

APPENDIX E: CHIM SAO MARINE TERMINAL INFORMATION SECURITY LEVEL: 1

(1) PORT: VUNG TAU
(2) TERMINAL: CHIM SAO MARINE TERMINAL
(3) LOCATION (FPSO "Lewek Emas"): LAT: 7° 20' 39.97"N
(4) BERTH INFORMATION: There are 2 fixed surface facilities at the Chim Sao oil field: 1) FPSO "Lewek Emas"; 2) Chim Sao Well Head Platform
located at 07°19' 57.23" N; 108°17' 49.05" E (SW of FPSO at distance of 1.14 n.m); 3) The submarine pipelines were laid recently. Please refer to the
UKHO Notice to Mariner No 1746/13 and attached drawing of the newly established Fishing and Anchoring Prohibited Zones along these pipelines;
4) There is an orange colour, unlit mooring buoy at position: (7°19.71'N-108°19.26' E) bearing from FPSO 125°, distance from FPSO: 1 n.m
(4.1) (Under Type of Berth advise if sbm, cbm, jetty, pier, wharf etc.)

Name of berth	Type of berth	Depth Alongside (4.3)	Max LOA	Max beam	Max draft (4.4)	Max displacement	Max height of manifold Above sea level	Max bow to centre manifold	Products handled (4.6)	Ballast & slop Reception (4.10)
Lewek Emas	FPSO	96 m	NA	NA	NA	150,000 MT	NA	130m	CRUDE	NA

(4.2) Additional requirements:

- Port side Aft Spring winch with 36-42mm x 220m PP rope is ready for heaving in the offloading hose to main deck level in the reach of port side manifold crane
- Crane hook is of a safety type (equipped with safety latch) or self-locking hook; and be fitted with a stinger to keep the block clear of personnel.
- Ballast, Trim & drafts: to maintain at least thirty (30) percent of its summer dead weight; to keep its propeller submerged; to ensure that it is not trimmed more than three (3) meters by the stern; and to ensure that its forward draft is such that the loading hose cannot be caught under the Export Tanker's bow.
- Send to PFSO (email <u>cphuong@premier-oil.com</u>) "Ship Security Notification" and Crew list for security screening

(4.3) Depth alongside refers to: *Lowest Astronomical Tide*

(4.4) Draft limited by: N/A

(4.5) Other limitations (including minimum) of any kind: *Weather criteria for personnel transfer from FPSO to tanker is Hs* <2.0m, Av. Wind speed <20kts

- (4.6) Product handled: *CR* = *Crude*
- (4.7) Mooring Arrangements:
- OCIMF 'Recommendations for Equipment Employed in the Mooring of Vessels at Single Point Moorings with at least 1X 76mm Chain Stopper. Smit Bracket is not accepted.
- Stern tow is secured to a strong point (Bollard with SWL >60T) on the tanker stern. Towline is provided by tug boat.

(4.8) Hoses/Arms: 16" Tanker Rail Hose as per OCIMF standard will be connected to <u>port side</u> midship manifold (Flanges are ANSI 150, steel) using camlock coupling. OCIMF 'Recommendations for Oil Tanker Manifolds and Associated Equipment'' is applied. There is a Marine Breakaway Coupling installed between the hose section No 3 and 4 off the tanker manifold to serve as emergency disconnect of the hose from terminal.

(4.9) Cargo Handling: Maximum pumping rate is 35,000 bbls/h. Top up rate is about 10,000bbls/h.

(4.10) Ballast & Slop Handling: There is no reception facility at offshore terminal



(4.11) Other: SOLAS pilot ladder arrangement for embarkation and disembarkation of terminal personnel. Early Departure Procedure may apply subject to the discretion of terminal representative.

(5) WEATHER: Transition from SW to NE monsoon with occasional squalls

(6) NAVIGATION AND OCEANOGRAPHIC INFORMATION:

(6.1) Charts and sailing directions:

Approach: BA charts 3482 or INT 550

Sailing Directions: South China Sea Pilot Vol.1

Harbor: Vung Tau

(6.2) Tidal Information: *Not clearly defined pattern but tide affected*

(6.3) Anchorage(s) & Pilot Boarding Area: *a circle with a radius of 0.5 nautical mile with Center at Latitude: 07°21'29.27" N; 108°17' 38.56" E.*

The sea water depth around the area is approximately 95 m.

<u>Alternative Pilot Boarding Ground:</u> Vung Tau Bad Weather Tanker Boarding Ground in position: 10°15'N 107°05'E (4 n.m south of Mui Vung tau point)

Terminal limits: an area within a radius of two (2) nautical miles with centers at the positions of the WHP and the FPSO.

- (6.4) Approach/Departure Channel: *Approach to moor to stern of FPSO*
- (6.5) Turning Basin: *outside the 500m radius Safety Zones*
- (6.6) Fog Signals: Fog horns are fitted on both FPSO and WHP
- (6.7) Navigation lights on WHP and FPSO: IALA Morse "U"
- (6.8) RACON "U" and AIS are fitted on FPSO

(7) PILOTAGE: Compulsory. A local pilot will board together with Terminal Mooring Master and Bowman.

(8) TOWAGE: 01 Static Tow boat with 80T bollard pull secured to tanker stern and 01 Standby boat in close standby to assist if required.

(9) IGS AND COW: *Oxygen content below 8% must be maintained*. (10) COMMUNICATIONS: *ETA advice on departure then 72 hours, 48 hours and 24 hours before arrival*.

• Terminal Operator contact:

 Email:
 cphuong@premier-oil.com

 Phone:
 +84 39105788 Ext. 2513

 +84 903 74 88 22

• FPSO "Lewek Emas":

 Call Sign:
 9V8904

 IMO number:
 7506039

 VHF Working Channel:
 12 & Channel 15 during berthing

 Telephone:
 +870 773201574 or

 Fax:
 + 84 31 36 32 928

 Fax:
 + 84 31 36 32 925

- (11) EMERGENCY PROCEDURES:
- Contingency plan Appendix H1 to Terminal Regs to be discussed with Mooring Master for situation when Well Head Platform or Drilling Rig are located downstream of FPSO

(12) SAFETY PROCEDURES:

- Safe berthing sector (+/- 15° on either side of FPSO centerline) for tanker to approach to FPSO STERN is applied.
- Safe sector for station keeping of tanker during the pumping operation is 30° on either side of FPSO centerline.
- 100T Hawser tension is trigger for cargo stop.
- Stop pumping & disconnect when >100T tension happens twice in 30 min or when >120T.
- Criteria for cargo stop/hose disconnect/unberth will be discussed and agreed before berthing.
- Safety measures for Nitrogen blow through the floating hose string to tanker cargo tank on completion of cargo transfer
- Caution to avoid damage to floating hose when casting off the Mooring hawser from the tanker bow

• *No venting from cargo tank when helicopter landing on FPSO* (13) POLLUTION:

- No materials shall be thrown overboard.
- Discharge of oily water into the sea is strictly prohibited
- Any spillage or leakage must be reported immediately to the Mooring Master.

(14) COMPLIANCE WITH REGULATIONS/SAFETY GUIDELINES:



Vung tau Harbor Regulations; Chim Sao Marine Terminal Information and Regulations Rev. C2; OCIMF ISGOTT latest edition; OCIMF guidelines: SPM mooring, Manifold arrangement, Mooring Equipment, etc.

(15) OTHERS: There is no bunker and store supply at the terminal