Oiltanking

Manual on Ships Operating Procedures and Regulations of Puerto Rosales Terminal

CONTENT

1 OBJECTIVE

The purpose of this Manual on Procedures is to inform all the PARTIES (Clients - Carriers - Shipowners – Charterers – Captains – Shipping Agencies - etc.) involved in port operations at the Terminal that Oiltanking EBYTEM S.A. has in Puerto Rosales of the minimum basic points that each of them has to fulfill.

This Manual does not substitute nor replace current information and/or regulations and/or provisions and/or laws issued by competent authorities of our country or elsewhere nor exempts any of the aforementioned parties from their responsibilities and legal obligations.

Oiltanking EBYTEM S.A. does not assume any responsibility for the use and information of this Manual on Procedures for tankers, and reserves the right to extend and/or amend it when considered convenient at its sole discretion, giving this no right to claims.

2 SCOPE

This Manual and procedure apply to OTE Personnel linked to maritime and land operations, to the Contractor Companies in charge of the services of Loading Masters, Maintenance, Tug and Mooring boats, as well as to the Clients, Maritime Agencies, Shipping Companies, Carriers and Charterers that need to follow the procedures in this document in the different operations by ships at the terminal. It is responsibility of the clients which nominate ships at the terminal of Puerto Rosales, to inform about this document and its procedures and to enfoce it to their carriers, charterers / tanker operators.

3 DEFINITIONS

Anchor: A nautical controlled mobile object that opposes the force of the tides allowing the ship to ensure its position in the sea.

Bulb: Low forward part of the ship in the form of a prominent nose

Chain Buoy: Float constructed of polyurethane foam covered with polyurethane fabric used to keep the mooring chain afloat.

Chain Stopper: Lock placed in the ship's Bow for the mooring line chains.

Hawser: Nylon mooring rope, specially designed to keep the ship moored to the monobuoy.

Headway: Ship's motion forwards or backwards.

Lifting Chain : Chain used to lift and lower the hose during the connection to the tanker.

Loading Master (LM) : Person trained to supervise Operations on Tankers.

He is a Maritime Professional who acts on board the tankers moored at the terminal, performing security and administrative management tasks together with the coordination of maneuvers and transfer of product between ship and land. He is the representative of the terminal on board the moored ships.

Manifold: Group of valves and pipes, located in the central part of tankers and on both sides, where the hoses or loading arms are connected for the transfer of liquids between the ship and the terminal.

Maritime Agency: It is the Company that takes care of everything a ship needs, like oil, water, crew transfer, documentation, medical care, etc.

Messenger Line: Floating Nylon rope, 130 m long, 8 inches in circumference and it is made of 12 braided cords. It is part of the mooring system.

Monitor System: System composed of Hardware and Software for the acquisition and transmission of operating variables between the monobuoy, the terminal control room and the ship. Through this system, it is possible to know the tension in the mooring system, the product pressure in the monobuoy, the prevailing wind speed and direction, as well as the displacement of the buoy with respect to its theorical position (excursion).

Monobuoy: Off shore port station anchored to the sea bottom used to moor tankers that load and unload crude oil through flexible hoses and submarine pipelines. Also known as **SPM (Single Point Mooring)**.

Mooring System: Set of steel shackles, synthetic fiber rope and 76 mm chain in diameter

with a messenger rope at its end. The shackles are fixed to the monobuoy being the chain the one that is fixed to the ship to keep it moored.

Trip Hooks: Fitting used to link a chain or sling with a fixed structure, designed to release the link quickly and easily (emergency).

4 RESPONSIBILITIES

It is the responsibility of OTE's personnel involved in logistics programation, commercial area and maritime operations at the terminal to maintain updated the present document aligned to the requirements of the Integrated Management System, and also to spread and enforce it. It is Terminal Manager and Maritime Operations Manager responsibility to approve this document.

It is responsibility of the Clients - Carriers - Shipowners - Charterers - Pilots - Captains - Maritime Agencies, maritime contratists of OTE to acknowledge the present document and to follow and ensure that the requirements here mentioned are followed.

5 Terminal Access and Description

5.1 Terminal Location

The terminal is located in Puerto Rosales, 6 km away from Punta Alta city, Buenos Aires Province, Argentina, and it is reached by Puerto Rosales access road. The tanks and other infrastructure are located in the Cantarelli island.

The maritime installations are located 1800 metres away of the coast on the north bank of the access channel to the port of Bahia Blanca.

5.2 Terminal Description

The Terminal owns 18 storage tanks of different capacities, which have a capacity from 15,000 cubic meters to 50,000 cubic metres, resulting in a total nominal capacity of 480,000 cubic meters.

The pipelines of the tank farm are connected to the maritime installation through valves

and underwater pipes of carbon steel, with 30” in diameter and 1,800 metres of length each one.

5.2.1 Geographical Position of the SPMs

SPM (Single Point Mooring)	Located Between Buoys	Depth (mts)	Position	
			Latitude	Longitude
Punta Ancla	N° 18 y 19	18	38° 57´ 44,1" SUR	62° 00´ 08,1" OESTE
Punta Cigueña	N° 20 y 21	19	38° 56´ 46,62" SUR	62° 03´ 06,68" OESTE

5.2.2 Description of the monobuoys

Punta Ancla Monobuoy:

It is a single point mooring (SPM) type of installation with 10.5 m in diameter, Cathenary Anchor Leg Mooring (C.A.L.M.) type – designed and built under ABS norms. The monobuoy is kept in position thanks to four chains arranged radially forming a 90° angle between each other.

Each chain has two offdrill-type anchors in tandem of 15 tons each.

The anchor field radious is 300 metres and it is important to take this into account as to not anchor there.

The diameter of floating hose string is 20" and the diameter in the camlock connection to the tanker is 12".

The floating hose has a total length of 230 meters and has 2 light beacons for night signalling (Ambar flashing light – one flash every 3 seconds).

The monobuoy has an all-around signalling white light, with flashes of the letter "U" in Morse Code.

The mooring system has a Nylon hawser of 21" in circumference, with a length of 45 metres and a 11 metres section of chaffing chain for bow stoppers of 76 mm of diameter.

The Mooring System meets the recommendations OCIMF 2007.

In this monobuoy can operate tankers from 30,000 t DWT (Deadweight tonnage) and up to 70,000 t DWT at maximum summer draft, limited by hydro meteorological conditions of the moment.

Punta Cigüeña Monobuoy:

It is a single point mooring (SPM) type of installation with 11.5 m in diameter, Cathenary Anchor Leg Mooring (C.A.L.M.) type – designed and built under ABS norms. The monobuoy is kept in position thanks to four chains arranged radially forming a 90° angle between each other.

Each chain has two offdrill-type anchors in tandem of 20 tons each.

The anchor field radious is 300 metres and it is important to take this into account as to not anchor there.

The diameter of floating hose string is 20" and the diameter in the camlock connection to the tanker is 12".

The floating hose has a total length of 230 meters and has 2 light beacons for night signalling (Ambar flashing light – one flash every 3 seconds).

The monobuoy has an all-around signalling white light, with flashes of the letter "U" in

Morse Code.

The mooring system has a Nylon hawser of 21" in circumference, with a length of 45 metres and a 13 metres section of chaffing chain for bow stoppers of 76 mm of diameter.

The Mooring System meets the recommendations OCIMF 2007.

In this monobuoy can operate tankers up to 106,000 t DWT at maximum summer draft. The tankers with a DWT higher than 70,000 t, shall have pilot on-board during all the stay of the ship in the monobuoy, regardless of the crude oil quantity to load and/or unload. The pilot shall be hired and paid by the Shipowner / Charterer / Shipper / Shipping Agency.

6 Ship Acceptance Conditions

6.1 Generals

Tankers operating at the Terminal, on any of the SPMs (Single Point Mooring), shall meet the requirements in the form Tankers Nomination.

For that aim, clients that nominate ships must send the form previously mentioned, completed, signed and attaching all the documentation required there and in the present document.

Only nomination forms signed by clients will be received and accepted, since they are the responsible for guaranteeing that the nominated ship meets all the requirements specified in the form and in this document.

The equipment of the tankers, their operation and maintenance, must be aligned with the updated versions of the recommendations on OCIME and on ISGOTT 2020, and must meet the requirements of dimensions, structural requirements and performance - detailed in the form previously mentioned – that guarantee an adequate compatibility between the ship and our facilities of mooring and load transfer.

For the vessels acceptance in Punta Cigüeña SPM:

1) That in Punta Cigüeña the DWT is from 30,000 t. and up to 106,000 t. at maximum original summer draft of the shipyard. In this monobuoy, vessels with multiple gross weights will be accepted if they meet the following conditions: the shipper presents, along with the Nomination form, copies of the Load Line and Tonnage certificates, issued by the ship´s Classification Society, where it is established that the ship´s gross weight is equal to or less than 106,000 t. In addition, vessels must provide maximum load information for the new DWT endorsed by the Class.

2) The vessel dimensions must not exceed:

Length: 245 meters **Beam:** 44 meters **Depth**: 21.5 meters

For the vessels acceptance in Punta Ancla SPM / Backup SPM:

1) That in Punta Ancla or with the Backup Monobuoy the DWT is between 30,000 t. and up to 70,000 t. at maximum original summer draft of the shipyard. In both monobouys, Vessels with multiple gross weights will be accepted if they meet the following conditions: the shipper presents, along with the Nomination form, copies of the Load Line and Tonnage certificates, issued by the ship´s Classification Society, where it is established that the ship´s gross weight is equal to or less than 70,000 t. In addition, vessels must provide maximum load information for the new DWT endorsed by the Class.

2) The vessel dimensions must not exceed:

Length: 228 meters **Beam:** 32.40 meters **Depth**: 21 meters

OTE reserves the right to reject the nomination of any ship that is considered not suitable for operation in the Terminal of Puerto Rosales as well as suspending the operation and the unmooring of any ship that is on operation if this one has operative problems that threatens the normal development of the operations' program and/or presents structural conditions, concerning equipment or personal, that risk the people, the environment or the goods and reputation of the company.

6.2 Maximum Age of Ships

There will be no ships allowed that have more than 25 years old, counting from the date of delivery in the shipyard.

The clients that nominate ships contracted on a spot basis, and that have between 20 and 25 years old, have to deliver the following documentation attached to the form PRO-OPE-RE-049:

i. CAP Certificates (Condition Assessment Program) with a qualification of 1 or 2, obtained at 15 and 20 years old. They will not be allowed ships with a qualification of CAP 3 or 4.

The clients that operate ships with time charter, with ships that have over 20 years old, have to hand the following documentation attached to the form PRO-OPE-RE-049:

i. CAP Certificates (Condition Assessment Program) with a qualification of 1 or 2, obtained at 15 and 20 years old. They will not be allowed ships with a qualification of CAP 3 or 4.

ii. Every 6 (six) months they will have to send to the terminal a copy of the last 3 inspections carried out under the system SIRE (OCIMF) and a copy of the reports of operative efficency carried out by the charter.

6.3 Verification of the UN sanctions and other organisms

Clients or companies that nominate ships to operate in our terminal must:

I. Check that the ship is not part of any sanction program by United Nations, European Comunion and OFAC (USA) or other relevant organisms.

II. The ship flag is not from a country reached by these sanctions.

III. The product to be unloaded is not from a sanctionated country.

IV. The product is not from a port or is going to a port of a sanctionated country.

Oiltanking Ebytem S.A., as a company member of the Marquard & Bahls AG Group, has a strong commitment to the sustainable development of their businesses and hopes, through them, to generate aggregated value to their employees, accionists and the society, while taking care of the environment.

In order to achieve this strategic aim, the Group urges the companies and all their employees, among other things, to work within a frame of responsible and honest behaviour, avoiding and reporting any act of corruption, money laundering and development of terrorist activities, with an approach that goes beyond mere compliance with local law.

In that sense, a careful control is carried out to the identify the ships and/or loads whose owners could be people or companies included in the sanction's programs of the UN and other relevant organisms.

OTE reserves the right to reject the reception and/or the dispatch of ships and/or their loads if, as a result of this exhaustive process of control, they result to be reached by the previously mentioned sanctions.

With the aim of avoiding inconveniences and delays at the moment to operate, we solicitate your collaboration in the process of checking ships and loads, before the nomination.

7 Notifications prior to the arrival and mooring of ships

7.1 Coordination with the Shipping Agency

The local maritime agencies hired in representation of the ships which will operate on the SPMs (Single Point Mooring), will have to inform to the personnel of Maritime Operations the ETA announcement. This announcement shall be made seventy-two (72), fourty-eight (48) and twenty-four (24) hours before its arrival at the Terminal.

Any arrival variation greater than two hours shall be immediately reported to the Terminal. If the tanker voyage from the last port takes less than forty-eight (48) hours, departure time shall be reported.

Likewise, within fourty-eight (48) hours prior to the arrival of the ship, they should act as intermediaries for the exchange of information pre-arrival between the ships and the Terminal.

7.2 Sanitary Requirements

Due to the riskis arising from the covid-19 pandemic and the probability of significant effects on the services provided by OTE, the terminal requires the ships coming from abroad to have been in navigation (or at anchor) for at least 14 days from the date of departure from the last port of call and the entire crew to be without symptoms compatible with this disease.

For that aim, the captain of the ship and/or the shipping agency will have to send the crew's health declaration with documentary evidency of the crew's temperature control.

This requirement does not modify nor replace the obligations of the ship to comply all the sanitary requirements established in the legislation of Argentina.

7.3 Customs Documentation

By virtue of the current customs regulations, the Maritime Agencies must, prior to the arrival of the ship, send by e-mail to this Terminal a copy of all the customs documentation that enables and corresponds to the operation (Removed/Import/Export) of the ship in question.

The Shipping Agencies which act as Customs Transport Agents, have to ensure the presence of a Customs Inspector at the Terminal and on the tanker before and after the beginning and end of operations.

It must be considered that no tanker will be moored until the documents required in this section are available.

The Terminal will inform the Shipping Agency of the scheduled mooring time, the operations to be performed, the quantity to be loaded/unloaded and any other news related to the operation.

Loading and unloading operations can be performed at any of the SPMs (Single Point Mooring). If the Terminal requires it, tankers will make the necessary line displacements, at no cost to OTE.

The Terminal will not render the Clients services of Agency, embarking and/or disembarking crew, goods, spare parts or make presentations to maritime, health and/or customs authorities.

7.4 Enlistment Letter

The tanker's Captain or his representative will issue the Notice of Arrival following the terms and conditions of the transport contract conclude and confirm it by e-mail to the Terminal.

The mooring turns of the ships that arrive to the Terminal are granted following the guidelines for assigning operating windows established in the Internal Regulations of the Terminal. In this sense, the Terminal Programmer will ensure that the operating windows are assigned to guarantee the best logistical development and fulfillment with the definitive monthly program agreed upon by all the Terminal's clients/users.

7.5 I.S.P.S (International Ship and Port Facilities Security)

(P.B.I.P.)

The OTE Maritime Terminal has a Protection Plan approved by the Prefectura Naval Argentina Argentina (PNA)[Argentine Coast Guard] in line with the requirements established by the International Maritime Organization in the International Convention for the Safety of Human Life at Sea (S.O.L.A.S.) and in compliance with the Maritime Ordinance No. 6/2003, having received the Port Facility Compliance Statement. The contact details of the Port Facility Security Officers (OPIP) will be provided to the tankers by the Loading Master who will act as an intermediary between the ship and the responsible for the security at the Terminal. The necessary contact information will be recorded in the Pre-Operative Conference form.

Nevertheless, it is necessary to clarify that the monobuoys of this terminal and its surrounding water mirror are within the jurisdiction of the Consorcio de Gestión del Puerto de Coronel Rosales (Coronel Rosales Port Management Consortium). Except for the transfer of loads, which is carried out through hoses and pipes between the ship and the terminal, the entire ship-shore interface, such as the movement of crew and visits, inspectors and authorities, provisions, spare parts and other elements that have be loaded on boats and transported to or from ships, is done through the Puerto Rosales dock without entering the OTE maritime terminal premises. The maritime agencies that act on behalf of the ships that operate in our terminal must ensure that they comply with the documentation and control requirements established by the Consorcio de Gestión del Puerto de Coronel Rosales (Coronel Rosales Port Management Consortium), whose contact details are the following:

Telephone: +54 2932 431140

8 Nautical Information and Meteorology

Important Note for Captains: *Depth at the SPMs is higher than that of the "Main Channel" and "Port Access". The Shipping Authority and/or Shipping Agency shall be consulted about the maximum draft available.*

8.1 Publications and Navigation Charts

8.1.1 Publications and Argentinian Charts:

- H-202 Couse, Part II
- H-212 Lighthouses and nautical signals, Part II
- H-610 Tide tables
- Argentinian Charts: Nº 50, H-2, H-200, H-211, H-212, H-254, H-255, H-256

8.1.2 Publications and English Charts:

- NP 5 South America Pilot, Vol. 1
- NP 202 Tide Tables, Vol. 2
- Charts nº= 3066, 1331, 3755

8.1.3 American Charts:

- Charts nº= 23121, 23122, 23125

8.2 Navigation

Any ship that navigates to the terminal coming from the open sea must enter the access channel through the pair of buoys No. 1 and, in order to do this, it must request authorization from the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard] through its coastal station (L2N) that attends on channels 12/14/16 of marine VHF.

The ships that navigate through the cannel must always have an Unider-Keel Clearance (UKC) equal to or greater than 10% of its maximum draft (static).

From buoy No. 11 to Terminal facilities, pilotage is obligatory for foreign ships, of any draft condition, while Argentinian ships shall be exempted from pilotage if their draft is less than 27´ (8.20 m). The service is provided 24 hours and must be requested at least 24 hours in advance by the Shipping Agent representing the ship tanker.

The conditions above also apply to tankers beginning their navigation from the SPMs (Single Point Mooring) to buoy No.11

8.3 Waiting and Anchorage Areas

Tankers which have to wait for a turn to dock or for a tide to to pass through Toro Channel (Canal del Toro) (from pair No. 12 to pair No. 16) shall anchor at the places authorized for that purpose by the Shipping Authority.

The anchorages habilitated are:

Anchorage in the proximity of buoy Nº 4

Anchorage "A" (alfa), Anchorage "B" (bravo), Anchorage "C" (charlie), Anchorage "D" (delta)

These anchorages are well demarcated in the nautical publications mentioned in point 8.1. Tankers which wish to use them shall indicate their intention and request authorization to the traffic control L2N Prefectura Naval Radio [Coast Guard Radio].

All communications related to navigation and sea traffic security, in the area of Bahía Blanca's estuary, are carried out through VHF channel 12 / 14 / 16 with "L2N" Prefectura Naval Radio [Coast Guard Radio]. This includes reporting time of access to/departure from main channel, as well as reporting the time of anchorage/departure from anchorages.

8.4 METEOROLOGY

8.4.1 Generalities

Generalities	Annual	High Monthly	Low Monthly
Pressure (hPa)	1003.4	1006.5 September	999.4 January
Temperature (°C)	14.9	7.7 July	23 January
Precipitation (mm)	712	103 February	26 August
Average Relative Humidity (%)			64
Annual Average Frequency of Foggy Days			16.8
Average Wind Speed is 31 km/h, being 50% predominant			W–NW-N

8.4.2 Winds

The predominant wind direction in the area is NW, with an average speed of 31 km/h. The highest wind frequency in this sector occurs in July and the highest speed occurs in December-January.

8.4.3 Tides and Currents

Bahía Blanca's estuary has a semi-diurnal tidal regime, whose range can reach more than 4 m. Tabulated tide timetables and heights often show variations due to the influence of the prevailing wind. In general, it can be said that WNW and NNE winds cause lower heights and extend the ebb tides while E to W winds (passing through the south) cause greater heights and extend the flood tides. In big storms, the height difference may be up to 1.5 m higher or lower than the tabulated tide.

The highest current speed takes place between 3 and 4 hours after the high or low tide, having reached speeds of up to 2.6 knots. Current courses in the Terminal area are approximately 295° for the increasing tide and 115° for the lowering one.

9 MARITIME OPERATIONS PROCEDURES

9.1 Communications

For communications between the tanker and the supporting boats during maneuvers of mooring and departure from SPMs (Single Point Mooring), as well as for those made between the tanker and the Terminal for loading/unloading operations, only VHF channel 68 shall be used.

9.2 MOORING

9.2.1 General Conditions for Mooring in SPMs

Tankers ready to start mooring maneuvers shall have all the terminal personnel on board and, in order to do this, they must have prepared, on both sides, the personnel boarding ladders in accordance with international and local requirements for boarding pilots.

The Captain of the ship must make sure to:

- Have anchors clear of any object and properly housed in the hawse.
- Have the proper reduction installed in the connection line.
- The ship's mooring handling equipment and crane are in perfect working order.

Ships that have not taken on board the terminal personnel are strictly forbidden to approximate less than 5 (five) cables (aprox. 900 metres) from the SPM (Single Point Mooring). Captains and/or Pilots must be sure to take all necessary precautions to accomplish this requirement.

The mooring, support and tug boats will be in the area of the monobuoy.

It shall be compulsory for all ships to have the tug line attached to the stern before starting the mooring maneuver.

The mooring system meets the "Recommendations for Equipment Employed in the Mooring of Ships at Single Point Moorings", 4th Edition, published in 2007 by OCIMF. This system stipulates the use of a bow stopper for chains of 76 millimeters in diameter.

The Terminal has established the following climate limit conditions for all the maritime

operations.

OPERATION	WIND SPEED* [knots]	WAVES HEIGHT [metres]
MOORING AND CONNECTION	30	1
PRODUCT TRANSFER	34	2
DISCONNECTION	36	2,5
UNMOORING	40	3,0

***It is supposed that the wind speed is sustained and not in gusts.**

*** The terminal reserves the right to demand more restrictive conditions**

The terminal reserves the right to demand more restrictive conditions for the mooring of ships on occasions where it deems it necessary, without this giving rise to any claim from the transport or loading companies.

9.2.2 Mooring Maneuver

Once the tug line has been attached to the stern, the supporting boat shall take the floating hose length and move the hose away from the tanker's route while the mooring boat sails in the proximity "at orders" from the tanker's Captain or Pilot (**See Annex**: Mooring Sequence). When the tanker is 200 meters away from the SPM (Single Point Mooring), the tanker shall pass a messenger rope to the mooring boat, which shall be shackled to the pick-up rope. Then, the tanker shall heave up the messenger and pick-up rope until the 76-mm chaffing chain reaches the bow stopper. Then the chain shall be secured to the stopper, after which the tanker shall be considered moored.

It is very important to control for 2 or 3 minutes that the ship does not continue with the headway forward or backwards, in order to avoid damages to the buoy or the mooring system.

It is compulsory that the ship's crew does not leave the forecastle without disconnecting the shackle between the messenger and the pick-up rope. Only after finishing the above-mentioned task, the cargo hose connection will be allowed.

Addionally, it is very important to highlight that the pickup rope is only used as a way to reach the mooring chain to the ship and, hence, it should not, under any circumstances, be subjected to excessive stress during the maneuver. This rope must NOT be used to bring the ship closer to the final mooring position.

9.3 CONNECTION

Once the mooring maneuver is finished, the cargo hose will be connected.

It is pointed out that delays in connection due to embarkment or disembarkment of authorities, crew, supplies or materials will not be allowed. Those tasks should be performed only after the hose is connected and without the use of the ship's manifold crane.

The connection of the hose will be performed by loading operators of Oiltanking (terminal personnel) under the supervision of the Loading Master with the help of the ship's crew.

It is the ship's master responsibility to make sure that their crew provides all the necessary collaboration to the terminal personnel, to ensure that the crew members who operate the manifold crane are competent and have their certification on lifting equipment handling, and to have a responsible officer in the manifold's area during the connection maneuver in order to keep the master informed about the development of all the tasks that are being done. (**See Annex:** Connection Sequence).

In Punta Ancla SPM (Single Point Mooring) and in Punta Cigüeña SPM the 12" connection hose, ANSI 150 flange, shall be connected on starboard side.

Before the connecting maneuver, the Loading Master shall ensure that the SPM (Single Point Mooring) and coast valves are closed. First, the mooring boat shall take the end of the string hose beside the tanker and the boat personnel shall fasten the hose lifting chain to the tanker's crane hook. Then, the tanker's personnel shall lift the hose and OTE Loading operators shall fasten it tightly to the deck of the tanker, remove the blind flange, check the condition of the sealing O-ring, and connect it to the line assigned by the tanker.

Once the hose is correctly fastened to the tanker's flange, the Loading Operators shall perform the tightness test on the hose-tanker connection, opening and immediately closing the hose valve and performing a visual inspection of the gasket. If there are no leaks, the

connection maneuver will be finished.

Once the connection is finished, the Loading Master will request the supporting launch to open the SPM's (Single Point Mooring) valve, inform the Terminal of the connection time and request to prepare tanks and lines on shore for the operation.

9.4 Pre-Cargo Conference and Ship-Shore Verifications

Before starting loading/unloading operations, the Loading Master will meet the responsible master deck to exchange information and agree about different aspects on the load transfer operation and operational variables, actions to be taken in case of emergencies and data related to Maritime Safety and Security.

There has to be a document on which this exchange of information should be registrated.

For such purpose, the Terminal has a pre-printed form (Pre-Cargo Conference form) to be completed and signed by the participants at the meeting. PRO-OPE-RE-022 (Pre-operative Conference) / PRO-OPE-RE-023 (Pre-cargo Conference Record) / PRO-OPE-RE-013 (Security Ship-shore checklist)

Additionally, the Loading Master and the responsible Master deck should do the tour of the deck in order to the verify and complete the mandatory security ship-shore checklists in Maritime Rule n°1/1993 National Coast Guard regulation (PNA - Ordenanza Marítima n° 01/1993) according to the OCIMF reccommendations.

During the load transfer operations, the loading master will have to do periodic verifications with the agreed frequency and put them on the list.

9.5 Loading

With the hose end and tanker manifold valves closed, the Terminal Operator shall open the tank and line valves on shore to complete the line.

Once the aforesaid is done, the Terminal Operator shall inform the Loading Master, who shall, in turn, inform the tanker's Captain or his representative. They shall confirm later that the tanker is "ready to receive". Next, the Loading Master shall request the loading operators to open the hose end valve. Then, the tanker's Captain or his representative shall give the order to open the manifold valve, thus beginning the loading by gravity (with an approximate flow of 700 cm^3/h, depending on the height of liquid of the shore tank). It is the tanker's and the terminal's responsibility to conduct a check, verifying at least the following operating conditions:

* Normal reception on the tanker.
* End of line hose connection tightness, fitting and support.
* End of line valve.
* SPM (Single Point Mooring).
* Surrounding water.
* Mooring system and tanker/SPM (Single Point Mooring) relative position.

Once the aforesaid is done, the tanker's Captain or his representative shall inform the Loading Master that everything is normal and ready to increase the load flow.

The Loading Master shall request the Terminal Operator to start the first pump, whose discharge valve shall be opened very slowly until the system stabilizes. The pressure shall be approximately 2.00-2.50 kg/cm2 and the flow rate 1.500 cm^3/h. The Parties shall conduct a check, verifying at least all the items mentioned in the previous paragraphs.

Once the tanker's Captain or his representative confirms the Loading Master that everything is normal and ready to receive with a second pump, the Loading Master shall request the Terminal Operator to start the second pump. The pressure shall be approximately 5.00 kg/cm2 and the flow 2.500 cm^3/h.

After that, the Parties shall conduct a new check, verifying again, at least, the aforementioned items.

If operating conditions require it and the tanker's master accepts, the Terminal may, at its sole discretion, start a third pump.

To do this, both the Loading Master and the Terminal Shift Supervisor shall accept this condition.

In this case, the pressure shall reach approximately 6.80 kg/cm2 and the flow rate shall reach approximately 3.100 m^3/h.

Operating in these conditions, precautions on the tanker shall be maximized since the safety systems will stop the loading pumps at a pressure of 7.00 kg/cm2.

At all times, any change on the valves' conditions on the tanker must be announced to the Loading Master with plenty of time so that he informs the Terminal Operator, in particular when there is tank shifting on the tanker. In this case, the tanker should open completely the valve that enables the new tank to receive before starting the closure of the valve of the tank that was already receiving.

In case of line displacements from terminal to tanker, only one pump shall be used.

If ship's tanks have to be completed and/or topped up, this shall be done with only one pump, as when only one tank is being loaded.

When the system is stabilized, special precautions shall be taken in order not to produce any restriction of the crude oil reception since it may cause damages and/or breakings in hoses, expansion joints, etc., causing a loss or spill, with the subsequent environmental pollution.

It is worth noting that the terminal has instruments which accurately register line pressure and its possible alteration.

At regular intervals, not longer than two (2) hours, the tanker has to inform the Terminal the volume of product that has already loaded and the average flow rate of the last hour. Also, the terminal shall inform of its data regarding volume and flow rate for the same

period of time and compare the received/delivered quantities.

If the volume difference is greater than two hundred (200) cubic meters, operation should be stopped and a careful control of stocks aboard and in the Terminal should be carried out in order to detect the cause of the problem. Operations shall not be resumed until the origin of this difference is known and the said difference can be reverted.

Shipowners and Loading Masters are encouraged to keep measuring instruments calibrated and in proper working conditions to avoid unnecessary operations interruptions.

Loading operations will be finished according to the following procedure:

When loading is performed with three pumps, one of them shall be stopped at least forty-five (45) minutes before finishing the loading. If the loading is performed with two pumps, one of them shall be stopped at least twenty (20) minutes before finishing the loading. The last 10 minutes of loading shall be done by gravity, with a flow rate not higher than 250 m3/h. If this limit is exceeded, the only open discharge valve shall be throttled in order to reduce it. Once the loading established volume is reached, the Loading Master shall give the tanker's Captain or his representative the order to close the manifold valve. This maneuver shall last at least one minute so as not to produce instability on the loading system. When this valve is closed, the Loading Master shall inform the Terminal Operator, who shall close the corresponding valves. Also, the Loading Master shall give the loading operators the order to close the hose end valve.

If the operation has to be stopped in accordance with ship's quantities established, the Loading Master shall be the one who orders to finish the operation.

If the operation has to be stopped for having reached the loading volume established by the shipper, the Terminal Operator shall be the one who finishes the operation.

Then, drain shall be produced in the end of line hose and the hose shall be disconnected. The aforementioned loading flow rates are approximate and do not imply the Terminal's commitment to fulfill them.

9.6 Unloading

When the Terminal is ready to receive the product, the Loading Master shall inform the

tanker's Captain or his representative of this news and later, he also shall authorize the loading operators to open the hose end valve. Next, the tanker shall open the manifold valve.

Then, a pump on the tanker shall be started at minimum flow rate possible, thus beginning the unloading. The Loading Master shall be informed of this, and he shall inform the news to the Terminal Operator. The Terminal Operator shall immediately inform the Loading Master when the crude oil has started entering into the receiving tank. Once the Parties (Tanker and Terminal) have conducted a check verifying at least the following operating conditions: tanker's hose connection, surrounding water, mooring system and tanker-SPM (Single Point Mooring) relative position, and with the confirmation of the Terminal's reception, the tanker shall progressively increase the flow rate until reaching a pressure of 7.00 kg/cm^2 in its manifold, which shall result in a flow of approximately 2.500 m^3/h.

Tankers shall complete their unloading operations within a maximum of 24 (twenty-four) hours or, otherwise, shall maintain at all times a pressure of 7 kg/cm^2 in the manifold.

If the tanker cannot fulfill one of these two conditions, at least should be able to discharge at a minimum rate of 2.000 m^3/h**.** If the tanker cannot pump at the above-mentioned rate and the time required for the tanker operation put at risk the normal development of the Terminal's Operation Schedule, the Terminal, through the Loading Master, may request the tanker's Captain to stop the operation and depart from the buoy.

The Parties shall announce to each other with plenty of time any change in the unloading conditions (tankers at the Terminal, flow decrease and/or interruption due to stripping, crude oil wash starting and finishing, etc.), informing again when the maneuver has finished.

At regular intervals, no longer than two (2) hours, the tanker will inform the Terminal the volume of product that has already loaded or unloaded and the average flow rate of the last hour. Also, the terminal should inform of its data regarding volume and flow rate for the same period of time and compare the received/delivered quantities.

If the volume difference is greater than two hundred (200) cubic meters, operation should be stopped and a careful control of stocks aboard and in the Terminal should be carried out in order to detect the cause of the problem.

Operations shall not be resumed until the origin of this difference is known and the said difference can be reverted.

Shipowners and Loading Masters are encouraged to keep measuring instruments calibrated and in proper working conditions to avoid unnecesary operations interruptions.

Once unloading is finished, the Loading Master shall inform the Terminal Operator of the news. The tanker's personnel shall close the manifold valve by order of the tanker's Captain or his representative.

The Loading Master shall give the loading operators the order to close the end valve of the string end hose.

The Terminal Operator shall close the valves corresponding to the type of manoeuver which was enabled.

Tankers shall have duly identified and in perfect conditions the emergency stop systems of their discharge pumps as well as the overpressure release safety systems of hoses, SPM (Single Point Mooring) and submarines hoses.

9.7 OPERATION IN BAD WEATHER CONDITIONS

If during the tanker operation hydro meteorological conditions become unfavorable or it is reached the wind speed limit or maximum waves height, the Loading Master, at his sole discretion, may call off the operation, ordering to interrupt all the maneuvers aboard the tanker and at the Terminal; and, if he considers it necessary, the disconnection of the hose and the unmooring of the tanker. In that case, he will request the tanker's Captain to leave the SPM (Single Point Mooring) area and go to anchor at the place assigned by the Maritime Authority.

If, for any reason, after receiving the order from the Loading Master, the tanker remains moored longer than the normal time that the disconnection and departure maneuver takes, the tanker's Captain and/or Shipowner and/or Shipper/Charterer shall be fully responsible for all the damages resulting from the said stay which may be caused to people and/or the environment and/or Terminal facilities.

If hydro meteorological conditions make it possible, the tanker shall request the assistance of the mooring and supporting boats; conversely, it shall do it with its own resources only with the help of the tugboat.

In case that the ships unmoor the SPM (Single Point Mooring) without assistance of the mooring ships, the terminal personnel will remain on board, being the tanker's captain responsibility to provide necessary accomodation and food.

If the Loading Master considers that hydro meteorological conditions have improved and operations can be resumed safely enough, he shall inform the tanker's Captain that he may proceed to moor at the SPM (Single Point Mooring) again in order to finish the operation, and he shall call the mooring and supporting boats to assist the tanker.

9.8 DISCONNECTION

Once the operation is finished, the Loading Master should ensure that both the SPM and submarine valves are closed. Having checked this condition, drain shall be produced in the connecting manifold pipe and the hose shall be disconnected. This manouver shall be performed by loading operators with the support of the tanker's personnel and under the supervision of the loading master.

It is the ship's master responsibility to make sure that their crew provides all the necessary collaboration to the terminal personnel, to ensure that the crew members who operate the manifold crane are competent and have their certification on lifting equipment handling, and to have a responsible officer in the manifold's area during the disconnection maneuver in order to keep the master informed about the development of all the tasks that are being done.

The loading operators shall check the O-ring seal condition, and finally shall place the blank flange ensuring that there is no leak.

After that, the hose will be lifted to free it from the chain that was securing it to the ship. Once the chain is released, the hose will begin to be lowered with the ship's retaining rope, so that the hook can be removed from the lifting chain and the hose can be finally lowered to the water.

Depending on the weather conditions, which shall be evaluated by the loading operators and the Loading Master, it will be decided to let go the hose freely or to keep it attached to the ship's rail by a rope until the mooring boats arrive.

It is responsibility of the loading operators and the Loading Master to assure that the hose does not hit the ship's hull.

9.9 STAY AT THE SPM (SINGLE POINT MOORING) AFTER OPERATIONS

Once the hose is disconnected, the tanker may not stay more than one (1) hour moored at the SPM (Single Point Mooring) after unloading, and no more than three (3) hours after loading. If the tanker does not leave the maritime facilities after finishing the unloading or loading operations in the stated period of time and having OTE given due notice to the tanker, ship owner, agent, captain or chief mate, the Client will be subject to a payment of a USD 2,500 (two thousand and five hundreds United States dollars) fee per hour or fraction of delay, without prejudice to the damages that may be caused to OTE. This value will be adjusted in a period of time at the discretion of OTE, letting the costumers know about the changes by the means that it considers appropriate

9.10 UNMOORING

Before finishing the operation, the Loading Master shall inform the mooring and supporting boats of the time when they have to be beside the tanker to close the SPM valve and assist in the departure maneuver.

Once the operation is finished, the string end hose is disconnected, and having expired the term mentioned in point 9.9, the tanker shall leave the SPM (Single Point Mooring).

The supporting boat shall take the hose string to separate it from the tanker's hull while the mooring boat remains in proximity to the bow ready to take the end of the pick-up rope.

The ship, under the command of the Master or Pilot, should execute the necessary maneuver to reduce the tension over the mooring system.

Once the tension over the mooring system has been reduced, the chaffing chain shall be released heaving the pick-up rope from the winch, then the pick-up rope shall be paid out very slowly.

At that moment, the loading operator shall inform the Loading master by VHF that "The chain has been released and the pick-up rope is starting to be paid out".

The ship's personnel and the responsible deck master must take care to release the pick-up rope at a very slow speed to avoid the chain floater to hit the ship´s bulbous bow or the water violently.

All costs arising from repairs or replacement of mooring system parts derived from the misshandling during unmooring manoeuvres will be charged to the clients.

In addition, the Ship's command shall avoid going in reverse or manouvering with the tug boat until the ship is completely freed from any element in the SPM (Single Point Mooring).

Once the pick-up rope is completely in the water, the loading operator shall inform the Loading Master by VHF that "the messenger line is in the water and the bow is free" and then the mooring boat will be able to maneuver with the mooring system, taking care that its position does not interfere with the tanker's travel route.

At that moment, the ship shall be able to move through the channel by itself or with the help of the tug boat taking care not to damage the terminal facilities.

The tug boat, under the Tanker's or Pilot order, shall be released only once the departure maneuver is finished, and the tanker is free to start navigation through the channel and there is no risk for the terminal facilities.

Having finished the departure maneuver, the Loading Master and the loading operators shall disembark and return to the port on one of the mooring boats.

10 SHIPS REGULARIONS AT THE TERMINAL

10.1 OPERATION WINDOWS

The tanker shall complete the operation within the Window assigned in the Monthly Schedule.

If the tanker arrives outside the assigned Window, the Terminal shall reschedule it, enabling its operation as soon as possible, but considering Terminal operating conditions and Monthly Schedule availability.

If the tanker is late and it is considered that it will not be able to complete the operation within the Window assigned in the Monthly Schedule, it may be moored and operated as long as it does not interfere with the operation of the next tanker which arrives within its window.

In case that the tanker cannot finish the operation due to its own causes or it does not fulfill the operating terms established by the Terminal, it will have to leave the monobuoy in order to do all the regarding reparations. When the ship is again in conditions to continue the operation, the tanker or its representative should deliver a letter of enlistment, indicating its state of aptitude to continue the operation. Subsequently, the Terminal will reschedule the operation of the ship.

If bad weather conditions cause that a moored tanker has to leave the S.P.M. (Single Point Mooring), once all the activities have resumed it will moor in first place to continue its operation.

If bad weather conditions make it impossible a tanker to dock, once all the activities on the monobuoy have resumed, it will moor in first place to start the operation as long as it has arrived within its window. In case that the tanker has not arrived within its window, the Monthly Programation Program PRO-PLO-RE-121 will be followed and the tanker will be moored when a window is available.

A ship is considered to arrive within the window when it delivers its arrival notification or Enlistment Letter within the first 24 hours of the total time asigned for that window.

Having arrived the tanker within the assigned window, the Terminal will start the mooring within six (6) hours of receiving the Notice of Arrival (NOA), except for those tankers that

must moor in daylight, in which case the Terminal will start the mooring within six (6) hours of receiving the NOA or when there is daylight, whichever is later.

10.2 QUANTITY AND QUALITY OF THE LOAD/UNLOAD PRODUCT

10.2.1 Quantity

All the volumes of oil that enter and/or exit by the tanker will be determined by manual measurement of OTE's storage tanks. The measurement of the tanks will be taken by the OTE operators. The client will have the right to designate a representative, at his own expense, to witness the tank measrement activities.

If the client does not designate such a representative, it will be conclusively presumed that the volume determinations taken by OTE are correct.

10.2.2 Quality

The quality of the oil received/delivered by the tankers will be determined by laboratory tests carried out on the samples taken by in-line flow-proportional samplers.

Laboratory tests will be performed in the OTE laboratory. The client will have the right to designate a representative, at his own expense, who may witness the laboratory testing activities corresponding to his transactions-

In the case of ship unloading at our terminal, clients must guarantee that the quality of the delivered product meets all the requirements stipulated in the section 3.2 of the Internal Regulations for Operations at the Puerto Rosales Terminal.

In the event of any client requiring the entry of oil outside of commercial specification, they must request prior authorization from OTE, acepting that this oil will be returned to them under the same conditions and that they must hold OTE harmless against claims from other clients or purchasers of the oil or its refiners that may arise as a result of the entry of that off-specification crude oil to the terminal, this must hold OTE harmless against any claim that OTE may receive.

In addition, the client who delivers oil out of specification must pay OTE the charges for

the fines established in the Internal Regulations.

10.3 SERVICES PROVIDED BY THE TERMINAL

10.3.1 Services provided to ships

The services provided by OTE to the ships that operate in the Terminal are:

- S.P.M. (Single Point Mooring) use service, for oil transfer between ships and terminal tanks.
- Assistance service por mooring and unmooring.
- Tug service for ships in monobuoys.

10.3.2 Billing and Payment for Services

OTE will deliver the bills to the Clients/users of the terminal for all the services provided to the ships that they nominate and, therefore, they must pay them within the terms and conditions established in the respective documents.

Notwithstanding the foregoing, OTE acknowledges that, due to the habits of maritime load transport, clients may nominate a maritime agency on behalf of the ship that receives services in monobuoys.

In those cases, in the event that OTE, at the request of the Client, delivers the bills corresponding to the services in the name of the nominated Shipping Agencies, the Clients will be jointly and severally liable before OTE for their payment, renouncing the benefit of exclusion or division.

The expiration of the established term of payment indicated in the bills delivered by OTE, will produce the automatic default with full right without the need to formulate notifications or interpellations of any type. The automatic default will generate the obligation to pay punitive interest plus the corresponding administrative expenses.

In the event of a default of any payment obligation by the Client, OTE may exercise the right of retention provided for in article 2587 and in the following of the Civil and

Commercial Code on Petroleum and/or any other asset of the Client.

This right of retention will be applicable in the case of non-payment of the Maritime Agencies nominated by the Clients.

10.4 OTHER SERVICES AND FACILITIES

10.4.1 Fuel and Water Supply

The Terminal does not have any facilities for supplying fuel and water.

Supplying fuel and water while the tanker is moored at the SPM is prohibited.

The Port of Bahia Blanca has suppliers and ships to supply water and fuel to ships. In the event that a ship requires this type of service, it must be managed through the Maritime Agency.

10.4.2 Food, Materials and Spare Parts Supply

The Terminal does not provide loading/unloading services for materials and/or provisions of any kind for ships.

The support boats for transporting terminal personnel and for supporting the mooring of ships are prohibited from transporting any element between the port and the ship.

This type of service may be required by the ship and coordinated by its Maritime Agency with providers available in Puerto Rosales and Bahía Blanca. The terminal will only allow those services that do not cause delays of any kind, that do not affect the operation of the ship and that are carried out exclusively by the stern. The loading and/or unloading of merchandise or spare parts, drums and/or containers done with the cranes of the manifold sector during operations is not allowed.

It is forbidden for the boats that transport provisions and materials to remain moored to the beacons or to the towing sling of the floating hose of the monobuoys. They may only remain moored to the ship on the opposite side to that of the loading hose.

10.4.3 Transportation of Crew, Authorities and other Visitors on board

The Terminal does not provide boarding / disembarkation services for Crew Authorities, Agents and other people.

The support boats for the transportation of terminal personnel and for support to the mooring of ships are prohibited from transporting people outside the maritime mooring contractor or outside OTE.

This type of service may be required by the ship and coordinated by its Maritime Agency with providers available in Puerto Rosales and Bahía Blanca.

It is forbidden for the boats that transport Agents, crew and other visitors to remain moored to the beacons or to the towing sling of the floating hose of the monobuoys. They may only remain on standby moored to the ship on the opposite side to that of the loading hose.

10.4.4 Medical Care

The Terminal does not have medical care structure for the tanker's crew.

The captain or his representative should manage it through the Shipping Agency.

The Terminal will come as soon as possible to the aid of a seriously injured person on board for his disembarkation using the mooring boats; the Captain or Shipping Agency must request the transfer from the port to the health center that will provide medical care.

Tanker-port transfer will be free of charge; the Terminal and its Contractors disclaim responsibility for what might happen during the said transfer.

In case OTE's personnel have an accident on-board, the Loading Master must request the mooring boats for disembarking, inform the terminal, call Oiltanking Workers Compensation Insurance Company (ART) and request for the corresponding ambulance. (**See Annex**: Contact List).

10.4.5 Garbage removal from ships

The Terminal does not provide garbage collection services. The captain shall request it from

the Shipping Agency.

10.4.6 Ballast/Slop Reception

There are no facilities at the Terminal for the reception of ballast and/or slop.

This type of service may be required by the captain of the ship and coordinated through its Maritime Agency with providers available in Bahía Blanca.

Dirty ballast and/or slop discharge operations cannot be carried out while the ship is moored at the monobuoy.

10.4.7 Repairs

Bahía Blanca and Punta Alta cities have naval shipyards for making repairs. These services should be contracted through Shipping Agencies.

Only cold repairs not affecting the stipulations of OM 1/93 and reliably authorized by the Maritime Authority shall be permitted aboard the tankers.

10.4.8 On-Board Inspections

Any type of inspections will not be authorized to be carried out on ships that are moored to the Monobuoys, when they imply the affectation of the operations of the ship and demand that both the Captain of the ship and his crew distract their attention from the conditions of safety and efficiency of the product transfer operation.

10.5 Terminal Personnel On Board

10.5.1 Loading Operators

There are 2, they embark the same boat as the Loading Master and should inform him about the news related to the mooring, loading and unmooring operations.

They will remain aboard during all the stay of the ship. They will be at the bow during the

entire mooring manoeuver, informing the Loading Master of its development.

They will connect and disconnect (with the help of the tanker's crew) the loading hose; they will permanently control their work and they will control the mooring system and the relative tanker-buoy position, especially during tide changes.

They will inform the Loading Master of any arising news, being the Loading Master the person who will take any kind of measures.

They must be provided with accommodation and food according to their ranks, making it clear that it is imperative that the operators have a cabin or space where they can rest adequately given their 6-hour shift regime on board.

Special consideration is recommended to avoid that, in cases where personnel from naval workshops have embarked, the loading operators are located in the same place.

Below are their main responsibilities on board:

* They shall be on the bow during the mooring manouver and inform the Loading Master of its development and any unusual situation noted. Recommend and/or advice the Tanker's Officer in charge of the bow manouver. Verify the tanker has been moored correctly.
* They shall supervise and carry out the hose connection/disconnection manouver verifying handrails levels/manifold, checking state and operation of the system components, and inform any arising news to the Loading Master.
* They shall inform the Loading Master when the hose is connected and they shall remain next to the hose waiting for the order to open the valve.
* They shall stay in the manifold from the beginning of the operation and until it is normalized, verifying tightness of the hose/manifold connection.
* They shall permanently check, during all the tanker's stay at the SPM (Single Point Mooring), the mooring system (hawser, chain, Messenger rope) and the hose/manifold connection, the surrounding water and hydro-meteorological conditions, reporting any arising news to the Loading Master. They shall be on the bow during tide changes checking tanker/SPM (Single Point Mooring)/hose position and the mooring system, unless Loading Master orders on the contrary, reporting to him any arising news.

* They shall watch during hose disconnection the correct closing of the head valve and its blind cover to avoid the slightest product leak that could contaminate the environment.
* They shall supervise the unmooring manouver informing the Loading Master of any unusual situation noted.
* They shall be responsible for completing, in each tanker they assist, the safety check list before and after the operation.

10.5.2 Loading Master

He embarks the mooring boat before the tanker begins the mooring manouver to the SPM. He remains aboard during all the stay of the ship. He is on board representing the Terminal and is the essential link between the Tanker and the Terminal. Accommodation and food appropriates to his rank shall be provided.

Below are his main responsibilities and duties:

* He shall be the link between the Tanker and the Terminal, coordinating with the Captain or his representative all the things concerning the mooring and unmooring, unloading-loading-cleaning operation, etc.
* He shall order at his judgment and discretion when the operations shall start and when they should be interrupted if necessary.
* He shall be present during the load sampling and principally during water sampling when OTE requests it specifically.
* He shall be present during the slop tanks sampling, after the arrival and before the departure of the ship.
* He shall order to stop operations and disconnect the hose or leave the SPM (Single Point Mooring) if he considers it safe and/or necessary due to bad weather conditions.
* He shall deliver and receive the Letters of Protest.
* He shall fill in and sign all forms related to OTE maritime operation.
* He shall write reports about unusual situations and unsafe conditions in OTE facilities and on the tankers operating there.

* He will not advise or do any activity except those specifically requested by Oiltanking Ebytem S.A. and/or arising from the contract. It is expressly forbidden to participate or advise the Tanker's Captain during tanker mooring and unmooring.
* He will be the obligatory link between the tug boat assisting the moored tanker and the Tanker's Captain, transmitting by VHF all the necessary instructions to the tug boat.

10.6 Ship Support Contractor Companies

10.6.1 Mooring Company and Supporting Vessels

Docking, connection, and departing operations are assisted by personnel and supporting vessels that belong to the mooring company hired by the Terminal.

Additionally, boats are available to tankers only for operation and emergency purposes.

Besides this operational assistance, boats also transport the Terminal personnel that embarks on the tankers. In this sense, the personnel of the mooring company is expressly prohibited from transporting people outside the operations of the terminal and transporting cargo, spare parts, packages and other materials to or from the ship.

10.6.2 Tugboats

The terminal has a towing service that is provided to customers exclusively through a company contracted by OTE.

The main characteristics and conditions of the service are the following:

* The service is hired by OTE through a sole contract which provides a number of tug boats devoted to its fulfillment.
* Operation coordination is carried out by OTE.
* OTE verifies that the tug boat Company complies with all current regulations regarding the boats and the personnel performing the activities.
* The tug boats hold a certified bollard pull equal or higher than 50 tons.
* The tug boats are no older tan 20 (twenty) years old and have a azimuthal propeller system or similar.

* The tug boat shall be taken by the tanker before the mooring manouver and shall remain in that condition during all the stay of the tanker at the SPM (Single Point Mooring).
* The tug boat shall only be released once the unmooring manouver from the SPM (Single Point Mooring) has finished and ensuring that the ship is ready to sail without putting the Terminal's maritime facilities at risk.
* During mooring and unmooring manouvers, the tugboat shall be under the orders of the Ship's Captain or Pilot, as appropriate; during the tanker's stay at the SPMs (Single Point Mooring), the tug boat master shall follow Loading Master's orders.
* The hours of the actual service shall result from a document (PRO-OPE-RE-015 Mooring – Unmooring and tug service report) completed by the OTE representative (Loading Master) on the Tanker taking the service and shall be endorsed by the Tanker's Captain.
* The tugboat shall arrive at each SPM (Single Point Mooring) manouver area at the time arranged by OTE and the Maritime Agency representing it. The action of taking the tow line (or the arrival time arrange + 1 (one) hour) before mooring at the SPM (Single Point Mooring), shall define the time of the beginning of the service.
* The time in which the tow line is released shall define the time of the end of the service.
* All towing elements, winches, hooks, towing ropes, etc. are provided by the tugboat.
* The tug has fire-fighting elements to respond to possible incidents in tankers.
* The tugboat has basic spill response equipment if necessary.

11 SAFETY AND ENVIROMENT

11.1 Environmental care

Argentine laws are very strict in relation to water pollution along the coast.

Dirty ballast, oily water, waste, debris, etc. shall not be discharged into the water. Big fines are imposed on offenders.

All the bilge and loading system sea valves shall be conveniently closed before any operation. Load transfer shall be carried out with the greatest possible care in order to

avoid distractions or mistakes that may cause spills.

All the scuppers shall be covered and sealed to avoid pollution in case of tank overflowing.

The purpose of the Terminal is to eliminate completely operational or intentional pollution of waters with hydrocarbons, oily mixtures, or any other harmful substances as well as to minimize accidental spills.

IMPORTANT: In case of a spill or danger of spill of the Product or other polluting or dangerous substance from a tanker or from the Terminal in waters adjacent to the Terminal while a Client's tanker is at or near the Terminal, OTE and the Client shall cooperate and immediately take the necessary measures to avoid a greater spill or danger and to reduce to the minimum the damage resulting from the said spill and to proceed to clean, without prejudice to the fault that may befall to OTE and/or the Client and the obligations and responsibilities that may correspond to each of them by virtue of current international and/or national and/or provincial and/or municipal laws. OTE and the Client shall recover the cost of the said measures according to the negligence that each of them may be guilty of, in accordance with what might be agreed. If within 90 days of the date on which the spill occurs an agreement is not reached in this regard, the matter shall be solved according to current laws and through the corresponding procedures. Without affecting what is otherwise stated in this paragraph, the provisions herein contained shall not affect, with regard to the parties, any responsability to third parties for costs or damages which are not the cleaning costs incurred in by the parties by virtue of this Clause, whether the said third parties are private or governmental entities.

11.2 GENERAL SAFETY RULES

11.2.1 Ladders for embarkation and disembarkation of personnel

The tanker shall provide ladders for embarking and disembarking personnel, which shall meet national and international standards (SOLAS Convention and Maritime Rule No. 4/89) regarding Pilot embarking and disembarking.

As a supplement, it shall be provided a life buoy with a light signal and a leading line at

least 27 meters long, in the proximity of the ladders, for emergency use.

Ladders shall be in good condition, clean, properly rigged, and well lit at night.

Embarking/disembarking shall be supervised by an Officer in charge having an appropriate communication system with the bridge.

Since embarking and disembarking are the activities with the highest risk for people, it is very important that the Tanker's Command ensures the best shelter and protection conditions (leeward) for the boat carrying the personnel.

The boat's master and the Loading Master shall evaluate the embarking conditions and shall decide whether to embark the personnel or not.

11.2.2 Ship-shore Safety Checklist

Before each operation, the Loading Master and one officer in charge of the tanker shall jointly control and fill in all the items of the ship-shore safety checklist as established in Maritime Rule No. 1/93.

All the items shall be filled affirmatively, and items of periodic control should be controlled again regularlly at intervals not longer than 6 hours, during the entire operation.

11.2.3 Ship's Personnel on Duty

The Terminal requires that, at least, during the entire stay of the ship there is one person from the crew on duty on deck and another in the ship's Control Room.

The person on watch on deck must control the connection of the hose, the work of the mooring system and the relative position of the ship/monobuoy. He must have an adequate communication system to report any news to the officer on duty.

It is an essential condition that the captain of the ship, or the representative designated by him, is present on the command bridge during tidal changes, bad weather conditions or emergencies.

This concept also applies to the Loading Master.

The ship's shift staff, as well as the entire crew, must cooperate fully with the terminal's staff in order to maintain a safe and clean operation.

11.2.4 Contamination Free Operation

All the bilge and loading system sea valves must be closed before any operation. Given the need to avoid pollution, it is necessary to go over the maneuver of all the loading system valves before the operations and perform the said maneuvers with full awareness and attention, avoiding mistakes that may result in pollution. Necessary equipment, tolos and absorbent material should be at hand to confine and absorb spills on the tanker's deck.

11.2.5 Watertight Doors – Access to Superstructure

Absolutely all the watertight doors of the superstructure, pump room, and engine room hatches must remain closed and tightened during the entire operation.

The Ship Command will determine the access door(s) to the superstructure that will be enabled for exiting to the tank deck during product transfer.

11.2.6 Inert Gas System

Ships that arrive at the terminal to carry out their operations must do them with a percentage of oxygen in the atmospheres of their tanks that are below 8 (eight)%.

The ship's Inert Gas equipment must be in perfect working order, guaranteeing a production of Inert Gas that contains less than 5 (five)% of oxygen and whose flow allows maintaining a positive pressure in the load tanks.

The operation of any ship that does not comply with the preceding conditions will not be allowed.

Unloading operations must be immediately suspended in the event of failure of the inert gas system.

By virtue of the mandatory use of inert gas, ships must have the necessary equipment to operate with a closed tank.

11.2.7 Oil Washing Operations

Crude Oil Washing operations may be authorized by the terminal as long as they do not imply excessive delays in the conclusion of the ship's unloading.

The Maritime Agencies must request authorization from the Terminal for the ships they represent to carry out washing operations with crude oil. Ships must complete the safety checklists recommended by OCIMF for this type of operation.

11.2.8 Smoking

Smoking or carrying cigarettes, either lighted or put out, on bare decks or on the boats, when they are near to the tanker, is strictly prohibited.

Smoking will only be allowed in authorized places on the tanker, which should be clearly indicated with the corresponding signs.

Safety ashtrays containing water have to be used aboard.

11.2.9 Ship Fire Fighting Equipment

Before starting any operation, at least two fire hoses should be connected to the main line and ready to be used, one at the bow and the other at the stern of the loading hose connecting manifold.

At least two foam fire extinguishers of appropriate size, must be near the manifold.

The firefighting main line should always be under pressure. If engine facilities do not allow this condition, the main firefighting pump have to be tested and ready to be used at any moment.

11.2.10 Other Ship Safety Conditions

Tanker engines, the servo motor, fire pumps and any other essential equipment as well as all the machinery on deck must constantly remain in a state of alert for the start-up of all

its power immediately and, thus, enable the tanker to perform any maneuver required during tide changes or an emergency.

Likewise, the tanker's personnel should control that the draft and the trim are always the adequate so as not to reduce efficiency of the propeller and steering systems.

12 Emergencies

12.1 Stopping Trades

The Loading Master is the coordinator of the operation, therefore, he is the obligatory contact between the tanker and the Terminal. In case of emergency, the Loading Master will be the one who must order to stop the operations.

If the Loading Master is unable to give this order, it may be exceptionally ordered by the tanker's Captain or his representative or the loading operators. Nevertheless, interrupting the oil flow by closing the manifold valve or the end valve of the string hose is absolutely prohibited, except at the special request of the Loading Master. In all cases, the closing maneuver should last at least 3 minutes.

The order to call off the operations will be given by VHF channel 68, or to the Terminal telephone numbers (See Annex 1 – Contact List)

The Loading Masters also have cell phones (See Annex 1 – Contact List)

12.2 Interruption of Communications

If communications by VHF between the Terminal and the Tanker are interrupted, the Loading Master cell phone is the backup way of communication.

- Once the Loading Master has been informed, he will exhaust all the possibilities to reestablish communications using his cell phone to call the Terminal telephone numbers or the mooring boats numbers (See Annex 1 – Contact List).
- Once the previous point has been done, Operations shall be stopped. In the case of unloading, it shall be done by the tanker. In the case of loading, the tanker manifold valve may be closed within a period of not less than 3 minutes.
- Operations shall be resumed once communications have been reestablished and their efficiency has been proved.
- As a complementary resource, the portable radio (VHF) of the loading operators can be used for communication with the Terminal.

12.3 Fire

- The affected party (Tanker or Terminal) should give the corresponding alarm, using an audible alarm and communication by VHF channel 68.
- The Terminal Operator and the Loading Master should coordinate and stop the product transfer operations.
- The Loading Master should inform about the situation as soon as he can to the Terminal Operations Headquarters.
- Once the operation is stopped, the ship must close the manifold valve and the loading operator, the end of line valve. The Loading Master will evaluate the need to disconnect the loading hose and set sail if this is necessary.
- The Loading Master will call the supporting ships to close the SPM's valve and remain vigilant in the vicinity of the ship.
- If the fire occurs aboard the tanker, the tug boat assistance may be required since it has a Foam-Water Monitor to attack fires on tank decks. Likewise, the tug has an international connection to the shore to provide water to the ship's fire system.
- If the support of the tug boat is not enough, the tanker's Command will request more assistance from the Base Naval Puerto Belgrano, by VHF channel 67, or communicate with its Shipping Agency to contact private towing companies from Bahía Blanca.

12.4 Breakage of the Mooring System

- The product transfer operation should be stopped immediately and the manifold and hose valves closed.
- The ship, with its own engine and the help of the tugboat, must try to stay close to the monobuoy to avoid damage to the loading hose.
- The Loading Master will call the support boats to set sail immediately and assist the ship.
- An emergency hose disconnection should be attempted to free the hose.

- If it is possible to disconnect the hose, the ship must proceed to anchor in a place authorized by the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard].

12.5 Oil Spill

- Both the ship's crew and the terminal's personnel, if they detect a spill, they must immediately inform the Loading Master and the ship's captain.
- The Loading Master will order the product transfer operation to stop and will order the manifold and hose valves to be closed.
- Likewise, he will quickly report the situation to the Terminal Operations Headquarters.
- The Loading Master will call the support boats to set sail immediately and assist the ship.
- Both parties (tanker and terminal) must implement their respective contingency plans and collaborate with each other to avoid wasting time and resources that may lead to more serious consequences for the environment.

The regulations of the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard], for spill cases, demand that any event of these characteristics is immediately reported to the corresponding coastal station. Hence, both whoever represents the terminal and the ship have the obligation to report on the spill produced regardless of where it was originated.

If possible, the Loading Master and the Captain of the ship must coordinate the delivery of the information to the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard].

12.6 Collision between Ship and Monobuoy

- Ship must activate the sound alarm and activate its Emergency Plan.
- The Loading master will stop the operation, coordinate the closure of all ship and land system valves and urgently call the mooring boats to be beside the ship.
- The Loading master should go to the area of the collision to evaluate the damages and call the Operations Supervisor of the Terminal in order to give him a report of the whole situation.
- The terminal will report what happened to the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard].
- The safety of people and the care of the environment must be prioritized.
- If necessary, the Loading Master could ask the ship to pump sea water through the hose system and submarine pipelines to clean them.
- The ship must provide the maximum collaboration to move the product with sea water if this is required.
- If the sweeping with sea water is not required, the Terminal may request the ship to depart from the monobuoy until the damage is evaluated and the actions to follow are defined.

12.7 Collision between the Moored Ship and another Ship

- The moored ship must give the corresponding sound alarm and activate its emergency plan for these cases.
- This event must be reported to the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard]. If possible, the Loading Master and the Captain of the ship, together with the Terminal and the Maritime Agency, must coordinate communications with the Maritime Authority.
- The Loading Master must immediately suspend the operation, coordinate the closure of all ship and land system valves and urgently call the mooring boats to be beside

the ship.

- The Loading Master must go to the area of the collision, evaluate the damage and contact the Terminal Operations Headquarters to give a report on what has happened and what has been done to date.
- Safety of people and care of the environment must be prioritized.
- The terminal and the Ship Command will determine the necessary actions to avoid major damage to people, facilities and the environment following the guidelines determined by the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard].

12.8 Ship's Grounding

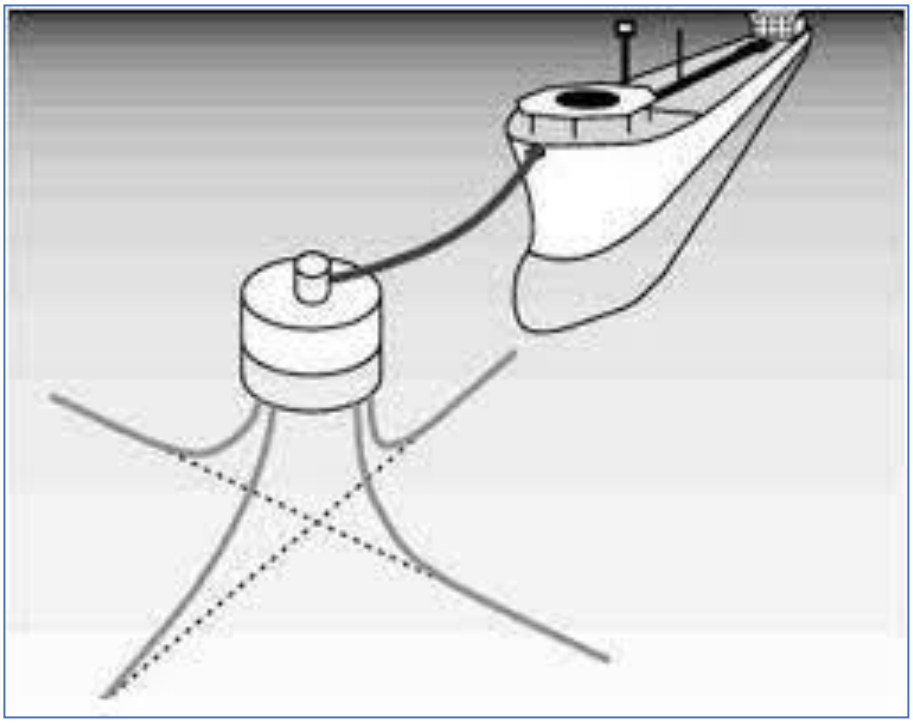
- The Captain of the ship must start his emergency plan and call list for these cases. If the Loading Master is not on board at the moment of the stranding, it will be the ship's Captain's obligation to inform the terminal of this event if the ship is stranded less than 1,500 (one thousand five hundred) meters from any of the monobuoys or underwater pipelines.
- The Captain of the ship and/or the Loading Master must communicate with the Terminal Operations Headquarters to clearly indicate the position of the ship with respect to the closest monobuoy and the approximate distance to the underwater pipeline of that monobuoy.
- The Captain of the ship must evaluate the possibility of requesting assistance from any of the OTE tugboats that are available or requesting another type of support from his Maritime Agency.
- As in the case of any extraordinary event of navigation, it is the obligation of the Captain of the ship to immediately inform the Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard] about the stranding.

13 Annexes

13.1 Emergency Contact List

Puerto Rosales Terminal	
Terminal's Control Room	Tel. +54 2932 429 204 Cell Phone: +54 2932 617227
Control Room e-mail	supervisor.rosales@oiltanking.com
Port Facilities Security Officer	Tel. +54 291 416 1029 javier.feijoo@oiltanking.com Tel.+54 291 412 2151 jorgel_schulz@yahoo.com.ar
Headquarter of Operations	Tel. +54 2932 429 230 / 210
Maritime Operations Supervisor	Cell Phone: +54 291 5139104 emiliano.rosales@oiltanking.com
Loading Masters	
Loading Master 1 *Diego Mazza*	Cell Phone: +54 291 4664723
Loading Master 2 *Adrián Alvez de Lima*	Cell Phone: +54 11 3792 0495
Loading Master 3 *Matías Arroyo*	Cell Phone: +54 2932 61 7360
Loading Master 3 *Jesús Aguirre*	Cell Phone: +54 2932 61 7360
Loading Master e-mail	rosales@grouphydra.com
Mooring Boats	Cell Phone: +54 291 4070130
Prefectura Naval Argentina Argentina (PNA) [Argentine Coast Guard]	
PNA Bahía Blanca	VHF Ch 12 – 14 – 16
PNA B Blanca	Cell Phone: +54 291 497 1293

13.2 CALM System (Cathenary Anchor Leg Mooring)



13.3 Mooring Sequence

The support boat picks up the messenger line and takes it in the direction of the ship.

The support boat shackles the messenger line to the ship's winch.

The ship begins to lift the messenger line

The ship continues to advance and begins to embark the chain and buoy system.

After the mooring system is on board, the chain is attached to the Stopper and the tanker is moored.

13.4 Connection Sequence

After mooring, the mooring boat will bring the hose closer to the manifold sector of the ship.

After the support boat picks up the end of the line, the crane picks up the hose and lifts it onto the deck so that the loading operators can secure the chain to the deck.

After the hose is secured to the deck, it bends at the Gunwale rail in the direction of the connection manifold.

After securing the head to the ship's manifold flange, the hose is secured with the sling tensioned by the crane where will the entire operation remain.

In this way the slip hook is secured and the hose remains firm on the Gunwale rail.

13.5 Documents Used During Operations

PRO-OPE-RE-007 Verificaciones en monoboyas previas al amarre y posteriores a la zarpada de los buques

PRO-OPE-RE-008 Verificaciones de amarre y conexión de mangueras

PRO-OPE-RE-009 Carta al capitán

PRO-OPE-RE-010 Letter to master

PRO-OPE-RE-011 Condiciones operativas de descarga de monoboya

PRO-OPE-RE-012 Unloading operation in the maritime terminal

PRO-OPE-RE-013 Lista de verificaciones de seguridad buque-tierra

PRO-OPE-RE-014 Servicio de amarre zarpada y remolque

PRO-OPE-RE-015 Mooring - Unmooring and tug service report

PRO-OPE-RE-016 Registro tiempo

PRO-OPE-RE-017 Time sheet

PRO-OPE-RE-018 Carta protesta

PRO-OPE-RE-019 Letter of protest

PRO-OPE-RE-020 Carta de rechazo

PRO-OPE-RE-021 Letter of protest rejection

PRO-OPE-RE-022 Conferencia preoperative

PRO-OPE-RE-023 Precargo conference record

PRO-OPE-RE-026 Check list cambio de marea

PRO-OPE-RE-032 Registro performance buque

PRO-OPE-RE-033 Performance of Ship Record

PRO-OPE-RE-034 Notificación a los comandos de buques previa a las operaciones

PRO-OPE-RE-049 Tankers nominations