless PQA from and against any loss, damage, liability, suit, claim, or expense arising there from.

16. Parties and Related Parties

It is hereby expressly agreed that no servant or agent of PQA shall be under any liability whatsoever for any loss, damage, or delay of whatsoever kind arising or resulting directly or indirectly from any act or neglect or default on its part while acting in the course of or in connection with its employment. Without prejudice to the generality of the foregoing provisions in this Article, every exemption, limitation, condition, and liability herein contained and every right, exemption from liability, defense, and immunity of whatsoever nature applicable to PQA or to which PQA is entitled hereunder shall also be available and shall extend to protect every such servant or agent of PQA acting as aforesaid, and for the purpose of all the foregoing provisions of this clause, PQA is or shall be deemed to be acting as agent or trustee on behalf of and for the benefit of all persons who are or might be

its servants or agents from time to time, and all such persons shall to this extent be or be deemed to be parties to this agreement.

17. Resolution of Disputes

Any dispute or differences of any kind whatsoever (“the Dispute”) arising out of or in connection with Port or Terminal Regulations, including these Conditions of Use, shall (regardless of the nature of the Dispute) be referred to arbitration by arbitrators one to be appointed by each party and an umpire appointed jointly by the arbitrators before entering upon the reference in accordance with Pakistan Arbitration Act, 1940 and any amendment or re-enactment thereof. The venue of the arbitration shall be the city of Karachi, Pakistan and the arbitration proceeding shall be held in English language.

18. Governing Law and Jurisdiction

The Port and Terminal Regulations, including these Conditions of use, shall in all respects be read and construed and shall operate in conformity with the Laws of Pakistan and subject to Resolution of Disputes by arbitration provided herein the courts at Karachi, Pakistan shall have sole jurisdiction for adjudicating any disputes hereunder.

Name of the Ship

Name of the Master _____ Ships Stamp

Signature of the Master _____

Dated _____

PORT QASIM AUTHORITY

Marine Service Certificate

for

LNG CARRIERS

Dated 11th April 2015

Annex 2

to Standard Operating Procedures for LNG Carriers in Port Qasim

MARINE SERVICES CERTIFICATE

Towage pilot transfer and pilotage (Marine Services)

Towage and Pilot Transfer

All towage and Pilot transfer services to be provided by PQA Crafts, SMIT Lamnalco / Seamax Marine Services on behalf of Port Qasim Authority within their jurisdiction are subject to the United Kingdom Standard Towage Conditions (1986 edition and following amendments) UKSTC.

Pilotage

At all times the master of the vessel remains responsible for the safety and proper navigation of the vessel. The pilot and Port Qasim Authorities shall be without any responsibility or liability whatsoever, for damage arising directly or indirectly from the advice and actions from the pilot regarding the pilot's services rendered to the vessel regardless of any gross negligence or willful misconduct of the pilot and/or Port Qasim Authorities. Furthermore and in addition to this, the pilotage conditions as published in the Port Qasim Port Regulations shall apply.

Prior to commencement of any Marine Services, Master shall agree fully to above conditions and to the Port Qasim Port Regulations by signing this form.

Vessel: _____ (Name)

Master: _____ (Name)

_____(Signature)

On termination of the Marine Services, the master and the pilot shall complete and sign this Form. Certifying the details of the services rendered as requested by Master of the vessel.

_____ Inward

_____ outward

Name of vessel:	_____	Date:	_____
L.O.A	_____	Forward draft:	_____
G.R.T	_____	Aft draft:	_____
N.R.T	_____	Deepest actual draft:	_____
Time pilot embarked:	_____	Time pilot disembarked:	_____
Passing fairway water:	_____	Berth No:	_____
Ships agent:	_____	Port clearance No:	_____

Assisted / towed / Transferred / stood by:

From: _____ to: _____ by: _____ Pilotboat(s)
From: _____ to: _____ by: _____ tugboat(s)
From: _____ to: _____ by: _____ tugboat(s)
From: _____ to: _____ by: _____ tugboat(s)

Master _____ (Name) Pilot _____ (Name)

_____(Signature) _____(Signature)

The above name services have been provided by Port Qasim Authorities, SMIT Lamnalco / Seamax Marine Services