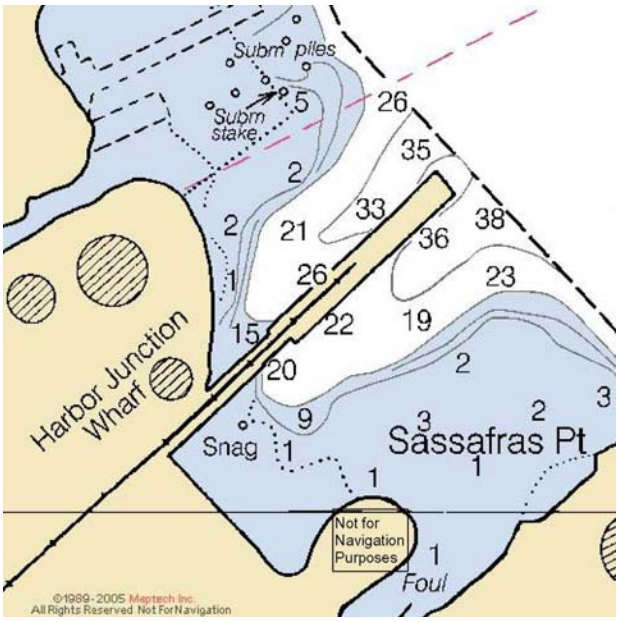
MOTIVA
ENTERPRISES LLC

MARINE TERMINAL GUIDE
PROVIDENCE, RHODE ISLAND

Marine Terminal Guide



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PART 1 – EMERGENCY PROCEDURES AND CONTACTS

EMERGENCY CONTACTS

Any vessel navigating within the US exclusive economic zone on charter to STUSCO, Motiva or Shell Chemicals 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 terminal
- Situations with the potential to become more serious, and
- Requests for assistance.

Notification should be made to the Motiva/SOPUS/STUSCO Shipping Emergency 24 hour Contact Number on:

(713) 241-2532

After hours, an answering service will take the call and contact the Shipping Duty Person.

TERMINAL EMERGENCY CONTACTS

In addition to the above, the following local emergency contacts should be advised of an incident that occurs while alongside or in the approaches to the Motiva Providence Terminal:

Name	Position	Office	Cell/Pager
Michael Sullivan	NE Complex Manager	401-461-6600 X113	401-413-8164 (cell)
Paul Fatum	Terminal Superintendent	401-461-6600 X102	732- 672-6777 (cell)
Jason Pace	New Haven Terminal Manager	203-468-4000 x 101	203-242-6260 (cell)
Terminal Operators		401-461-6600 X112	
David Keene	Marine Technical Advisor – New England	508-252-7333	508-463-5066 (cell)

PART 1 – EMERGENCY PROCEDURES AND CONTACTS

EMERGENCY SIGNALS

INCIDENT ALARM (TERMINAL)

Audible alarm on dock to alert vessel
Two way radio communications between vessel and dock

VESSEL EMERGENCY (or reported from Vessel)

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

Audible alarm on dock to alert vessel
Two way radio communications between vessel and dock

TERMINAL EMERGENCY PROCEDURES

Refer to the Terminal ICP manual for Emergency Response and call out procedures.

PART 2 – TERMINAL INFORMATION

GENERAL INFORMATION

1. DESCRIPTION OF TERMINAL (MOTIVA PROVIDENCE)

The terminal is located on 75 acres of land (10 of which are under water) at Harbor Junction Wharf on the west bank of the Providence River, within the City of Providence. It has 26 tanks which store six (6) different grades of petroleum products, and various additives.

Products are received via ships and barges and shipped via truck or barges. Product is transferred through either a ten (10) bay truck rack or the dock.

The dock has two (2) mooring areas with two (2) areas for transferring product. A total of two (2) vessels can be handled simultaneously (one ship & one barge or two barges). The South berth can receive ships or barges up to 750 feet in length, with a beam of 107 feet, and a maximum a draft of 39 feet. The largest size vessels accepted at the ship berth have a maximum SDWT of 70,000 MT and a maximum displacement of 81,000 MT. Vessels of a larger size require approval from the Marine Technical Advisor (MTA) before berthing. The North berth can receive barges up to 600 feet in length, with a beam of 90 feet, a maximum a draft of 26 feet, and a maximum displacement of 23,000 MT.

Any vessels wishing to discharge cargo at Motiva Providence with a deeper draft and using the tide will need approval from the Marine Technical Advisor (MTA) or the Vetting group before berthing.

There is a personnel shelter near the transfer facilities providing good visibility of the area. A fire alarm box is located at the head of the dock.

HOURS OF OPERATION:

24 hours per day 7 days per week

WATERSIDE DIRECTIONS TO MOTIVA DOCK:

The dock area is located at Harbor Wharf Junction on the west bank of the Fox Point Reach section of the Providence River, which empties into Narragansett Bay and Rhode Island Sound.

Latitude: 41 degrees 48’ 05”N

Longitude: 71 degrees 22’ 45”W

PART 2 – TERMINAL INFORMATION

LANDSIDE DIRECTIONS TO MOTIVA TERMINAL:

From Providence and points North:

Take Interstate 95 South and exit 18. Turn left at the end of ramp on to Thurbers Avenue. Proceed to the traffic light and take a right onto Allens Avenue. The terminal will be on your left in 0.2 miles.

From points South of Providence:

Take Interstate 95 North and exit 18. Bear right at the end of ramp on to Thurbers Avenue. Proceed to the traffic light and take a right onto Allens Avenue. The terminal will be on your left in 0.2 miles.

PRODUCTS HANDLED:

Gasoline: PBOB, RBOB
Ultra Low Sulfur Diesel
High Sulfur Heating Oil
Jet Fuel
Gasoline & Diesel Additives
Ethanol

2. ANCHORAGES AND WAITING AREAS

Vessels calling at Rhode Island Ports generally anchor at the Newport/Jamestown anchorage at the lower part of Narragansett Bay. The vessel pilot will coordinate Anchorage position and location. Lightering operations are regularly held at this anchorage.

3. COMMUNICATIONS PRIOR TO ARRIVAL

ETA messages are handled via the vessel's agent or directly with the Barge Company.

Pre-arrival information required by terminal for ships is located in the attachments section of this guide.

4. PILOTAGE

Pilotage is compulsory for foreign vessels and U.S. vessels under register when entering and departing Narragansett Bay and all ports of the waters of the State of Rhode Island. Contact details can be obtained from Ship's Agent, British Admiralty and United States Coast Pilot books, but a minimum of 24 hours notice is required.

5. TUGS

Ocean-going vessels use tugs as specified by the pilot and the vessel's captain.

Tugs are required to remain in the vicinity of their barges while discharging/loading product at the Motiva Providence Terminal.

6. TERMINAL MANNING

Two (2) operators are required per shift during vessel loading and discharge operations.

A minimum of four (4) Motiva employees or contractors is required during ship tie-up/mooring.

A minimum of two (2) Motiva employees or contractors is required during barge tie-up/mooring.

7. CARGO TRANSFER FACILITIES

Dock Name	Hoses or Manifolds	Size	Rate barrels/hour		Maximum Pressure
			Loading	Discharge	
Motiva Providence South Berth	6 Hoses Total 2 Fuel Oil 2 Gasoline 1 Ethanol 1 Diesel (ULSD) **Manifolds not presently in use**	- 10” 10” 10” 10”	7,000 BPH Maximum	Rates are to be established during the pre-transfer conference with the dock PIC. The dock PIC will use the terminal established tank rates for reference when calculating max loading rate. Once agreed upon, the max loading rate shall be documented on the pre transfer plan.	100 PSI or 6.9 Bar
Motiva Providence North Berth	**5 Manifolds Total** Gas Ethanol Jet Diesel Fuel Oil	8”	Ethanol 4,000 BPH Maximum Fuel Oil 6,000 BPH Maximum	Rates are to be established during the pre-transfer conference with the dock PIC. The dock PIC will use the terminal established tank rates for reference when calculating max loading rate. Once agreed upon, the max loading rate shall be documented on the pre transfer plan.	100 PSI or 6.9 Bar

PART 2 – TERMINAL INFORMATION

8. ARRANGEMENTS FOR EMERGENCY SHUTDOWN

In the event of a spill, fire/explosion, personnel injury, vessel breakaways, severe weather conditions, and terrorist activity, the guidelines in the Integrated Contingency Plan, the USCG Operations Manual and the Terminal Security plan should be followed. Vessel masters will be advised of requirements at the Pre-Transfer Conference.

9.

Berth Characteristics		
Description	**South Dock**	**North Dock**
Maximum LOA	750 feet // 228.65M	600 feet // 182.88M
Minimum LOA	230 feet // 70.12M	100 feet // 30.48M
Beam	107 feet // 32.62M	90 feet // 27.43M
Minimum Parallel Mid Body Length	230 feet // 70.12M	100 feet // 30.48M
Maximum BCM	375 feet // 114.33M	300 feet // 91.44M
Maximum SCM	375 feet // 114.33M	300 feet // 91.44M
Depth Alongside @ Mean Low Water	40.0 feet @ MLW 12.19M @ MLW	27.0 feet @ MLW 8.23M @MLW
Maximum Allowable Draft	39.0 feet @ MLW 11.89M @ MLW	26.0 feet @ MLW 7.92M @ MLW
Maximum Freeboard (including Deck to manifold height)	TBD	TBD
Deadweight	70,000 MT	22,500 MT
Displacement	81,000 MT	23,000 MT
Maximum Speed of Approach	5 inches/second	5 inches/second
Water Density	Brackish	Brackish

All dimensions shown are in feet and inches and refer to the visiting vessel's maximums. Deadweight and displacement are shown in metric tonnes.

LOA = Length Overall of the vessel (maximum length)
BCM = Bow to centre manifold
SCM = Stern to center manifold

10. TIDES AND CURRENTS

The mean range of tide at Providence is 4.6 feet, and the maximum range due to the combined effect of wind and other causes may reach 8 feet or more at times.

Tidal currents are weak in the approach channel and the harbor. The velocity near the middle of the ebb and flood period is generally less than 0.5 knot.

11. CLIMATIC CONDITIONS AND ABNORMAL WEATHER

Weather: Lightning Storms

During periods when electrical storms are in the vicinity, cargo operations will be stopped by mutual agreement between the terminal's loading master (known in the USA as the Dock Person in Charge, or PIC), and the vessel's officer in charge of cargo operations. The vessel will be expected to close down all cargo hatches and openings if it is not operating under closed conditions.

Weather: Temperatures

The temperature for the entire year averages around 51°F (10.6°C). January is the coldest month averaging 29°F (-1.7°C), and July the hottest month averaging 73°F (22.8°C). Freezing temperatures occur on the average about 117 days per year and the days with minimums below 5°F (-15°C) average six each year. An average nine days each year record maximums in excess of 90°F (32.2°C). The all-time maximum for Providence is 104°F (40°C) recorded in August 1975 and the all-time minimum is -13°F (-25°C) recorded in January 1976.

Weather: Wind parameters

The prevailing winds are south-westerly in the summer and north-westerly in the winter. The heaviest gales are usually from the northeast and northwest.

South Berth:

Ships-Articulated Tug Barge Units (ATB'S):

With a sustained wind from any direction at anything over **34 knots** (39 mph), the vessel will suspend cargo operations (stop pumping) and have the vessels crew on mooring watch.

With a sustained wind from any direction, at anything over **40 knots** (46 mph) the hoses should be disconnected the vessel's engines should be on stand-by.

With a sustained wind speed of over **46 knots** (53 mph) from any direction, the crew and engines will be on stand-by and a tug or tugs should be alongside.

Barges:

With a sustained wind from any direction at anything over **20 knots** (23 mph), the vessel will suspend cargo operations (stop pumping) and have the vessels crew on mooring watch.

With a sustained wind from any direction, at anything over **26 knots** (30 mph) the hoses should be disconnected the vessel's engines should be on stand-by.

With a sustained wind speed of over **32 knots** (37 mph) from any direction, the crew and engines will be on stand-by and a tug or tugs should be alongside.

North Berth:

Barges only:

* If winds are forecasted to be in excess of 25 knots (29 mph) during the transfer, the vessel crew should be instructed to place additional mooring lines out.

With a sustained wind from any direction at anything over **35 knots** (41 mph), the vessel will suspend cargo operations (stop pumping) and have the vessels crew on mooring watch.

With a sustained wind from any direction, at anything over **40 knots** (46 mph) the hoses should be disconnected the vessel's engines should be on stand-by.

With a sustained wind speed of over **45 knots** (52 mph) from any direction, the crew and engines will be on stand-by and a tug or tugs should be alongside.

*Sustained wind is defined as winds remaining at the same velocity for a period of at least 10 minutes.

Ice

The approach channel and the harbor are generally free of ice and navigable throughout the year. During severe winters, the harbor and several miles of Providence River and Upper Narragansett Bay are occasionally broken over, but the ice is usually broken up in the channels to the principal wharves by the traffic in the harbor.

12. FACILITIES FOR RECEPTION OF DIRTY BALLAST, CARGO SLOPS AND ENGINE-ROOM OILY WASTES

Facilities for the reception of Dirty Ballast, Cargo Slops and Engine Room Oily wastes are not available at the terminal for ocean going ships unless arranged with terminal management at least 24 hours prior to the vessels arrival.

13. AVAILABILITY OF BUNKERS

Bunkers are not available at the Motiva Providence Terminal.

14. AVAILABILITY OF FRESH WATER

Potable water is not available at the Motiva Providence Terminal.

15. ARRANGEMENTS FOR RECEIVING PROVISIONS AND STORES

Stores may not be taken on board without prior Motiva management approval.

16. AVAILABILITY OF GARBAGE RECEPTION FACILITIES

The facility accepts waste material and garbage from any vessels in accordance with MARPOL 73/78. A specific waste disposal plan must be arranged with terminal management at least 24 hours prior to the vessels arrival in order to arrange an approved disposal area.

17. TERMINAL ACCESS AND VISITOR SECURITY

All access to the Terminal by personnel coming ashore or going aboard vessels will be facilitated under the authority of the U.S.C.G. approved Facility Security Plan (FSP). All personnel and accompanying baggage entering the terminal property are subject to screening and search at any time. Anyone refusing to comply with this will be denied entry.

Weapons and Guns are prohibited at all times on Motiva Enterprises property, except for authorized Law Enforcement officials.

The **Ship** or shipping company are directly responsible for the costs associated with the hiring of the additional security services as necessary for the anticipated amount of personnel traffic associated with a **Ship** call at the terminal. The vessel's agent should contact the Motiva Providence Terminal management for a listing of authorized security services

All **Tug and Barge** *crew shore leave* and *crew changes* from the vessel will be managed at the convenience of terminal personnel and controlled under the authority of the U.S.C.G. approved facility security plan (FSP). The TWIC card is the present approved government issued picture identification for access from and to the terminal.

All **Tug and Barge** *shore support staff* intending on visiting their vessels while at the terminal must send a list of names and identifying information on company letterhead by fax (401) 461-6627 well in advance of their arrival at the terminal. Government issued picture identification will

be required for access to and from the terminal. The availability of **Tug and Barge** *support staff* visitations will be managed at the discretion and convenience of terminal personnel and controlled under the authority of the U.S.C.G. approved facility security plan (FSP).

If a ship, barge, shipping company, or agents have a complaint about the quality or performance of an individual security company or other security related issues, please contact the terminal Facility Security Officer (FSO) by fax at (401) 785-9290. The fax should include the time of the incident and provide all pertinent details available.

Any vessels, persons or companies attempting to circumvent the facility security protocol may be barred from the facility permanently.

18. SAFE ACCESS TO VESSELS ALONGSIDE

The provision of safe access between the vessel and the shore is a shared responsibility. When docking on the north berth, the shore fixed hydraulic gangway shall be the preferred gangway system whenever safe and practicable. 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. When docking on the south berth, the ship's gangway is the preferred method of access. If the vessel docking on the south berth does not have an adequate gangway, the shore portable gangway system may be utilized.

19. TERMINAL PPE REQUIREMENTS FOR "INNOCENT PASSAGE"

All of those who participate in "innocent passage" at the Terminal will be required to comply with the following PPE requirements on all areas of the dock. Examples of personnel who innocently pass across the dock are crewmembers, vessel owners/reps, repair technicians, ship agents, pilots, cargo inspectors, chaplains, etc.

While on the docks, all individuals must be compliant with the following Motiva PPE requirements:

Hard Hat

Safety Glasses

USCG approved Personal Floatation Device (PFD)

Appropriate shoes (Leather Uppers, Slip resistant sole, defined heel)

Appropriate clothing shall be worn at all times. Long pants. Shirts with sleeves.

If the individual does not have the appropriate PPE with them, Hard Hats, Safety Glasses, and PFD's will be provided for them at the dock gate, on the dock, or from the contracted security escort provider. If PPE is loaned to the individual, it should be returned before leaving the dock.

PART 3 – TERMINAL REGULATIONS

GENERAL REQUIREMENTS

Life Saving Rules – Some Guidance for Ships and Barges
Transporting Hydrocarbons
Applicability to Crews on Chartered Vessels

Life Saving Rules apply to Shell owned vessels and vessels operated by Shell staff. Crews on chartered vessels are not contractors and therefore the Life Saving Rules do not apply although following the rules is to be actively encouraged and Shell's vetting procedures apply (see below). However, if a crew member breaches a LSR or other applicable facility procedure while transiting between vessel and shore through a Shell facility, or is on the Shell facility for other reasons, then certain actions may be taken against that crewmember (see examples below).

Examples:
A crew member from a third party vessel is going to be transported through our facility either by Shell personnel or a security approved transport service. If the crew member refused to put on his seatbelt, the vehicle should not proceed. If it does proceed, then any LSR consequences should apply to the driver who is fully accountable for compliance through direct Shell employment or contractual terms.

A crew member from a third party vessel shows up at the gate to our facility (returning from town for example) and is drunk/disorderly. We have the right to deny that person access. In this situation, the Ship's agent should be contacted to ensure the safety of the crew member.

If a third party crew member was found smoking on our property in an unauthorized area, we have the right to have the person escorted off the premises into the hands of the Ship's agent and insist that he not be allowed to return to the vessel while it is berthed/docked at our facility. This is a violation of both our terminal requirements as well as tanker industry requirements while alongside an oil terminal (ISGOTT Ship/shore checklist). We would expect full cooperation by the vessel management.

Shell's Vetting procedures are quite clear: If Shell confirms there have been serious breaches of safety rules by crew on or off a chartered ship, we have the ability to prevent use of the vessel until positive confirmation is received that corrective action has been taken to prevent reoccurrence. (Significant breaches could result in an entire fleet being barred from Shell business, although these cases are somewhat rare.) Similarly if there is a significant incident, i.e. a fatality, grounding, collision on board any third party vessel under a charter with us, the vessel's investigation and response would need to satisfy vetting that all appropriate issues/controls have been addressed or the vessel would be prohibited from doing business with Shell. Before a new vessel is brought onto a Shell charter there is a similar review of past incidents.

Applicability to Contractors On Board Chartered Vessels
The Life Saving Rules apply to Shell-contracted surveyors, inspectors, expeditors and others whether on **board a Shell vessel or a chartered vessel managed by others.**

Note:
Pictograms of Life Saving Rules may be found in the attachment section in the back of this guide.

PART 3 – TERMINAL REGULATIONS

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 SOPUS, Motiva or Shell Chemicals, hereinafter referred to as **'terminals'**.

2. ROLES AND RESPONSIBILITIES

Each party, vessel and terminal, is 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.

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.

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 prior to the commencement of transfer activities.

6. VESSEL INFORMATION

To facilitate pre transfer 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. These regulations establish working hour limits of not more than 15 hours in any 24-hour period, or not more than 36 hours in any 72 hour period, except in an emergency or drill.

Watch hand-overs 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 Document (MMD) readily available. It is required that the MMD 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 while a vessel is berthed at the terminal.

- long pants
- suitable 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.

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 terminal representative. 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 terminal representative. Should a craft be given permission to come alongside, personnel on board it must be instructed regarding safety regulations.

Bunker barge operations are not be permitted while a vessel is alongside the terminal.

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 terminal representative 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 terminal representative must be advised immediately.

For tank barges, the tow boat assigned to a tank barge or a number of tank 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 terminal representative.

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

The use of power-driven or manually operated devices capable of producing sparks is prohibited in the cargo area, cargo tanks, fuel tanks, cargo pump rooms 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 separately.

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 four mooring lines which shall be of an adequate size and strength and be in good condition.

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, should 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.

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

Tank ships shall rig emergency towing wires of adequate strength secured to the offshore bow and quarter bollards with the towing eye maintained at, or about, the waterline.

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 fire fighting 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 pump rooms should be well ventilated and gas free before arrival at the terminal. While alongside, the ventilation system shall be kept running and the pump room 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.

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.

Designated smoking areas should be conspicuously marked.

Smoking is not permitted in the terminal.

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 and pagers of an intrinsically safe type 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 savealls 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 fully bolted 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.

PRE-TRANSFER LIAISON 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 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 Declaration of Inspection (DOI) with relevant addendum for benzene, liquefied hazardous gas, or vapor control operations, as required by Federal regulations. A ship/shore safety checklist, in accordance with ISGOTT recommendations, should also be completed if presented by vessel or terminal. A checklist combining both the DOI and ISGOTT pre-transfer requirements is employed at the terminal.

38. MATERIAL SAFETY DATA SHEETS (MSDS)

An MSDS or Cargo Information Card should 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 should, if requested, provide an MSDS 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

Marine transfer vapor control equipment is not in use at this terminal.

CARGO TRANSFER OPERATIONS

41. COMMUNICATIONS

All vessels alongside a terminal shall have at all times at least one person on duty that speaks and readily 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 pre-transfer conference. Rates shall be established for initial loading and will take into account the need for precautions when handling grades defined as static accumulators. Procedures for final topping-off will also be agreed.

43. CHECKS ON QUANTITIES TRANSFERRED

Preferably every hour, and in any event, at least every two hours, the vessel should provide the terminal representative 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 setpoint 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 a terminal without prior approval of the terminal representative.

46. CRUDE OIL WASHING

Crude Oil Washing (COW) is not allowed at this terminal.

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 are not permitted alongside the terminal.

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 is 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 (piggy-backing) 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 gasoline's and distillates; high sulfur and low-sulfur 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 STUSCO Shipping. Inert gas operation should be conducted in accordance with procedures contained in the vessel's IGS manual. The terminal representative may require random checks to be made to verify the oxygen content in cargo tanks 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 sulfide (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.

ATTACHMENTS

1.) Primary and Secondary Evacuation Route

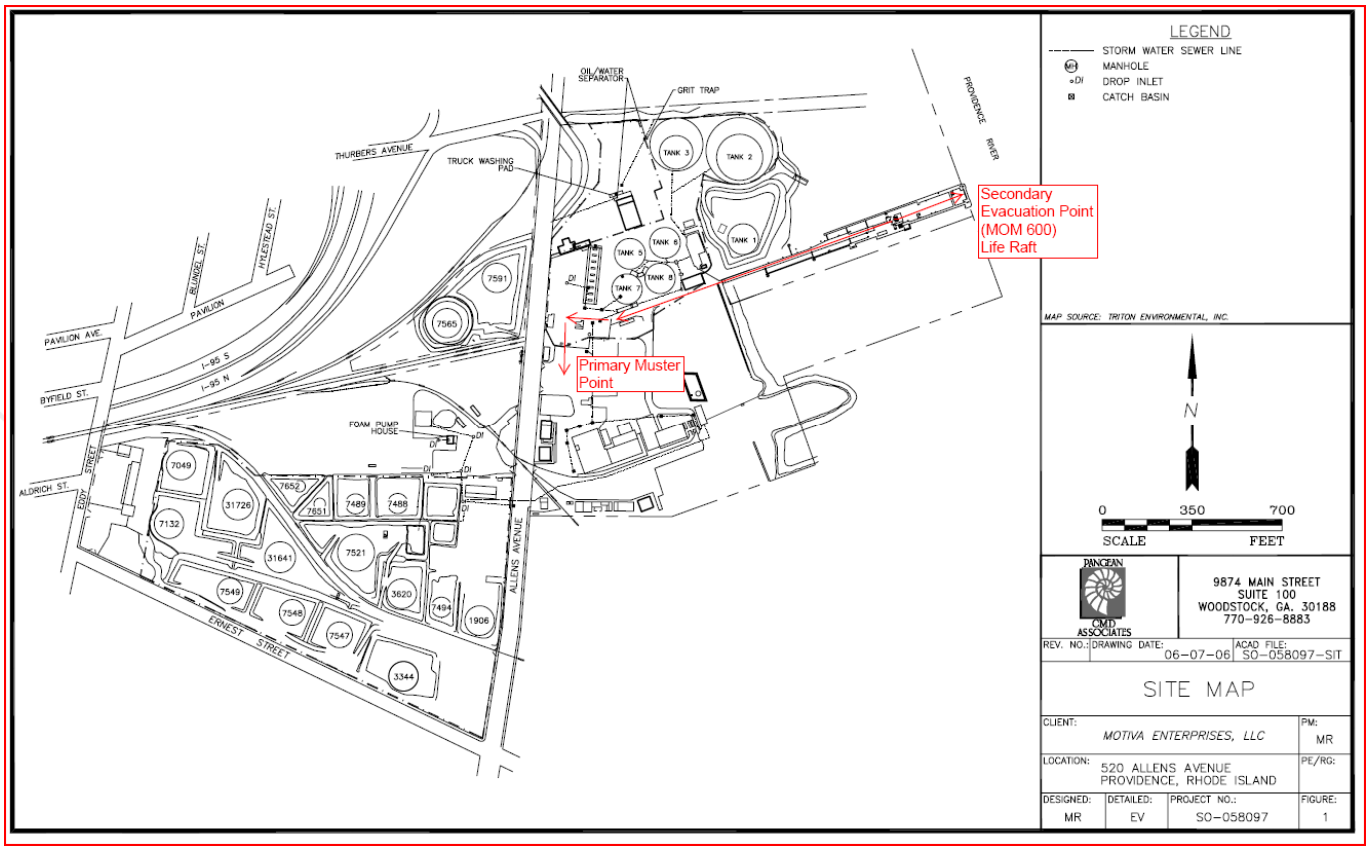
2.) Mooring Diagrams (Minimum mooring arrangement for each berth and generic ship/barge type)

3.) Pre-Arrival Questionnaire for Vessels Scheduled to Berth at the terminal

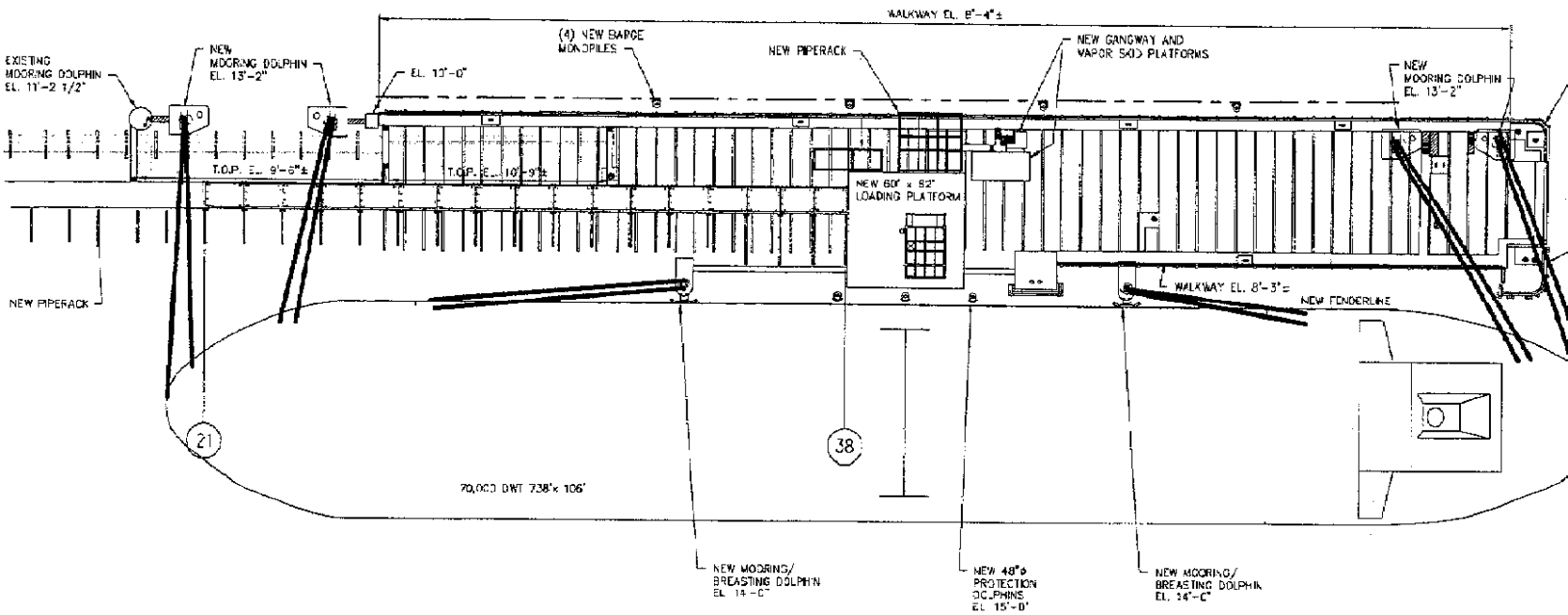
4.) Life Saving Rules

Motiva Providence Terminal

Primary and Secondary Emergency Evacuation Route



Minimum Suggested Ship Mooring Arrangement
(Locations of mooring points on the vessel estimated for general purposes.)



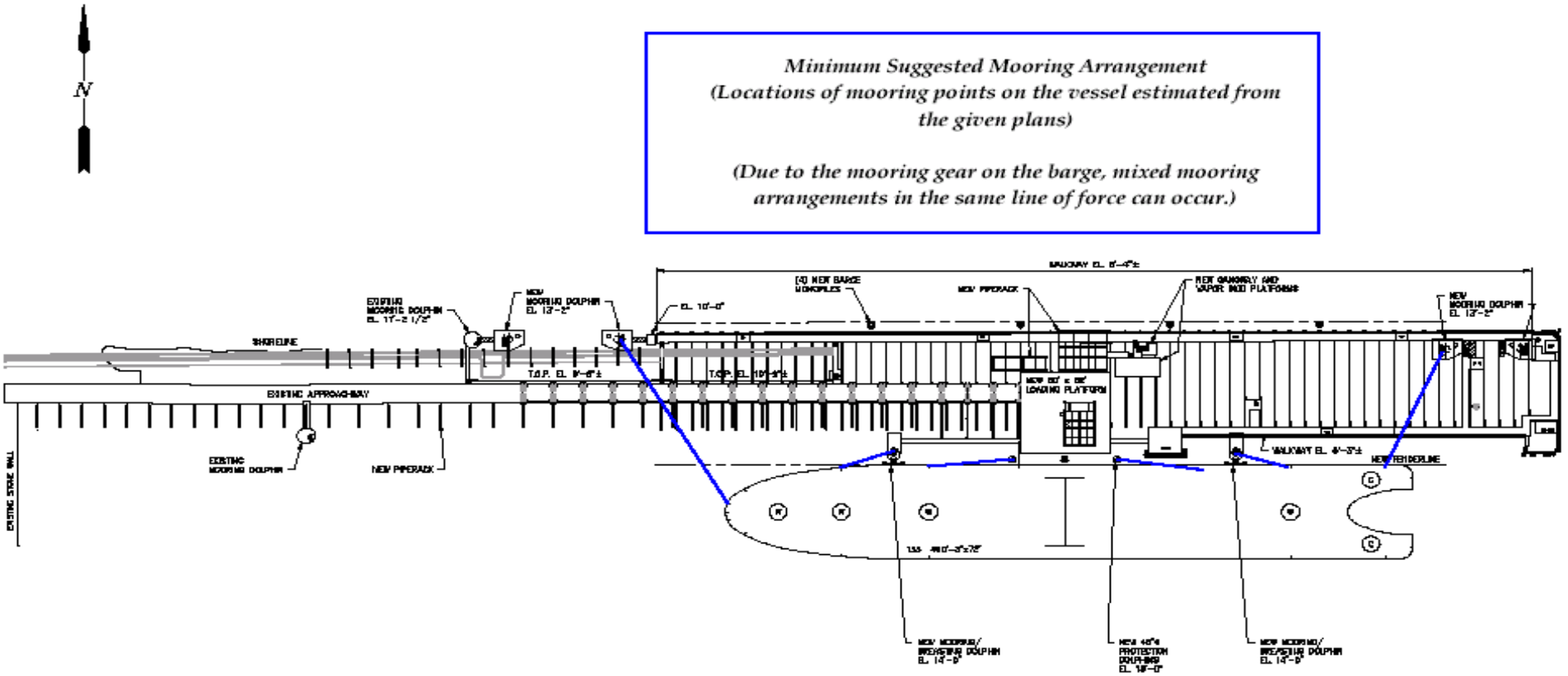
South Berth

PROVIDENCE RIVER

MOTIVA ENTERPRISES LLC

Standard ATB/ Large Barge Mooring Arrangement at Motiva Providence

South Berth

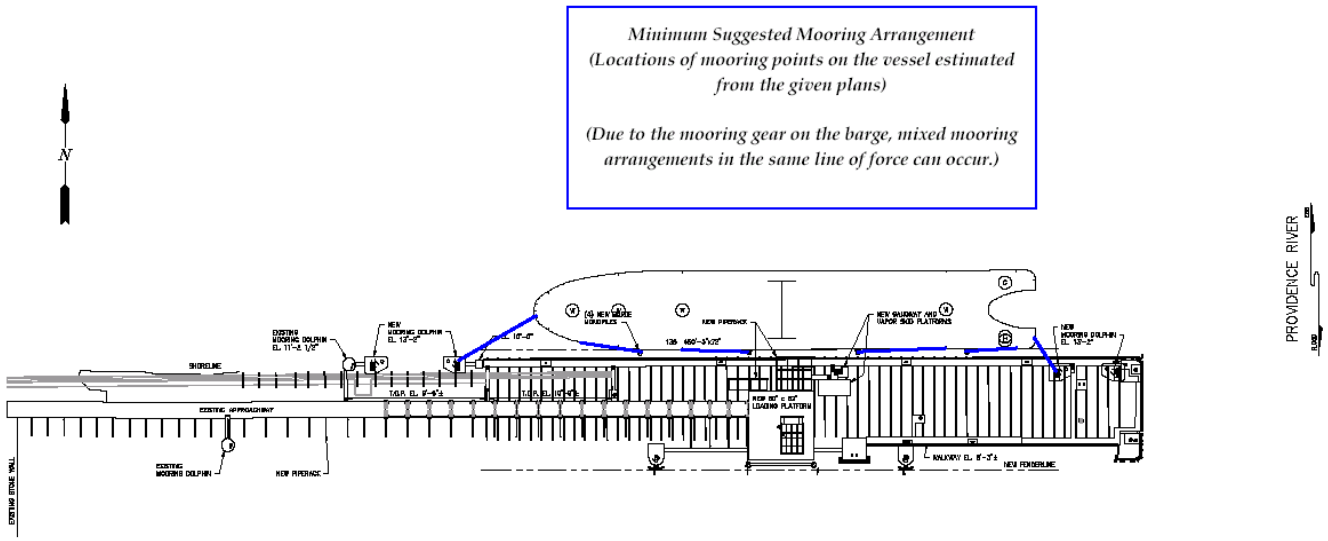


Spring line placement can be adjusted for specific vessel mooring arrangements.

Note: Drawing not to scale. All structures and features presented should be considered approximate.

MOTIVA ENTERPRISES LLC

Standard ATB/ Large Barge Mooring Arrangement at Motiva Providence North Berth

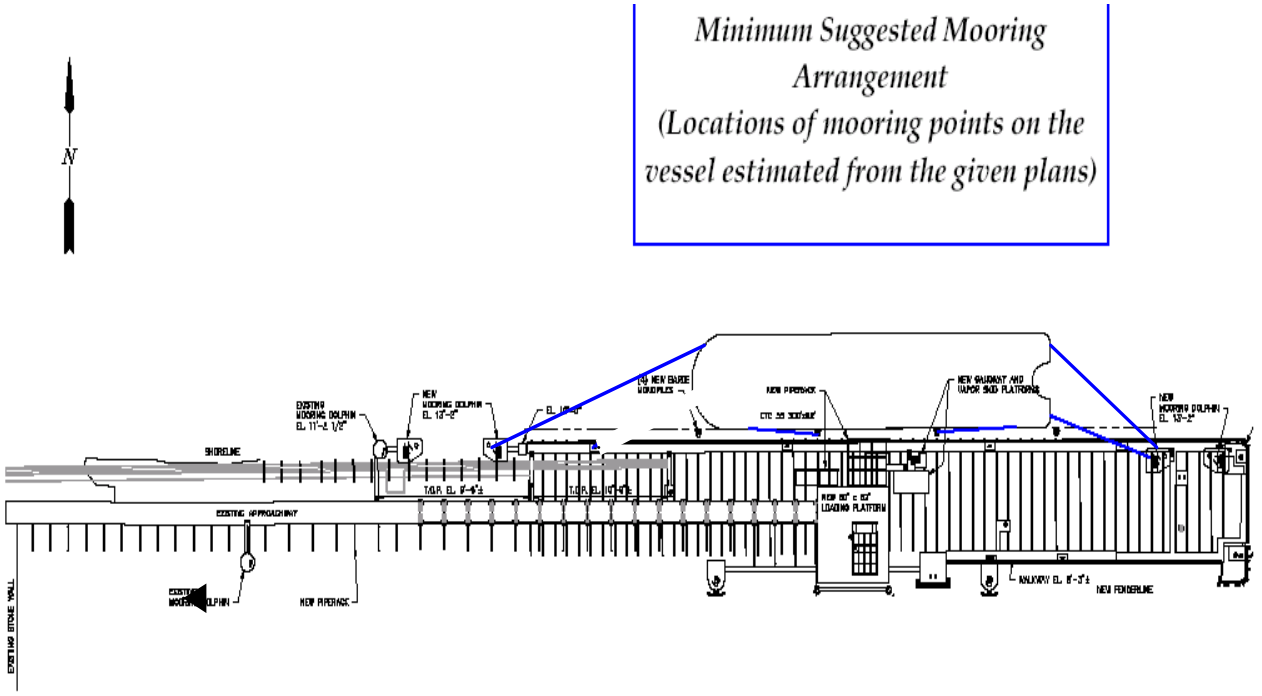


Spring line placement can be adjusted for specific vessel mooring arrangements.

Note: Drawing not to scale. All structures and features presented should be considered approximate.

MOTIVA ENTERPRISES LLC

Standard Barge Mooring Arrangement at Motiva Providence North Berth



Spring line placement can be adjusted for specific vessel mooring arrangements.

Note: Drawing not to scale. All structures and features presented should be considered approximate.

MOTIVA
ENTERPRISES LLC

Motiva Providence Terminal

Pre-Arrival Questionnaire For Vessels Scheduled To Berth

Please respond at least 24 hours prior to the ship's arrival at the terminal.
Fax +1 (401) 461-6627

Please note all measurements to be reported in feet & inches and barrels.

1.)Name of Vessel:
2.) Vessel draft fore and aft on arrival:
3.) Estimated vessel draft fore and aft on departure:
4.) Length Overall, Beam, and BCM (Bow to Center Manifold) Distances:
5.) Critical Equipment: Please list any effects of hull, machinery or equipment that could adversely affect safe operations or delay commencement of cargo handling.
6.) What is the safe working load of the Cargo Hose Crane(s) and they fully operational?
7.) Vessel Load Port:
8.) Vessel Last Port:
9.) Has U.S. Customs and Immigration cleared the vessel at another U.S. port?
10.) What MARSEC level will the vessel be operating under during this port call?
11.) Does the vessel have the ability to safely moor without using wire ropes?
12.) What is the type and amount of cargo onboard:
13.) Amount of cargo to be discharged at this terminal if different than the amount above?
14.) Is the vessel prepared to receive ten inch (10") hoses? (Number of hoses is dependent on grade.) (The vessel will berth starboard side to at this terminal, please re-confirm with Pilot after boarding.)
15.) Please state the number of available pumps for discharge per parcel and pumping rate:

Motiva Providence Terminal

Pre-Arrival Questionnaire For Vessels Scheduled To Berth

16.) The maximum discharge pressure allowable at the ship's manifold by the terminal is 100 psi or 7 kg/cm^2. Is the vessel capable of maintaining at 100 lbs psi per parcel during discharge?
17.) Will the vessel require to strip tanks to complete the discharge and what anticipated time will be needed?
18.) If you have multiple products, can the ship discharge all products simultaneously? Can two-valve separation be maintained between products? If not, what are the specific restrictions?
19.) Is the vessel capable of ballasting concurrently with discharge? If not, how many hours required for ballast? Is the ballast system totally segregated from the cargo system?
20.) The terminal does not provide a shore gangway at the ship berth. Does the vessel have a safe working gangway with proper safety net and access steps? What is the overall length of the vessel's gangway?
21.) Please provide the name and after hours contact info for agent assigned to vessel:
22.) Please provide the vessel's telex, satellite, cell phone and fax numbers:
23.) Please provide the name of the vessel's P&I Club:
24.) Please provide the Qualified Individual's name and after hours contact info:
25.) Does the ship have a valid U.S.C.G. Non U.S. Flagged Vessel Certificate of Compliance (C.O.C.) ?
26.) Does the ship have a copy of the Motiva Providence Marine Terminal Guide (Version 6) 4 January 2013?

Motiva Providence Terminal Contact Info:

N.E.Complex Manager: **Michael Sullivan:** Office: **+1 (401) 461-6600 ext 113** Cell: **+1 (401) 413-8164**

Terminal Superintendent: **Paul Fatum:** Office: **+1 (401) 461-6600 ext 102** Cell: **+1 (732) 672-6777**

Terminal Fax: **+1 (401) 461-6627**

24 Hour Operations Number: +1 (401) 461-6600 ext 112

Shell's 12 Life-Saving Rules

1: Work with a valid work permit where required

2: Conduct gas tests when required

3: Verify isolation before work begins and use the specified life protecting equipment

4: Obtain authorization before entering a confined space

5: Obtain authorization before overriding or disabling safety critical equipment

6: Protect yourself against a fall when working at height

7: Do not walk under a suspended load

8: Do not smoke outside designated areas

9: No alcohol or drugs while working or driving

10. While driving, do not use your phone and do not exceed speed limits

11. Wear your seat belt

12: Follow prescribed Journey Management Plan