PERTAMINA HULU KALIMANTAN TIMUR

SANTAN MARINE TERMINAL

TERMINAL INFORMATION

REGULATIONS
AND
CONDITIONS OF USE

(Terminal Regulations)

May 2021

Revision Sheet

Revision	Date	Description of change
1	5 May 2021	Newly PHKT

SANTAN MARINE TERMINAL

Attached is a copy of the ”Santan Marine Terminal Conditions of Use / Terminal Information“ for your guidance.

You requested to study the manual and to acquaint your crew with the regulations on force at the terminal, which will strictly enforced throughout your stay in the port. By acknowledging receipt of the manual, you agree to comply with the provisions of this document, including all safety appendices.

Pertamina Hulu Kalimantan Timur Mooring Master will be onboard your vessel throughout the period your vessel is in the berth and is empowered to stop operations should there be any contravention of the regulations.

Pertamina Hulu Kalimantan Timur.
By :
Title :

Acknowledge:

I acknowledge receipt of Santan Marine Terminal Information and Regulation / Condition of Use.

Capt……
Master Of MT ……..

Table of Contents

Appendices

FORM

1. Arrival & Departure Log for crude oil
2. Arrival & Departure Log for LPG
3. Condition of use of port Pertamina Hulu Kalimantan Timur
4. Oxygen content check before loading
5. Mooring & housing job on board Tankers
6. Berthing - Unberthing certificate
7. Notice to ships master
8. Procedure at SBM
9. Pollution information
10. Dry certificate
11. BRC loading rate notice
12. Crude Loading rate Notice
13. Cargo Nomination for LPG
14. LPG loading rate Notice
15. BRC & Crude Ullage report
16. Safety & fire regulation at LPG jetty
17. Safety & fire regulation at SPM
18. Safety Requirement
19. Ships shore safety check list for SPM
20. Ships shore safety checklist for LPG

SECTION 1
INTRODUCTION

1. Pertamina Hulu Kalimantan Timur operates Crude Oil, Condensate and LPG (propane and butane) located within the Makassar Strait called Santan Marine Terminal. A large degree of commonality exits between the terminals and this document contains information that is common to the terminals in Section 1-15. Specific information relative to the individual terminals in contained in Sections 16.

2. Except where a specific Terminal is mentioned by name, as in Sections 16, these Regulations shall apply to Santan Marine Terminal

3. Vessels using the terminal moored at SPM for Crude Oil and Condensate, and Jetty for LPG.

4. Whilst every effort has been made to ensure that the information in this document is accurate, no warranty is given as to its accuracy. The information contained in this document does not replace official publications relating to the area, contained in hydrographic charts, sailing directions and other publication which vessel Masters shall ensure are carried and are the most up-to-date available. Charts & Sailing Directions for the specific Terminals are mentioned in Sections 16.

5. In conducting operations at the Terminal reference shall be made to the latest versions of the following Oil/Marine Industry Recommendations contained in, but not limited to:

   a) Oil Companies International Safety Guide for Oil Tankers and Terminals, (ISGOTT)
   b) Recommendations for Equipment Employed in the Mooring of Ships at Single Point Moorings, (OCIMF)
   c) Single Point Mooring Maintenance and Operations Guide (OCIMF)
   d) Effective Mooring (OCIMF)
   e) Recommendations for Oil Tanker Manifolds and Associated Equipment, (OCIMF)
   f) Required Boarding Arrangements for Pilots (IMO/IMPA)

   (**OCIMF** – Oil Companies International Marine Forum)
   (**IMO** – International Maritime Organization)
   (**IMPA** – International Marine Pilot's Association)

6. a) Terminal operations take place on 24 hours a day basis in normal weather conditions.
   b) Berthing operations take place in **DAYLIGHT only**. (06:00 - 16:00 Hours LT)
   c) The Terminal may be closed if the Company considers weather or other conditions make the continued operation of the Terminal unsafe
   d) The Terminal may be closed if the Company considers weather or other conditions make the continued operation of the Terminal unsafe.
   e) Periods of Terminal Closure and the reasons for closure will be notified to Terminal Users in writing.

7. Vessels waiting to berth, berthing or moored to the Terminal, must hoist the national flag Republic of Indonesian during daylight hours.

8. The basic principle underlying this document is the protection of life, the environment and property.

No commercial consideration shall ever influence decisions where the safety of life or protection of the environment and property is involved.

SECTION 2
DEFINITIONS

Terminal	**The SANTAN MARINE TERMINAL located at East Kalimantan**
The Company	Pertamina Hulu Kalimantan Timur, The Operator of the Field and the Terminals on behalf of the group oil companies who are the concessionaires of the Field.
Superintendent Production Santan Terminal	The Person who is responsible for all Terminal activity
Master / Captain	The person designated in the Ship's Register onboard as the Master/ Captain and, having overall command of the Vessel.
Mooring Master	The person who advises the Master of the Vessel on all aspects of the navigation and maneuvering of the vessel when within the pilot age area of the terminal, including, but not limited to, mooring and unmooring. When the vessel is moored he acts as the loading coordinator between the Master and his/her Officers and the Terminal. He advises the Master on all aspects of the loading and cargo transfer documentation.
Mooring Master's Assistant	A person with suitable marine experience who assists the Mooring Master during berthing operations and hose connection/disconnection.
Superintendent Marine & Mooring Operation	The leader Of SANTAN MARINE TERMINAL as applicable to the Terminal at which the Terminal is located.
ETA	Estimate Time Arrival
ETD	Estimate Time Departure
ACO	Attaka Crude Oil (Comingled Attaka Crude and Badak Crude)
BRC	Bontang Return Condensate
WSBM	West Seno Bangka Mix
OCIMF	Oil Companies International Marine Forum
ISGOTT	International Safety Guide for Oil Tankers and Terminal
ISPS	International ships and port security
IMO	International Maritime Organization
Solas	Safety Of Live A sea , the international convention for the safety of live at sea 1974 and its protocol 1978
Off take Vessel	Any oil tanker nominated to load crude oil, Condensate and LPG at the Terminal.
Vessel Agent	The company appointed by an Owner(s) of a Vessel to act on behalf owner during at port
MARPOL	International Convention on Marine Pollution 1973 and the 1978 Protocol.

SECTION 3
CONDITIONS ON USE OF SANTAN MARINE TERMINALS, INDONESIA

All Service, facilities and assistance of any sort, whatsoever provided by the Company in connection with the port / Terminal, Whether or not any charge is made by the Company therefore are provided subject to the following conditions.

1. Neither the Company nor its servants (in whatsoever capacity they may be acting) shall be responsible for any loss, damage or delay from whatsoever cause, arising on consequence of any assistance, advise, of instructions, whatsoever given, or tendered, in respect of any vessel, whether, by way of pilotage or berthing services, the provision of navigational facilities, including buoys or other channel, markings, or otherwise, in all circumstances the master of any vessel shall remain solely responsible on behalf of his owners for the safety and proper navigation of this vessel.

2. While the Company endeavors to ensure that the berth, premises facilities, property, gear, craft, and equipment provided by the Company are safe suitable for vessels permitted or invited to use them, no guarantee of such safety or suitability is given, and the Company shall not be responsible for any loss, damage, or delay of any sort that may be sustained by or occur to any vessel, or her owners, or her cargo, or any part thereof, (whether such cargo is on board or in the course of loading or discharging) by whomsoever, or that's over cause, such loss, damage or delay is occasioned and whether or not it is due in whole, or in part, to any etc. neglect, omission, or default, on the part of any servant or agent of Company, or by any fault or defect in the Company berth, premises facilities, gear, craft or equipment of any sort.

3. The Company will not responsible for any loss, damage, or delay directly caused by arising from strikes, lockouts, or labor disputes, or disturbances, whether the Company or its agents are parties there to or not.

4. If it connection with, or by reason of the use by vessel of a berth, any part of the Company premises, or of any gear or equipment provided by the Company or of any craft, or of any other facility, or property, of any sort whatever belonging to or provided by the Company, any damaged is caused any such berth, premises, gear or equipment, craft to other facility, or property, from whatsoever cause such damage may arise and irrespective of whether there has been any neglect or default of vessel, or the Owners, in any such case the vessel and the Owners shall hold the Company harmless from, and indemnified against, all such damage and against all loss sustained by the Company, consequent thereon, Further the vessel and her Owners shell hold the Company harmless from and indemnified against, all and any claims, damage, cost and expenses arising out of any loss, damage or delay caused to any third party be the vessel or by her Master, or crew, or by any other servants, or agents of the Owners.

5. If any vessel sinks, or grounds, or otherwise becomes in opinion of the Company an obstruction or danger in any part of the port or the approaches there to, and the Owner of the vessel fails to remove the obstruction or danger within or period to be stipulated by the Company, PERTAMINA HULU KALIMANTAN TIMUR shall be empowered to take any steps it may deem to be necessary to remove the obstruction or danger, and any expenses of such removal shall be recoverable from the Owner of the vessel at the time of the accident causing the danger or obstruction.

6. The Master, or the person in charge the vessel, shall, from time place, transport and remove the vessel at, or from the berth as the SUPERINTENDENT PRODUCTION SANTAN TERMINAL, or any servant of PERTAMINA HULU KALIMANTAN TIMUR in charge of the Company premises and Company property shall reasonably require for the proper and efficient use of the same.

7. These conditions shall be construed according to the law INDONESIA and if so required by the Company the vessel and her Owner shall submit to the jurisdiction of the INDONESIA Courts

8. Vessels shall be entered under TOVALOP. For any oil pollution caused by the Vessel, her master or crew, the Vessel and her Owners shall protect, defend, indemnify, and hold harmless the Company including members of the Block B8/32 concession joint venture, their parent companies, subsidiaries and affiliates, or its or their servants, agents, and contractors from any against any loss, damage, liability, suit, claim, or expense arising there form.

9. **It is a Mandatory the Vessel's Master sign this Section as on behalf of the Vessel Owners**. **In the event, this section is not so signed (or otherwise accepted), Company shall be under no obligation to perform or provide any services referred to in this section or elsewhere in the Terminal regulations.**

MT

……..

I hereby acknowledge receipt of a copy of the conditions of use of the port of SANTAN MARINE TERMINAL from PERTAMINA HULU KALIMANTAN TIMUR and agree to comply with the same in all respects.

Master : _____

Time and date : _____

SECTION 4
SAFETY & ENVIRONMENTAL PROTECTION PROCEDURES

4.1 General

Nothing contained in these Terminal Regulations shall relieve Masters of their responsibility from observing the normal precautions to prevent:

- Fire
- Oil Spill
- Tank Over pressurization or vacuum
- Environmental pollution
- Damage to the Mooring System
- Damage to the Loading Hose System
- Damage to the Terminal

The master remains at all times wholly and fully responsible for his or her vessel and its officers and crew.

The Mooring Master is authorized to advise and request Masters to take any additional measures that may be necessary to ensure safe operations and eliminate risks should the circumstances require.

The Mooring Master is authorized to suspend oil transfer operations in the event that, in his or her opinion, safety is compromised or a hazardous situation exists.

Operations at the Terminal and Onboard Vessels shall be conducted in accordance with the latest ISGOTT, a copy of which shall be available on board Vessels.

4.2 Vessel Vetting and Acceptance

A nomination for a Vessel to berth and load at the Terminal will not be accepted unless the vessel has been cleared through the Company Vetting System. Not with standing prior approval, all Vessels shall be subject to final inspection by the Mooring Master on boarding.

4.3 Terminal Drugs and Alcohol Policy

The Terminal operates a **ZERO TOLERANCE** Drug and Alcohol Policy. If at any time anyone involved in or connected with the loading operation is found to be under the influence of drugs or alcohol, loading will be stopped immediately. The Drug and Alcohol Policy is mentioned in the Terminal Safety Letter and applies equally to the Vessel and Terminal Personnel. Penalties in the Indonesian Republic for illegal drug usage and trafficking are severe, up to and including the death penalty.

Pertamina Hulu Kalimantan Timur or contract personnel involved in tanker berthing, loading and unberthing operations shall not consume any alcohol from 12 hours prior to proceeding to a tanker, until they return ashore and are free from duty.

Prescription Drugs
PHKT or contract personnel involved in tanker berthing, loading and unberthing operations, who are taking prescription drugs, shall consult either the PHKT Medic/Safety Officer or the doctor prescribing the drugs as to their fitness, whilst taking the drugs, to perform their appointed duty.

4.4 Securing Anchors and Cables

Prior to approaching the Terminal or passing over pipelines adjacent or near to the Terminal, the Master will shall ensure that the Anchor Cables are secured so as to ELIMINATE the possibility of the anchors being accidentally dropped.

4.5 Safety Requirements Form Letter (See Appendix A)

The Mooring Master prior to the commencement of berthing operations will present the Master with a Terminal Safety Requirement Letter. A signed acknowledgement of this letter is required prior to the commencement of berthing operations.

4.6 Safety Check Lists (See Appendix C & D)

Prior to the commencement of berthing operations the Master and Mooring Master must carry out a pre-berthing conference and complete the Pre-Berthing/Mooring Checklist & Questionnaire.

On completion of berthing and before loading operation the Master or his designated responsible deck officer and Mooring Master shall carry out a pre-loading conference and Vessel/Terminal Safety Checklist. The Vessel/Terminal Safety Checklist is based on recommendation contained in ISGOTT Chapter 26. From time to time thereafter random inspections shall take place to verify continued compliance.

4.7 Deadweight & Trim Requirements

Vessel must arrive with and at all times have sufficient ballast or cargo onboard to maintain:

- At least 30% of their Summer Deadweight
- The propeller must be submerged
- Vessel must not be trimmed more than 3 meters by the stern
- Forward draft shall be such that loading hose cannot be catch under the bow.

4.8 Inert Gas System

The inert gas system shall be fully operation and cargo tanks shall be inert so that oxygen content of the tanks is below **8%** at all times. The Mooring Master will check the oxygen content in tanks before *Berthing* at random to ensure that this requirement is met. If the tank atmosphere found to have oxygen content in excess of **8%** the vessel will rejected for loading until the oxygen content of the tank atmosphere reduced below **8%**. Any time thus used shall not count as lay-time and a vessel may lose her berthing priority.

Hydrogen Sulphide

Each cargo tank will be checked on arrival to verify that any hydrogen sulphide present is not more than 15 parts per million. Fail to Comply with this procedure, The Tanker will Rejected

4.9 Tank Inspections, Gauging, Taking Water Dips and Temperatures

The above operations shall carried out following the procedures and taking the precautions outlined in ISGOTT Chapter 7.2.

In vessels not fitted with vapor locks to enable the above operations to be undertaken with the tanks under pressure, the procedures outlined in ISGOOT Chapter 7.2.2 shall be followed.

4.10 Communications

Effective and efficient communications are essential to safe operations. Break downs in communications both by radio at a distance and interpersonal communications face to face can and do lead to accidents. Every care shall be taken to ensure that communication equipment is in good working order and that all spoken communications are received and understood. All orders and instructions shall be repeated back, so that person giving the order or instruction knows that what is in his or her mind has been passed correctly to the person receiving the order or instruction.

4.11 Fire Precautions

The Vessel's firefighting appliances, including main and emergency fire pumps, shall be kept ready for immediate use and pressure shall be maintained at all times on the fire main while the Vessel is in the berth.

Before operations commence, at least two fire hoses with jet/fog nozzles shall be laid out on the tank deck, one forward and one aft of the manifold in use, connected to the fire main and tested as required by the Mooring Master. The two monitors immediately adjacent to the manifold shall be set at the appropriately effective position and made ready for immediate use.

Two portable fire extinguishers, preferably of the dry chemical type, shall be available in the proximity of the manifold area.

Should a fire occur on the vessel, the master or responsible Vessel's officer shall make on immediate signal by **a continuous blast on the Vessel's whistle,** sound the General Alarm and place the vessel's engine on standby. The Terminal shall be informed and all loading operations will cease immediately, manifolds shut and preparations made to disconnect hoses and vacate the berth if required. The tug shall then be on stand by for firefighting/rescue operations.

The Vessel shall be solely responsible for and shall be capable of fighting any fire onboard the Vessel without assistance from the Terminal.
(See Appendix contingency plan).

4.12 Avoidance of Pollution

During cargo loading operations all scuppers shall be effectively plugged. Fixed and portable manifold oil containment shall be in place and no leakage or spillage of oil or water that can possibly contain oil shall be allowed to escape over board.

Scupper plugs shall be removed to drain off accumulation of water periodically but must be replaced immediately after the water has been drained off. Manifold containment shall be drained before loading operations commence.

Any spillage or leakage must be reported immediately to the Mooring Master.

If oil spillage occur during the loading or de-ballasting operations, then all such operations shall cease immediately and action be taken to control and contain the spillage. Cleaning up operations shall start immediately and loading operations will not be resumed until remedial action has been completed to the satisfaction of the Mooring Master.

No materials shall be thrown overboard.

4.13 Contingency Plans

The Master and the Mooring Master shall discuss and agree on the action to be taken if the following circumstances occur:

- Communications Failure
- Thunder Strom
- Squall
- Bad Weather
- Hawser or Mooring Lines Failure / Excessive loads on mooring hawser
- Cargo Hose Failure or Damage
- Cargo Over Flow
- Spill From Ships (Not From Cargo)
- Fire On Board
- Must Riser Fire

- Fire On Engine Room
- Tanker Black Out / Out of Power
- Push Back Tug Failure Engine
- Medical Emergency (sick, incident,) During Loading
- Security Incident During Loading

The master of the Vessel shall provide the Mooring Master with a copy of the Vessel's Emergency Organization and Contingency Plans.

4.14 Loading and De-ballasting Procedures

The Vessel shall provide the Mooring Master with a detailed loading plan and de-ballasting plan, which shall always provide for stress limitations never to be exceeded and which shall indicate any critical times when the trim and deadweight may approach the limits mentioned in Section 4.7.

The times of commencement of de-ballasting shall be agreed between the Master or Chief Officer and the Mooring Master prior to be commencement of loading.

Terminal shall be given 30 minutes notice before slowing down the loading rate for topping off purpose.

In the event of "SHIPS STOP" slow down rate and finish loading will Controlled from ships, but ten (10) minutes Notification are require prior topping off period Terminals shall be 30 minutes before slowdown

In the event of "SHORE STOP" slowdown rate and finish loading will executed by shore but ten (10) minutes Notification are require prior topping off period, vessel shall notify by terminal 30 minutes before slowdown.

In order that the requirement of Section 6.2.4 can be met, the amount of cargo loaded onboard the Vessel shall be monitored so that the quantity and loading rate can be reported and Compare to the Terminal hourly.

4.15 Conditions to be observed in the Vessel during Loading and De-ballasting Operations

a) A Qualified and responsible, English speaking Vessel's officer is required to be on deck or in the control room at all times. A continuous deck watch shall be maintained to ensure the mooring hawser and cargo hose are under observation at all times.

b) Every Hour Ships should Call Terminal to compare the quantity of cargo loaded at tankers.

c) The Vessel shall always have her engines available for immediate use and be ready to leave the berth, and consequently adequate coverage of the engine room by qualified personnel is required at all times (See 9.3.2).

d) For LPG Tankers Emergency Towing Wires (Fire Wires) shall be made fast to bitts as far forward and aft as possible on the sea side. The wire shall be in good condition and of adequate strength (See ISGOTT Chapter 26.5) and secured with at least five turns or have the eye on the bitts. The outboard eye shall be maintained at a height of between 1 and 2 meters above the water at all times using a small diameter heaving line for this purpose.

e) All doors, portholes and openings leading to accommodation, machinery spaces (excluding pump room) and forecastle shall be kept closed. Cargo control room doors opening on to or above the main deck may be opened momentarily for access.

f) There shall be adequate lighting to illuminate the cargo deck and forecastle area.

g) Central air-conditioning or mechanical ventilation shall be adjusted to prevent the intake of petroleum vapor, if possible by re-circulation of air within enclosed spaces so that a vacuum is not created. Intakes within the range of possible petroleum vapor release shall be closed. If at any time it is suspected that petroleum vapor is being between drawn into the accommodation, the center air conditioning and mechanical ventilating systems shall be stopped and the intakes closed.

h) The vessel's whistle shall be kept at instant readiness at all times.

i) The vessel shall fly the Flag "B" by day and night exhibit a red all round light.

THERE SHALL BE AT LEAST TWO (2) OF THE VESSEL'S CARGO TANKS OPEN AT ALL TIMES DURING LOADING.

4.16 Smoking

Smoking shall ONLY be allowed in places that have been approved, in writing, by the Master and the Mooring Master. "Smoking Room" notices, which state the conditions under which smoking is permitted in these rooms, shall be posted.

4.17 Matches and Lighters

The carrying of matches and lighters is PROHIBITED on board the Vessel whilst in the berth or approaching thereto, except under controlled conditions in the designed Smoking Areas.

4.18 Gallery Cooking Equipment

The use of galley's cooking equipment's, EXCEPT oil fired stoves is permitted. If the Master considers that the galley equipment fitted in his or her Vessel presents an unusual risk its presence shall be drawn to the Mooring Master's attention prior to berthing.

4.19 Portable VHF/UHF Radios, Lamps and Flashlights

Portable VHF/UHF radios, lamps, flashlights or other electrical devices shall not be used unless approved as intrinsically safe. The use of portable electrical lamps and equipment on extension cords or wandering leads is prohibited in any cargo space or adjacent ballast space, pump room, cofferdam, forecastle, bunker compartment, hold or anywhere over the cargo tanks.

Portable VHF/UHF radios, photographic flash equipment, portable electronic calculators, tape recorders, video/digital cameras, mobile phones and any other battery powered equipment not approved as intrinsically safe shall not be used on the tank deck area of the vessel not in any place where hazardous vapor may be encountered.

4.20 Movement of Tugs, Workboats and other Craft

During cargo transfer operations no craft shall be allowed alongside the Vessel unless approval has been given by the Mooring Master and agreed by the Master of the Vessel. It is the duty of the vessel's personnel to see that the vessel's sides are kept clear of any such craft at all times.

4.21 Repair Work

A vessel secured to the Terminal shall be maintained in a state of readiness to leave the berth immediately, under full engine power, therefore, no repairs will be permitted. The testing of any electrical equipment, including radar and radio is prohibited unless the permission of the Mooring Master has been granted.
Tank cleaning and gas freeing shall not be carried out while in the berth. Chipping and scraping on the deck or hull is not permitted.

NO WELDING IS PERMITTED IN ANY LOCATION ON BOARD WHILE THE VESSEL IS IN THE BERTH.

4.22 Prevention of Sparks from Funnels/Stacks and Excessive Smoke

Excessive smoke from funnels/stacks and soot blowing is prohibited. Immediate steps shall be taken to eliminate any sparks from funnels/stacks. All vessels shall be fitted with funnel/stack flame arresters. Incinerators, if fitted and operational, shall not be used when the tanker is at the terminal.

4.23 Transmitting Aerials

Prior to berthing, all radio transmitting equipment, including secondary and emergency transmitters shall have their aerials earthed. VHF radio equipment shall be switched to low power transmission. Satellite Communication equipment may be used provided the approval of the Mooring Master is obtained.

4.24 Impressed Hull Cathode Protection Systems

Vessels fitted with an Impressed Hull Cathode Protection System should keep the system switched on whilst at the berth.

4.25 Sea valves and Overboard Discharge Valves

Except when discharging ballast, in strict accordance with Section 12, the above valves shall remain closed and shall be sealed. The area around the Vessel in the vicinity of the above overboard discharge points shall be kept under observation in order to detect any leakage. At right the sea area referred to above shall be adequately illuminated.

4.26 Tank Openings

Only Vessels that can perform closed loading will be accepted at the Terminal.
All openings into cargo and ballast tanks shall be secured prior to berthing. Except with the approval of the Mooring
Master, no cargo, void space or ballast tank opening shall be opened during cargo loading and de-ballasting.

4.27 Manifold Connections

For Tankers loading Crude Oil, the vessel's manifold on the port side shall have ready 2 x 12-inch ANSI 150.
For Tankers loading BRC (Bontang Return Condensate), the vessel's manifold on the port side shall have ready 1 x 12-inch ANSI 150
For LPG tankers, the vessel's manifold on the port or starboard side shall have ready 1 x 4-inch ANSI 300 (liquid) and 1 x 2-inch ANSI 300 (vapor) and comply with OCIMF recommendations, see Section 1.5(e)

Except for the manifold connection to be used for loading all other cargo and bunker connections shall be blanked off and bolted shut.

Stern discharge lines, if fitted, shall be isolated forward of the bridge by being blanked off.

4.28 The Ship should Have crane used to lift the hose shall:

- Have Valid Cargo Gear Certificate
- Have a SWL of at least 10 tones
- Able to lift the hose 10 meters above the deck, estimated weight to be lifted 8.5 tons
- Be fitted with a safety hook complete with a safety latch or self-locking hook
- Be fitted with a "stinger" to keep the block clear of personnel

Ships with Derrick for used to lift Hose will be rejected.

4.29 Materials Safety Data Sheet

The Terminal will provide the Ship Master with a Materials Safety Data Sheet (Appendix M) in relation to the cargo the vessel is to load.

4.30 Emergency Escape

Prior to berthing means of emergency escape shall be discussed and agreed by the Master and the Mooring Master. The means of Emergency Escape shall be advised to the Terminal and the tug prior to berthing.

4.31 Suspension of Loading and Un-berthing in Emergencies

In any of the following conditions the Master in consultation with the Mooring Master and the Superintendent Production Santan Terminal shall ensure that loading and/or de-ballasting operations are stopped and if the circumstances require the hose disconnected and the Vessel un-berthed.

a) If storms are forecast for the Terminal Area

b) On the approach of or during electrical storms or disturbances, or heavy rain or strong winds
   - 25 knots – Stop loading operation
   - 30 knots – Disconnect cargo hose
   - 35 knots – Cast Off or Unberthing

c) If an oil spill occurs either on or from the Vessel

d) If an oil spill occurs either on or from the Terminal

e) If a fire occurs in the Vessel

f) If a fire occurs in the Terminal

g) If the Tension in the Mooring Hawser appears excessive

h) If the Mooring Hawser appears damaged

i) If the tug on static tow is unable for any reason to prevent the possibility of the Vessel from riding up on the SPM or from “fish tailing” excessively.

j) Any other conditions which in the opinion of the Master, the Mooring Master and the Terminal Superintendent Production Santan Terminal, present a risk to life, the environment or property.

SECTION 5
WEATHER, ENVIRONMENTAL INFORMATION & WEATHER REPORTS

5.1 General

Masters should have the latest edition of the sailing directions for information on the weather and environmental conditions

5.2 Current

Current in the Terminal are generally weak and variable. From October to March, during the northeast monsoon, wind-driven, mainly near shore surface currents in the Terminal circulate in a counter clockwise direction. These currents are reversed by prevailing southeast winds from April to September and develop a clock-wise flow. Current speeds of greater than 1.50 knots have been reported in the northeastern Terminal, but average speeds are usually less than 0.50 knots.

5.3 Winds

The Terminal is sheltered fairly from the winds of the monsoon and as a result, has a high percentage of calm to light condition throughout the year. The direction of prevailing winds is determine by monsoonal activity. Between May and September, the southwest monsoon period, southwesterly winds are predominant. Wind direction is variable in October and then during the north-east monsoon from October to March, the winds are from the north to east.

In February and March the dominant wind direction is North-east and in April, winds are again variable with the transition from the winter to summer monsoons. Shelter from the Asian landmass has an effect on wind speeds in the terminal such that during the northeast monsoon, wind speeds are lighter in the north of the terminal than in the south. In the southwest monsoon light winds are less frequent in the north than in the south. Strong winds are more frequent during the northeast monsoon than the southwest monsoon. In an average year, storm winds may exceed 40 km/h.

5.4 Waves

Sea conditions are generally calm to slight in the sheltered conditions of the Terminal.

5.5 Climate

The region, influenced by the northeast and southwest monsoonal systems, is subject to seasonal wind shifts.

5.6 Sea Water Temperatures and Salinity

The averages monthly sea surface temperature in the Terminal region range from 27^0 C to 30.5^0 C. In general, surface salinities in the Terminal are between 30.5 and 33 parts per thousand (ppt).

SECTION 6
COMMUNICATION *(See 16.12 and 17.12 for Terminal contact Details*)

6.1 Time Zone

Indonesian Central Area is situated in time zone UTC + 8, there is no daylight saving and this zone applies throughout the year.

6.2 Prior to Arrival

6.2.1 Estimated Time of Arrival (ETA)

ETA's shall be sent to the Terminal through the Terminal to :

- Stn-Mooring.Master@pertamina.com
- santandispatch.phkt@pertamina.com

(Details contact numbers are listed in Sections 16 or 17 as appropriate.)

ETA's shall be sent at: -

- 72 Hours Before Arrival
- 48 Hours Before Arrival
- 24 Hours Before Arrival which ETA shall confirm a FIRM arrival time

If at any time the ETA changes by more than one hour, the terminal shall be notified.

The 72 Hours before arrival notice sent by master of the vessel shall include but not limited to the following information:

- Name of Vessel
- IMO No and Call sign
- ISPS Status (Level of Ships)
- 10 List of Last Port and Status of ISPS
- Arrival Draft and Trim
- Master’s Name and Correct spelling for documentation purpose

ETA's shall be submitted even if the Vessel is in a previous port or has another port call prior to the expected arrival at the Terminal. In such a case the Master shall explain the situation fully in his or her ETA message.

The Government of Indonesian Officer is not resident at the Terminal and has to travel to attend vessels. ETA's dictate the Government Officer travel and incorrect ETA's may result in the non-availability of the Government Officer to clear the Vessel. Such delays will not count as Lay time.
When within 100 nautical miles of the Terminal the Vessel shall maintain a listening watch on the Terminal VHF Operating Channel 16 & 09 (as given in Section 16). The Vessel shall try to establish verbal communication with the Terminal as early as possible so that up to the minute information may be passed between the Vessel and Terminal. This will include, but not be limited to:

- Port Status. Vessels that will not berth immediately will directed to the Anchorage Waiting Area. **UNDER NO CIRCUMSTANCES** shall a vessel anchor without the approval of the Santan Terminal Manager (See Section 16 for Anchorage Area details.)
- Weather Conditions
- Mooring Master boarding time
- Berthing time
- Confirmation that the Vessel has no defects or problems which may affect her operations whilst approaching, mooring at and loading at the Terminal

6.2.2 Terminal Pre-Arrival Questionnaire

As early as possible and not more than 48 Hours before arrival, the vessel shall supply the Terminal with the information (see Appendix B) for vessels making their first call at the Terminal.

Whilst at the Terminal, the Terminal will supply a Master Copy of the Form to be photo copied for future use.

If the Master has any questions concerning his or her Vessel's arrival, berthing or loading at the Terminal he or she shall not hesitate to call the Terminal for advice or clarification. The mutual aim of the Terminal and Vessel shall be a safe and efficient operation and communication is essential for this goal to be achieved.

Vessel shall arrive at the Terminal with all machineries and navigating equipment and instrument in good order. In case of any discrepancy and /or shortcomings, it is imperative that the terminal and Mooring Master be informed immediately

6.2.3 Communications When Berthing/Un-berthing

The Mooring Master will provide VHF hand held radios with which he/she will communicate with Support Boat & tug.

The Vessel shall be equipped with suitable hand held radios to enable efficient communication between the Master and his or her officers and the Terminal.

As required in the Pre-Berthing checklist both the Mooring Master's and the Vessel's primary means of communication shall be tested prior to berthing. It is recommended that the Vessel's officers have available a spare radio set should their primary set fail.

6.2.4 Communication during Loading

Communications between the Vessel and the Terminal will be, principally, by means of terminal portable radio, all communication between vessel and terminal shall be through the Mooring Master, These handsets should be tested prior to the commencement of loading operations and periodically during loading to ensure that effective communications

are available at all times. The secondary communication system is using VHF Channel 09/16.

A secondary means of communication is using the Vessel's main VHF set and the Terminal main set VHF shall be established and tested prior to the commencement of loading operations. The VHF sets shall be switched to low power.

In order to test communications during loading the Vessel shall call the Terminal at 15 minutes past each hour and report the total quantity of cargo loaded and the loading rate in the last hour. Quantities shall be recorded in Gross Barrels.

If communications are lost between the Vessel and the Terminal, and if after trying the secondary means of communications no communication can be established, loading shall be stopped until communications have been safety re-established.

If radio communications are not available, EMERGENCY STOP for cargo

loading to cease shall be signaled by a continuous blast on the Vessel's whistle.

SECTION 7
ARRIVAL PROCEDURES

7.1 Vessel Notice of Readiness

Notice of Readiness may be tendered at any time, day or night, in order to establish the Vessel's arrival in relation to its agreed Lay-Can. However, for purposes of commencement of Lay-time, Notice of Readiness can only be accepted during daytime.

The Mooring Master will sign the Notice of Readiness to acknowledge its receipt when the vessel is all fast in the berth. This receipt does not constitute acceptance of the Notice of Readiness or agreement that the Vessel is in all respects ready to load.

7.2 Vessels Awaiting Berth

Vessels that will not be berth immediately for any reason will be advised of the expected waiting time, by the Terminal and requested to anchor in the Anchorage Waiting Area.

Masters are herewith advised of the presence of many submarine gas and oil pipelines in and around the Terminal area and anchors shall **FULLY SECURED** except when entering the Anchorage Area for the purpose of anchoring to wait berthing.

The results of an anchor fouling a pipeline can be catastrophic.

Vessels at anchor waiting for berth shall keep at all times a full bridge watch and shall continuously monitor VHF Marine radio Ch 09/16.

7.3 Port Formalities & Services

7.3.1 Customs and Health Requirements

The Indonesian Republic Government Customs, Immigration and Port Health officials will board the Vessel at the same time as the Mooring Master. They will provide inward and outward clearance and Pratique services.

7.3.2 Agency

The Terminal does not perform any general agency work, therefore the Vessel Owner(s)/Charterer(s) must appoint a Vessel's Agent in Indonesia.

7.3.3 Shore Leave & Crew Changes

No shore leave is possible at the Terminal. Crew members are not permitted to leave the Vessel except in cases of extreme urgency. A valid passport is required. No crew changes are permitted during the period the Vessel is in the Terminal.

7.3.4 Fresh Water

Not Available

7.3.5 Provisions & Stores

Not Available

7.3.6 Fuel & Lubricants

Not Available

7.3.7 Medical Assistance

Emergency treatment is available from the Terminal on a limited scale. Medivac by Ambulance and Helicopter can be arranged for certain cases to the hospital.

7.3.8 Garbage Disposal

There are no garbage disposal facilities at the Terminal and it is expressly forbidden to dump garbage overboard.

SECTION 8
PILOTAGE

8.1 Compulsory Pilotage

All berthing, mooring and unmooring operations within the Terminal Areas are to be conducted with a Mooring Master onboard the Vessel to advise the Master on the Vessel's maneuvering and mooring/unmooring operations. The Master remains at all times in command of his or her Vessel and fully responsible for the safety of life, the vessel, the environment and third party property. With the Master's agreement, the Mooring Master's advice will take the form of direct instructions, which the Master will monitor in the case of helm or engine orders for example and pass on to his or her officers, in the case of line deployment etc. If the Master does not agree with a Mooring Master's directions or actions he or she may question or countermand such directions or actions at any time.

8.2 Mooring Master Boarding

The Mooring Master and Terminal Personnel, accompanied by the Government of Indonesian Officer, will board the Vessel either when she is in the Anchorage Area or when the Vessel is underway near thereto:

8.3 Mooring Master Transfer Arrangements

A pilot ladder or a pilot ladder in combination with an accommodation ladder shall be rigged on the port/starboard side in accordance with the recommendations contained in the IMPA Poster "Required Boarding Arrangements For Pilot" a copy of which appears on the following page.

The use of a mechanical pilot hoist is not accepted.

The Terminal will advise the height above the water the bottom of the pilot ladder shall be.

Transfer might use personal basket as sea conditions allowable, especially during light ships condition (**freeboard ≥ 10 meter**). Personal basket to be use shall be manufacture by approved Class and have load test and valid safety certificate.

No homemade and / or own fabricated personal basket allowed to be used in any conditions.

Proper inspection shall conduct prior usage, to ensure the personal basket correctly installed on the crane and good integrity.

When the Vessel is underway the Master shall ensure that an adequate lee is provided and the vessel is proceeding at a speed agreed between the Master and the Mooring Master.

Delays caused by inadequate boarding arrangements on the Vessel will not count as lay time.

The Vessel's crane or derrick shall be rigged on the port side, so that it can lift onboard the boxes containing the Mooring Master's mooring and hose connection equipment.

8.4 Mooring Master and Terminal Personnel - Food and Accommodation

The Mooring Master and any Terminal personnel remaining on the Vessel during loading. Shall be provided with food and accommodation of the standard usually provided for Vessel's officers.

REQUIRED BOARDING ARRANGEMENTS

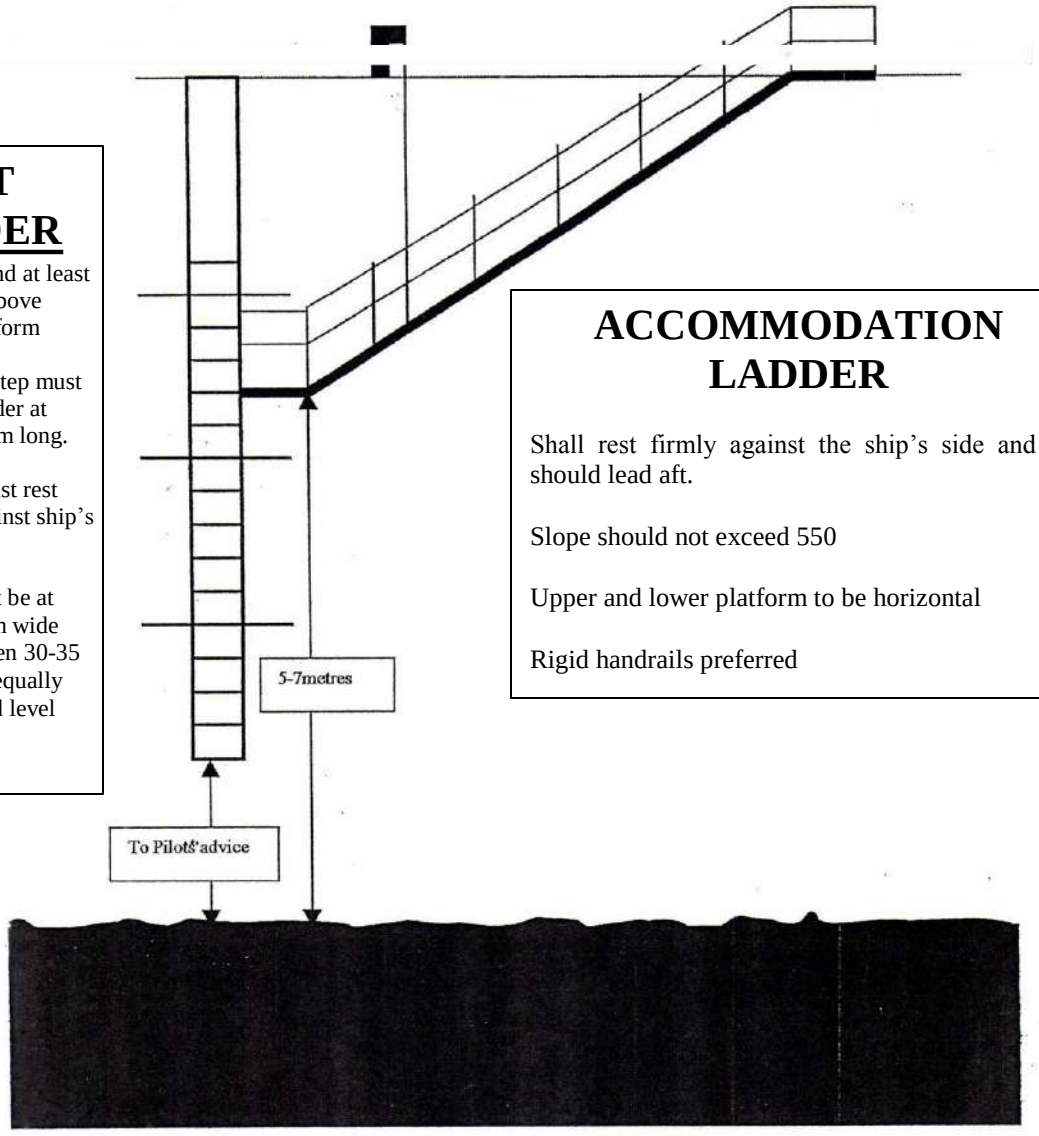
PILOT LADDER

Must extend at least 1 meters above lower platform

Every 8th step must be a spreader at least 1.80 m long.

Ladder must rest firmly against ship's side

Steps must be at least 40 cm wide and between 30-35 cm apart, equally spaced and level



ACCOMMODATION LADDER

Shall rest firmly against the ship's side and should lead aft.

Slope should not exceed 550

Upper and lower platform to be horizontal

Rigid handrails preferred

SECTION 9
BERTHING AND MOORING ARRANGEMENT

9.1 Environmental Limits for Berthing

The Santan Terminal situated within the Makassar straits. If at any time, the Santan Terminal Mooring Master decides that operations may become unsafe due to deteriorating weather conditions, then the Master will be informed of this decision and berthing operations will cease.

9.2 Conditions Exceeding Safe Limits for Berthing

The Vessel will be notified one hour before the last ETA given to the Santan Dispatch if the weather conditions will not permit berthing. This notice will be given by VHF radio, Channel 09. If the conditions negate berthing, the Vessel is to tender Notice of Readiness on arrival at the anchorage.

9.2.1 Environmental Limitations on Tanker Operations

If, at any time, the Santan Terminal Mooring Master decides that, due to deteriorating weather conditions, Santan Terminal operations may become unsafe, then the Master of the Vessel will be informed of this decision, and operations will cease.
The Master shall ensure that the Vessel's personnel are aware of the prevailing weather at Santan water. In the event of a localized electrical storm, cargo loading shall be suspended and all cargo valves shall be closed. Care shall be taken to avoid any pressure build up in the tank.
The Vessel is to advise the Master of any potential risk that may arise aboard the Vessel from the prevailing weather.

1. Wind

20 knots from any direction	Maximum wind speed for berthing
25	Stop loading operation
30	Disconnected loading Hose
35	Disconnected from SPM

2. Sea State

1.6 meters significant wave height	Maximum Limit for berthing/unberthing. Loading Suspended and consideration given to disconnection and removal of Gangway and Floating Hose the Master

3. Current

Above 1.0 knots	Berthing/unberthing at Mooring Master's with discretion in consultation
Above 2.0 Knots in any Direction	No Berthing / Unberthing operations permitted
Above 3.0 Knots in any Direction	Loading Suspended and consideration given to disconnection and

4. Visibility

< 1.0 nautical mile	No berthing / unberthing operations permitted.

9.3 Vessel Bow Mooring Arrangement (for Crude and Condensate Loading)

Vessels for crude and condensate loading will be moored on the vessel bow to the SPM and loading will be by means of a floating hose deployed from SPM to Vessel.

Vessel less than 50,000 Summer DWT must have 1 chain stopper on the forecastle
Vessel 50,000 – 125,000 Summer DWT must have 2 chain stoppers on the forecastle

Vessel bow mooring arrangements must comply with the recommendations contained in the latest OCIMF publication *"Recommendations for Equipment Employed in the Mooring of Ships at Single Point Moorings"*. Vessels must be fitted with an approved chain stopper. Smith Brackets or other devices to secure the chafe chain are not permitted.

In addition to the above it is compulsory to use a winch storage drum to handle and stow the entire length of the pick-up rope which is attached to the mooring assembly. The use of a warping drum to handle the pick-up rope is a hazardous practice and is not normally permitted. ***The Mooring line position through the winch drum must clear from line of fire or snap back zone.***

The-Vessel will be secured to the mooring hawser using a 76mm chafe chain.

The crews of vessels visiting the Terminals are required to perform all operations of mooring, unmooring, connecting and disconnecting hoses and the towing vessel.

The Terminal will reject for berthing and loading any vessel that cannot comply with the above requirements.

9.4 Preparations for Berthing and Mooring

9.4.1 Pre-Berthing Inspection

When the Mooring Master boards the Vessel he will conduct a general operational safety inspection of the vessel which will include, but not be limited to,

- bow mooring arrangements for Crude and BRC loading
- General Mooring Arrangement for LPG Loading

- anchor & cables and their security
- cargo loading manifold
- crane(s) and associated gear
- poop deck arrangements
- cargo control room
- any other area that the initial inspection may indicate
- Oxygen content of the cargo tanks atmosphere must not more than 8%

If the Mooring Master has reason to believe that the Vessel is in any way defective or substandard, so that it is unacceptable for berthing and loading at the Terminal he will immediately advise the Master and the Superintendent Production Santan Terminal.

9.4.2 Master's Acceptance of the Terminal Regulations

After boarding the Vessel, unless the circumstances otherwise dictate, to avoid immediate danger, when the Mooring Master meets the Master, the Mooring Master will invite the Master to sign the formal acceptance of the Terminal Regulations and the Terminal Safety Requirements Letter (Appendix A).

The Vessel will not be permitted to approach the Terminal until the Master's signature has been obtained.

9.4.3 Pre-berthing Conference

Before proceeding to the berth the Mooring Master will discuss with the Master and brief the Vessel's officers on the procedures to be followed in berthing and mooring. This briefing shall be in sufficient detail to enable the Master to monitor the berthing and mooring operation so that he or she will be aware if a departure from the agreed plan is taking place.

The Master will advise the Mooring Master of the Vessel's handling characteristics and ensure that the Mooring Master is given the Vessel/Pilot Information card to study. Once the foregoing procedures have been satisfactorily completed the Pre-berthing/Mooring Checklist (Appendix "C") shall be completed and signed by the Master and the Mooring Master.

The Mooring Master will personally observe the engine being tested astern and the wheel being put hard over to each side.

9.4.4 Preparation of forecastle

- Bow anchors are to be brought fully horn, and secured in the hawse pipe in such a way that they cannot be accidentally dropped.
- One empty winch storage drum shall be ready to accept the pick-up rope of the mooring assembly.
- A messenger line 26mm diameter by at least 200 meters length, rigged through the port bow SPM fairlead and lead outboard clear of obstructions to the port shoulder or where the Vessel's parallel body begins. This is to avoid the danger of the Work Boat coming into contact with the Vessel's bow.

- A spare messenger ready to replace the one mentioned above if necessary.
- A heaving line. Weighted heaving lines are not permitted.

9.4.5 Preparation of the Poop

- A heaving line. Weighted heaving lines are not permitted.
- A bollard stopper.
- A sharp knife or axe.

9.4.6 Preparations of the Manifold

- See section 4.27 for manifold connections.
- Drip cans and absorbent material.

9.5 Berthing

9.5.1 Assist Tug

A suitable Tug Boat is provided to assist with berthing and after berthing with static tow for Crude Oil and BRC Loading to keep the Vessel a safe distance from SPM, to control fish tailing motion and maintain safe alignment. The Mooring Master will advise the Master where, when and how the Towing Vessel shall be made fast, prior to the Vessel's final approach to the SPM.
The Towing Vessel will provide the towing assembly

9.5.2 Approaching the SPM/LPG Jetty & Berthing

- The prevailing environmental conditions will dictate the Mooring Master's approach to the Terminal.
- When the Vessel is a suitable distance from the stern of the SPM, the messenger shall passed to the Work Boat, which will carry it to the end of the hawser pick-up rope and secure it (see Section 9.4.3).
- The messenger will be heave in as the Vessel moves towards to the SPM.
- No excessive weight shall place on the messenger or pick-up rope during the approach. The chafe chain shall be hove onboard the Vessel through the bow fairlead and into the bow chain stopper.
- When the chafe chain is in a suitable position the chain stopper bar shall be lowered and pinned in place.
- Once the Vessel has brought up and is lying steady astern and in safe alignment of the SPM, hose connection will commence.
- Minimum Mooring arrangement for LPG tanker secured with 3 headlines, 2 forward and aft spring lines
- Stern lines – if required the vessel should be able to accommodate with 4 head and stern lines
- For Crude Oil and BRC loading the vessel should provide mooring line at starboard quarter during maneuvering

The Vessel's engines, once the Vessel is securely moored, must remain available for immediate use.

SECTION 10
HOSE CONNECTION

Crude Oil and BRC

After the vessel is securely moored, the Workboat will bring the floating hose string alongside on the port side. The
Terminal is equipped with one hose string, for BRC and two Hose string for Crude Oil.
The tail/rail hose being 150 ANSI 12 inch. The weight of the hose lift is approximately 6 tones. All hose lifting equipment / Ship's Crane and tackle shall have a Safe Working Load of at least 10 tones.

- Hose connection will be carried out by the Vessel's crew under the supervision of a
- Vessel's officer, acting on the advice of the Assistant Mooring Master / Mooring Master
- Before starting hose connection the personnel involved shall be warned of the danger of sudden wave induced hose movement that could cause the hose end to strike or pin personnel against the manifold structure.
- Vessels are required to provide a 12-inch, 150 ANSI presentation flange.
- The hose is connected to the presentation flange using a Cam-lock Coupling.
- Care should be took during the hose handling operation to avoid serious damage to the hoses and associated equipment. If any action taken by the Vessel or her Master or Crew causes or contributes to damage to the loading system, the Master, Owner(s) or Charterer(s) will held accountable for the cost of rectification of such damage, including but not limited to consequential damages.

LPG

After the vessel is securely moored, the Terminal is equipped with 2 flexible hoses (liquid and vapor) with 4 Inch
ANSI 300 for liquid and 2 Inch ANSI 300 for vapor.

- Hose connection will be carried out by the Vessel's crew under the supervision of a Vessel's officer, acting on
- The advice of the assistant mooring master / Mooring Master.
- Before starting hose connection the personnel involved shall be warned of the danger of sudden wave induced hose movement that could cause the hose end to strike or pin personnel against the manifold structure.
- Vessels are required to provide a 4-inch and 2-inch ANSI 300 presentation flange.
- Vessel shall provide gaskets for the manifold

VESSELS ARE CAUTIONED NOT TO SHUT VALVES AGAINST THE FLOW OF OIL AT ANY TIME DURING THE LOADING.

UNLESS ARRANGEMENTS ARE MADE WITH THE MOORING MASTER AND THE LOADING RATE IS REDUCED TO SLOW,

THERE SHALL BE AT LEAST TWO (2) OF THE VESSEL'S CARGO TANKS OPEN AT ALL TIMES DURING LOADING.

SECTION 11
LOADING OPERATION

11.1 Pre-loading Conference

Prior to commencement of loading operations the Mooring Master will discuss with the Master or his designated Deck Officer the procedures to be followed throughout the loading/de-ballasting operation. This briefing shall be in sufficient detail to enable the Mooring Master to monitor the operations so that he will be aware if a departure from the agreed loading plan is taking place.

At this time the Vessel/Terminal Safety Checklist (Appendix D) shall be completed and signed by the Mooring Master and Master or his designated Deck Officer. A record that the meeting took place shall be recorded in the cargo log.

11.2 Communications and Coordination of Loading

A Qualified and responsible, English speaking Vessel's officer is required to be on deck or in the control room at all times.
Except for the hourly radio checks, all communications from the Vessel to the Terminal, relating to loading, shall be made by the Mooring Master.
At the same time vessel is to exchange transfer quantity and the hourly loading rate during such communication

11.3 Tank Inspection

Terminal or the Mooring Master carry out tank inspections or issue dry certificates. If an Independent Surveyor is required to carry out tank inspections prior to loading, they shall be conducted as provided in Section 4.9.

11.4 Lining up and Readiness to Load

Upon Satisfactory completion of the pre-loading conference and signing off the vessel terminal safety check list, and Loading Hose has been connected, vessel will line up vessel applicable lines and tank valves for readiness to receive cargo.
Under the direction of the mooring master or assistant mooring master Vessel crew is may also put the manifolds is in the open position, for leaking test the connection with loading hose.

Only when Vessel and terminal ready to commenced transfer and Confirm by Radio to terminal that the vessel is ready to receive cargo, butterfly valve at the end of the transfer hose and SPM valve will opened

11.5 Commencing Loading

During the commencement of loading and until the full loading rate is achieved the Mooring Master or his assurance accompanied by a vessel officer, will remain at the Vessel's manifold.

When the Vessel confirms that it's tank valves and manifold valve are open, the Mooring Master will request the Terminal to **commence the loading by gravity at slow rate**. The Vessel will observe the flow of oil into the Vessel's tanks. Once satisfied that the oil is flowing into the designated tanks, the

mooring master will advise the Terminal Dispatch that the Vessel is ready to receive cargo at full rate and ask for increase the loading rate to full rate

During the period of slow loading and build up to full rate the area around the floating hose shall be under constant observation for leakage. Loading shall be stop in the event of any leak being detected

The maximum loading rate for:
- Crude Oil will be 24,500 barrels per hour with 2 X 12 inch reducer
- BRC (Bontang Return Condensate) is 14,500 barrels per hour with 1 X 12 inch reducer or the maximum the Vessel can receive
- LPG Loading rate about 80 MT to 100 MT / Hour

For Crude Oil loading, minimum loading rate 18.000 Barrels / Hour
For BRC loading, minimum loading Rate 12.000 Barrels / Hour

VESSELS ARE CAUTIONED NOT TO SHUT VALVES AGAINST THE FLOW OF OIL AT ANY TIME DURING THE LOADING.

UNLESS ARRANGEMENTS ARE MADE WITH THE MOORING MASTER AND THE LOADING RATE IS REDUCED TO SLOW, THERE SHALL BE AT LEAST TWO (2) OF THE VESSEL'S CARGO TANKS OPEN AT ALL TIMES DURING LOADING.

11.6 During Loading

The Vessel's Cargo Control Room shall he manned at all times and be under the control of a Vessel's Officer. An efficient deck watch shall he maintained so that the mooring assembly, the loading hose and the manifold are under constant observation.

The loading rate may be reduced at any time by requesting the Terminal to reduce the loading rate.

11.7 Emergency Stops during Loading

If for any reason the Vessel requires an immediate stop to the loading, the Terminal shall be called, as follows:
"**SANTAN DISPATCH EMERGENCY STOP SANTAN DISPATCH EMERGENCY STOP SANTAN DISPATCH EMERGENCY STOP …..THIS IS MT……**

Santan Dispatch Should Respond by saying:

MT…… THIS IS SANTAN DISPATCH EMERGENCY STOP ACKNOWLEDGED PLEASE INDENTIFY YOUR CODE NO.
Mooring Master will Replay with Code His ID Badge No

In either case if radio communication fails continuous sounding of the Vessel's whistle will initiate an Emergency Stop.

SECTION 12
BALLAST OPERATIONS

12.1 Requirements

There are no ballast or slop reception facilities at the Terminal. Vessels must arrive with clean ballast suitable for discharging directly to sea in accordance with the standards set by the International Conventions. **Vessels arriving with ballast unsuitable for discharge to sea will be rejected for loading**. Any Vessel rejected because of contaminated ballast or sea pollution will automatically invalidate her Notice of Readiness and will lose any priority of loading. **Vessels discharging contaminated ballast overboard shall be subject to the anti-pollution laws of Indonesian. Penalties for pollution are severe.**

12.2 Ocean Exchange of Ballast Water

Whilst there is currently no legal requirement for Vessels to exchange ballast water for ocean water prior to its discharge into the Indonesian water, the Company wishes to encourage Masters to exchange ballast loaded in port or estuarial areas with clean ocean water. In the form requesting approval to discharge ballast mentioned in 12.3(f), below, there is section requesting information on ballast water treatment. Although Masters are not required to provide this information, they are encouraged to do so.

12.3 De-Ballasting Procedures

Vessels shall preferably have the ability to de-ballast concurrently with loading operations and any crossovers between cargo and ballast system shall be blanked. Only SBT Vessel can be accepted loading and in this port.

Vessel arrives with clean ballast which is not part of a segregated ballast system and wishes to discharge such ballast to the sea, the following conditions shall be met.

- The Vessel must be operating with dedicated clean ballast tanks in accordance with the provisions of Regulation 13(9) or (10) of the MARPOL Annex 1992 revision
- The Vessel must comply with MARPOL Regulation 13A. 1992 revision.
- When operating the oil content monitor required by MARPOL Regulation 13A the monitor record shall be kept and the record given to the Mooring Master for inclusion with the Vessel's documents in port.
- The discharge of ballast from dedicated clean ballast tanks (CBT) shall be carried out in daylight, unless there is adequate lighting to illuminate the sea area near the ballast discharge point, in order that the quality of the ballast is being discharged to the sea can be constantly monitored. The Mooring Master's decision as to, whether there is sufficient lighting shall be final.

- If possible prior to the discharge of the ballast an independent inspector shall inspect the tanks containing the ballast and certify that it is clean and take samples of the ballast, one sample to be retained on board and the other to be kept by the Company
- The Master of the Vessel shall declare, in the form provided, that the lines used for the discharge of the ballast are clean and that the blanks separating the discharge line and the crude oil lines and tanks are tight and free from leaks.
- If the CBT ballast forms all or part of the ballast required to maintain the Vessel in the conditions mentioned in Section 12.1 above, no ballast shall be discharged until an amount of crude oil has been loaded, so that after the discharge of the CBT the Vessel's condition still complies with the requirements of 4.7.

12.4 Precautions to be taken whilst De-ballasting

During the discharge of ballast, the sea area adjacent to the ballast discharge point shall be kept under observation to ensure that no oil or oily water residue is pumped overboard.

SECTION 13
CARGO COMPLETION-CARGO MEASUREMENT & COMMERCIAL DOCUMENTATION

13.1 Completion of Loading

At least 30 minutes before the loading of cargo is to be completed the Mooring Master shall be advised and told the amount of cargo required to complete loading. This information will be passed to the Terminal.

When there are 3,500 barrels left to load, the loading pumps shall be reduced to slow speed and the remaining cargo loaded at slow rate. Notwithstanding the foregoing the Vessel may request a reduction in the loading rate at any time.

The Vessel will advise the Mooring Master when to stop cargo loading unless the nominated quantity has been delivered by the meter, when the Terminal will stop the cargo transfer. When the Terminal confirms that the loading pumps are stopped, a Vessel's valve that can be closed slowly shall be shut and then the manifold valve shut. The Loading Hose End Valve is then shut.

13.2 Cargo Measurement & Sampling

The Vessel Crew and an Independent Cargo Surveyor, if present, will undertake cargo measurement and sampling. The Vessel's figures shall be provided to the Mooring Master as soon as possible after the completion of loading. Any delay due to the Independent Surveyor's Survey shall not count as Lay time.

If the Vessel and Terminal Cargo Figures differ by greater than 0.3%, the Vessel will be requested to re-gauge and re-calculate the cargo figures. The Mooring Master will not witness or check these figures. . If after both the Vessel and Terminal have re-checked their figures the difference still exits, a Letter of Protest will be issued
In the even free water found during cargo measuring, Santan dispatched must be inform immediately

13.3 Cargo Documentation

The Terminal will provide the Vessel with cargo figures as soon as possible after the completion of loading. The Terminal will prepare the following cargo documents for the Master's signature. The Terminal will retain the originals and the Master will be presented with sets of copies as per the distribution list, agreed between the Buyer(s) and the Company.

The Vessel and Terminal will exchange copies of other documents, such as time sheets relating to the lifting.

The Mooring Master will receive any Letters of Protest.

Mooring Master's signature ONLY CONFIRM RECEIVE and DOES NOT CONFIRM ANY agreement with the text the Letters of Protest contains.

SECTION 14
HOSE DISCONNECTION

On completion of loading, the loading hose will be disconnected by the Vessel's crew under the supervision of a responsible Vessel officer, acting on the advice of the Assistant mooring master / Mooring Master.

Before starting hose disconnection the personnel involved shall be warned of the danger of sudden wave induced hose movement that could cause the hose end to strike or pin personnel against the manifold structure.

Hose system maintenance, particularly in bad weather, is extremely difficult and involves possible danger to personnel. For this reason, vessels are requested to give as much assistance as possible by taking seaman like care of the mooring and hose equipment and returning it to the water ready for the next Vessel.

Hose and Mooring System maintenance is expensive. If the Terminal judges that the Vessel has misused the hose or any part of the mooring system, the vessel will be liable for the expenditure involved in making repairs, including, but not limited to, any consequential costs due to Terminal downtime.

SECTION 15
UNMOORING & DEPARTURE

15.1 Preparation for Unmooring

- Prior to unmooring the fire wires shall be recovered.
- All Bridge Gear Tested (Coordination with Mooring master)
- Engine test and ready for use
- The tug astern may be released or may remain moored to the Vessel's stern to assist with unmooring for Crude Oil and BRC Loading.
- The Mooring Master in consultation with the Master will decide the time unmooring will commence.

15.2 Release from the Mooring System for Crude Oil and BRC Loading

The weight will be allowed to come off the mooring hawser, it may be necessary to use the Vessel's engine for this purpose. When the weight comes off the hawser, the chafe chain will be released from the bow stopper and the pickup rope carefully paid out as the Vessel moves astern and clears from the berth.

Care shall be taken to ensure that the mooring hawser and pickup rope is not dropped over the hose string.

Anchors shall be secured until the vessel is well clear of the Terminal and subsea pipelines.

15.3 Mooring Master Disembarkation

Once the Mooring Master is satisfied that the Vessel is clear of the Terminal Area, he and any other Terminal Personnel will disembark using a pilot ladder as laid down in Section 8.3. The Mooring Master's equipment may be offloaded at this time or at any earlier time, mutually acceptable to the Master and Mooring Master.

SECTION 16
SANTAN MARINE TERMINAL SPECIFIC INFORMATION

16.1 Location

Santan Terminal

SBM
Latitude: 00^0 06’ 18.6” South / Longitude: 117^0 32’ 18.8” East
Water Depth: 28 meters

LPG Jetty
Latitude: 00^0 05’ 25.7” South / Longitude: 117^0 30’ 44.2” East
Water Depth: 11.5 meters

16.2 Charts for Area

British Admiralty Charts Numbers: 3040
Indonesian Chart Number: 37

16.3 Sailing Directions

Makassar Strait

16.4 Safety Zone

See appendix E.

16.5 Terminal Lay-Out

See appendix E.

16.6 Permissible Vessel Size

The Terminal is designed to accept Vessels as follows:

For Crude Oil and Condensate

Maximum Size: 125,000	Summer Deadweight Tones
Minimum Size : 30,000	Summer Deadweight Tones
Maximum LOA: 250 meters.	Minimum LOA: 130 meters

For LPG :

Maximum Size	3,500	Summer Deadweight Tones with
Minimum Size	1,000	Summer Deadweight Tones
maximum LOA	100 meters	
Minimum LOA	70 meters	

16.7 Navigation and Approach to the SPM

The Terminal is situated near busy shipping lanes and Masters of visiting Vessels are cautioned accordingly.

16.8 Designated Anchoring Position

The designated anchoring area for Vessels awaiting berth lies approximately 2 nautical miles Northeast of the SPM in a water depth of approximately 40 meters- To avoid danger to sub-sea installations, no anchors may be dropped in the Terminal area except at the designated anchoring area and only with prior approval from the SPM (See Section 7.2).

16.9 Mooring Master Boarding Position

The Mooring Master boarding position is 2.0 nautical miles East-North-East of the SPM or where the Mooring Master might otherwise advise to the arriving vessel.

16.10 Terminal Facilities

16.10.1 Mooring System (Please see Appendix H)

16.10.2 Loading Hose (Please see Appendices I and J)

16.11 Santan Marine Terminal Properties

The following specification is representative only, the exact quality of each cargo will vary. These figures are supplied as a guide to the crude oil specification.

Crude Oil :

API Gravity at 60^0 Fahrenheit	38.0-44.0
Density at 15^0 Celsius in vacuum	0.8110 Kg/Liter
Reid Vapor Pressure	4.8
Pour Point	25.0^0F
Flash Point	$84\text{-}86^0$ F
Loading Temperature	$86\text{-}90^0$F

Condensate :

API Gravity at 60^0 Fahrenheit	74.0-80.0
Density at 15^0 Celsius in vacuum	0.8110 Kg/Liter
Reid Vapor Pressure	8.5
Pour Point	(-) 60^0F
Flash Point	60^0F
Loading Temperature	86-90^0F

16.12 Terminal Contact Details

Terminal Name : ***"SANTAN MARINE TERMINAL"***

Call Sign : SANTAN MARINE TERMINAL

Terminal VHF channel : 09 and 16

Terminal Phone No : +62-542-7568100

Terminal Fax No :

Control Room Dispatch Mobile Phone : +62-8111-9534-339

Email : santandispatch.phkt@pertamina.com
Stn-Mooring.Master@pertamina.com

SANTAN MARINE TERMINAL PORT INFORMATION

SPM

Berth Names	:	Santan SBM
Berth Types	:	SBM for loading crude & condensate;
SBM position	:	00^0 06' 18.6" S / 117^0 32' 18.8" E.
Berth Operator	:	Pertamina Hulu Kalimantan Timur Santan Terminal.
Dock water density: 1,025.00		
Type of bottom	:	Sand/Mud.
Minimum water depth	:	SBM area, In berth = 28.00 meters;
	:	In Channel = 50.00 meters.
Minimum Req. Port UKC	:	3.0 meters.
Average tide height MLWS/MHWS	:	3 Meters
Max. Summer D.W.T	:	125,000 DWT.
Minimum DWT	:	30.000 DWT
Max. L.O.A.	:	250 meters
Min. L.O.A	:	130 Meters
Max. Vessel bow to manifold	:	480 Ft. (143.2 meters)
Min. Vessel bow to manifold	:	240 Ft. (72.0 meters)
Min. Required SWL of Vessel Crane	:	10 Tons.
Name of cargo Suppliers	:	SKK Migas, PHKT, PHM, PHSS, ENI, Chevron Makassar Limited, Chevron Rapak Limited
Type of Oil	:	Light Crude Oil, Gravity @ 60^0 F 38.0- 44.0 API;
	:	BRC, Gravity @ 60^0 F 74 - 80 API.
Number and size of shore arms/Hoses	:	Crude: 2 X 12",
		BRC: 1 X 12".
Expected Loading Rate	:	Crude: 24,500 Barrels/Hours;
	:	BRC : 14,500 Barrels/Hours.
Manifold position normally used	:	Port side position.
Berth equipped with a vapor recovery system	:	No
Ballast/Slop facilities available at the berth	:	No.
Fuel Oil bunker available ex berth	:	No
Fuel Oil bunker available ex barge	:	No
Diesel Oil bunker available ex berth	:	No
Diesel Oil bunker available ex barge	:	No
Fresh water available ex berth	:	No
Fresh water available ex barge	:	No

Terminal contact name Santan Terminal (Pertamina Hulu Kalimantan Timur)
Telephone No. : +62 542 7568107 / 542 7568126
Control Room Dispatch Mobile Phone : +62-8111-9534-339
Fax. No:
Email : Stn-Mooring.Master@pertamina.com
santandispatch.phkt@pertamina.com

SANTAN MARINE TERMINAL PORT INFORMATION

LPG Jetty

Berth Names	:	Santan LPG Jetty
Berth Types	:	Jetty for loading LPG.
LPG Jetty position	:	00^0 05' 25.7" S / 117^0 30' 44.2" E.
Berth Operator	:	Pertamina Hulu Kalimantan Timur Santan Terminal
Dock water density	:	1,025.00
Type of bottom	:	Sand/Mud.
Minimum water depth alongside LPG Jetty	:	11.50 meters
Minimum Req. Port UKC	:	3.0 meters
Maximum Vessel draft permitted (LPG Jetty)	:	7.5 meters
SBM	:	20 meters.
Average tide height MLWS/MHWS	:	3 Meters
Max. Summer D.W.T	:	LPG 3,500 MT;
Max. L.O.A.	:	100 Meter
Min L.O.A.	:	70 Meter
Min. Parallel Body Length	:	Not less than 100 Ft. (30.49 meters)
Max. height Vessel manifold from waterline	:	7 meters.
Min. height Vessel manifold from waterline	:	1 meters.
Gases type	:	Propane (C3) and Butane (C4).
Number and size of shore arms/Hoses	:	1 X 4"
Expected Loading Rate	:	LPG 80 - 90 MT
Manifold position normally used	:	Any Side;
Berth equipped with a vapor recovery system	:	Yes.
Ballast/Slop facilities available at the berth	:	No.
Fuel Oil bunker available ex berth	:	No
Fuel Oil bunker available ex barge	:	No
Diesel Oil bunker available ex berth	:	No
Diesel Oil bunker available ex barge	:	No
Fresh water available ex berth	:	No
Fresh water available ex barge	:	No

Terminal contact name Santan Terminal (Pertamina Hulu Kalimantan Timur)
Telephone No. : +62 542 7568107 / 542 7568126
Control Room Dispatch Mobile Phone : +62-8111-9534-339
Fax. No:
Email : Stn-Mooring.Master@pertamina.com
santandispatch.phkt@pertamina.com

Appendix "A"

Safety Requirements Letter

PERTAMINA HULU KALIMANTAN TIMUR SANTAN TERMINAL

The Master
SS/MV_____ **Date**_____

SAFETY REQUIREMENTS

Responsibility for the safe conduct of operations on board your ship while at our Terminal rests with you as Master. Nevertheless, since personnel, property and other shipping may also suffer serious damage in the event of an accident aboard your ship, we wish, before operation start, to seek your cooperation and understanding on the safety requirements including the Terminal Drug and Alcohol Policy set out in the Santan Marine Terminal Regulation.

The safety requirements contained therein are based on practices widely accepted by the oil and tanker industries. We therefore except you and all under your command to adhere strictly to them throughout your stay in this port. We, for our part, have instructed our personnel to do likewise and cooperate fully with you in the mutual interest of a safe and efficient operation. In order to assure ourselves of your compliance with these safety requirements, we shall, before the start of operations and thereafter from time to time, instruct a member of our staff to inspect your ship. After reporting to you or your deputy, he will invite one of your officers to join him in a routine inspection of your ship to ensure that the Santan Terminal Safety Check List shall be complete in the affirmative.

If we observe any infringement on board your ship of any of these safety requirements, we shall bring this immediately to the attention of yourself or your deputy for corrective action. If such action is not taken in a reasonable time, we shall adopt measures which we consider to be the most appropriate to deal with the situation and we shall notify you accordingly. If you observe any infringement of these regulations by our staff on board your ship, please bring this immediately to the attention of the Mooring Master who nominated as your contact during your stay in port. Should you feel that any immediate threat to the safety of your ship arises from any section on our part, or from the equipment under our control, you are fully entitled to demand an immediate cessation of operations.

IN THE EVENT OF CONTINUED OR FLAGRANT DISREGARD OF THE SANTAN MARINE TERMINAL REGULATIONS BY ANY SHIP, WE RESERVE THE RIGHT TO STOP ALL OPERATIONS AND TO ORDER THAT SHIP OFF THE BERTH FOR APPROPRIATE ACTION TO BE TAKEN BY THE CHARTERER AND OWNERS CONCERNED.

Please acknowledge receipt, understanding and acceptance of this letter by countersigning and returning the attached copy.

For and on behalf of
PERTAMINA HULU KALIMANTAN TIMUR

_____
(Signature)

SS/MV _____

RECEIPT AND ACCEPTANCE OF THIS LETTER IS HEREBY ACKNOWLEDGED

Signed: _____Master

Date: _____Time : _____Hours.

Appendix "B"

PERTAMINA HULU KALIMANTAN TIMUR SANTAN TERMINAL
PRE-BERTHING SHIP/SHORE CHECK LIST

MT/SS _____

Date if Arrival_____ Time of Arrival_____

INSTRUCTIONS FOR COMPLETION

The safety of operations requires that all questions be answered affirmatively with a tick i.e.√. If an answer is not possible, the reason should be given and agreement reached upon appropriate precautions between the ship and the terminal. Where any question is not considered to be applicable a note to that effect should be inserted in the remarks column.

☐ - the presence of this symbol in the columns "Ship" and Pertamina Hulu Kalimantan Timur "COT" indicates that the check shall be carried out by the party concerned.

The presence of the letters **A, P and R** in the column "Code" indicates the following:

A - the mentioned procedures and agreements shall be in writing and signed by both parties.
P - in the case of a negative answer the operation shall not be carried out without the permissions of COT

	Ship	COT	Code	Remarks
A1. Are radio communications well established ?	☐	☐	**P**	
A2. Is ship's mooring arrangement in accordance with OCIMF *Recommendation for Equipment Employed in the Mooring of Ships at Single Point Moorings?*	☐	☐	**P**	
A3. Is ship's manifold arrangement in accordance with OCIMF *Recommendation for Oil Tanker Manifolds and Associated Equipment?*	☐	☐	**P**	
A4. Is ship's lifting equipment in accordance with OCIMF *Recommendations for Oil Tanker Manifolds and Associated Equipment?*	☐	☐	**P**	
A5. Are rope messengers, stoppers and heaving lines ready for use?	☐	☐		
A6. Is a spool prepared on the forward winch for lifting the hawser pick-up rope on board?	☐	☐		
A7. Are all cargo tank atmospheres 8% or less oxygen content by volume and with positive pressure?	☐	☐	**P**	
A8. Has "Vessel/Pilot" information card been exchanged?	☐	☐	**R**	
A9. Are berthing and mooring procedures agreed?	☐	☐		
A10. Are the crew briefed on the mooring procedure?	☐	☐		
A11. Has the tug been briefed on the berthing and mooring procedure?	☐	☐		
A12. Are engines, steering gear and navigational equipment tested and found in good order ?	☐	☐	**P**	
A13. Are both anchors secured?	☐	☐		
A14. Is a proficient helmsman at the wheel?	☐	☐		

Declaration
We have checked, where appropriate jointly, the items on this checklist, and have satisfied ourselves that the entries we have made are correct to the best of
our knowledge.

For Ship	For Pertamina Hulu Kalimantan Timur
Name	Name
Rank	Position
Signature	Signature

Appendix "C"

SHIP SHORE CHECK LIST

Ship's Name_____ **Berth**_____

Port_____ **Date of Arrival**_____ **Time of Arrival**_____

Part `A' - Bulk Liquid General - Physical Checks

Bulk Liquid - General	Ship	Terminal	Code	Remarks
1. There is safe access between the ship and shore.			R	
2. The ship is securely moored.			R	
3. The agreed ship/shore communication system is operative.			A R	System: Backup system:
4. Emergency towing-off pennants are Correctly rigged and			R	
5. The ship's fire hoses and fire-fighting equipment are positioned and ready for immediate use.			R	
6. The terminal's fire-fighting equipment is positioned and ready for immediate use.			R	
7. The ship's cargo and bunker hoses, pipelines and manifolds are in good condition, properly rigged and appropriate for the service				
8. The terminal's cargo and bunker hoses or arms are in good condition, properly rigged and appropriate for the service				
9. The cargo transfer system is sufficiently isolated and drained to allow safe removal of blank flanges prior to connection.				
10. Scuppers and save-alls on board are effectively plugged and drip trays are in position and empty.			R	
11. Temporarily removed scupper plugs will be constantly			R	
12. Shore spill containment and sumps are correctly managed.			R	
13. The ship's unused cargo and bunker connections are properly secured with blank flanges fully				
14. The terminal's unused cargo and bunker connections are properly secured with blank flanges fully bolted.				

Bulk Liquid -General	Ship	Terminal	Code	Remarks
15. All cargo, ballast and bunker tank lids are closed.				
16. Sea and overboard discharge valves, when not in use, are closed and visibly secured.				
17. All external doors, ports and windows in the accommodation, stores and machinery spaces are closed. Engine room vents may be open.			R	
18. The ship's emergency fire control plans are located externally.				Location:

If the ship is fitted, or is required to be fitted, with an inert gas system (IGS), the following points should be physically checked:

Inert Gas System	Ship	Terminal	Code	Remarks
19. Fixed IGS pressure and oxygen content recorders are working.			R	
20. All cargo tank atmospheres are at positive pressure with oxygen content of 8% or less by volume.			P R	

Part `B' - Bulk Liquid General - Verbal Verification

Bulk Liquid -General	Ship	Terminal	Code	Remarks
21. The ship is ready to move under its own power.			P R	
22. There is an effective deck watch in attendance on board and adequate supervision of operations on the ship and in the terminal.			R	
23. There are sufficient personnel on board and ashore to deal with an emergency.			R	
24. The procedures for cargo, bunker and ballast handling have been agreed.			A R	
25. The emergency signal and shutdown procedure to be used by the ship and shore have been explained and understood.			A	
26. Material Safety Data Sheets (MSDS) for the cargo transfer have been exchanged where requested.			P R	

Bulk Liquid - General	Ship	Terminal	Code	Remarks
27. The hazards associated with toxic substances in the cargo being handled have been identified and understood.				H2S Content: Benzene Content:
28. An International Shore Fire Connection has been provided.				
29. The agreed tank venting system will be used.			A R	Method:
30. The requirements for closed operations have been agreed.			R	
31. The operation of the P/V system has been verified.				
32. Where a vapour return line is connected, operating parameters have been agreed.				
33. Independent high level alarms, if fitted, are operational and have been tested.			A R	
34. Adequate electrical insulating means are in place in the ship/shore connection.			A R	
35. Shore lines are fitted with a non-return valve, or procedures to avoid back filling have been discussed			P R	
36. Smoking rooms have been identified and smoking requirements are being observed.			A R	Nominated smoking rooms:
37. Naked light regulations are being observed.			A R	
38. Ship/shore telephones, mobile phones and pager requirements are being observed.			A R	
39. Hand torches (flashlights) are of an approved type.				
40. Fixed VHF/UHF transceivers and AIS equipment are on the correct power mode or switched off.				
41. Portable VHF/UHF transceivers are of an approved type.				
42. The ship's main radio transmitter aerials are earthed and radars are switched off.				
43. Electric cables to portable electrical equipment within the hazardous areas are disconnected from power.				
44. Window type air conditioning units are disconnected.				

Bulk Liquid -General	Ship	Terminal	Code	Remarks
45. Positive pressure is being maintained inside the accommodation, and air conditioning intakes, which may permit the entry of cargo vapours, are closed.				
46. Measures have been taken to ensure sufficient mechanical ventilation in the pumproom.			R	
47. There is provision for an emergency escape.				
48. The maximum wind and swell criteria for operations have been agreed.			A	……..Stop Loading ……Hose Disconnected …Disconnect / Unberthing
49. Security protocols have been agreed between the Ship Security Officer and the Port Facility Security Officer, if appropriate.			A	
50. Where appropriate, procedures have been agreed for receiving nitrogen supplied from shore, either for inerting or purging ship's tanks, or for line clearing into the ship.			A P	

If the ship is fitted, or is required to be fitted, with an inert gas system (IGS) the following statements should be addressed:

Inert Gas System	Ship	Terminal	Code	Remarks
51. The IGS is fully operational and in good working order.			R	
52. Deck seals, or equivalent, are in good working order.			R	
53. Liquid levels in pressure/vacuum breakers are correct.			R	
54. The fixed and portable oxygen analysers have been calibrated and are working properly.			R	
55. All the individual tank IG valves (if fitted) are correctly set and locked.			R	
56. All personnel in charge of cargo operations are aware that, in the case of failure of the inert gas plant, discharge operations should cease and the terminal be advised.				

If the ship is planning to tank clean alongside, the following statements should be addressed:

Tank Cleaning	Ship	Terminal	Code	Remarks
59. Tank cleaning operations are planned during the ship's stay alongside the shore installation.	Yes/No*	Yes/No*		
60. If `yes', the procedures and approvals for tank cleaning have been agreed.				
61. Permission has been granted for gas freeing operations.	Yes/No*	Yes/No*		

* Delete Yes or No as appropriate

DECLARATION

We, the undersigned, have checked the above items in Parts A and B, and where appropriate Part C or D, in accordance with the instructions, and have satisfied ourselves that the entries we have made are correct to the best of our knowledge.

We have also made arrangements to carry out repetitive checks as necessary and agreed that those items with code `R' in the Check-List should be re-checked at intervals not exceeding _____ hours.

If to our knowledge the status of any item changes, we will immediately inform the other party.

For Ship	For Shore
Name Chief Officer _____ Signature _____ Date _____ Time _____	Name _____ Position or Title Terminal Representative Signature _____ Date _____ Time ----------

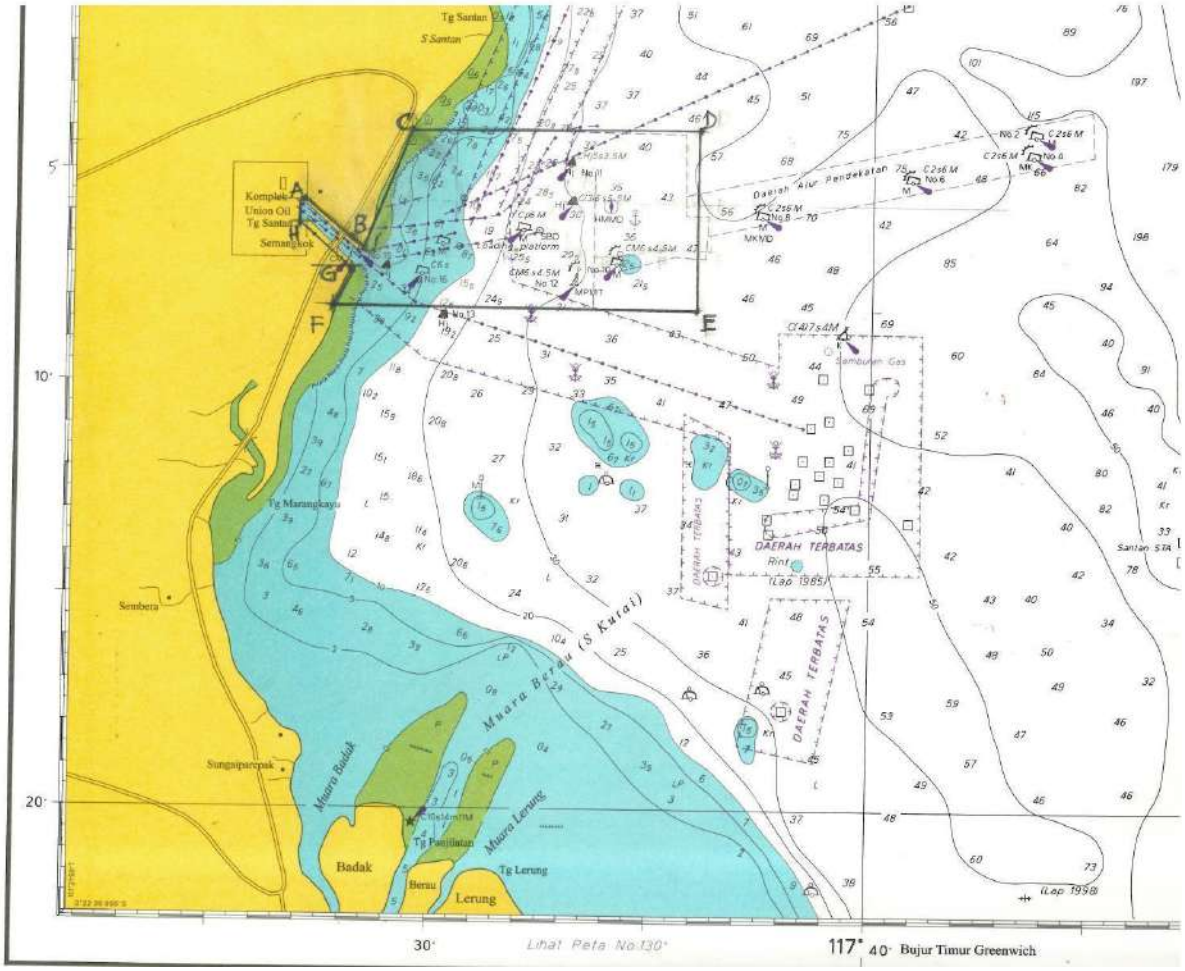
Record of repetitive checks:

Date:							
Time:							
Initials for Ship:							
Initials for Shore:							

Appendix “ D “

SANTAN MARINE TERMINAL

INDONESIAN CHART NO.37



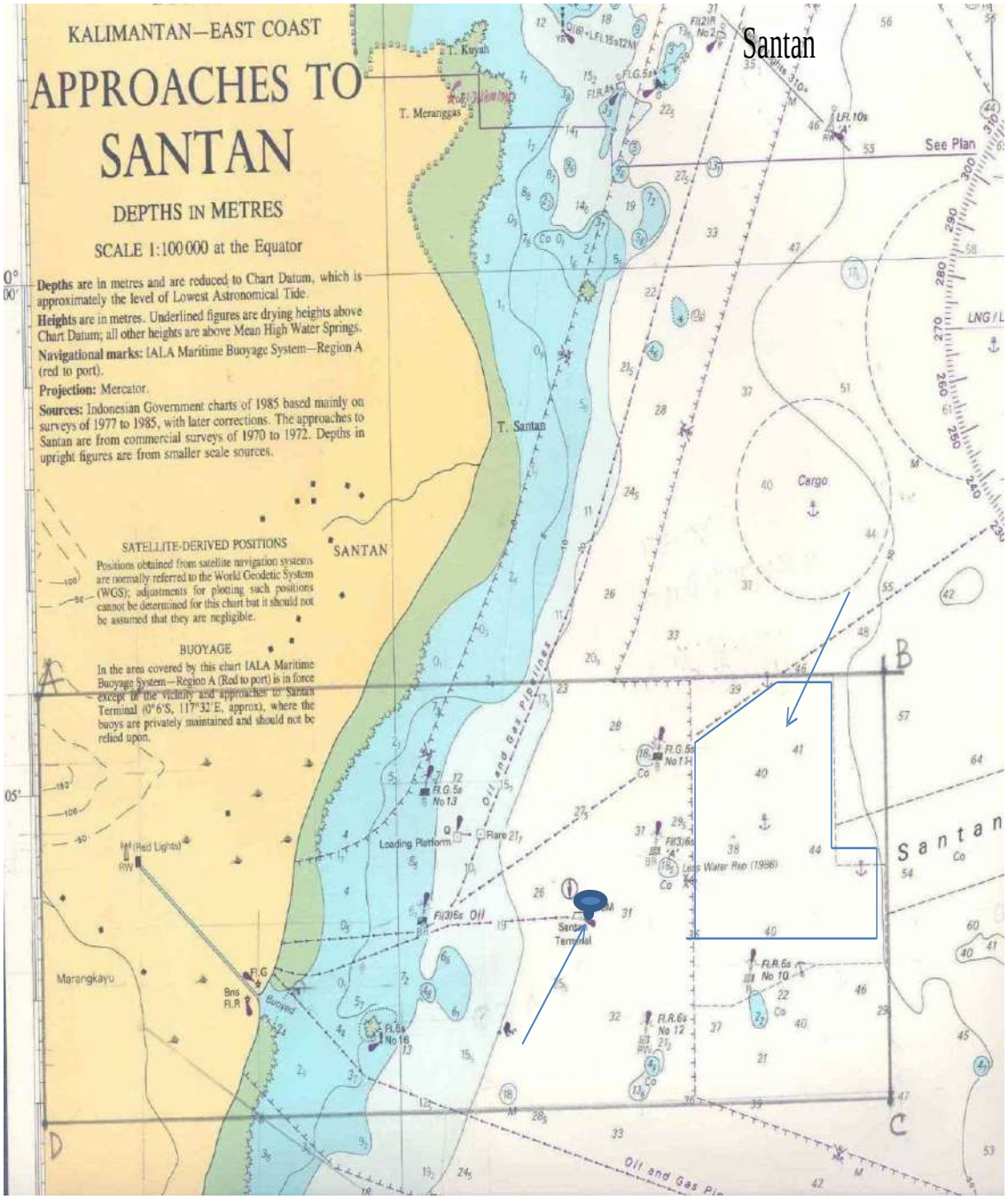
Koordinat :

Titik A. 000 05’ 45”S - 1170 27’ 00” T Titik B. 000 06’ 50”S - 1170 28 16” T Titik C. 000 04’ 00”S - 1170 29’ 30” T Titik D. 000 04’ 00”S - 1170 36’ 18” T Titik E. 000 08’ 20”S - 1170 36’ 18” T Titik F. 000 08’ 20”S - 1170 27’ 46” T Titik G. 000 07’ 18”S - 1170 28’ 12” T Titik H. 000 06’ 12”S - 1170 27’ 00” T

Appendix " E "

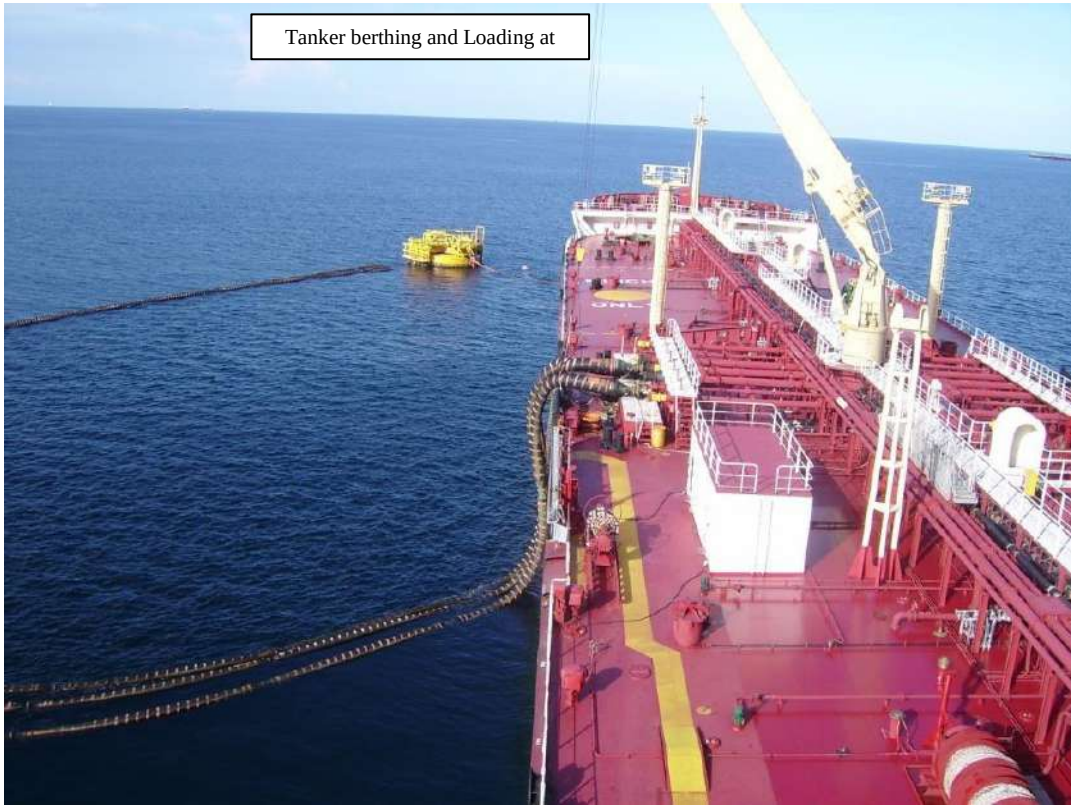
SANTAN MARINE TERMINAL

BRITISH ADMIRALTY CHART NO.3040



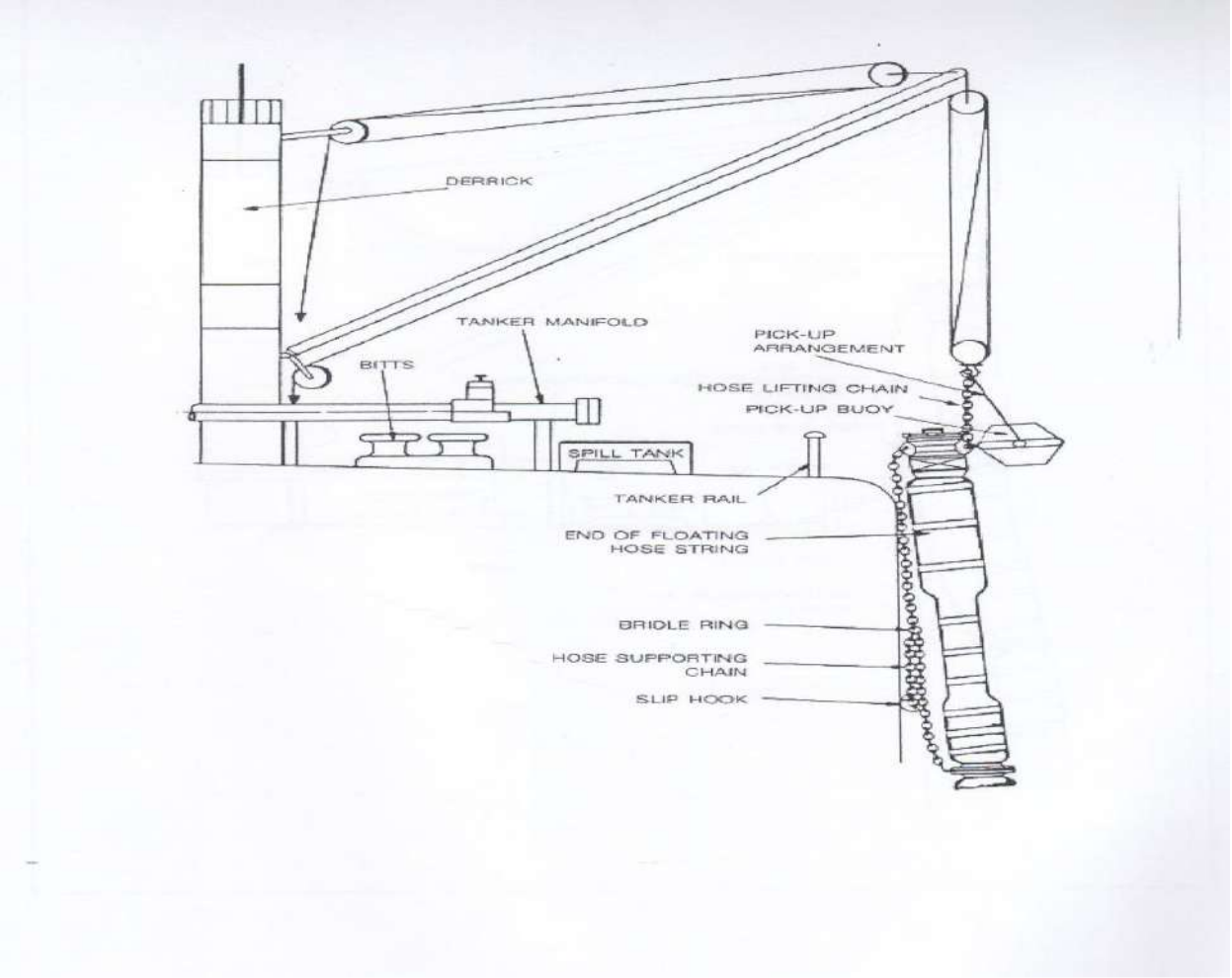
Appendix" F"
SPM (SINGLE POINT MOORING)

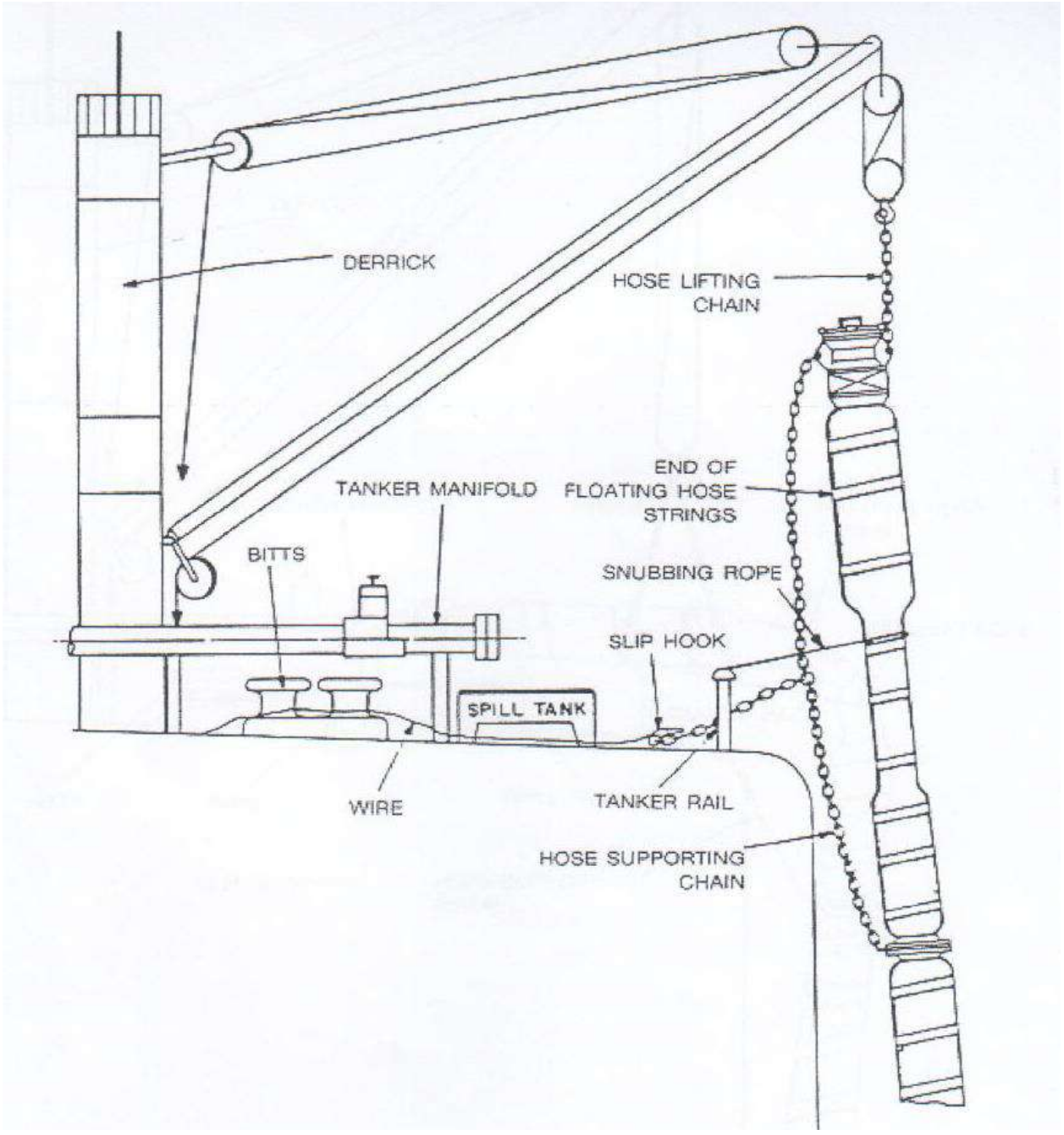
SANTAN SPM

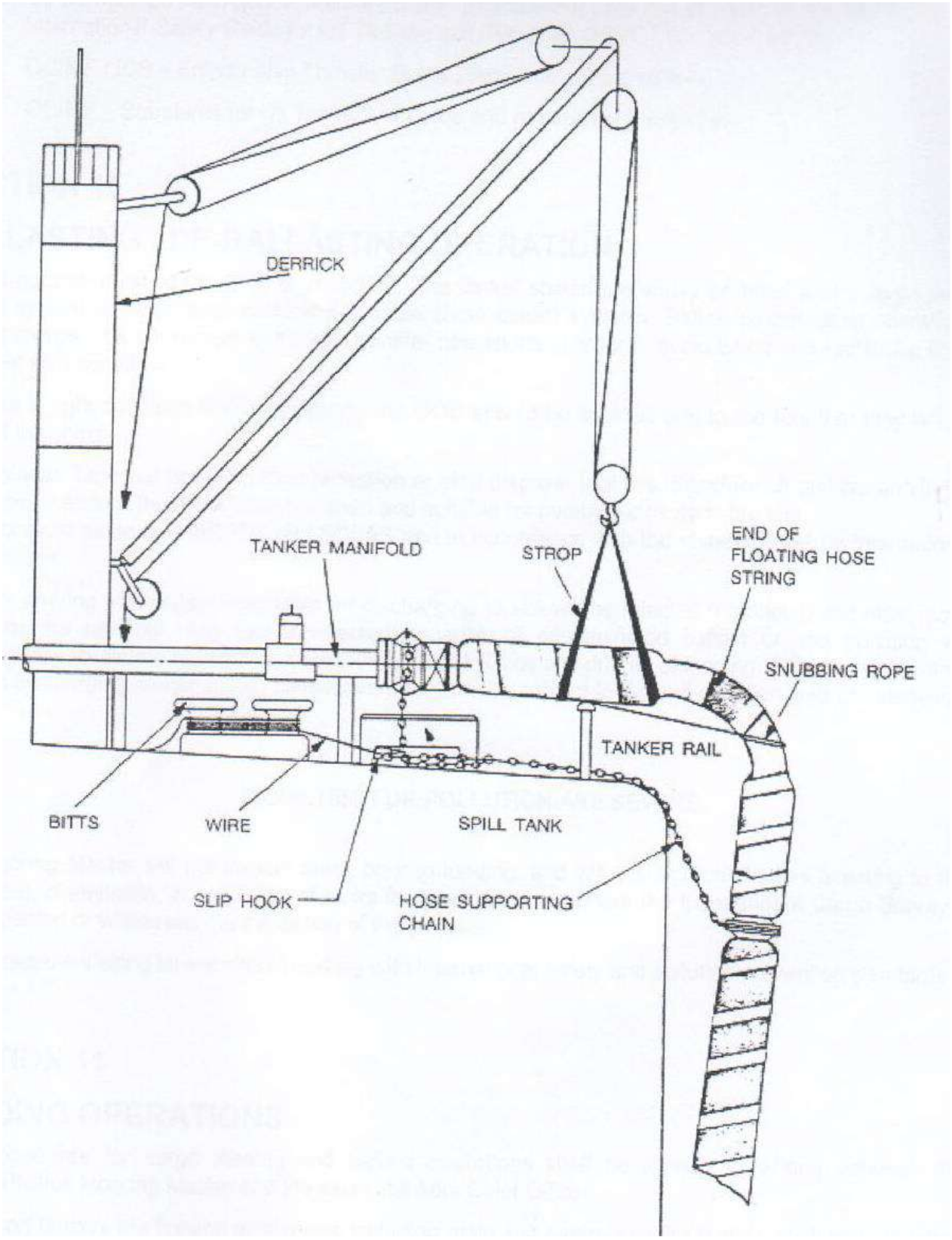


Tanker berthing and Loading at

Appendix" G "
Hose Support Chain and Pick-up Arrangement Santan SPM

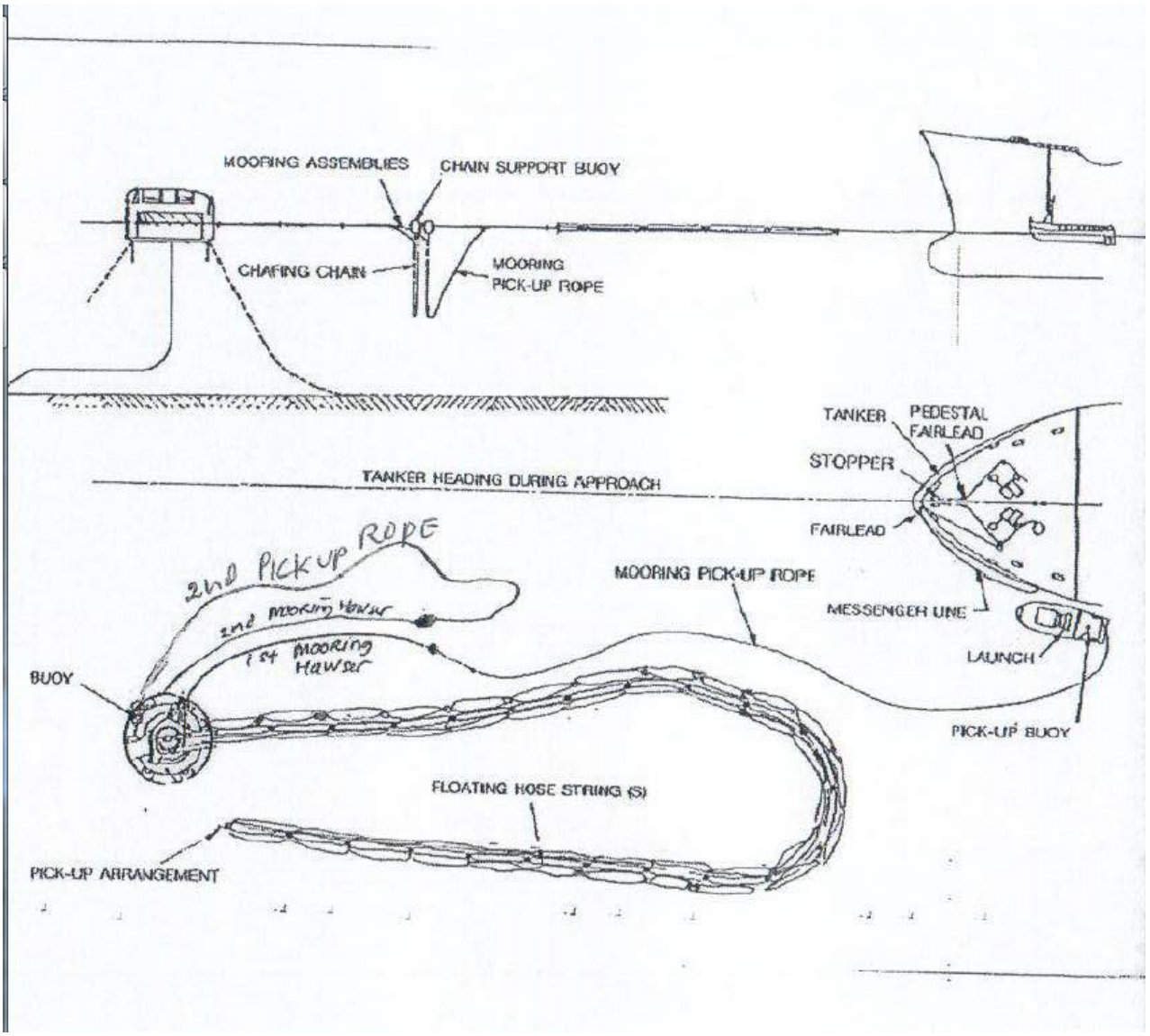


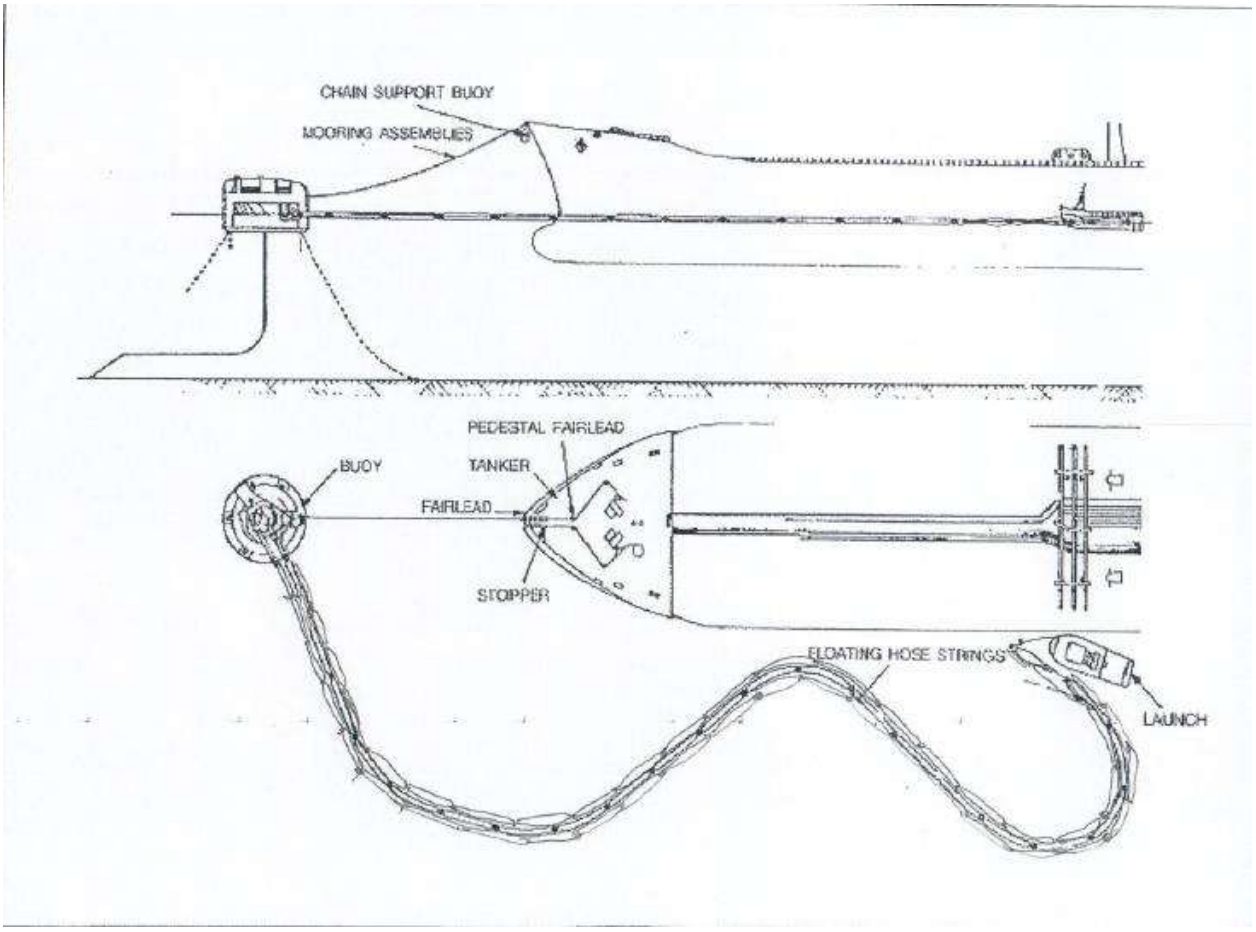

DERRICK
HOSE LIFTING CHAIN
END OF FLOATING HOSE STRINGS
TANKER MANIFOLD
BITTS
SNUBBING ROPE
SLIP HOOK
SPILL TANK
WIRE
TANKER RAIL
HOSE SUPPORTING CHAIN


DERRICK
TANKER MANIFOLD
STROP
END OF
FLOATING HOSE
STRING
SNUBBING ROPE
TANKER RAIL
BITTS
WIRE
SPILL TANK
SLIP HOOK
HOSE SUPPORTING
CHAIN

Appendix ” H ”

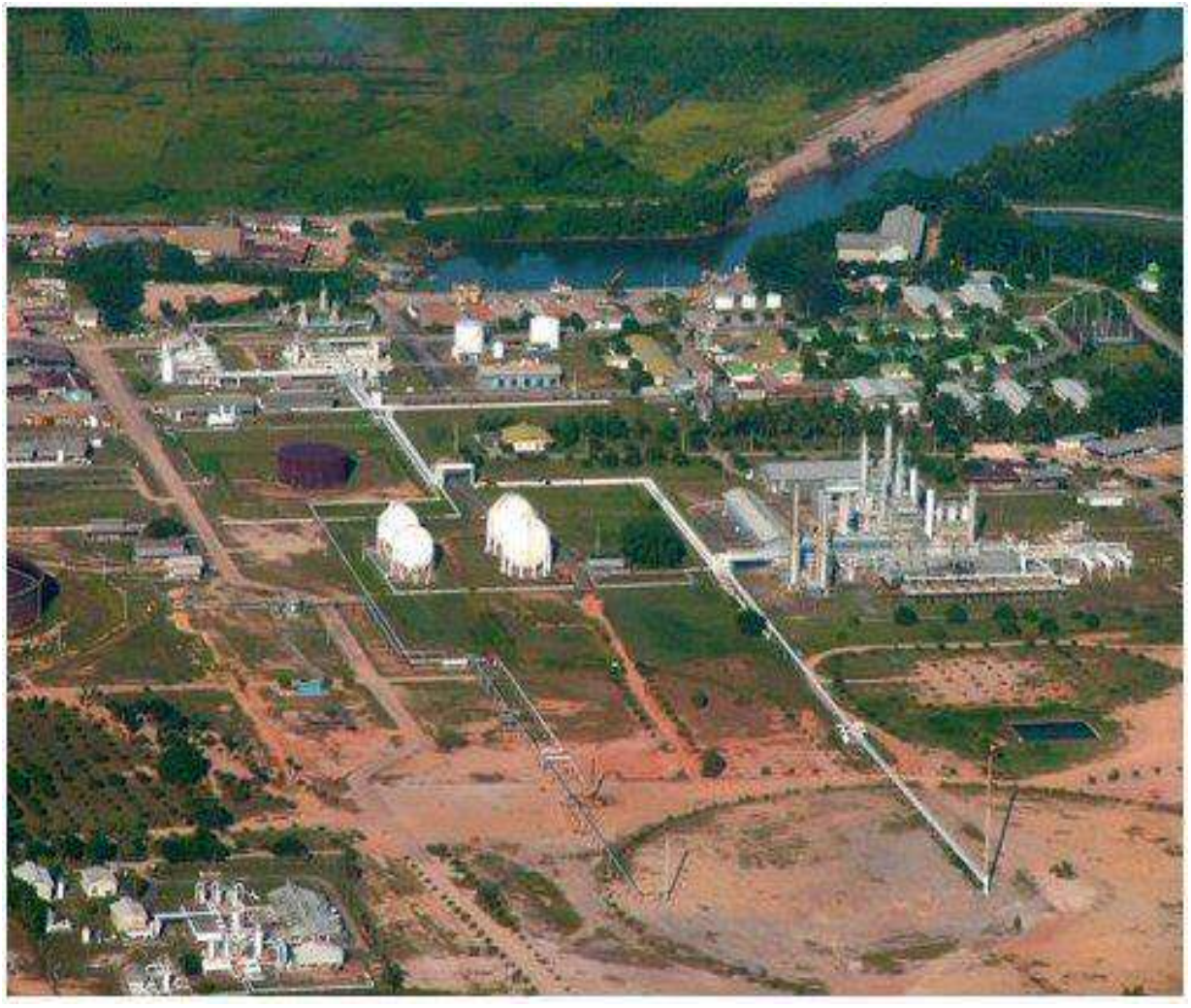
Mooring Arrangement




CHAIN SUPPORT BUOY
MOORING ASSEMBLIES
PEDESTAL FAIRLEAD
BUOY
TANKER
FAIRLEAD
STOPPER
FLOATING HOSE STRINGS
LAUNCH

Appendix ” I ”

Santan Terminal – Aerial View



Appendix "J"

Intertanko's Standard Tanker Chartering Questionnaire 88 (Q88)

INTERTANKO CHARTERING QUESTIONNAIRE 88 - OIL/CHEMICAL		Version 5
1.	GENERAL INFORMATION	
1.1	Date updated:	
1.2	Vessel's name (IMO number):	
1.3	Vessel's previous name(s) and date(s) of change:	
1.4	Date delivered/Builder (where built):	
1.5	Flag/Port of Registry:	
1.6	Call sign/MMSI:	
1.7	Vessel's contact details (satcom/fax/email etc.):	
1.8	Type of vessel (as described in Form A or Form B Q1.11 of the IOPPC):	
1.9	Type of hull:	
Ownership and Operation		
1.10	Registered owner - Full style:	
1.11	Technical operator - Full style:	
1.12	Commercial operator - Full style:	
1.13	Disponent owner - Full style:	
Insurance		
1.14	P & I Club - Full Style:	
1.15	P & I Club pollution liability coverage/expiration date:	
1.16	Hull & Machinery insured by - Full Style: (Specify broker or leading underwriter)	
1.17	Hull & Machinery insured value/expiration date:	
Classification		
1.18	Classification society:	
1.19	Class notation:	
1.20	Is the vessel subject to any conditions of class, class extensions, outstanding memorandums or class recommendations? If yes, give details:	
1.21	If classification society changed, name of previous and date of change:	
1.22	Does the vessel have ice class? If yes, state what level:	
1.23	Date/place of last dry-dock:	
1.24	Date next dry dock due/next annual survey due:	
1.25	Date of last special survey/next special survey due:	
1.26	If ship has Condition Assessment Program (CAP), what is the latest overall rating:	

Dimensions					
1.27	Length overall (LOA):				
1.28	Length between perpendiculars (LBP):				
1.29	Extreme breadth (Beam):				
1.30	Moulded depth:				
1.31	Keel to masthead (KTM)/ Keel to masthead (KTM) in collapsed condition, if applicable:				
1.32	Distance bridge front to center of manifold:				
1.33	Bow to center manifold (BCM)/Stern to center manifold (SCM):				
1.34	Parallel body distances		Lightship	Normal Ballast	Summer Dwt
	Forward to mid-point manifold:				
	Aft to mid-point manifold:				
	Parallel body length:				
Tonnages					
1.35	Net Tonnage:				
1.36	Gross Tonnage/Reduced Gross Tonnage (if applicable):				
1.37	Suez Canal Tonnage - Gross (SCGT)/Net (SCNT):				
.38	Panama Canal Net Tonnage (PCNT):				
Loadline Information					
1.39	Loadline	Freeboard	Draft	Deadweight	Displacement
	Summer:				
	Winter:				
	Tropical:				
	Lightship:				
	Normal Ballast Condition:				
	Segregated Ballast Condition:				
1.40	FWA/TPC at summer draft:				
1.41	Does vessel have multiple SDWT? If yes, please provide all assigned loadlines:				
1.42	Constant (excluding fresh water):				
1.43	What is the company guidelines for Under Keel Clearance (UKC) for this vessel?				
1.44	What is the max height of mast above waterline (air draft)			Full Mast	Collapsed Mast
	Summer deadweight:				
	Normal ballast:				
	Lightship:				

2.	CERTIFICATES	Issued	Last Annual	Last Intermediate	Expires
2.1	Safety Equipment Certificate (SEC):				
2.2	Safety Radio Certificate (SRC):				
2.3	Safety Construction Certificate (SCC):				
2.4	International Loadline Certificate (ILC):				
2.5	International Oil Pollution Prevention Certificate (IOPPC):				
2.6	International Ship Security Certificate (ISSC):				

2.7	Maritime Labour Certificate (MLC):				
2.8	ISM Safety Management Certificate (SMC):				
2.9	Document of Compliance (DOC):				
2.10	USCG Certificate of Compliance(USCGCOC):				
2.11	Civil Liability Convention (CLC) 1992 Certificate:				
2.12	Civil Liability for Bunker Oil Pollution Damage Convention (CLBC) Certificate:				
2.13	Liability for the Removal of Wrecks Certificate (WRC):				
2.14	U.S. Certificate of Financial Responsibility (COFR):				
2.15	Certificate of Class (COC):				
2.16	International Sewage Pollution Prevention Certificate (ISPPC):				
2.17	Certificate of Fitness (COF):				
2.18	International Energy Efficiency Certificate (IEEC):				
2.19	International Air Pollution Prevention Certificate (IAPPC):				
Documentation					
2.20	Owner warrant that vessel is member of ITOPF and will remain so for the entire duration of this voyage/contract:				
2.21	Does vessel have in place a Drug and Alcohol Policy complying with OCIMF guidelines for Control of Drugs and Alcohol Onboard Ship?				
2.22	Is the ITF Special Agreement on board (if applicable)?				
2.23	ITF Blue Card expiry date (if applicable):				

3.	**CREW**		
3.1	Nationality of Master:		
3.2	Number and nationality of Officers:		
3.3	Number and nationality of Crew:		
3.4	What is the common working language onboard:		
3.5	Do officers speak and understand English?		
3.6	If Officers/ratings employed by a manning agency - Full style:		

4.	**FOR USA CALLS**	
4.1	Has the vessel Operator submitted a Vessel Spill Response Plan to the US Coast Guard which has been approved by official USCG letter?	
4.2	Qualified individual (QI) - Full style:	
4.3	Oil Spill Response Organization (OSRO) - Full style:	
4.4	Salvage and Marine Firefighting Services (SMFF) - Full Style:	

5.	**SAFETY/HELICOPTER**	
5.1	Is the vessel operated under a Quality Management System? If Yes, what type of system? (ISO9001 or IMO Resolution A.741(18) as amended):	
5.2	Can the ship comply with the ICS Helicopter Guidelines?	
5.2.1	If Yes, state whether winching or landing area provided:	
5.2.2	If Yes, what is the diameter of the circle provided:	

6.	**COATING/ANODES**				
6.1	Tank Coating	Coated	Type	To What Extent	Anodes

	Cargo tanks:				
	Ballast tanks:				
	Slop tanks:				

7.	BALLAST				
7.1	Pumps	No.	Type	Capacity	At What Head (sg=1.0)
	Ballast Pumps:				
	Ballast Eductors:				

8.	CARGO		
Double Hull Vessels			
8.1	Is vessel fitted with centerline bulkhead in all cargo tanks? If Yes, solid or perforated:		
Cargo Tank Capacities			
8.2	Number of cargo tanks and total cubic capacity (98%):		
8.2.1	Capacity (98%) of each natural segregation with double valve (specify tanks):		
8.2.2	IMO class (Oil/Chemical Ship Type 1, 2 or 3):		
8.3	Number of slop tanks and total cubic capacity (98%):		
8.3.1	Specify segregations which slops tanks belong to and their capacity with double valve:		
8.3.2	Residual/retention oil tank(s) capacity (98%), if applicable:		
SBT Vessels			
8.3.3	What is total SBT capacity and percentage of SDWT vessel can maintain?		
8.3.4	Does vessel meet the requirements of MARPOL Annex I Reg 18.2:		
Cargo Handling and Pumping Systems			
8.4	How many grades/products can vessel load/discharge with double valve segregation:		
8.4.1	State type of cargo containment (integral, independent, gravity or pressure tanks):		
8.5	Are there any cargo tank filling restrictions? If yes, specify number of slack tanks, max s.g., ullag e restrictions etc.:		
8.6	Max loading rate for homogenous cargo	With VECS	Without VECS
	Loaded per manifold connection:		
	Loaded simultaneously through all manifolds:		
Cargo Control Room			
8.7	Is ship fitted with a Cargo Control Room (CCR)?		
8.8	Can tank innage/ullage be read from the CCR?		
Gauging and Sampling			
8.9	Is gauging system certified and calibrated? If no, specify which ones are not calibrated:		
	What type of gauging system as per IBC 13.1 is fitted (Open/Restricted/Closed)?		
	What type of fixed closed tank gauging system is fitted:		

	Is a tank overflow control system fitted? If yes, then state if system includes automatic closing of Valves ?				
	Are high level alarms fitted to the cargo tanks? If Yes, indicate whether to all tanks or partial:				
8.9.1	Can cargo be transferred under closed loading conditions in accordance with ISGOTT 11.1.6.6?				
8.9.2	Are cargo tanks fitted with multipoint gauging? If yes, specify type and locations:				
8.10	Number of portable gauging units (example- MMC) on board:				
Vapor Emission Control System (VECS)					
8.11	Is a vapour return system (VRS) fitted?				
8.12	Number/size of VECS manifolds (per side):				
8.13	Number/size/type of VECS reducers:				
Venting					
8.14	State what type of venting system is fitted:				
Cargo Manifolds and Reducers					
8.15	Total number/size of cargo manifold connections on each side:				
8.15.1	Does the vessel have a Common Line Manifold connection? If yes, describe:				
8.16	What type of valves are fitted at manifold:				
8.17	What is the material/rating of the manifold:				
8.17.1	Does vessel comply with the latest edition of the OCIMF 'Recommendations for Oil Tanker Manifolds and Associated Equipment'?				
8.18	Distance between cargo manifold centers:				
8.19	Distance ships rail to manifold:				
8.20	Distance manifold to ships side:				
8.21	Top of rail to center of manifold:				
8.22	Distance main deck to center of manifold:				
8.23	Spill tank grating to center of manifold:				
8.24	Manifold height above the waterline in normal ballast/at SDWT condition:				
8.25	Number/size/type of reducers:				
8.26	Is vessel fitted with a stern manifold? If yes, state size:				
Heating					
8.27	Cargo/slop tanks fitted with a cargo heating system?		Type	Coiled	Material
	Cargo Tanks:				
	Slop Tanks:				
8.27.1	Is a Thermal Oil Heating system fitted? If yes, identify tanks?				
8.28	Maximum temperature cargo can be loaded/maintained:				
8.28.1	Minimum temperature cargo can be loaded/maintained:				
Inert Gas and Crude Oil Washing					
8.29	Is an Inert Gas System (IGS) fitted/operational?				
8.29.1	Is a Crude Oil Washing (COW) installation fitted/operational?				
8.30	Is IGS supplied by flue gas, inert gas (IG) generator and/or nitrogen:				
8.30.1	If nitrogen generator, specify the applicable flow rate for each of the designed purity modes:				
Cargo Pumps					
8.31	How many cargo pumps can be run simultaneously at full capacity:				
8.32	Pumps	No.	Type	Capacity	At What Head (sg=1.0)
	Cargo Pumps: Cargo Eductors:				
	Stripping:				

8.33	Is at least one emergency portable cargo pump provided?					
Tank Cleaning Systems						
8.34	Is tank cleaning equipment fixed in cargo tanks?					
8.35	Is portable tank cleaning equipment provided?					
8.36	Tank washing pump capacity:					
8.37	Is a washing water heater fitted? If yes is it operational and state max washing water temperature:					
8.38	What is the maximum number of machines that can be operated at their designed max pressure?					
Other Deck Equipment						
8.39	Is vessel fitted with a remote cargo tank temperature monitoring system. If yes, is it operational?					
8.40	Is vessel fitted with a remote cargo tank pressure monitoring system. If yes, is it operational?					
8.41	Is vessel fitted with a cargo tank drier. If yes is it operational and state capacity:					
8.42	Is vessel fitted with a cargo cooling system. If yes is it operational and state tanks applicable:					
8.43	Is steam available on deck?					
9.	**MOORING**					
9.1	Wires (on drums)	No.	Diameter	Material	Length	Breaking Strength
	Forecastle:					
	Main deck fwd:					
	Main deck aft:					
	Poop deck:					
9.2	Wire tails	No.	Diameter	Material	Length	Breaking Strength
	Forecastle:					
	Main deck fwd:					
	Main deck aft:					
	Poop deck:					
9.3	Ropes (on drums)	No.	Diameter	Material	Length	Breaking Strength
	Forecastle:					
	Main deck fwd:					
	Main deck aft:					
	Poop deck:					
9.4	Other lines					
	Forecastle:					
	Main deck fwd:					
	Main deck aft:					
	Poop deck:					
9.5	Winches	No.	No. Drums	Motive Power	Brake Capacity	Type of Brake
	Forecastle:					
	Main deck fwd:					
	Main deck aft:					
	Poop deck:					

9.6	Bitts, closed chocks/fairleads	No. Bitts	SWL Bitts	No. Closed Chocks	SWL Closed Chocks
	Forecastle:				
	Main deck fwd:				

	Main deck aft:				
	Poop deck:				
Anchors/Emergency Towing System					
9.7	Number of shackles on port/starboard cable:				
9.8	Type/SWL of Emergency Towing system forward:				
9.9	Type/SWL of Emergency Towing system aft:				
9.10.1	What is size of closed chock and/or fairleads of enclosed type on stern				
Escort Tug					
9.10.2	What is SWL of closed chock and/or fairleads of enclosed type on stern:				
9.11	What is SWL of bollard on poop deck suitable for escort tug:				
Lifting Equipment/Gangway					
9.12	Derrick/Crane description (Number, SWL and location):				
9.13	Accommodation ladder direction:				
	Does vessel have a portable gangway? If yes, state length:				
Single Point Mooring (SPM) Equipment					
9.14	Does the vessel meet the recommendations in the latest edition of OCIMF 'Recommendations for Equipment Employed in the Bow Mooring of Conventional Tankers at Single Point Moorings (SPM)':?				
9.15	If fitted, how many chain stoppers:				
9.16	State type/SWL of chain stopper(s):				
9.17	What is the maximum size chain diameter the bow stopper(s) can handle:				
9.18	Distance between the bow fairlead and chain stopper/bracket:				
9.19	Is bow chock and/or fairlead of enclosed type of OCIMF recommended size (600mm x 450mm)? If not, give details of size:				
10.	**PROPULSION**				
10.1	Speed			Maximum	Economical
	Ballast speed:				
	Laden speed:				
10.2	What type of fuel is used for main propulsion/generating plant:				
10.3	Type/Capacity of bunker tanks:				
10.4	Is vessel fitted with fixed or controllable pitch propeller(s):				
10.5	Engines		No	Capacity	Make/Type
	Main engine:				
	Aux engine:				
	Power packs:				
	Boilers:				
Bow/Stern Thruster					
10.6	What is brake horse power of bow thruster (if fitted):				
10.7	What is brake horse power of stern thruster (if fitted):				

Emissions		
10.8	Main engine IMO NOx emission standard:	
10.9	Energy Efficiency Design Index (EEDI) rating number:	

11.	SHIP TO SHIP TRANSFER	
11.1	Does vessel comply with recommendations contained in OCIMF/ICS Ship To Ship Transfer Guide (Petroleum, Chemicals or Liquified Gas, as applicable)?	
11.2	What is maximum outreach of cranes/derricks outboard of the ship's side:	
11.3	Date/place of last STS operation:	

12.	RECENT OPERATIONAL HISTORY	
12.1	Last three cargoes/charterers/voyages (Last/2nd Last/3rd Last):	
12.2	Has vessel been involved in a pollution, grounding, serious casualty, unscheduled repair or collision incident during the past 12 months? If yes, provide details:	
12.3	Date and place of last Port State Control inspection:	
12.4	Any outstanding deficiencies as reported by any Port State Control? If yes, provide details:	
12.5	Recent Oil company inspections/screenings (To the best of owners knowledge and without guarantee of acceptance for future business)*: * *"Approvals" are not given by Oil Majors and ships are accepted for the voyage on a case by case basis.*	
12.6	Date/Place of last SIRE inspection:	
12.6.1	Date/Place of last CDI inspection:	
12.7	Additional information relating to features of the ship or operational characteristics:	