DEER PARK REFINING LP

MARINE TERMINAL GUIDE

Version 2023

Issued by: DEER PARK REFINING LP (DPRLP)

This guide is issued to serve as the main guide in the conduct of tanker receiving operations at the Terminal. All personnel are required to comply with the instructions contained within.

DOCUMENT CONTROL PAGE

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TABLE OF CONTENTS

Part III: Terminal Regulations

1. Applicability
2. Roles and Responsibilities
3. Conditions of Vessel Acceptance
4. Readiness to Load or Discharge
5. Pre-Arrival Checklist
6. Vessel Information
7. Minimum Number of Crew
8. Watch Schedule
9. Personnel Requirements
10. Protective Clothing and Equipment
11. Unauthorized or Intoxicated Persons
12. Craft Alongside
13. Entry into Enclosed Spaces
14. State of Readiness
15. Maintenance and Repair Work
16. Weather Conditions
17. Garbage
18. Mooring
19. Access to the Vessel
20. Firefighting Equipment
21. Cargo Pump rooms
22. Accommodation Doors and Ports
23. Accommodation Ventilation and Air Conditioning
24. Smoking
25. Prevention of Sparking and Excessive Smoke from Stacks
26. Sources of Ignition
27. Portable Electrical Equipment
28. Main Transmitting Aerials
29. Use of VHF and Satcom While Alongside
30. Flame Screens/Deck Openings
31. Scuppers/Drains
32. Discharge Containment/Drip Pans
33. Tank Barge Gauge Points
34. Insulation Means between Ship and Shore
35. Transfer Manifold and Connections
36. Pre-Transfer Conference
37. Pre- Transfer Safety Checks and Declaration
38. Safety Data Sheet (SDS)
39. Benzene DOI Addendum
40. Vapor Control Operations DOI Addendum
41. Communications
42. Cargo Transfer Rates
43. Checks on Quantities Transferred
44. Maximum Cargo Tank Filling Level
45. Tank Cleaning
46. Crude Oil Washing
47. Handling Static Accumulation Cargoes
48. Barges with a Single Load/Discharge Line

49. Jet Loading Procedures
50. Tandem Barge Operations
51. Vapor Control Operations
52. Inert Gas Operations
53. Benzene
54. Hydrogen Sulfide
55. Life Saving Rules

Appendix 1: Pre-arrival checklist & Marine Vapor Recovery Checklist
Appendix 2: Advance Notification Form for Waste Delivery to Port Reception Facilities and Standard Format following Ship's Use of a Port Reception Facility
Appendix 3: Alongside Service Fees
Appendix 4: Mooring Diagrams

PART 1- EMERGENCY PROCEDURES AND CONTACTS

EMERGENCY CONTACTS

Any vessel navigating within the US exclusive economic zone on charter to P.M.I. Services North America, Inc. is required to give prompt notice of:

Personnel injury, Ship, tug, or barge grounding, Cargo release, Contamination or loss of cargo, Collision, fire, or explosion, Breach of hull, including openings to voids, ballast tanks or double hulls, Damage to any terminal, Situations with the potential to become more serious, and Any requests for assistance.

Notification should be made to the P.M.I. Services North America, Inc. Shipping Incidents Hotline 24-hour Number on:

+1 (832) 955 - 8906

TERMINAL EMERGENCY CONTACTS

In addition to the above, the following local emergency contact should be advised of an incident that occurs while alongside or in the approaches to the DPRLP terminal:

Primary Contact: DPRLP CARGO INSPECTOR +1 (713) 246 - 6253

Secondary Contact: VHF Channel 16 or via Shore Radio

EMERGENCY SIGNALS

INCIDENT ALARM (TERMINAL)

- **Site Wide Emergency Alarm – one high/low blast, 15 seconds long**
- **Site Wide All Clear Signal – 3 blasts, 5 seconds each.**

Horn signals and Emergency Communication System are tested every Monday at noon

VESSEL EMERGENCY (or reported from Vessel)

- **By Verbal advice over the radio**
- **Tank ships - at least six blasts on the ship's whistle, each of not less than ten seconds duration, supplemented by a continuous sounding of the general alarm system.**

BARGE EMERGENCY

- **Contact Dock via radio. Visual and Verbal signaling as appropriate**

TERMINAL EMERGENCY PROCEDURES

Terminal Personnel will refer to the Facility Integrated Contingency Plan.

In the case of an emergency, transfer operations are to cease immediately with all equipment secured as appropriate. Necessary notifications by terminal and vessel personnel are to be made, with the vessel following its Vessel Response Plan.

In all cases, ensure Personnel Safety is the first priority.

Brief reference of emergency response details:

Oil/Chemical/LHG Spills & leakages

- **Suspend transfer operations, close all valves, and eliminate the source of the spill.**
- **Drain lines and loading arms into containment systems. Stop any spill to water.**
- **Make appropriate notifications.**
- **Employ the Facility Spill Response Plan.**

Fire and/or Explosion

- **Terminate transfer operations, close all valves, and raise the alarm by two-way radio.**
- **Eliminate the source of the fire if possible.**
- **Make appropriate notifications.**

Personnel Injury

- **Notify the dock PIC and suspend transfer operations.**
- **If safe to do so, move the injured party to a safe location.**
- **Organize medical assistance.**
- **Make appropriate notifications.**

Severe Weather

- **Terminate transfer operations**
- **Refer to Part 2, Section 11 of this Guide.**

Security Threat

- **Terminate transfer operations and raise the alarm by two-way radio.**
- **Follow the Facility/Vessel Security Plan and make appropriate notifications.**

PART 2 – TERMINAL INFORMATION

GENERAL INFORMATION

1. DESCRIPTION OF TERMINAL

Deer Park Refining LP Marine Terminal is sited approximately 48.8 NM from the Sea Buoy on the Houston Ship Channel (Crude Dock) and within a slip (Product Docks) extending off the main channel. The coordinates of the terminal are Latitude: 29 deg 43.84 min and Longitude: 95 degrees 08 min.

The Facility slip is 2600 feet (length) by 630 feet (width). The distance between dock mooring clusters on the southern side of the slip and barge mooring clusters on the northern side of the slip is 440 feet.

The facility consists of 5 docks:

1. West Dock
2. Center Dock
3. East Dock
4. Barge Dock
5. Crude Dock

The Crude Dock is located outside of the slip on the Houston Ship Channel approximately 1000 feet east of the East Dock.

Transfers at West, Center, East and Barge Dock are conducted with hoses.

Transfers at the Crude Dock are conducted with Marine Loading Arms (16” MLAs with 12” QCDC devices).

Maximum number of tank barges at West, Center, and East Dock is four barges each (2-2 barges in tandem).

Maximum number of barges at Barge Dock is one.

Maximum number of Tank Ships is one per Dock at West, Center, and East & Crude Dock. No ships can be accommodated at the Barge Dock.

2. ANCHORAGES AND WAITING AREAS

The North part of the slip (also referred to as the Mud Bank) is no longer available for attending tugs to standby while their attended barges are conducting cargo operations alongside the terminal due to the width of the slip and other inbound / outbound vessel traffic.

Barges waiting to load or discharge at Deer Park Refining LP may tie up to the old Coker Dock on the Houston Ship Channel, once given permission by the Facility Cargo Inspector (713-246-6253).

Tugs may not tie up to any dock or mooring point that is damaged or not fit for service.

3. COMMUNICATIONS PRIOR TO ARRIVAL

- **Ships**
  - Vessel estimated time of arrival (ETA) shall be coordinated via the vessel Shipping Agent and the Deer Park Refining LP Marine Scheduler.
  - Terminal requires advance ETA notices at 72, 48, 24 and 12 hours prior to tank ship/barge arrival
  - A fully completed current version of the pre-arrival questionnaire (included in this guide) is required by the terminal prior to the vessel's arrival at the terminal.
  - Vapor Recovery information (Certificate of Tightness, tank ship/barge vapor manifold size, ship/barge safety valve setting both high and low, ship/barge manifold pressure drop at vessel maximum transfer rate, type of ship/barge overfill protection, **Confirmation that vessel will enter with less than 300 mm wg (0.4 psi) pressure in tanks and not vent alongside the terminal.)**
  - Notification should be made for Tendering of the NOR as well as dropping tender:

    SDPR-Marine-Movements@deerparkrefinery.com

    Jon-Eric.Gonzalez@deerparkrefinery.com, Brian.McLarnon@pmicim.com
- **Barges**
  - Upon tendering NOR, barges should notify the Facility Cargo Inspector by phone (713-246-6253) **AND** by email to SDPR-Marine@deerparkrefinery.com

4. PILOTAGE

Pilotage through the Houston Ship Channel and in the Deer Park Refining LP slip is required.

Pilotage is coordinated through the vessel Shipping Agent.

Comprehensive Pilotage information is available at Houston Pilots website (**www.houstonpilots.com**), Tel: +1 (713) 645 9620, VHF Channels 14, 74, 16.

Complete information on Pilotage should be sought from the sources above. The following is given for informational purposes –

The Houston Ship (main) Channel is maintained at a depth of 45 ft. up to the Facility berths, with a width of 530 feet. Further depths of 12 feet are maintained for barge traffic for a width of 235 ft. on either side of the main channel.

Vessels transit under the Fred Hartman or Baytown Bridge which is 175 Ft above MHW. Vessels also transit under Electrical power lines which are 197 Ft. above MHW. A minimum clearance of 10 feet should be maintained for these.

Vessels should report to and monitor Houston VTS (Vessel Traffic System) during transits.

Berthing speed of vessels at the berths should be not more than .28 fps at 6-degree approach angle.

5. TUGS

A minimum of 2 tugs are required for ships docking and undocking at the facility unless more are required as specified below.

There are numerous tugs available in the Port of Houston. The primary types are as follows:

Tug Type	HP
Twin Z-Drives	4000 – 6300
Twin Screw	3900
Single Screw	1700 – 2850

The following guidelines have been developed to determine adequate tug assistance for docking and undocking in the Port of Houston. Similar docks have been grouped and coupled with vessel size and draft information. Assist tugs are then designated by the circumstances of the docking or undocking maneuver. Tugs are categorized by “bollard pull” as provided by area operators. Bollard pull is used rather than horsepower to rate tugs effectiveness. Additionally, the tug’s design type, tractor or conventional has a definite bearing on effectiveness and desirability.

Tug Thruster Horsepower: Minimum Requirements

Vessel LOA	Thruster Horsepower
More than 900 Ft	2500
751’ – 900’	2000
551’ – 750’	980
501’ – 550’	730
451 – 550’	565
350’ – 450’	400 Less
than 350’	200

ZTech tugs can substitute for any class

T can substitute for S, M, or L

L can substitute for S or M

M can substitute for S except arrivals less than 30’

Vessels with a beam greater than 145’ and over 35’ in draft must have a minimum of 3 (L) tugs.

Tug Class Rating: Minimum Bollard Pull (in Lbs.)

Class	Ahead	Astern
S (Small, Compact)	35,000	20,000
M (Medium, Diamond Class)	60,000	45,000
L (Large, Twin Screws)	85,000	55,000
T (Tractor)	100,000	90,000
Z (ZTech)	160,000	150,000

Ships

Vessel Size	Draft	Arrival	Departure	Notes
<400’	Any	S	S	No Thruster substitute
<500’	<30’	SS	SS	
<500’	≥30’	MS	SS	
<550’	<30’		S	Head out sailing. No thruster substitute
501’-650’	<30’	LM	LM	
501’-650’	≥30’	LL	LM	
>650’	<30’	LL	LM	
>650’	≥30’	LL	LM	
Widebody	<34’	LL	LL	
Widebody	≥34’	LLL/TL	LL	
Widebody	≥40	ZT/TT	TT/TL	
Widebody Crude Dock	<34’	LL	LL	No thruster substitute
Widebody Crude Dock	≥34’	LL	LL	No thruster substitute
Widebody Crude Dock	≥40’	ZT/TT	TT/TL	No thruster substitute

Oceangoing Tug Barge Units

Vessel Size	Draft	Arrival	Departure	Notes
<400’	<20’	S	S	
<400’	≥20’	M	S	
401’ – 600’	<20’	L	M	
401’ – 600’	≥20’	L	L	
>600’	<20’	L	L	
>600’	≥20	L	L	
*Note: This matrix does not apply to oceangoing tug barge units going to Facility crude dock.				

Any vessel specific concerns should be discussed with the Houston Pilots as the ultimate decision falls to the pilot. Ships and the waters in which they operate represent a dynamic, ever-changing environment. Firm rules addressing every possible scenario are not possible. The individual pilot

on board is best situated to evaluate the specific docking and/or undocking evolution contemplated by the vessel and the prevailing weather, current, and traffic situation affecting the vessel. These guidelines are recommendations only. It is recognized that the on-scene discretion of the pilot and master should not be hindered. The following guidelines regarding tug assistance for docking and undocking are in no way intended to limit, hinder, or override the on-scene discretion of the pilot. We realize that there will be situations where actions that conflict with these recommendations may be necessary to address specific situations or special circumstances that confront a specific vessel. Further, it is recognized that the vessel, tug design, and terminal configuration may change requiring a departure from the current tug assistance for docking and undocking guidelines

A tugboat dock is also provided for tugs on standby for barge tows. The tug dock is located at the far west end of the Facility slip.

Tugboat Pilot, or designate, must monitor Marine Traffic Channel 16 at all times while conducting business in the Facility slip.

DPRLP requirements for tugs, to be engaged for all berthing and un-berthing operations, are in line with those recommended by Houston Pilots. Use of tugs is coordinated through the vessel's Shipping Agent. Tug requirement matrix is provided above

6. TERMINAL MANNING

The Deer Park Refining LP Docks facility operates 24 hours a day, seven days a week.

Shift change by Dock PIC is between 0500 to 0530 and 1700 to 1730 hrs.

Deer Park Refining LP requires a minimum of one PIC for each dock during cargo transfer operations. Deer Park Refining LP requires one licensed (PIC) for each vessel.

7. CARGO TRANSFER FACILITIES

Dock Name	Flange Size	Vapor Flange Size	Rate barrels/hour		Maximum Allowable Working Pressure	Products Handled
			Loading	Discharge		
Crude Dock	12" MLA	NA	5,000	40,000 bbls/hour	125psig	Crude
Barge Dock	6", 8" Hoses	4" Spent Caustic 6" Phenol	5,000	Varies	Varies	Oil Products & Chemicals
East Dock	6" - 8" Hoses	8" Hose	10,146	Varies	Varies	Crude, Oil Products & Chemicals, LHG
Center Dock	6" - 8" Hoses	8" Hose	10,146	Varies	Varies	Oil Products & Chemicals
West Dock	6" - 8" Hoses	8" Hose	10,146	Varies	Varies	Oil Products & Chemicals, LHG

MLA Clearing at Crude Dock - Since Deer Park Refining LP takes crude cargoes that have high H2S content, a process of clearing the Crude Arms and lines on the crude dock is in place. This

process requires the vessel to connect a 2” water hose to each loading arm, just outside the manifold. On completion of Discharge, these lines are used to flush and clear the loading arms of any crude residual. The procedure will be discussed with the vessel during the Pre-Transfer Conference.

Note Above line clearing is also applicable at the East Dock, after Crude discharge, where hoses instead of Loading Arms are used.

8. ARRANGEMENTS FOR EMERGENCY SHUTDOWN

During the Pre-Transfer Conference, a plan for emergency shutdown shall be developed.

There may be times during an Emergency (Fire, Gas Release, Severe Weather) that a ship or barge will request to sail from the dock to ensure the safety of the ship or barge and the vessel’s personnel. During such an event, Facility Dock Operations shall follow local procedure EP-004 which may include the following measures:

1. Stop all transfer of product.
2. Block in all valves, shore, and vessel.
3. Have vessel close all Dome & Ullage hatches.
4. Facility Dock Operations shall notify the affected Unit, describe Emergency measures being taken.
5. Notify the Cargo Inspector that the Vessel requests Emergency Sailing.
6. Have the vessel open a tank so we can drain the product transfer hose to it.
7. Raise hose so that product is drained back to the vessel’s tank.
8. After draining the hose to the vessel rig the hose close to the vessel header for support.
9. Disconnect the hose from the vessel header.
10. Install a blind to the end of the product hose.
11. Raise the hose to a vertical position above the Dock Header.
12. Remove the gangway from the vessel.

9. MAXIMUM AND MINIMUM VESSEL CRITERIA

The Deer Park Refining LP Terminal can accommodate tankers up to 120,000 M/T displacement with maximum drafts as below. The total number of tankers docked at any one time at Deer Park is four (4).

The following guidelines shall be used to manage ship traffic inside the Deer Park Refining LP slip:

Dock Name	Min. Depth Alongside	Max. Acceptable Draft	Max. Vessel Length	Max. Beam	Maximum Displacement	Max. Freeboard	Min. PBL	Notes
Crude Dock	47 ft.	45 ft. FW	900 ft.	145 ft.	120k M/T	50 ft.	200 Ft	1,3
East Dock	40 ft.	39 ft. FW	820 ft.	140 ft.	96k M/T	50 ft.	N/A	1,2,3,6, 8
Center Dock	40 ft.	39 ft. FW	800 ft.	106 ft.	51k M/T	40 ft.	150 Ft	1,2,3,4,5,6, 8
West Dock	40 ft.	39 ft. FW	700 ft. Max SCM 145 Ft	106 ft.	96k M/T	50 ft.	N/A	1,2,3,6, 8
Barge Dock	15 ft.	14 ft. FW					N/A	1,6,7

Notes to Vessel Criteria:

1) Minimum depths alongside and Maximum acceptable draft figures are subject to ongoing evaluation and may be affected by seasonal variations and status of maintenance dredging/siltation. Updates and temporary changes to the above data are communicated directly to vessel agents, when applicable, via DPRLP Marine Scheduler. **Latest data regarding available water depth and maximum drafts must only be verified from** DPRLP Marine Scheduler**. Vessels must maintain a minimum Under Keel Clearance of 1 foot at all other docks, at all times.** Dock limitations are based on prevailing southerly winds and are subject to re-evaluation by Pilots and vessel Master pending local conditions. A winter seasonal reduction of up to 2ft may be applicable to water depth & draft values between December and April.
2) The combined beam of ships passing, and vessels moored at the East Dock should not exceed 245 ft.
3) A minimum of two tugboats are required for all ships docking and sailing. Tugboat size requirements are as defined in tugboat matrix item 5.
4) Maximum allowable ***freeboard*** at the Docks is based on the length of the shore gangways. *(Freeboard is the distance measured between the water and the deck of the ship).*
5) When ships are berthed at both East Dock and West Dock, and have dimensions approaching the maximum allowed limits, the Center Dock may be limited to only barge traffic.
6) There shall be a minimum of one tug per barge tow on standby within DPRLP slip.
7) The barge connecting header at the barge dock shall not be more than 30 ft. from end of barge (this distance is considered safe and within environmental concerns).
8) Minimum distance between moored Ships should be NOT LESS THAN 50 FEET unless approved by the Pilot and the Master. Stern to Center of Manifold for the West Dock is measured from the center of the dock to the West (320 ft.). The stern of moored vessels must be kept clear of shallower water at the end of the slip.

10. TIDES AND CURRENTS

The position/location of the Deer Park docks as well as the specifics of the Houston Ship Channel means that currents in the dock area are nominal and should never be more than 0.2 knots in the general direction of the channel. It should be noted that a slightly higher current could be experienced following heavy storms and excessive rain. In that case, the Pilots will be able to advise the Master.

11. CLIMATIC CONDITIONS AND ABNORMAL WEATHER

Deer Park Refining LP Docks have Operating Procedures in place to address hurricane situations, as well as, sailing a vessel during an emergency. Provisions should be made for making sure all loose objects are picked up, secured, or stored away. This will minimize the danger of injury to personnel, and damage to buildings and equipment.

Measures should be taken to lessen the possibility of environmental incidents.

- The Marine Scheduler will make every effort to avoid having vessels at berth in the Facility Slip.
- Loading operations involving vessels at the dock will be expedited to obtain a seaworthy draft. Where it is apparent that an unloading vessel will not sail before severe storm conditions occur, sufficient cargo and or ballast must be aboard to provide adequate stability.
- Communications will be prearranged between vessels and shore personnel to maintain two-way communication throughout the storm.
- Vessels to be loaded that have not started loading operations must be adequately ballasted.

Storm Preparedness Planning for Oceangoing Vessels "Remaining in Port Checklist"

Under normal circumstances no vessel or barge will be permitted to remain alongside any DPRLP berths.

In the event an oceangoing vessel must remain moored alongside Facility Docks (hurricanes, in climate weather, etc.), the person in charge of the vessel must submit in writing a mooring plan for approval by the USCG Captain of the Port of Houston as prescribed by relevant MSIB published on USCG Homeport webpage.

Note: No vessel (ship or barge) shall be allowed to be moored at Center Dock during impending hurricane weather.

Vessels remaining in port must have their decks clear of "missile" hazards, potential pollution hazards, and flammable materials. All persons in charge must ensure that hatches are secured for heavy weather. The following information must be included in the mooring plan submission.

Vessel information:

1. Name, call sign, and official number of vessel.
2. Nationality of vessel
3. Name of Master
4. Name, address, and phone number of agent, charterer or operator, and owner.
5. Reason why the vessel is not leaving the port.
6. Provide a full stowage plan and manifest to determine the particular cargo and pollution hazards.
7. Name of berth and location.
8. Depth of water in the vessel's berth at mean low water.

Storm Preparedness Planning for Oceangoing Barges with Tugs "Remaining in Port Checklist"

The person in charge of the barge and assist tug(s) must submit in writing a mooring plan for approval by the USCG Captain of the Port of Houston as prescribed by relevant PSIB published on USCG Homeport webpage.

Tugs and barges remaining in port must have their decks clear of "missile" hazards, potential pollution hazards, and flammable materials. All persons in charge must ensure that hatches are secured for heavy weather. The following information must be included in the mooring plan submission.

Vessel information particular to tug/barge units:

1. Name, call sign, and official number of tug and barge(s).
2. Nationality of the tug and barge(s).
3. Name of the Master of the tug.
4. Name, address, and phone number of the owner/operator, charterer, and/or agent.
5. Reason why the tug and barge are remaining in port.
6. Provide a full stowage plan and manifest to determine particular cargo and pollution hazards.
7. Name of berth location
8. Describe how the vessel will be secured to the berth. Submit a diagram showing the mooring arrangements with the size, length, and lead of mooring lines or wire.

Still Air Conditions

With little or no wind, tank vessel loading operations of volatile oil products and certain hazardous materials without Vapor Control or Inert Gas Operations may cause cargo vapors to accumulate either on deck or ashore. If these conditions exist, the loading of cargo tanks (or any ballasting of non-gas free cargo tanks) should be discontinued.

Electrical Storms

Loading/discharging of cargo, bunkers as well as ballasting of non-gas free cargo tanks will be halted or not commenced in anticipation of approaching electrical storms, regardless of whether or not an Inert Gas System and/or Vapor Control system is fitted and in use. All tank openings, tank venting system (including inert gas mast riser isolating valve), cargo line, and manifold valves must be closed.

Windstorms

During windstorms, product transfer operations will be halted at sustained winds of 20 mph and hoses/loading arms shall be disconnected at sustained winds of 30 mph.

Note: Sustained winds are of one or more hours in duration.

12. AVAILABLILITY OF RECEPCTION FACILITIES

FACILITIES FOR RECEPTION OF CONTAMINATED BALLAST, CARGO SLOPS, AND ENGINEROOM OILY WASTES (MARPOL I)

DPRLP has a list of approved APHIS contractors and Slop Reception barge companies that have been approved for entering, collecting, and disposing of garbage and/or Slops from vessels berthed at DPRLP.

Vessels /agents must provide advanced notification to DPRLP in writing at least 24 hours in advance using the Standard Format Advance Notification Form for Waste Delivery To Port Reception Facilities (at the end of this document and also sent with the Pre-Arrival message) if a vessel requires utilization of the garbage collection and/or disposal service. Advance information should include details of amount & specific type of waste as detailed in the form. Arrangements for garbage and slop disposal must be made by the vessel, directly through the agents with the respective companies. Cargo operations must be suspended during any pumping of slops to barge. All costs associated with waste disposal are the vessel's responsibility and arrangements are to be made through the agents.

Service Contacts:

CIRCON Environmental
10200 Bayport Blvd.
Pasadena, Texas, 77507
Contact: 281-474-4210
MARPOL Annex I and II Oily Waste

FACILITIES FOR RECEPTION OF NLS PRODUCTS (MARPOL II)

Vessels discharging NLS products should strip out the cargo tanks in accordance with the vessels MARPOL P&A manual. A prewash with fresh water may be permitted as an alternative to purging the vessels lines. Vessels /agents must provide advanced notification to DPRLP in writing at least 24 hours in advance using the Standard Format Advance Notification Form for Waste Delivery To Port Reception Facilities (at the end of this document and also sent with the Pre-Arrival message) if a vessel requires utilization of the garbage collection and/or disposal service. Advance information should include details of amount & specific type of waste as detailed in the form. Arrangements for garbage and slop disposal must be made by the vessel, directly through the agents with the respective companies. Deer Park Refining LP can receive NLS (MARPOL II) per our approved Certificate of Adequacy and site operating procedures.

FACILITIES FOR RECEPTION OF GARBAGE (MARPOL V)

DPRLP has a list of approved APHIS contractors and companies that have been approved for entering, collecting, and disposing of garbage from vessels berthed at DPRLP.

Vessels /agents must provide advanced notification to DPRLP in writing at least 24 hours in advance using the Standard Format Advance Notification Form for Waste Delivery To Port Reception Facilities (at the end of this document and also sent with the Pre-Arrival message) if a vessel requires utilization of the garbage collection and/or disposal service. Advance information should include details of amount & specific type of waste as detailed in the form. Arrangements for garbage and slop disposal must be made by the vessel, directly through the agents with the respective companies. Cargo operations must be suspended during any pumping of slops to barge. All costs associated with waste disposal are the vessel's responsibility and arrangements are to be made through the agents.

Service Contacts:

Hard's Marine
611 Lakeside Drive
Channelview, Texas, 77530
Contact: 281-452-3171 – 24 Hour Number
Services: Stores - water delivery / APHIS Waste / Potable Water

Texana Waste
P.O. Box 293
Channelview, Texas, 77530
Contact: 281-456-7733
Services: APHIS Waste / Trash / oily rags / Class 6 Food Waste / Some Medical Waste

13. AVAILABILITY OF BUNKERS

Marine Bunkers (HFO, MGO & MDO) are not available directly from DPRLP. Subject to DPRLP management consideration and approval, in its sole and absolute discretion, concurrent bunkering via barge may be permitted at the Crude dock only. Such bunkering operation can only be undertaken when:

- Any barge proposed for providing bunkers must be approved, in advance through the Facility Vetting system. Such approval must be requested in advance by vessel's agents via the DPRLP Marine Scheduler
- Prior to entering DPRLP waterside areas and approaching berthed vessel, bunker barge must receive permission from DPRLP Crude dock office.
- The Master is solely responsible for the safe conduct of bunkering operations while alongside.
  Planned bunkering operation must be discussed at the pre-cargo transfer conference and the Master must agree and sign the "Conditions for Concurrent Bunkering Operations Alongside Wharves" checklist which contain the following restrictions:
  - Permission granted for daylight bunkering operations only
  - Sufficient crew available for the operation and adequately rested, no shore leave permitted during concurrent bunkering operations.
  - Bunkering operations to be supervised by an officer other than the one responsible for cargo operations
  - Lifting operation to be supervised by a qualified officer and crane operator adequately trained.
  - Prior to operations of crane, permission to be sought from the Dock PIC. Slewing of crane permitted only on the offshore side, never over the hoses/cargo arms.
  - Personnel are not permitted to transfer from the vessel to the bunker barge
  - Sailing of bunker barge should not be delayed for whatsoever reasons including quantity disputes. Quantity/quality disputes if any should be resolved post cargo operations after shifting to the anchorage area.
  - Actions in case of an emergency:
    - Vessel/barge emergency: Inform terminal / Cease operations
    - Terminal Emergency; As per Part I of this terminal guide

- Vessel will be responsible for all costs and delays associated with the bunkering operation, including but not limited to, additional berth occupancy fees, any berth shift fees & associated delays. Bunkering operations are subject to fees as outlined in Appendix 4 fee schedule.

14. AVAILABILITY OF FRESH WATER

Potable water connections are available at each dock via a 2" universal connection. Fresh water operations are subject to fees as outlined in appendix 4. Vessel personnel are generally responsible for making vessel connection to the dock potable water piping.

15. ARRANGEMENTS FOR RECEIVING PROVISIONS AND STORES

Vessels are only permitted to receive provisions and stores from waterside. Such storing operations can only be undertaken when:

- The storing operation has been advised and approved by DPRLP Marine Scheduler a minimum of 24hours in advance.
- Prior to entering DPRLP waterside areas and approaching berthed vessel, stores barge must receive permission from DPRLP dock office.
- Planned storing operation must be discussed at the pre-cargo conference.
- Vessel will be responsible for all costs and delays associated with the storing operation, including but not limited to, additional berth occupancy fees, any berth shift fees & associated delays. Storing operations are subject to the following fees per appendix 4.
- Vessel traffic movements within DPRLP, i.e., sailing and berthing of ships and barges, will have priority and such activity may require stoppage of the storing operation and for the stores barge to move clear of the ship's side while traffic is maneuvering within DPRLP slip.

16. TERMINAL ACCESS AND VISITOR SECURITY

Terminal access is limited to individuals listed on agent's list. Individuals entering onto Facility property must meet the following requirements:

* Must be on the vessel's entry gate list.

* Must have a valid TWIC card or be escorted by an onsite TWIC card holder.

* Must have valid identification.

If, for any reason, an individual does not meet the above criteria, it is the responsibility of vessel personnel to contact the designated shipping agent to make other arrangements.

Personnel must enter Facility property at Security Gate 34, which is located off Tenneco Rd. just North of the Highway 225 feeder. A jitney (shuttle) service is available for personnel transport to/from vessel.

17. SAFE ACCESS TO VESSELS ALONGSIDE

DPRLP docks are provided with 50ft portable gangways for safe access at all docks. Vessels and barges are responsible for ensuring safety nets are properly rigged.

Gangways will not be put in position until all vessel's lines are fast and sufficient personnel are available in the vicinity of the manifold area to receive the gangway end.

18. USEFUL TELEPHONE NUMBERS

Transportation to/from dock to gate - Facility Jitney Service. Facility Dock personnel will contact the shuttle when requested. Please allow 10-25 minutes during daylight hours. Vessel personnel requesting shuttle service should wait near the road.

Houston Seaman's Center - (713) 672-0511 normally makes pick up @ 18:40-18:45 each evening at Facility Security Gate 34.

U.S.C.G. Captain of the Port of Houston Primary: 281 464 4800, Emergency: 281 464 4840/4854

Pasadena Taxi – (713) 477-6000

All taxi and transportation services pick-up/drop-off at Facility Security Gate 34.

Deer Park Refining LP Marine Scheduler – (713) 246-7223

Deer Park Refining LP Cargo Inspector Fax – (713) 246-6847

Deer Park Refining LP Crude Dock – (713) 246-6253

Deer Park Refining LP East & Barge Dock - (713) 246-6265

Deer Park Refining LP Center Dock (713) 246-6266

Deer Park Refining LP West Dock - (713) 246-6268

19. TERMINAL SPECIFIC REGULATIONS

- **Inerted vessels scheduled to load classified VOC must arrive with a pressure of 0.4 psi (300 mm WG) or less.** In addition, a Certificate of Tightness is required for loading VOC products.

- Vapor recovery information must be provided 48-24 hrs. prior to vessel's arrival. The Marine Scheduler shall provide the Marine Vapor Recovery Checklist which will include:
  - What is vessel loading vapor header flange size (in inches)? (Facility has ability to connect to 6", 8" 12" flange size)
  - What is minimum flow rate? ○ What is maximum loading rate? ○ What is vessel PSV setting- high psig? ○ What is vessel PSV setting- low psig? ○ What is vessel manifold pressure drop at vessel maximum loading rate?
  - What type of overfill protection does the vessel have?
  - Inerted tanks must have less than 8% Oxygen content.

- Two chemical VOC products can be loaded at same time using one - 8" Vapor Recovery hose

- Ships loading gasoline (a VOC product) are to use an 8" Vapor Recovery hose
- Vessels docking at Deer Park Refining LP must have all mooring lines secured before gangway is placed.
- Mooring lines must be taught at all times throughout transfer.
- Minimum number of mooring lines for a vessel is 12 lines: 2 headlines, 2 stern lines, 2 breast lines fwd. & aft, 2 spring lines fwd. & aft.
- Minimum number of moorings lines for inland barge is 6 lines. For tandem barges a minimum of 6 lines to the dock.
- No lifeboat deployment for non-emergencies
- No tank cleaning

- No Hot Work
- "Flying switches", the act of doubling up barges while the tow (tugboat and barges) is still traveling is not allowed in the DPRLP slip. It is the responsibility of the vessel owner, operators, captains, and pilots to make sure "flying switches" are not performed in the DPRLP slip.
- Vessel Personnel In Need Of Medical Assistance - In the event vessel personnel (Tankermen, Shipmates, Deckhands, Inspectors, Ship Crew, etc.) are in need of medical assistance due to injury or illness, they are to contact shore personnel who will alert the Facility Medical Response Team. The response team will mitigate the situation, if needed.
- As per ISGOTT, MARPOL 73/78 Annex 1, Reg. 13B, IMO reg. A446(XII), A897(20) and charter parties, minimum crude oil washing (COW) shall take place at Deer Park Refining LP while discharging crude (25% of all cargo tanks should be COW on rotational basis and no cargo tanks needs to be washed more than once every 4 months).
- Ships anchor(s) must be secured when approaching and departing the Terminal and at all times while alongside.

PART 3 – Deer Park Refining LP Terminal Regulations

GENERAL REQUIREMENTS

1. APPLICABILITY

Except as otherwise provided, these regulations apply to all tank vessels (tank ships and tank barges), hereinafter referred to as **'vessels'**, loading at marine facilities, terminals and complexes owned, managed or operated by Deer Park Refining LP, hereinafter referred to as **'terminals**.

2. ROLES AND RESPONSIBILITIES

Each party, vessel, and terminal are responsible for the safe conduct of its own operations i.e., the management of its own personnel and the operation of its own equipment. Under no circumstances will either party operate any valves, switches, or alarms within the other's sphere of control.

3. CONDITIONS OF VESSEL ACCEPTANCE

Vessels are accepted at a terminal on the understanding that operations will be conducted in accordance with all applicable legislation, together with practices contained in relevant Codes of Practice, in particular, the guidance contained within the latest edition of the International Safety Guide for Tankers and Terminals (ISGOTT).

Vessels found deficient on arrival may be subject to refusal until the deficiencies have been rectified. Prior to arriving at DPRLP the barge operator will asked to verify the following barge and tug critical equipment readiness requirements including any defects of hull, machinery or equipment that could adversely affect safe operations or delay commencement of cargo handling.

Tug / Tow boat

- Propulsion systems
- Steering systems
- Navigation equipment
- Firefighting and emergency response systems

Barges

- Cargo System (pipelines, pumps, and valves)
- Overfill protection system
- Venting system
- Firefighting and emergency response systems

4. READINESS TO LOAD OR DISCHARGE

All vessels calling at a marine terminal shall arrive in a condition ready to commence operations. All vessel systems should be duly tested to confirm their operability. Prior to arriving at DPRLP the barge operator will asked to verify the following barge critical equipment readiness requirements including any defects of hull, machinery or equipment that could adversely affect safe operations or delay commencement of cargo handling. Additional requirements for barges below:

- Manifold connection size as dictated by the DPRLP Cargo Inspector
- All flanged connections must be directly over containment
- A 90-degree elbow will be provided for use at all barge manifold connections at West and East Dock
- Heating units will not be operated without the permission of the dock operator.
- All valves have been tested within the last 24 hours and are fully operational.

5. PRE-ARRIVAL CHECKLIST

The status of all items of vessel equipment necessary for the safe and efficient conduct of operations should be verified prior to the vessel's arrival alongside, preferably by use of pre-arrival checklist. The terminal should be advised of any defects or deficiencies. It should be noted that the use of a pre-arrival checklist does not replace the requirement to fully complete a Declaration of Inspection / Ship Shore Safety Checklist prior to the commencement of transfer activities.

6. VESSEL INFORMATION

To facilitate pretransfer formalities, the vessel should have the following documentation readily available on arrival at the terminal:

- Cargo stowage plan – identities of cargoes, quantities and tanks stowed in, or to be stowed in, as applicable.
- Ballast stowage plan – quantities and tanks stowed in, or to be stowed in, as applicable.
- Oil transfer procedure for the particular operations at the terminal.

Other relevant information should be readily available, such as tank cleaning records, list of previous cargoes carried and vessel experience factor calculations.

7. MINIMUM NUMBER OF CREW

Sufficient qualified crew members shall be provided for the safe execution of vessel operations, such as line handling and cargo operations and for berth evacuation in the event of an emergency.

8. WATCH SCHEDULE

The watch schedule for tank vessel personnel should be arranged to minimize fatigue and the maximum working hours established by the USCG for US flag vessels should be adhered to by all vessels.

Watch handovers involving the person-in-charge should be scheduled so as not to take place during critical phases of the transfer operation, such as within 30 minutes of the final topping-off of the vessel.

9. PERSONNEL REQUIREMENTS

During the transfer of oil and/or hazardous material to or from a vessel, both the vessel and the dock are required to have a person-in-charge (PIC). It is required that a PIC is designated for each vessel involved in a transfer. The PIC must be physically on board the vessel during all stages of the transfer operation. If the PIC needs to leave the vessel for any reason, the PIC must be properly relieved by a qualified tankerman or the transfer must be halted.

Tank barge personnel involved in the transfer of cargoes are required to have their Merchant Mariner's Credentials (MMC) readily available. It is required that the MMC indicates which class(es) of cargo the tankerman is authorized to handle.

10. PROTECTIVE CLOTHING AND EQUIPMENT

The following minimum dress code shall be adhered to by vessel personnel on board while alongside a terminal:

- long pants
- Close-toed shoes, preferably safety shoes or boots with steel toe cap (sandals or similar footwear is prohibited)
- shirt with sleeves
- USCG-approved life jacket or buoyant work vest when working aboard a barge without safety rails, or when working outboard of any safety rails.

Personnel engaged in vessel operations are actively encouraged to utilize PPE to the fullest during transfer, hose handling and mooring/unmooring operations. This includes the wearing of hard hats and safety goggles.

Attention must be given to the need for additional PPE when handling certain hazardous cargoes. In such circumstances, splash protective eye wear, face masks, chemical suits, rubber boots and gloves, respirators or fresh air breathing apparatus should be considered for use, as appropriate. In addition, the USCG requires vessel personnel to wear a respirator in regulated areas when handling products containing 0.5% or more benzene by volume. Vessel crew should have and use appropriate H2S monitors, per their company's SMS procedures, when handling high H2S cargoes.

11. UNAUTHORIZED OR INTOXICATED PERSONS

Unauthorized, disorderly, or intoxicated persons shall not be allowed on any terminal or on any vessel(s) alongside.

Visitors will only be allowed on board a vessel with the knowledge and approval of the PIC. Visitors transiting through the terminal or visiting a vessel at the terminal are required to comply with all terminal regulations contained within this booklet.

12. CRAFT ALONGSIDE

No craft is permitted to come alongside or remain alongside a vessel without the prior permission of the PIC. Should a craft be given permission to come alongside, personnel on board it must be instructed regarding safety regulations.

Bunker barge and storing operations as per Section 13. Availability of Bunkers & Section 15 - Arrangements for receiving provisions and stores.

13. ENTRY INTO ENCLOSED SPACES

As a matter of general policy, any personnel entry into enclosed spaces on a vessel alongside a terminal is prohibited unless necessary for the safety of the vessel and terminal.

In certain trades involving Shell Chemicals, tank entry may be required, for example, to check on tank preparation prior to loading particularly sensitive cargoes. Such tank entry should only be undertaken following recognized Enclosed Space entry procedures that include the issue of a written permit (ISGOTT or NIOSH recommendations refer). The PIC must be provided with a copy of the chemist's certificate confirming the suitability of the tank for entry.

14. STATE OF READINESS

While alongside a terminal, a tank vessel must at all times be able to move under its own power at short notice. If, for any reason, the vessel cannot comply with this requirement, the PIC must be advised immediately.

For tank barges, the tow boat assigned to a tank barge or a number of tank barges within the same company (not to exceed 3 barges) shall standby in the immediate vicinity of the barge(s) and shall maintain engines ready for maneuvering at short notice.

15. MAINTENANCE AND REPAIR WORK

Major planned repair work is not permitted while alongside the terminal. Emergency repairs, namely essential repairs needed to rectify malfunctioning equipment and prevent hazardous or unsafe conditions, will be permitted on a case-by-case basis, and may only commence once approval has been obtained from the Dock PIC.

Emergency repairs involving hot work and welding shall not take place without the prior written permission of the U.S. Coast Guard and the PIC.

The use of power-driven or manually operated devices capable of producing sparks is prohibited in the cargo area, cargo tanks, fuel tanks, cargo pumprooms or enclosed spaces immediately above or adjacent to cargo tanks, such as cofferdams. No chipping or other activities likely to produce sparks shall be permitted in these areas, tanks, or enclosed spaces.

16. WEATHER CONDITIONS

The terminal will establish criteria for suspending transfer operations, disconnecting hoses/arms, and evacuating the berth on the onset or forecast of imminent exceptional weather conditions.

During periods of still air, tank vessel loading operations involving volatile products may have to be suspended if cargo vapors accumulate either on deck or ashore.

Transfer operations, and the ballasting of non-gas free cargo tanks, will be halted on the near approach of an electrical storm, regardless of whether or not an inert gas system and/or vapor

control system is fitted and in use. All tank openings and vents must be closed, and the cargo system secured.

17. GARBAGE

No garbage or refuse of any kind shall be dumped overboard from any vessel moored at a marine terminal. Vessel-generated domestic garbage should be collected in suitable containers. Medical wastes, hazardous wastes and, for foreign flag vessels, waste regulated by the Animal and Plant Health Inspection Service (APHIS), is to be collected as detailed in Part 2.

VESSEL SAFETY PRECAUTIONS AND REQUIREMENTS

18. MOORING

All vessels must be securely moored alongside with sufficient ropes and/or wires in accordance with minimum mooring requirements established by the terminal. Tank barges shall be secured using a minimum of six mooring lines, which shall be of an adequate size and strength and be in good condition. Barges should only use designated mooring points.

Moorings shall be properly tended throughout the vessel's stay to prevent undue movement of the vessel.

The use of 'mixed mooring', i.e., synthetic fiber ropes and steel wire ropes onto the same shore bollard, shall be avoided. Lines in the same service should be of similar material. In this context, it should be noted that moorings constructed of High Modulus Polyethylene (HMPE) have the same extension characteristics as wire and may be used in the same service.

Mooring lines shall be secured on board using the storage reel or, on vessels not equipped with reels, on bitts. The practice of securing lines on the warping drums of winches is not permitted.

Self-tensioning winches, if fitted, must not be used in the automatic mode.

Soft rope pennants fitted to wire moorings shall be of sufficient length and strength and should be properly secured to the wire using a suitable shackle.

In line with OCIMF recommendations, DPRLP does not require the deployment of emergency towing off pennants (ETOPS), more commonly referred to as "fire wires", while vessels are moored at DPRLP berths. As such cases, applicable SSSCL question will be marked N/A. Vessels may, at their own requirement, continue to deploy fire wires.

19. ACCESS TO THE VESSEL

The provision of safe access between the vessel and the shore is a shared responsibility. The preference is for the terminal to provide a shore gangway. When the vessel's configuration does not permit use of the shore gangway, or a shore gangway is not available, the vessel's gangway or accommodation ladder will be used. All means of access must be properly constructed and be provided with stanchions and handrails. A safety net should be fitted under the gangway and a lifebuoy with line and light should be readily available.

20. FIREFIGHTING EQUIPMENT

The vessel's firefighting equipment must be ready for immediate use. Tank ships should have fire hoses, with jet/spray nozzles attached, connected to the main and run out forward and aft of, and

adjacent to, the cargo manifold in use. Additional protection against flash fires should be provided by having a portable dry chemical extinguisher with a capacity of at least 10 pounds located near the manifold.

Foam and/or dry chemical monitors, if fitted, should be ready for immediate use.

The International Ship Shore Fire Connection should be rigged ready for immediate use.

A copy of the vessel's Safety and Fire-fighting Plan should be located outside the accommodation in a watertight container.

Tank barges should have a portable extinguisher available at the manifold, preferably of the dry chemical type with a capacity of at least 10 pounds.

21. CARGO PUMPROOMS

Cargo pumprooms should be well ventilated and gas free before arrival at the terminal. While alongside, the ventilation system shall be kept running and the pumproom kept free of cargo vapors.

22. ACCOMMODATION DOORS AND PORTS

All external doors and portholes shall be closed during operations. Accommodation boundary doors should preferably be fitted with self-closing or other control devices but at no time should they be locked.

23. ACCOMMODATION VENTILATION AND AIR CONDITIONING

The intakes of central air conditioning or mechanical ventilation systems should be adjusted to prevent the entry of petroleum vapors, if possible, by re-circulation of air within the accommodation spaces taking care not to create a negative pressure inside the accommodation.

Window-type air conditioning units which are not certified as safe for use in the presence of flammable gas, or which draw in air from outside the accommodation must be electrically disconnected and any external vents or intakes closed.

24. SMOKING

Smoking is strictly prohibited on vessels alongside except under controlled conditions in specifically designated areas, not having doors or ports that open directly onto the cargo deck. Smoking is prohibited on board any unmanned tank barge while at or in the vicinity of the terminal.

Smoking in the terminal is only permitted in designated smoking areas.

Designated smoking areas should be conspicuously marked.

Use of E-Cigarettes is considered smoking and all above restrictions apply.

25. PREVENTION OF SPARKING AND EXCESSIVE SMOKE FROM STACKS

Soot blowing and excessive stack smoke or sparking is prohibited, and immediate action must be taken to eliminate any of these occurrences.

26. SOURCES OF IGNITION

The carrying and use of matches, lighters, or other sources of ignition, which includes battery-operated equipment and cameras, is prohibited within the terminal and on the deck of vessels alongside.

27. PORTABLE ELECTRICAL EQUIPMENT

All flashlights used shall be of a safe type which is approved by a competent authority.

The use of portable electrical equipment on wandering leads is prohibited in hazardous zones during cargo transfer operations. The equipment should be disconnected from power and preferably removed from the hazardous zone.

Only cellular phones that are intrinsically safe and authorized by Facility are permitted to be used on the deck of vessels while alongside a terminal.

28. MAIN TRANSMITTING AERIALS

Radio transmissions on medium (MF) and high frequency (HF) during transfer operations are potentially dangerous and therefore are strictly prohibited while alongside. The main and reserve transmitting antenna shall be earthed while at the terminal.

29. USE OF VHF AND SATCOM WHILE ALONGSIDE

Transmissions on permanently installed VHF/UHF equipment are acceptable provided the power output is reduced to one watt or less.

Portable VHF/UHF equipment of an approved type may be used for intra-ship and ship/shore communications.

Satcom equipment may be used while alongside the terminal unless specifically prohibited under local regulations.

30. FLAME SCREENS/ DECK OPENINGS

All deck openings, tank hatches, Butterworth plates, sounding pipes, etc., are to be kept closed while alongside the terminal unless properly fitted with a flame screen.

During cargo transfers, the cargo tank venting system as designed for the particular vessel shall be used. If necessary, ullage ports or other gauge points may be opened for short periods to enable ullaging or sampling to be undertaken.

31. SCUPPERS/DRAINS

Before any transfer of cargo, ballast, slops, or bunkers takes place, deck scuppers and drain holes in save-alls and drip trays must be suitably plugged. If local regulations permit, accumulated water may be drained off as required and scupper plugs replaced immediately the water has been run off. Oily water should be transferred to a slop tank or other suitable containment and it is recommended that a portable pump is rigged ready for this purpose. Air-operated pumps, such as Wilden pumps, must be securely grounded to the vessel's structure to prevent the generation of electrostatic charges.

32. DISCHARGE CONTAINMENT/DRIP PANS

Drip pans, manifold drip trays and other containment shall be kept empty while the vessel is alongside a terminal. Plugs and valves shall be properly secured.

33. TANK BARGE GAUGE POINTS

The appropriate tank opening or fitting to be used for custody transfer measurement should be identified as the 'gauge point' and the corresponding reference height (the total height between the rim of the ullage port and the striking plate at the bottom of the tank) shall be clearly marked.

34. INSULATION MEANS BETWEEN SHIP AND SHORE

To provide effective electrical isolation between the ship and shore, terminal systems are provided with insulating flanges. The use of bonding cables is not permitted.

With the protection provided by insulating flanges, the use of cathodic protection systems for vessel and jetty structures may be continued while a vessel is alongside.

35. TRANSFER MANIFOLD AND CONNECTIONS

Every mechanical loading arm or cargo hose must be properly supported to ensure that flange connections are not subjected to undue strain.

In all cases, the points of connection between the vessel's manifold and the cargo transfer arm or hose must be completely over the manifold containment or drip tray.

All flanged connections must be connected with a bolt in every hole.

The loading arm or hose must be blanked as soon as it is disconnected from the manifold. Manifold connections not in use are to be kept fully blanked with blind flanges, gaskets, and a bolt in every hole. Blanks should be metal; no plastic blanks will be accepted by Facility.

PRE-TRANSFER CONFERENCE AND PROCEDURES

36. PRE-TRANSFER CONFERENCE

The person-in-charge (PIC) of cargo operations on the transferring vessel and the PIC of transfer operations at the terminal are required to hold a pre-transfer conference, the scope of which must comply, as a minimum, with the requirements of 33 CFR Part 156.120W and 46 CFR Part 150.500.

37. PRE-TRANSFER SAFETY CHECKS AND SHIP SHORE SAFETY CHECKLIST / DECLARATION OF INSPECTION

The person-in-charge (PIC) of cargo operations on the transferring vessel and the PIC of transfer operations at the terminal should jointly complete a combined Ship Shore Safety Checklist (SSSCL) and Declaration of Inspection (DOI) with relevant addendum for benzene, liquefied hazardous gas or vapor control operations, as required by Federal regulations.

38.SAFETY DATA SHEETS (SDS)

An SDS or shall be available on request from the supplier of the product, i.e., a vessel loading cargo should receive the information from the terminal and a vessel discharging cargo shall, if requested, provide an SDS to the terminal.

39. BENZENE DOI ADDENDUM

An addendum to the DOI will be used to ensure that proper emphasis is given to the effective control of transfer operations involving benzene, or hydrocarbon mixtures containing in excess of 0.5% of benzene by volume.

As USCG benzene regulations do not apply to foreign flag vessels, it is required that the DOI Addendum is used to notify the vessel of the potential hazards associated with handling a benzene cargo.

40. VAPOR CONTROL OPERATIONS DOI ADDENDUM

An addendum to the DOI will be used whenever the transfer operation includes the collection of cargo vapors from a vessel's cargo tanks through a vapor control system not located on the vessel. The DOI addendum complies with the requirements of 46 CFR Part 35.35-30 and 33 CFR Part 156.120(aa).

CARGO TRANSFER OPERATIONS

41. COMMUNICATIONS

All vessels alongside a terminal shall have at all times at least one person on duty who speaks and understands the English language. The person-in-charge of the cargo transfer shall be able to communicate readily in the English language with the facility PIC and be available at all times.

Radio contact shall be maintained with the terminal PIC using the intrinsically safe radio provided by the terminal.

Transfer operations must be halted if communications are lost during any stage of the transfer or if it is determined that both parties (vessel and terminal PIC) cannot communicate readily in the English language.

42. CARGO TRANSFER RATES

The maximum allowable loading rates shall be established and agreed by PIC's during the pretransfer conference. Rates shall be established for initial loading and will take into account the need for precautions when handling grades defined as static accumulators. Methods for final topping-off shall also be agreed.

43. CHECKS ON QUANTITIES TRANSFERRED

At least every two hours, the vessel should provide the PIC with information regarding the amount of cargo that has been discharged or loaded. The terminal will provide the vessel with comparable shore figures. If the exchange of information reveals a sudden or significant difference between the terminal and vessel figures on quantities transferred, operations should be stopped until a satisfactory explanation can be found.

44. MAXIMUM CARGO TANK FILLING LEVEL

The maximum cargo tank filling level shall not exceed any of the following limits:

- six inches below the deck.
- 98 percent of tank capacity; or
- three inches below the set point of the overfill control system for a tank barge required by 46 CFR 39.20-9(b) or the liquid overfill alarm for a tank ship required by 46 CFR 39.20-7(d), as applicable, when collecting vapors of crude oil, gasoline blends or benzene.

SPECIFIC CARGO TRANSFER PROCEDURES

45. TANK CLEANING

No tank cleaning operations shall be conducted alongside the Deer Park terminal.

46. CRUDE OIL WASHING

Crude Oil Washing (COW) may be allowed on properly equipped vessels. The Master shall obtain permission from the PIC prior to or upon arrival and shall comply with any local terminal regulations established for COW operations.

47. HANDLING STATIC ACCUMULATOR CARGOES

The precautions described in ISGOTT shall be adhered to when loading, ullaging or sampling cargoes defined as static accumulators in non-inerted tanks. This will include controls on initial flow rates and restrictions on the use of metallic dipping, ullaging, or sampling equipment.

48. BARGES WITH A SINGLE LOAD/DISCHARGE LINE

Barges equipped with only a common load/discharge line should not load more than one cargo type, i.e., all gasoline or all middle distillates. Split loads of gasoline and middle distillates are not to be loaded on such vessels.

49. JET LOADING PROCEDURES

When loading schedules permit, Jet should be carried in cargo tanks of which the prior cargo was a middle distillate, for example, gas oil, premium diesel, kerosene. This eliminates the need for cleaning these tanks and limits the risk of contamination with water.

Jet should not be carried in tanks which have contained as prior cargo:

- sour (H_2S positive) products such as ‘sour’ naphtha.
- dirty products, for example, blended marine diesel oil, intermediate fuel oil.
- contaminated water (contaminated with persistent oils and/or other impurities).

A cargo surveyor will be appointed, and vessel tanks will be jointly inspected prior to loading. Particular care must be taken to ensure that all lines, hoses, and pumps are drained of water and any product, other than pure middle distillates, prior to loading.

During loading, sampling procedures will include the taking of a manifold sample on commencement of transfer, ‘one foot’ samples from each vessel tank and final samples on completion of loading. The manifold and ‘one foot’ samples can be taken as running samples unless it is suspected from visual indications that the cargo may be off spec.

50. TANDEM BARGE OPERATIONS

Tandem barge operations may be permitted alongside a terminal if the following requirements are met:

- a tankerman (PIC) is on each barge and must remain on board until all operations involving the barge is complete. For clarification, the inboard barge tankerman must stay on board if the outboard barge is discharging ashore via the manifold piping of the inboard barge. This does not apply if the crossover piping on the inboard barge is not connected to the cargo system (dummy piping).

- each tankerman must have contact with the PIC.
- barge carriers must have personnel experienced in tandem transfers and have specific written procedures in place that address the tandem operation.

51. VAPOR CONTROL OPERATIONS

Vapor control operations will be undertaken in accordance with approved terminal procedures developed to meet the requirements of related regulations. The following highlights some of the terminal requirements related to vessel systems and procedures:

Vessel tightness – cargo tanks and cargo tank access points shall be maintained in a vapor-tight condition and shall be proven vapor tight at 0.8 psi minimum, at intervals not exceeding 24 months, and upon completion of related maintenance, repairs, or modifications. Documentation of

the most recent test shall be kept on board. Soap testing, pressure drop test or EPA Test Method 21 are acceptable.

Vapor collection manifolds - vapor manifold arrangements, flanges and markings shall conform to API Recommended Practice 1124 *'Ship, Barge and Terminal Hydrocarbon Vapor Collection Manifolds'*. Vapor manifolds fitted above cargo liquid loading manifolds (piggybacking) are not permitted.

Overfill protection – tank barges shall be fitted with an Overfill Control System that conforms to 46 CFR 39.20-9(b) and API Recommended Practice 1125 *'Overfill Control Systems for Tank Barges',* except that the optional high level alarm system will not be used. Overfill Control System sensors should be located near the geometric center of each cargo tank with a set point not less than three inches below the deck.

Cargo gauging – on non-inerted vessels, gauging, sampling, and temperature monitoring may be carried out through an open ullage hatch (maximum opening 8 inches) provided that cargo transfer operations are not in progress. A slight under pressure will be maintained in the cargo tanks by the terminal's vapor collection system during these operations. On inerted vessels, and vessels loading toxic cargoes, a vapor lock should be installed on each cargo tank to facilitate gauging and sampling.

Split loading – vessels that split-load dissimilar cargoes must have a vapor collection system that allows segregation of cargo vapors. Examples of dissimilar cargoes include gasolines and distillates; high Sulphur and low-Sulphur cargoes, and toxic and non-toxic cargoes.

Tandem loading – where barges are employed in tandem loading operations, only one barge will be loaded at a time. The vapor manifold of the outboard barge must be connected to the facility's vapor connection either through a lightweight flexible hose (vessel-supplied, 150 psi MAWP) of sufficient length to make a direct connection or through a jumper hose and dedicated cross-over header, with no connections to the cargo tanks of the inboard barge. The terminal will provide sufficient cable to reach the Overfill Control System of the outboard barge.

52. INERT GAS OPERATIONS

As a general policy, it is required that if a vessel is equipped with an inert gas plant, it should be used. The only exception to this policy is where cargo quality may be adversely impacted by the use of inert gas. Such exceptions will only be considered following approval by the terminal. Inert gas operation should be conducted in accordance with procedures contained in the vessel's IGS manual. The PIC may require random checks to be made to verify the oxygen content in cargo tanks is less than 8% prior to commencement of transfer operations.

PROCEDURES FOR HAZARDOUS CARGOES

53. BENZENE

The requirements of OSHA and the USCG must be adhered to when handling benzene or hydrocarbon mixtures containing in excess of 0.5% of benzene by volume. Vessel owners, operators and personnel on board must be familiar with all applicable regulations and adhere to them, including the requirements of 46 CFR Part 197.

In the event that airborne concentrations of benzene are likely to exceed accepted exposure limits (PEL of 1 ppm and STEL of 5 ppm) within any area, the area should be designated a 'regulated' area. It is the responsibility of the vessel to establish and clearly mark regulated areas with warning signs and to limit access only to authorized personnel

Ullaging and gauging should be undertaken through vapor lock valves.

An approved respirator must be used at all times when exposure limits are likely to be exceeded, for example, when sampling cargo, making, or breaking cargo connections, opening a cargo tank, or transferring cargo when tanks are vented at less than 12 feet above the working deck. Impervious gloves and tight-fitting goggles or a face mask shall be worn during sampling, making, or breaking a cargo connection and when gauging a tank through a restricted gauging tube.

54. HYDROGEN SULFIDE

Hydrogen sulphide (H_2S) may be present in significant concentrations in crude oils and refined products such as naphtha, fuel oil, bitumen, and gas oils and in the vapor spaces of tanks that have previously contained such cargoes. Vessels should be aware of the potential presence of H_2S and should adopt appropriate monitoring procedures. Any concentration to exposures above 10 ppm should not be permitted without proper respiratory protection in the form of a supplied-air respirator or self-contained breathing apparatus.

Information on the presence of H_2S must be exchanged during the pre-transfer conference. The vessel owner/operator or vessel PIC must inform the facility PIC if the previous cargo contained, or was suspected to contain, H_2S. Carrier staff must be provided with appropriate H2S detecting equipment etc. as per their procedures.

55. LIFE SAVING RULES

The new International Association of Oil & Gas Producers (IOGP) Life Saving Rules are nine fundamental safety rules that have been chosen for special attention because of the firm belief that the Life Saving Rules can really save lives. None of these rules are new in industry, they represent long-standing requirements. The objective of the Life Saving Rules is to continue to drive a culture of compliance with HSE requirements by focusing on deterring violations. The Life Saving Rules will be strictly enforced. Breaches of Life Saving Rules will be investigated, even if it did not result in any harm, with the maximum appropriate disciplinary action resulting.

Compliance is mandatory for everyone.

See attached Life Saving Rules pictogram

International Association of Oil & Gas Producers LIFE SAVING RULES

APPENDIX 1
PRE-ARRIVAL QUESTIONAIRE AND VAPOR RECOVERY CHECKLIST

Pre-Arrival Questionnaire

To be completed and forwarded to DPRLP minimum 24 hours prior to Arrival
E-mail To: SDPR-Marine-movements@deerparkrefinery.com
Jon-Eric.Gonzalez@deerparkrefinery.com Brian.McLarnon@pmicim.com
Bala.Para@pmicim.com

Item	Description	Details
1	Vessel Name and IMO number	
2	ETA	
3	Loading or Discharging	
4	Is vessel equipped with Approved Vapor Recovery System (as per OCIMF recommendations)? Y/N	
5	Does the vessel have a Vapor Tightness Certificate? If yes, provide date certificate issued	
6	Confirm that Inerted vessels scheduled to load a classified VOC WILL arrive with a tank vapor pressure of 0.4 PSI/ 300mm WG or less at the berth and Oxygen content less than 8%	
7	Cargo / Product to be handled.	
8	Estimated Quantity (US bbls @ 60F)	
9	Loading: advise tank preparation and previous cargo Discharging: advise amount of Free water in cargo	
10	Fresh Water Arrival drafts Fore / Aft (ft.)	
11	Fresh Water Departure drafts Fore / Aft (ft.)	
12	Arrival Deadweight and Displacement	
13	Arrival manifold height above waterline and freeboard (ft.)	
14	Departure manifold height above waterline and freeboard (ft.)	
15	Size and number of manifold presentation flanges	
16	Confirm all vessel's Navigation, Mooring, Cargo Handling and critical equipment are in good working order and ready for immediate use. Itemize any deficiencies.	
17	Confirm that DPRLP Marine Terminal Guide Version V1 2022 has been received and vessel is able to comply. (If not available, vessel MUST obtain an electronic copy from the Agent and notify the terminal before berthing.)	
18	If COW operations planned, confirm pre-arrival tests and checklists completed.	
19	Number of tanks vessel intends to COW (subject to confirmation during pre-cargo conference).	

20	**Any de-slopping requirements at berth? (Y/N)** **If yes – Email Appendix 2 form at least 1 working day before arrival.**	
21	**If discharging NLS products state method of stripping NLS residue. If yes – please email Appendix 2**	
22	**LOA, Beam, and BCM**	
23	**Crude only: Has bunkering arrangements been made?**	
24	**Any other requirements/comments i.e., stores/lubes etc.**	

Vessel Marine Vapor Recovery System Checklist

E-mail To: SDPR-Marine-movements@deerparkrefinery.com AND Jon-Eric.Gonzalez@deerparkrefinery.com Brian.McLarnon@pmicim.com Bala.Para@pmicim.com

Note: Vessels MUST arrive with tank IG pressure of LESS than 300 mm WG/ 0.4 psi or vessel will not be accepted.

1. Name of Vessel: _____ a. Vessel Flag/Registry _____

   b. Vessel Owner/Operator _____

2. Is Certificate of Inspection or Certificate of Compliance on board? Yes No

3. Is vessel Marine Vapor Recovery System USCG approved? Yes No

4. Is Certificate of Tightness on board? Yes No
   (Photocopy must be emailed prior to arrival at DPRLP)

5. What is vessel Vapor header flange size? _____ inches
   (Facility has capability to connect to either 6", 8" or 12" flange size)

6. What is vessel liquid header flange size? _____ inches

7. Regulated products minimum loading rate?
   1. Product _____bbls / hour
   2. Product _____bbls / hour
   3. Product _____bbls / hour

8. Regulated products maximum loading rate?
   1. Product _____bbls / hour
   2. Product _____bbls / hour
   3. Product _____bbls / hour

9. Vessel pressure safety valve setting – high? _____ psig

10. Vessel pressure safety valve setting – low? _____ psig

11. Vessel manifold pressure drop at vessel maximum loading rate. _____ psig

12. Type of vessel overfill protection.
    a. Overfill connection (5 pin plug cable connection) _____
    b. Spill Valve _____
    c. Independent alarm _____

13. Prior Cargo? _____

14. Condition of cargo tanks prior to being loaded (i.e., cleaned, washed, gas freed, etc.)?

APPENDIX 2

STANDARD FORMAT OF THE ADVANCE NOTIFICATION FORM
FOR WASTE DELIVERY TO PORT RECEPTION FACILITIES (MEPC.1/Circ.644)

Notification of the Delivery of Waste to: FACILITY DEER PARK, HOUSTON *(enter name of port or terminal)*

EMAIL TO: SDPR-Marine-movements@DeerParkRefinery.com

The master of a ship should forward the information below to the designated authority at least 24 hours in advance of arrival or upon departure of the previous port if the voyage is less than 24 hours

This form shall be retained on board the vessel along with the appropriate Oil RB, Cargo RB, or Garbage RB

DELIVERY FROM SHIPS (ANF)

1. SHIP PARTICULARS

1.1 Name of ship:	1.5 Owner or operator:
1.2 IMO number:	1.6 Distinctive number or letters:
1.3 Gross tonnage:	1.7 Flag State:
1.4 Type of ship: _ Oil tanker _ Chemical tanker _ Bulk carrier _ Container _ Other cargo ship _ Passenger ship _ Ro-ro _ Other (specify)	

2. PORT AND VOYAGE PARTICULARS

2.1 Location/Terminal name and POC:	2.6 Last Port where waste was delivered:
2.2 Arrival Date and Time:	2.7 Date of Last Delivery:
2.3 Departure Date and Time:	2.8 Next Port of delivery (if known):
2.4 Last Port and Country:	2.9 Person submitting this form is (if other than the master):
2.5 Next Port and Country (if known):	

3. TYPE AND AMOUNT OF WASTE FOR DISCHARGE TO FACILITY

MARPOL Annex I – Oil	**Quantity (m3)**
Oily bilge water	
Oily residues (sludge)	
Oily tank washings	
Dirty ballast water	
Scale and sludge from tank cleaning	
Other (please specify)	
MARPOL Annex II – NLS	**Quantity (m3)/Name1**
Category X substance	
Category Y substance	
Category Z substance	
OS – other substances	
MARPOL Annex IV – Sewage	**Quantity (m3)**

MARPOL Annex V – Garbage	**Quantity (m3)**
Plastic	
Floating dunnage, lining, or packing material	
Ground-down paper products, rags, glass, metal, bottles, crockery etc.	
Cargo residues2, paper products, rags, glass, metal, bottles, crockery, etc.	
Food waste	
Incinerator ash	
Other wastes (specify)	
MARPOL Annex VI – Air pollution	**Quantity (m3)**
Ozone-depleting substances and equipment containing such substances	
Exhaust gas-cleaning residues	

Name of ship:	IMO Number:

Please state below the approximate amount of waste and residues remaining on board and the percentage of maximum storage capacity. If delivering all waste on board at this port, please strike through this table and tick the box below. If delivering some or no waste, please complete all columns.
I confirm that I am delivering all the waste held on board this vessel (as shown on page 1) at this port □

Type	Maximum dedicated storage capacity m3	Amount of waste retained on board m3	Port at which remaining waste will be delivered (if known)	Estimate amount of waste to be generated between notification and next port of call m3
MARPOL Annex I – Oil				
Oily bilge water				
Oily residues (sludges)				
Oily tank washings				
Dirty ballast water				
Scale and sludge from tank cleaning				
Other (please specify)				
MARPOL Annex II – NLS				
Category X substance				
Category Y substance				

Category Z substance				
OS – other substances				
MARPOL Annex IV – Sewage				
Sewage				
MARPOL Annex V – Garbage				
Plastic				
Floating dunnage, lining or packing material				
Ground paper products, rags, glass, metal, bottles, crockery				
Cargo residues, paper products, rags, glass, metal bottles, crockery				
Food waste				
Incinerator ash				
Other wastes (specify)				

Date: ..... Name and Position: .....

Time: ..... Signature: .....

APPENDIX 2

STANDARD FORMAT FOR THE WASTE DELIVERY RECEIPT FOLLOWING A SHIP'S USE OF PORT RECEPTION FACILITIES (MEPC.1/Circ.645)

The designated representative of the reception facility provider should provide the following form to the master of a ship that has just delivered waste.

This form should be retained on board the vessel along with the appropriate Oil RB, Cargo RB, or Garbage RB

RECEPTION FACILITY AND PORT PARTICULARS

1.1 Location/Terminal name:
1.2 Reception facility provider(s):
1.3 Treatment facility provider(s) – if different from above:
1.4 Waste Discharge Date and Time from: to

SHIP PARTICULARS

2.1 Name of ship:	2.5 Owner or operator:
2.2 IMO number:	2.6 Distinctive number or letters:
2.3 Gross tonnage:	2.7 Flag State:
2.4 Type of ship: _ Oil tanker _ Chemical tanker _ Bulk carrier _ Container _ Other cargo ship _ Passenger ship _ Ro-ro _ Other (specify)	

TYPE AND AMOUNT OF WASTE RECEIVED

MARPOL Annex I – Oil	Quantity (m3)
Oily bilge water	
Oily residues (sludge)	
Oily tank washings	
Dirty ballast water	
Scale and sludge from tank cleaning	
Other (please specify)	
MARPOL Annex II – NLS	**Quantity (m3)/Name1**
Category X substance	
Category Y substance	
Category Z substance	
OS – other substances	
MARPOL Annex IV – Sewage	**Quantity (m3)**

MARPOL Annex V – Garbage	Quantity (m3)
Plastic	
Floating dunnage, lining, or packing material	
Ground-down paper products, rags, glass, metal, bottles, crockery etc.	
Cargo residues2, paper products, rags, glass, metal, bottles, crockery, etc.	
Food waste	
Incinerator ash	
Other wastes (specify)	
MARPOL Annex VI – Air pollution	**Quantity (m3)**
Ozone-depleting substances and equipment containing such substances	
Exhaust gas-cleaning residues	

On behalf of the port facility, I confirm that the above wastes were delivered.

Signature: ..... Full Name and Company Stamp: .....

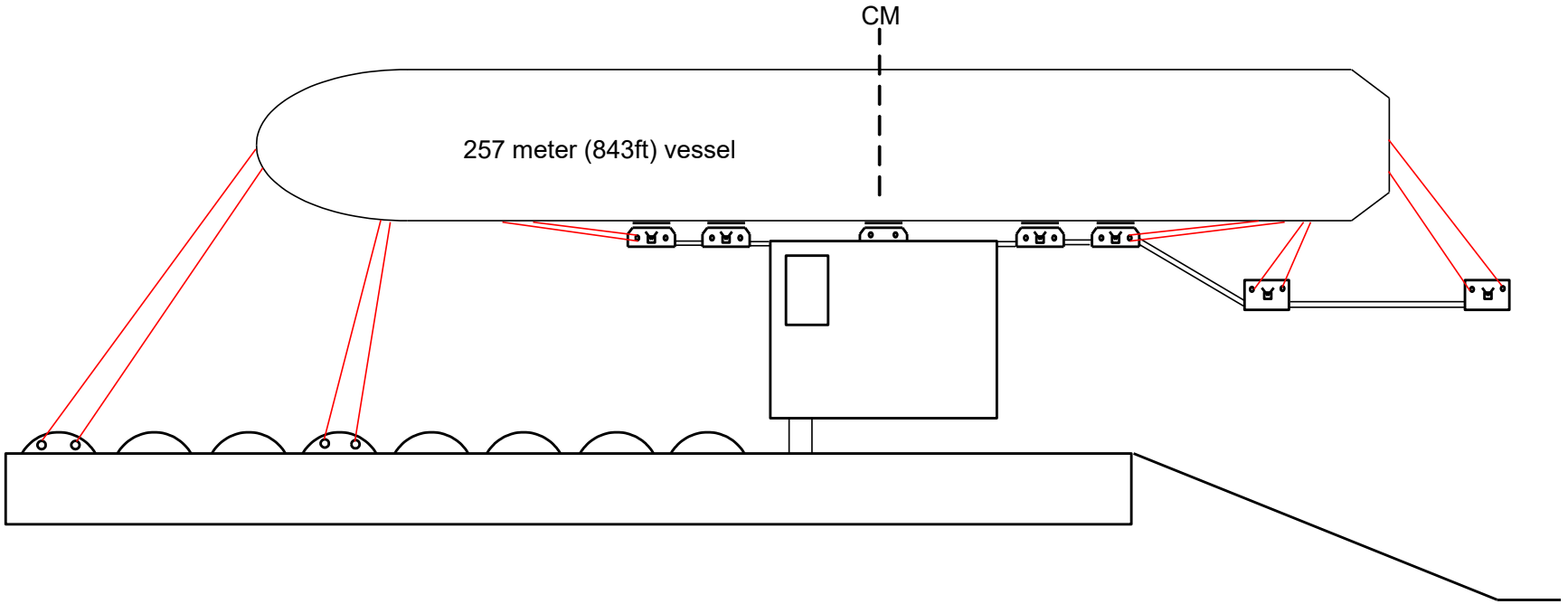
APPENDIX 3
ALONGSIDE SERVICES FEES

Bunker Barge	**USD $2000 per barge**
Lube Oil Barge	**USD $2000 per barge**
Stores Barge	**USD $1000 per barge/vessel**
Fresh water	**USD $400 flat fee**
Nitrogen Blanketing/Purging	**USD $250 per hour**
~~lay~~ berth	**USD $250 per hour**
Security Fee	**USD $ 400 flat fee**

APPENDIX 4
MOORING DIAGRAMS

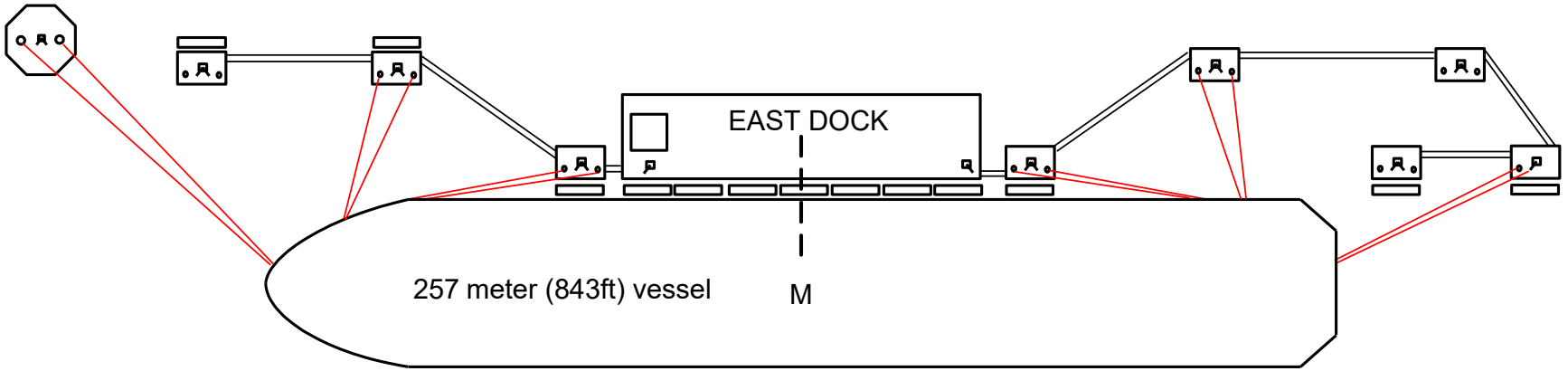
SDPRC Typical Mooring Diagrams

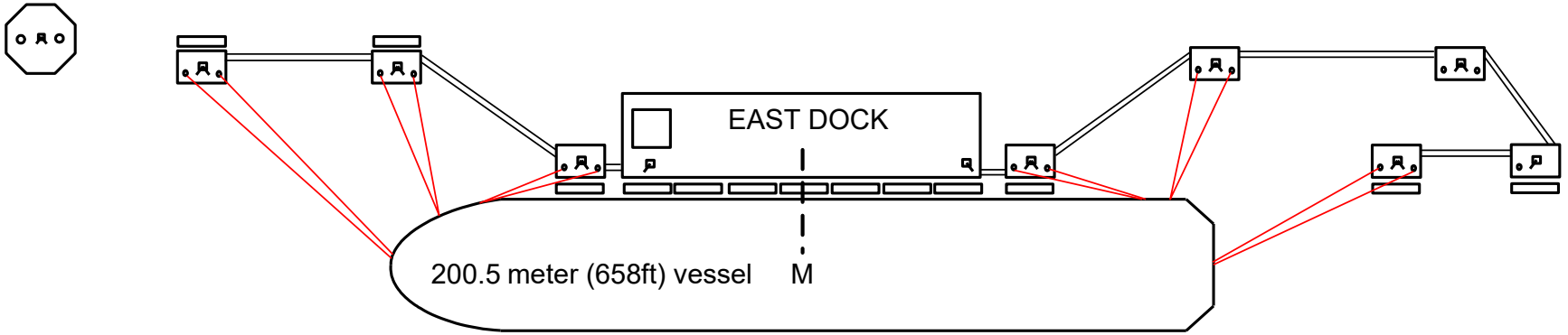
Crude Dock



DPRLP Typical Mooring Diagrams

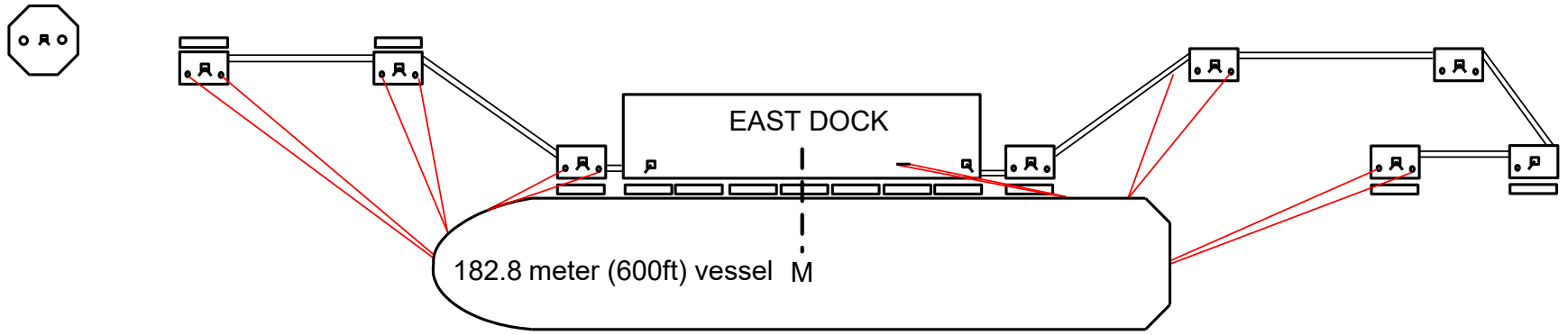
East Dock

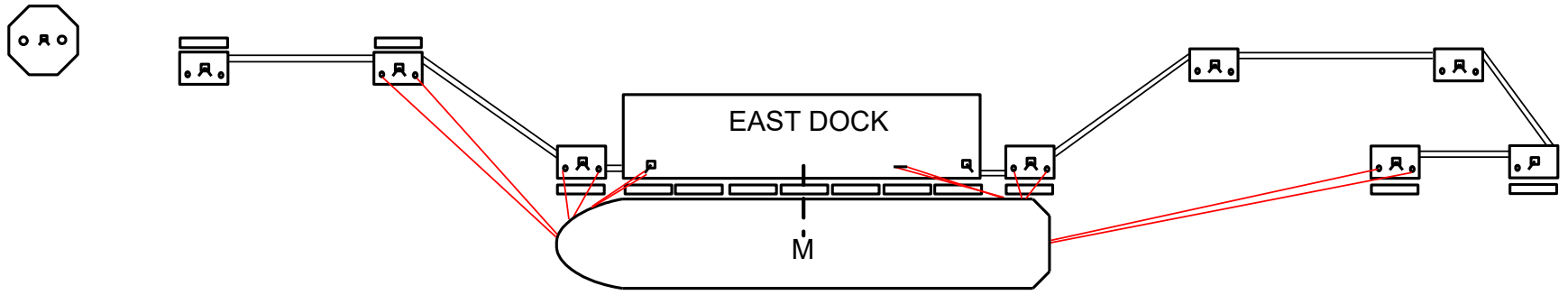




DPRLP Typical Mooring Diagrams

East Dock

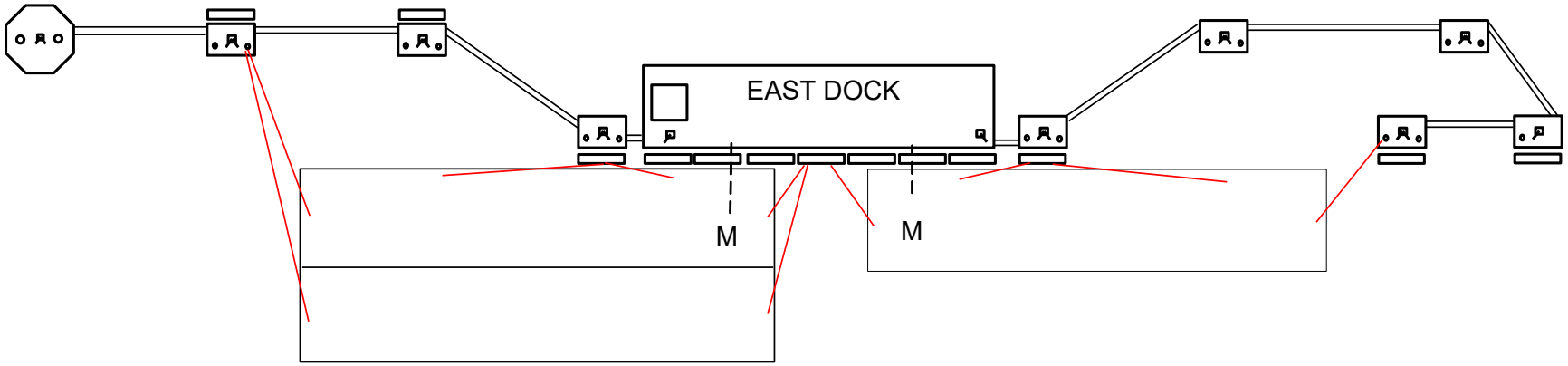




122 meter (400ft) vessel

DPRLP Typical Mooring Diagrams

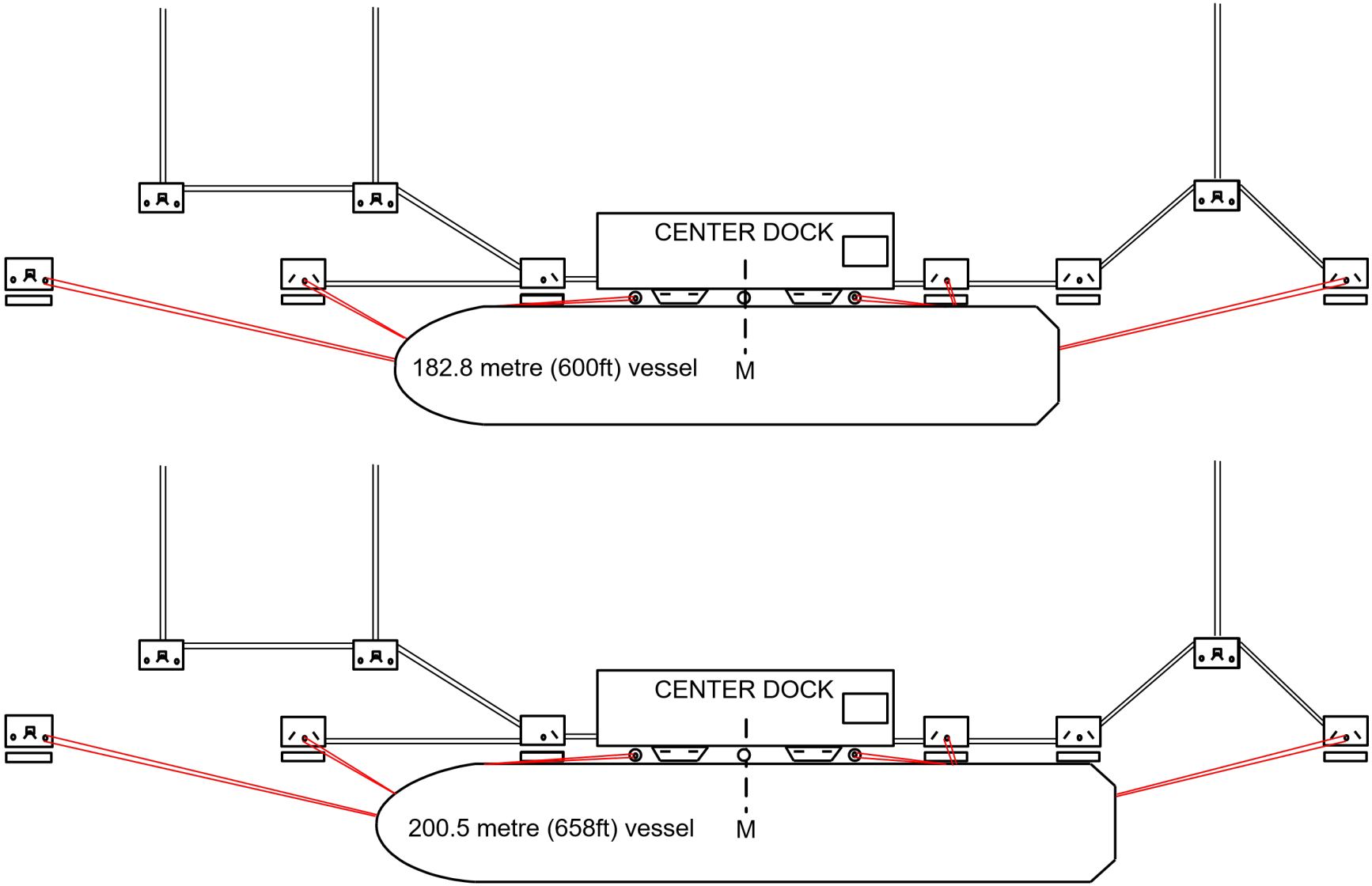
East Dock



Note: Barges must use only mooring points/hooks for making fast and are not to tie off to fender timbers.

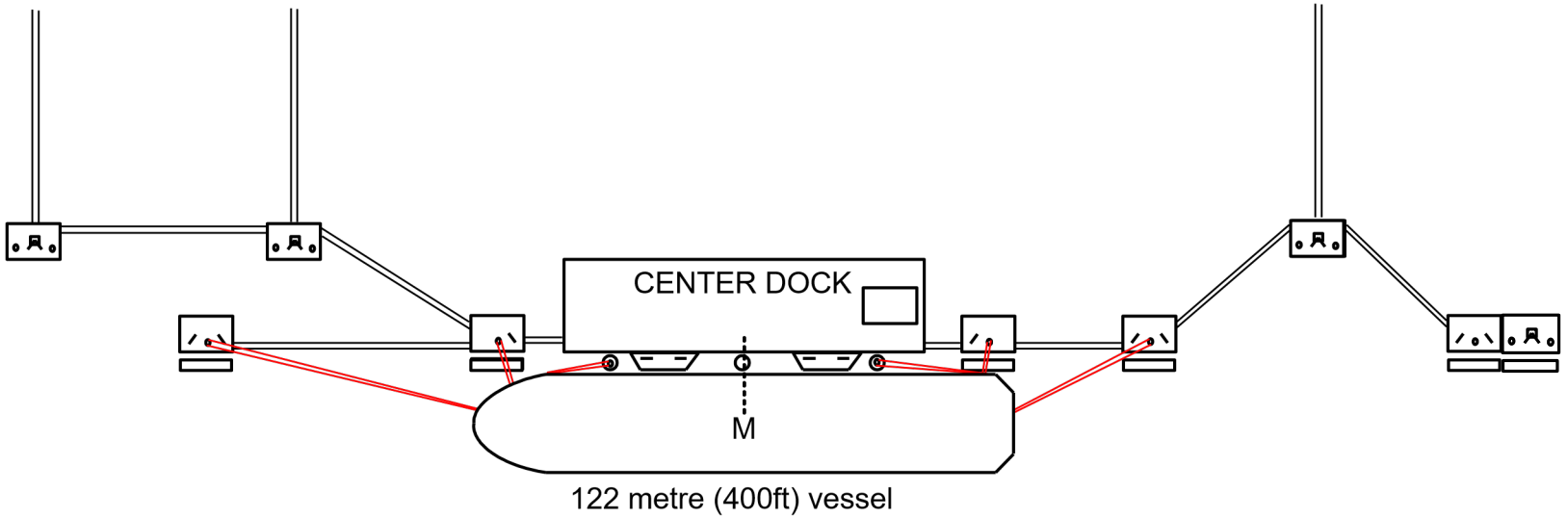
DPRLP Typical Mooring Diagrams

Center Dock

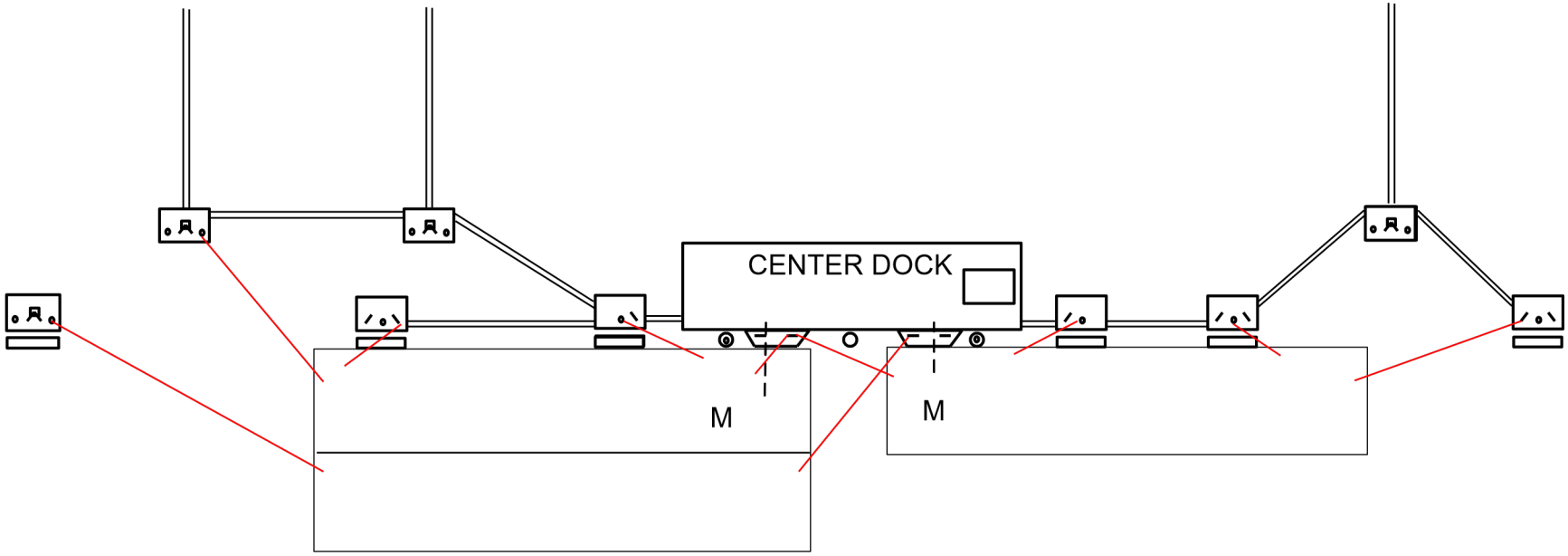


DPRLP Typical Mooring Diagrams

Center Dock

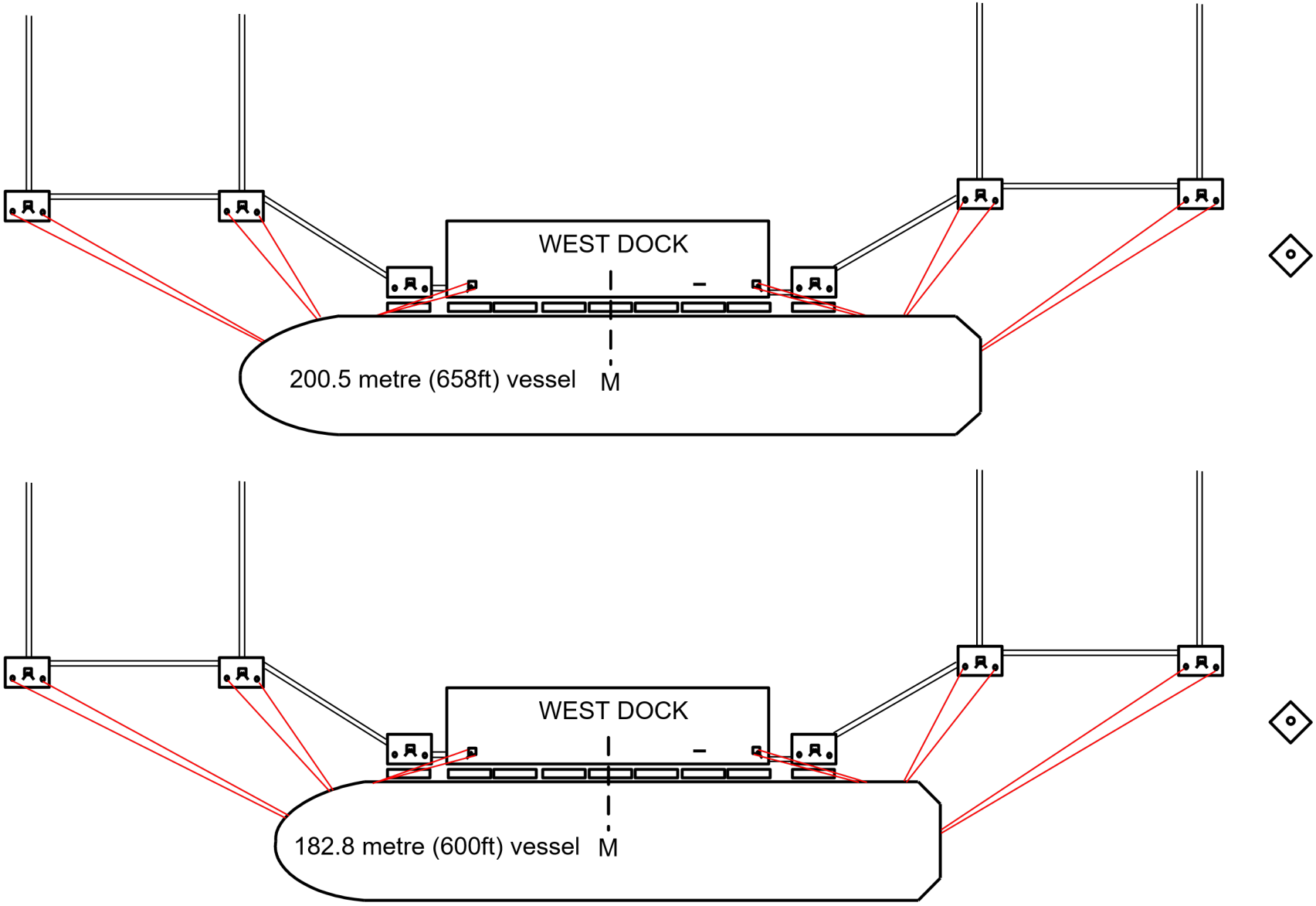


122 metre (400ft) vessel



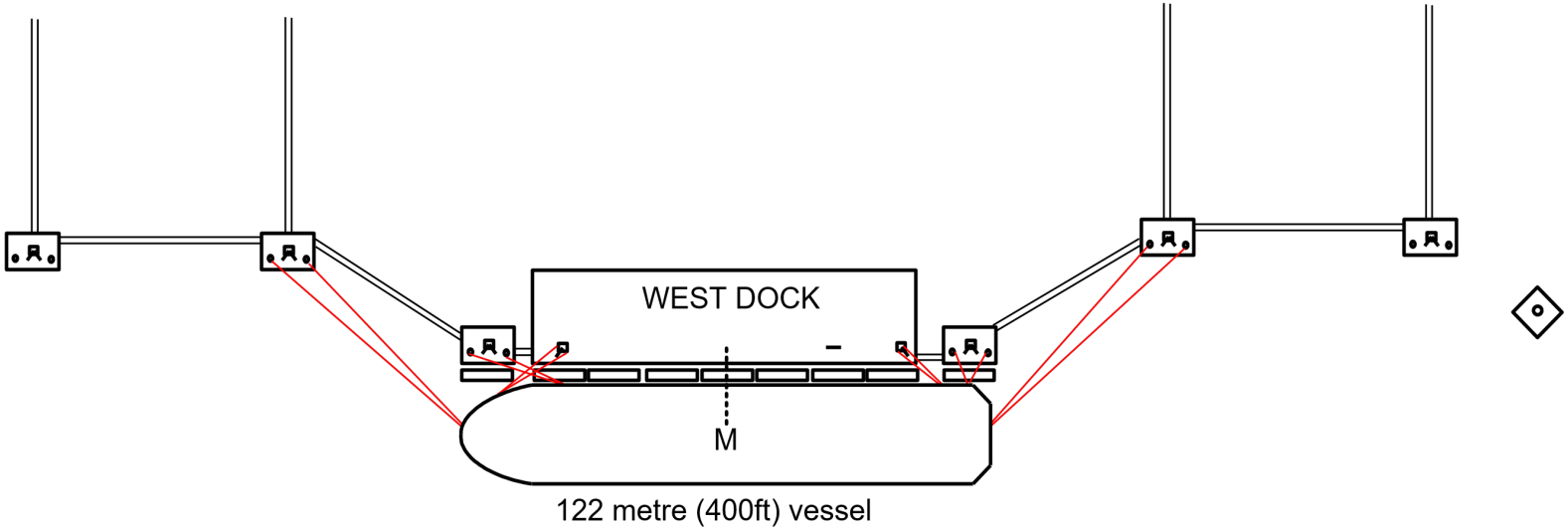
DPRLP Typical Mooring Diagrams

West Dock



DPRLP Typical Mooring Diagrams

West Dock



122 metre (400ft) vessel