

## MACEIÓ WATERWAY TERMINAL



Revision	Amendments	Date	Preparation	Approval
0	Original Revision			
A	Information Update	Jan/18	Hisolda	F. Lapa
B	Information Update	Oct/22	Hisolda	R. Vinha



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## 1. INTRODUCTION

This Port Information is prepared by Petrobras Transportes S.A. (TRANSPETRO) which operates the Maceió Waterway Terminal in the Port of Maceió. It provides essential information for ships operating in the terminal. This document is also distributed internally within the organization, for port stakeholders, local and national authority.

Port Information is available in Portuguese and English versions.

The information contained in this publication is intended to supplement, never replace or alter any type of legislation, instructions, guidance, or official, national, or international publications. Therefore, it should not be taken into account what contravenes any item of the aforementioned documents.

The Terminal reserves the right to change any of its operational characteristics presented herein, without prior notice.

If incorrect information is found which needs to be updated, please contact:

Maceió Waterway Terminal Management  
Phone: 55 81 99969-0521  
Email: tamaceio@petrobras.com.br

The latest version of this Port Information and the other Transpetro terminals can be obtained through the following address:

[www.transpetro.com.br](http://www.transpetro.com.br).

## 2. DEFINITIONS

**BP - "Bollard Pull"** - Static Traction

**SQUAT Effect** - Increase in the draft of a ship as a result of the increase in displacement speed.

**IMO - "International Marine Organization"**

**ISGOTT** - "International Safety Guide for Oil Tankers and Terminals"

**ISPS CODE** - International Ship and Port Facility Security - Parts A & B;

**Neap tide** - Condition in which the tide reaches its maximum point at a certain time of the year.

**Low tide** - Condition where the tide reaches its minimum point at a certain time of the year.

**PEI** - Individual Emergency Plan. Document originated in CONAMA 398: Individual Emergency Plan for oil pollution incidents in waters under national jurisdiction, originating in organized ports, port facilities, terminals, pipelines, land rigs, platforms and their support facilities, refineries, shipyards, marinas, nautical clubs and similar facilities.

**PRE** - Emergency Response Plan. Document available at SINPEP and that can be requested to the Terminal for consultation

**VTS - "Vessel Traffic Service"** - Vessel Traffic Service

### 3. CHARTS AND REFERENCE DOCUMENTS

Information about the Terminal can be obtained from the following publications.

#### Charts

Area	Chart number			
	Brazil (DHN)	US Hydrographic Office	British Admiralty	Others
<i>Proximity to the Port of Maceió</i>	920			
<i>Port of Maceió</i>	901		BA 960	

#### Other Publications

Type/Subject	Editor or Source			
	Brazil (DHN)	USA Hydrographic Office	British Admiralty	Others
<i>Standard and Procedures of the Port Authority</i>	NPCP-AL			
<i>Marine Terminal Private Questionnaire</i>				MTIS – OCIMF
<i>East Coast Roadmap (Sailing Directions)</i>	Navy Hydrography Center			

#### 4. DOCUMENTS AND INFORMATION EXCHANGE

The items listed below must be provided by the Terminal or the Ship, as indicated in the table.

Information	Prepared by:			Delivered to:			Comments
	Terminal	Ship	Both	Terminal	Ship	Both	
<b>Prior to Arrival</b>							
Estimate Time of Arrival (ETA) and information about the vessel		X		X			According to Appendix D
<b>Before the Transfer of Cargo or Bunker</b>							
Details on cargo / "slop" / ballast on board		X		X			According to Appendix E
Operationally essential information (complete onsite)	X				X		According to Appendix E
Ship / Land Safety Checklist			X			X	According to Appendix A of ISGOTT.
<b>During the Transfer of Cargo or Bunker</b>							
Repeat the Ship/Shore Safety Checklist			X			X	According to Appendix A of ISGOTT
<b>After the Transfer of Cargo or Bunker, Before Departure</b>							
Information necessary to untie the ship			X			X	Quantity of fuel and water on board
<b>AFTER UNBERTHING, ON LEAVING THE PORT</b>							
Information related to the port departure data		X		X			

## 5. DESCRIPTION OF THE PORT AND ANCHORAGE

### 5.1 General Description

The Port of Maceió consists of 6 berths for operation with liquid bulk, sugar, dry cargo and passengers. The main operations carried out in the Port of Maceió are:

Loading and Unloading of Oil, Derivatives and Biofuels – PGL (Berth 007) and Sugar Wharf (Berth 006);

Bulk sugar cargo: Sugar Wharf (Berth 006);

Supply of Vessels with MGO: PGL (Berth 007) and Sugar Wharf (Berth 006);

Bulk Salt Discharge: CMU – Multiple Use Wharf (Berth 005);

Loading and Unloading of general products: Commercial Wharf (Berths 002, 003 and 004);

Embarkation and Disembarkation of Passengers: Commercial Pier (Berths 002, 003 and 004).

### 5.2 Location



#### 5.2.1 Coordinates

Geographical coordinates: latitude 09° 40' 12" S and longitude 35° 42' 54" W.

The Liquid Bulk Pier of the Port of Maceió is geographically located at latitude 09° 40' 58" S and longitude 035° 43' 30" W.

#### 5.2.2 General Geographic Location

The Port of Maceió is located on the coast of the State of Alagoas, in the city of Maceió, between the beaches of Pajuçara and Avenida.



### 5.3 Approaches to the Terminal

#### 5.3.1 General Description

The access channel to the port is 520 m long and 120 m wide, with depths ranging between 10.5 m and 14 m. It has signs in the Maceió Lighthouse (1364) (flashing white and red lights), in the Farolete da Ponta do Molhe (flashing red light) and in the Boia do Peixe-Pau (flashing red light).

The Evolution Basin is limited by the Commercial Wharf and the Sugar Terminal, 400 m long, 350 m wide and an average depth of 11 m, with no entrance bar.

#### 5.3.2 Anchorages

##### a) Port of Maceió

Vessels > 3,000 AB		
Station	Latitude	Longitude
A	09° 41' 00" S	035° 44' 00" W
B	09° 41' 00" S	035° 44' 42" W
C	09° 42' 00" S	035° 44' 00" W
D	09° 42' 00" S	035° 44' 42" W

- sport and recreational vessels;		
Station	Latitude	Longitude
A	09° 40' 25" S	035° 43' 52" W
B	09° 40' 32" S	035° 43' 52" W
C	09° 40' 33" S	035° 43' 46" W
D	09° 40' 25" S	035° 43' 45" W

##### b) Anchorage Area for Visiting

Agência Nacional de Vigilância Sanitária [National Health]		
Station	Latitude	Longitude
A	09° 40' 51" S	035° 44' 42" W
B	09° 40' 51" S	035° 44' 24" W
C	09° 41' 18" S	035° 44' 24" W
D	09° 41' 18" S	035° 44' 42" W

##### c) Anchorage Area for nuclear-powered ships

Station	Latitude	Longitude
A	09° 44' 21" S	035° 45' 29" W
B	09° 44' 21" S	035° 44' 29" W
C	09° 45' 21" S	035° 45' 29" W
D	09° 45' 21" S	035° 44' 29" W

#### 5.3.3 Navigation Aids

The Ponta Verde Lighthouse (1360) that displays intermittent white and red light, located to the East and 2.44 nautical miles from the Ponta do Molhe Lighthouse (1380), which presents intermittent red light; the Peixe-Pau Buoy, intermittent red light, located to the South and 1.10 nautical miles from Ponta do Molhe; and Starboard Lights located on the Oil Pier 01, berth 007, indicating the entry into the evolution basin and the mooring edge.

For more information, see the East Coast Routes (Sailing Directions).

### 5.3.4 Port Limits

Marker Point	Geographical coordinates:	
	Latitude	Longitude
1	09° 42' 05" S	35° 45' 00" W
2	09° 40' 18" S	35° 45' 00" W
3	09° 40' 15" S	35° 44' 26" W
4	09° 40' 12" S	35° 43' 52" W
5	09° 40' 31" S	35° 43' 21" W
6	09° 40' 23" S	35° 43' 17" W
7	09° 40' 26" S	35° 43' 13" W
8	09° 40' 27" S	35° 43' 00" W
9	09° 42' 05" S	35° 43' 00" W

### 5.3.5 Port Control or VTS

Traffic in the port will comply with current legislation, as well as the rules provided for in international conventions ratified by the country, in addition to the standards established herein and those issued by the port administration.

Vessels must use audible and visual signals, including VHF communication, to define movements in advance, especially in the case of maneuvers close to less than 2 miles from the port.

It is mandatory to use the national flag on the stern, for vessels with more than 5 AB, in the following situations:

- At the entrance and exit of the ports;
- When traveling in sight of another vessel; and
- In the harbor, from 8:00 a.m. to sunset.

Foreign vessels will hoist the national flag at the top of the fore mast.

All foreign vessels and national long-haul and cabotage vessels must, mandatorily, maintain contact with the port administration and/or maritime agency, through VHF call, in the following situations:

- After anchoring at any of the authorized anchorages;
- b) after suspending the anchorages;
- When demanding the Braskem Terminal;
- Immediately after berthing in port; and
- When you're leaving the port.

It is prohibited for vessels berthed to keep stairs down when offshore. The breast-breaking ladder must remain folded in its Berth throughout the ship's stay in port. The accommodation ladder, lowered to the dock, should be provided with safety net, leaving at the Master discretion, to keep it lowered or hoisted at night.

Ships at anchor are allowed to put down an accommodation ladder between the sunrise and sunset. At night, the ladder can only be put down if necessary, and should be recovered immediately after the embarkation/disembarkation.

Treatment and painting on decks and sides are authorized, and the ship must provide the necessary measures to prevent the fall of people and/or material into the sea.

Boards and cottages can be lowered without prior license from CPAL. In the meantime, they should be collected at the end of the day.

Rescue vessels may be lowered for crew training regardless of CPAL license. The exercises should be recorded in the Logbook, on the dates they were made, stating the most interesting details of the duty performed.

The ship's side should have lighting on the sea side, to allow better supervision of the competent authorities.

Pontoon boat or barges – moored alongside ships for fuel supply, tank cleaning or any other purpose – must be properly illuminated.

The collection of garbage and debris, provision of lubricants and fuels and general supply should, in principle, be carried out during the day.

Mooring or anchoring of out-of-service vessels in ecologically sensitive areas or in environmental protection locations is not allowed.

To avoid safety hazards, out-of-service ships shall:

- a) keep the vital circuits of the ship running;
- Keep VHF equipment fed;
- Display the signage provided for in RIPEAM;
- Keep on board the minimum necessary personnel authorized by CPAL; and
- Maintain a breast-breaking ladder or gangway in ready-to-use condition.

### 5.3.6 Pilotage

The Pilotage Zone of the Port of Maceió and the Braskem Terminal is the defined place for the pilot's waiting point until berthing. The geographical coordinates of the pilot's waiting point are: latitude 09° 42'12" S and longitude 035° 44' 17" W.

Pilotage is mandatory for foreign ships and for oil tankers, propane and carriers of explosive cargo, of any value of gross tonnage.

Pilotage is optional for the following vessels:

- Those of the Brazilian flag, of any tonnage value, except those provided for below.
- Foreigners leased to a national company, with a gross tonnage value of less than 2,000, provided that they are commanded by Brazilian seafarers, of a category equal to or greater than the 1st nautical officer, and are not classified below.
- In wing maneuvers to the wharf to change mooring, for national and foreign vessels.

Vessels classified according to Normam-12, in the class of inland navigation of fishing and sport and recreation, of any nationality, are exempt from the use of pilot.

Each master is solely responsible for the maneuvers, being responsible for all information to be provided to the pilot about any peculiarities, specific conditions or existing difficulties, such as deficiency of machinery, boilers, problems or malfunctions of navigational aids, mooring cables or any element that may lead to danger with regard to mooring, laying of cables, loading and unloading of the ship.

### 5.3.7 Tugboats and Port Services

All mooring and unmooring maneuvers at the Port of Maceió and at the Braskem Terminal will be performed with the aid of tugboats, except for vessels of up to 2,000 TPB, when maneuvering at the Port of Maceió, obeying the correspondences between the vessel's TPB, minimum Bollard-Pull value and the recommended number of tugboats to be used, contained in item 6.3.

Maneuvers with platforms, carried out in inland waters, are considered special and must be planned in advance between shipowners and/or maritime agents and their service providers. As a preventive safety measure, the Port Captain or agent may assess the need for a high seas tug to accompany all maneuvers carried out by the other tugs.

It will be up to the shipowner, or its agent, to request the tugboats necessary for the maneuvers to be carried out. At the time of the maneuver, the captain of the vessel will decide the device for the towing, that is, the number of tugs and their positions to form the necessary force torque, and it is recommended to listen to the suggestion of the pilot, if the pilotage service is being used.

Vessels that have bow truster and/or stern truster device in perfect operating conditions may reduce the required values of Bollard-Pull, in the ratio of twice the nominal values of the powers of their organic devices, following the practical rule of correspondence provided for in item c) of the item (subtracted from the required Bollard-Pull, twice the power of the truster divided by 100).

The towing lines and other materials to be used in maneuvers with the tugboats must be adequate to the safety requirements for the maneuver. Its supply must be a product agreed between the contractor, shipowner or agent, and the contractor, tugboat company.

The master of the ship shall take the final decision on the use of materials and devices suitable for manoeuvre.

In cases of force majeure, the Port Captain may authorize maneuvers outside the rules established by this document, through the request of the shipowner or responsible for the vessel, with the agreement of the captain. The authorization that will be granted, always in view of the minimum conditions of safety of navigation, will not exempt its applicants, shipowner and/or maritime agent, and its executor, the commander, from their legal responsibilities.

It is understood as force majeure in this case, situations where there is no availability or the required amount of tugboats and the "BOLLARD PULL" is less than the desirable, for reasons that can not be avoided or prevented.

In these cases, the pilotage must also formally manifest itself as to the possibilities of carrying out the intended maneuver, safely.

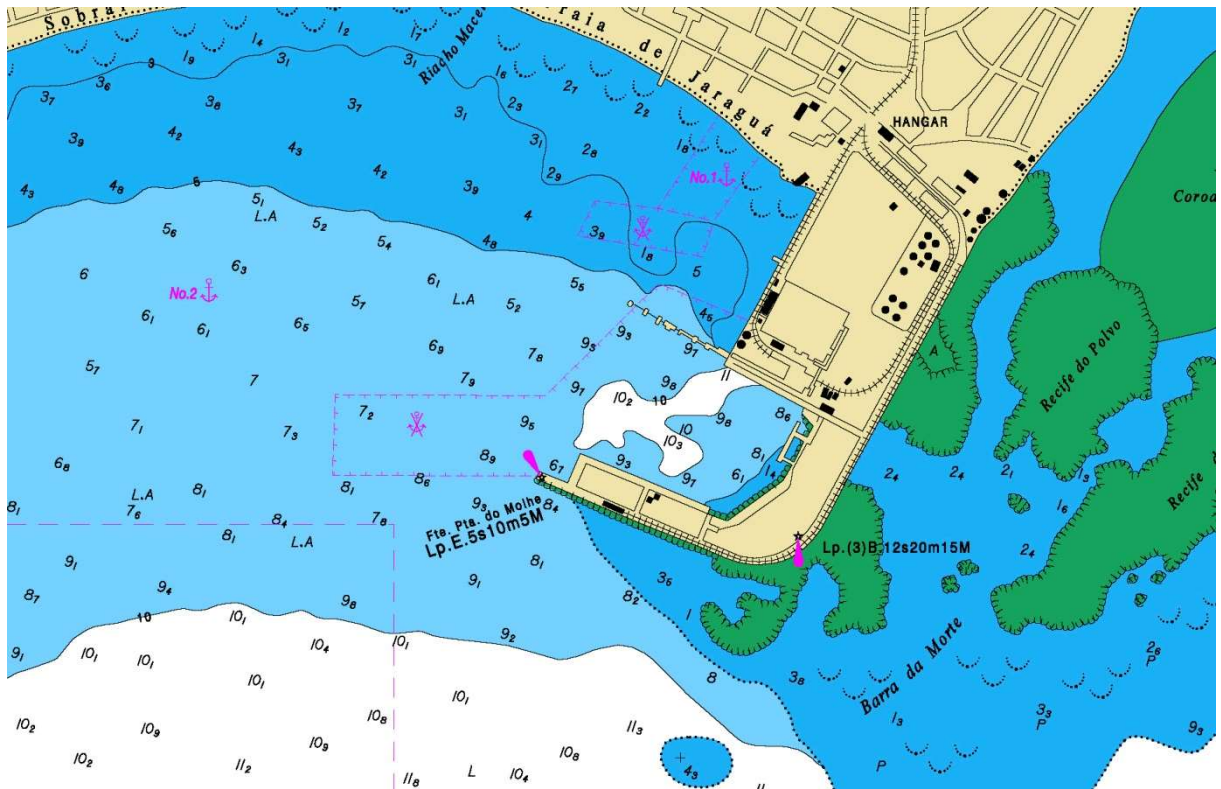
In tugboat maneuvers, close to the bow of the ships, the passage of the towing line is prohibited by lowering it through the bow to be picked up with croque by the trim of the tugboat. In tugboat maneuvers near the bows of the ships, the towing rope shall be drawn by means of a catch from the forward casing to the tugboat deck in order to avoid excessive tug / ship approach, reducing the effects of hydrodynamic interaction between vessels.

### 5.3.8 Navigations Risks

The utmost attention and caution is recommended when sailing close to the coast, especially at night, due to the large concentration of fishing boats in activity.

One should avoid sailing less than 2.5 miles from the Ponta Verde lighthouse when east of the 35°43' meridian due to the existence of numerous sparse and covert stones.

## 5.4 Maneuvering Areas



The maritime access is approximately 520 m long, 80 m wide and has a depth of about 10m to 14 m, with no entry bar. It has an evolution basin 400 m long and 360 m wide with 11 m deep.

### 5.4.1 Aids to Navigation and Mooring

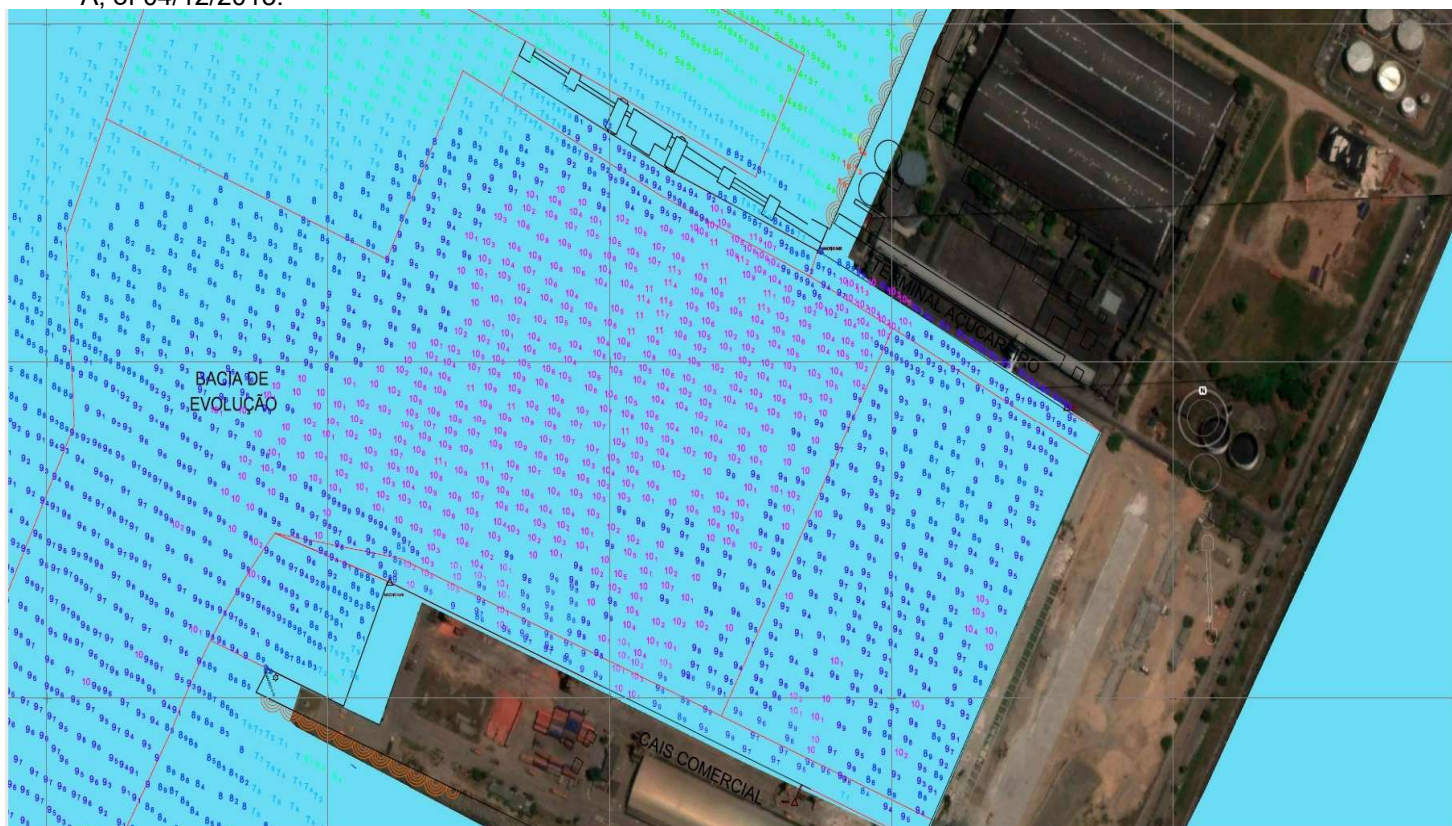
Maritime beacon signals are in accordance with IALA System B (International Association of Lighthouse Authorities Lateral System B).

The evolution basin for the pier is delimited by the Ponta do Molhe and the starboard lights of the Oil Pier.

Further information should be found in the East Coast Roadmap.

### 5.4.2 Depth Control

Depth control is done by the Port Authority. The last official bathymetry performed was INPH-220-10 A, of 04/12/2013.



The maximum draft allowed for operations in THE PGL is 10.5 m at low tide and 11.0 m at high tide.

### 5.4.3 Maximum Dimensions

Variable	Dimension
Draft	10.5 m Low / 11.0 m High (Max)
LOA	210 m (Max)
UKC	30 cm (Min)
TPB	60,000 Ton (Max)
Displacement (Berth)	72,000 Ton (Max)
Molded breadth	40 m (Max)
Parallel Edge	58 m (Min)
Free Edge	3 m (Min) / 13 m (Max)
Height Manifold / water	15 m (Max)

### 5.5 Environmental Factors

Weather and temperature conditions in the anchorage and basin of evolution throughout the year are good.

- Atmospheric Pressure – The annual average is around 1,012.0 mb.
- The average atmospheric temperature is 25.3°C, ranging from a minimum of 17°C in the winter to 35°C in the summer.
- The relative humidity during the year is high, about 87%, especially in the rainy months.
- The other meteorological information of the area is described below.

### 5.5.1 Prevailing Winds

In the months of April to August, the predominant winds from the statistical point of view are those of quadrants E and SE. In the other months, the prevailing winds come from quadrants E and NE.

The usual wind speed in the Port of Maceió is a maximum of 15 knots.

### 5.5.2 Waves and Places

Waves in anchorage areas are a result of the dominant wind forces as well as their direction and duration. If the wind is E-SSE, the average wave height varies between 1 m and 1.5 m.

### 5.5.3 Rainfall

The period of highest concentration of rainfall runs from March to August, considered the winter of the region, with the maximum rainfall of 390 mm/month, referring to June. In the driest period of the year, which runs from October to December, the level of precipitation decreases to a minimum of 48 mm/month in November.

### 5.5.4 Lightning Storms

Lightning storms are rare in the Port of Maceió. The highest incidence of lightning occurs in January, when it combines drier weather, high temperatures and occasional rain showers.

### 5.5.5 Visibility

Normally considered good to excellent, it can be reduced in the rainy season.

### 5.5.6 Tidal currents and other Currents

Due to the configuration of the coast, the prevailing current is the tidal current, whose direction in the flood is to the south; and in the ebb, to the north.

### 5.5.7 Variation in Tidal Levels

Place	Lat S	Long. W	HWF&C	Heights in meters above NR				
				MHWS	MHWN	MLWN	MLWS	MSL
Port of Maceió	9:41	35:43	3h45min	2.2	1.6	0.8	0.2	1.2

Information contained in the DHN 901 Nautical Chart.

### 5.5.8 Measurements

The Maceió Terminal has an anemometer installed on the Operations Room of PGL. The wind speed and direction are reported in the Supervisory System, located in the Operational Control Center. In addition to this instrument, an anemoscope is available at PGL, located near the mooring dolphin D2.

## 6. TERMINAL DESCRIPTION

### 6.1 General Description

The Maceió Waterway Terminal uses 2 berths for operation with liquid bulk, in which there are pipelines for handling oil, derivatives and biofuels, which are operated by Petrobras Transporte S.A. – Transpetro, as follows:

#### Liquid Bulk Pier

- Berths 007 A (PGL): operates with S500 diesel, gasoline, anhydrous ethanol, hydrated ethanol, MGO and Oil.
- Type: Pier "I" (Finger)
- Location: latitude 9°40'43.5324" South and longitude 35°43'34.752" West.
- Depth: 11.5 m
- Maximum draft: 11.0 m
- Maximum length (LOA): 210 m
- Maximum size: 60,000 dwt

#### Sugar Wharf

- Berth 006: operates with MGO and hydrated ethanol.
- Type: Wharf
- Location: latitude 9°40'47.7228" South and longitude 35°43'26.2956" West.
- Depth: 11.0 m
- Maximum draft: 10.5 m
- Maximum length (LOA): 210 m
- Maximum size: 50,000 dwt

### 6.2 PHYSICAL DETAILS OF THE CRIBS

Maceió Terminal							Port of Maceió			
Berth No.	Type	Berth Length (m)	Depth (m)	Tide (m)		Breadth (max)	Vessel Length (Max)	Products Handled	Displacement Max	Notes
				Syzygy	Low					
007	Pier I	310	10.5	2.3	-0.1	35	200	Oil, Diesel, Gasoline, Anhydrous Ethanol, Hydrated Ethanol, MGO	70,000	
006	Pier	250	10.5	2.3	-0.1	35	200	Hydrated Ethanol	70,000	

### 6.3 Berthing and Mooring Arrangements

No. of the Berth	Pilot	TPB Vessel Size (maximum)	No. & BP of Tugboats				Approach		Mooring Points	Mooring Cables		
			Mooring		Unmooring		Wind Max:	Angle Max:		Lashing	Athwartships lines	Spring
			No.	BP	No.	BP						
007	*	Supplier	0	NA	0	NA	5	15°	4	2	2 AF	2
	Yes	< 10,000	1	11	1	11	2.5	15°	4	3	0	3
		< 45,000	2	39	2	39	2.5	15°	6	3	2	2
		< \$50,000	2	42	2	42	2.5	15°	6	4	2	2

\* For tugboats of Brazilian flag, the use of the Pilot for mooring and unmooring maneuvers is allowed.



Mooring arrangements may be modified in case of bad weather. After assessing the need, moorings may be added to make mooring safer.

#### 6.4 Loading, Unloading and Refueling Berth Features

Berth No.	Products	Sleeve gloves /Arm Flanges	Load or Desc.	Temp.		Flow (m3/h) (Maximum)	Pressure (kgf/cm <sup>2</sup> ) (Maximum)	Notes
				Min	Max:			
007	Oil	2 x 8" API	Time	NA	NA	1,000	10.0	Summed Both
	Diesel (S500):	2 x 8" API	Desc.	NA	NA	1,000	10.0	Summed Both
	Gasoline	1 x 8 API	Desc.	NA	NA	500	10.0	
	MGO	1.x.6 API	Time	NA	NA	250 300	10.0	
	Anhydrous Ethanol	2 x 8" API	Discharge	NA	NA	1,200 1.800	10.0	Summed Both
	Gasoline	2 x 8" API	Time Discharge	NA	NA	1,200 1.800	10.0	Summed Both
006	MGO	1.x.4 API	Time	NA	NA	350	7.0	
	Hydrous Ethanol	1.x.4 API	Time Discharge	NA	NA	300 400	7.0	

#### 6.5 Management and Control

The Maceió Terminal Operational Control Center is located at the facilities of the Maceió Waterway Terminal, belonging to Transpetro, at coordinates 9°40'33.0168"S 35°43'16.2696"W.

The Operational Control Center has a complete Supervisory System, where all operations carried out in the Terminal are monitored and controlled, a CCTV system, capable of viewing the entire area of the Terminal and berths, and a maritime VHF radio, with standby on channel 12.

The Terminal Operations team is responsible for the control of operations, through manual and automatic measurement systems, documentation, communications, monitoring of loading and unloading operations and monitoring of vessel mooring and unmooring maneuvers.

The ship/terminal communication is carried out by means of VHF radio, maritime frequency channel 12 and the communication test carried out every hour.

#### 6.6 Principal Risks

The risks inherent to the operations carried out at the Maceió Terminal are described in Annex I – Preliminary Risk Analysis.

## **7. PROCEDURES**

### **7.1 Prior to Arrival**

Vessels destined for the facilities of TA Maceió must inform the estimated arrival (ETA) about 72 to 48 hours in advance, directly to the agency that represents it, via the Internet or other available means. Change or confirmation of the arrival of the ship must be communicated a minimum of 24 hours in advance. The ETA information must specify whether the time mentioned is local or UTC.

The Maritime Agencies send the Pre Arrival Information document (Appendix H) by e-mail to the vessels, which must complete and return the document with a copy to the Terminal. In addition to Pre Arrival, Agencies must submit the updated version of Port Information.

### **7.2 Arrival**

Port Control is carried out according to item 5.3.5.

The supplies (ODM or water) must be requested from the Agencies. Water supplies are carried out exclusively by maritime agencies, through water trucks from partner companies. ODM supply is carried out by the Terminal at Berths 006 (Boxes 01 and 02) and 007, by pipelines.

Cleanings of the on-board tanks are released during the stay, except the COW (Crude Oil Washing) and the cleaning of the ballast tanks. Ramonage is not allowed with the ship moored or in maneuver. The waste generated in the cleanings must be directed to the slop tanks, it must never be discarded with the ship moored

The exchange of information between ship and terminal must be carried out according to appendices D.

## 7.2.1 Useful Telephone Numbers

<b>NAME</b>	<b>FUNCTION</b>	<b>CONTACT US</b>
Rafael Vinha	Sector Manager	(81) 9 9969-0521
Hisolda Almeida	Nautical Inspector	(82) 9 9902-2255
Paulo Mac Arthur Dantas	SSP	(82) 9 8839-5188
Supervision (24 hours)	Operation	(82) 9 9914-3778
<b>MACEIÓ PORT ADMINISTRATION -APM</b>		
Gatehouse	Vigilantes 1a. Gatehouse	(82) 2121-2525
Safety Supervision	SSP Mr. Costa	(82) 9 9169-9344
Administration	Launch Help Desk	(82) 2121-2500
<b>EXTERNAL AUTHORITIES</b>		
Federal Police	CESPORTOS/AL	(82) 3216-6767 24h
Harbour Master	Central	(82) 3215-5800
Maceio Pilots	Pilotage	(82) 3311-8014
Alagipe Pilots	Pilotage	(82) 3313-2312
3rd Naval District	Brazilian Navy	(84) 3216-3024
PORTS AND COASTS	Brazilian Navy	(21) 2104-5236
Civil Protection	Emergency	0800 030 6205
IMA-AL	Supervision and Monitoring	(82) 9 8833-9401
The Brazilian Environment and Renewable Natural Resources Institute	Help Centre	(82) 2122-8300
Civil Police		147
Military Police		190
Federal Highway Police	Help Centre	191
Fire Department		193
SAMU		192

### **7.3 Mooring**

For landing, anchoring and mooring, ship captains must pay attention to the information contained in items 5.3, 5.4, 5.5 and 6.2 above.

With regard to mooring, the mooring lines must be permanently cared for when maneuvering, in order to always keep the ship in the indicated position. All cables must be kept under proper voltage at all times. Winches must be with constant tension, maintained by means of manual brakes, and the use of automatic tension winches is not allowed. Spies with similar functions must have the same type of material, length and SWL.

The mooring lines must be arranged as symmetrically as possible in relation to the midships. The beams must be oriented as perpendicularly as possible to the longitudinal axis of the ship and passed as far as possible fore and aft. The springs must be oriented as parallel as possible to the longitudinal axis of the ship.

If fiber tails are used in wire ropes (synthetic tails), the tails must be of the same type, with MBL 25% greater than the MBL of the wire rope, of the same material and the same length.

The horizontal angle of the head and stern lines in relation to the direction of a breast line perpendicular to the longitudinal axis of the ship should preferably not exceed 45°.

#### **7.3.1 Mooring system of the ship**

Meet the mooring arrangements defined in item 6.3

#### **7.3.2 Ship/shore access**

The pier of the Maceió Terminal does not have stairs to access the ships. This access is made through the ship's gangway. In exceptional cases, if this arrangement is not possible, the Terminal will provide a support boat to ensure safe access if the ship is not surrounded by containment barriers. On the way from the Ship to the transport vehicle and vice versa, the crew members must circulate in the safety lane demarcated on the floor (loading platform and dolphins). In the safety lane, the use of PPE by crew members or visitors is not mandatory.

### **7.4 Before Load Transfer**

With the ship moored, the operation will be interrupted or not started if the wind speed is greater than 25 knots, if services with open flame or sparking occur less than 30 meters from the side of the ship or in case of accidents where the Organizational Response Structure (leak, fire, explosion or fatal accident) is triggered.

When the ship is moored, after changing the safety checklist (Appendix A of the ISGOTT), if there are pending issues that are not resolved by the ship's crew, the Terminal will not authorize the start of the operation.

The electrical insulation of the ship will be carried out through electrically discontinuous hoses or electrical insulation flanges. The Terminal will adapt the formation of the transfer lines (continuous or discontinuous hoses) in accordance with ISGOTT.

The resources necessary to connect the ship are agreed upon at the first contact of the ship with the Terminal. The vessel must have the diameter of the load sockets in order to allow the connection of the loading hoses. Before the start of the operation, an on-board representative must monitor the entire connection operation of the hoses and their tightness during the start of the operation, and must be close to the ship's cargo outlet.

The start of the operation only takes place after filling out the initial letter, by the shore and onboard representatives.

It is forbidden to discharge dense smoke through the chimney of ships moored to the piers (MARPOL). Care must be taken to prevent sparks from escaping the chimney. It is prohibited to discharge water containing soot or other substances directly into the sea (MARPOL). Failure to comply with such regulations shall result in one or more of the following penalties:

- Immediate interruption of operations;
- Fine of the competent authorities;
- Compulsory unloading of the pier ship;
- Notification of infringement to shipowners;
- Fines, loss of time and all other related expenses will be charged to the ship.

The strict prohibition on the stay of small vessels on the side or in the vicinity of ships moored and in operation must be carefully observed. Only service vessels in the Terminal itself or those authorized by the port authorities or by the Terminal may be in the vicinity or alongside, provided that they meet all safety conditions. The transgression of this rule must be reported to the competent authority.

The moored ships will not be able to move their propeller(s) without express authorization from the Terminal Management after formal request made by the Owner to Transpetro.

## **7.5 Transfer of the Cargo**

Monitoring of pressures in the ship's manifold is done during cargo transfer, hourly and recorded by shipboard and shore representatives.

The Terminal controls the internal pressure variables through the centralized supervisory control system. The accumulated flows and volumes are obtained hourly and compared between the parties, with the limit defined in the Operational Monitoring chart, which is delivered and discussed with the ship's representative at the initial release. Any change in the conditions of operation must be communicated and documented between the parties. During operation, it is expressly forbidden to close valves that cause back pressure in the system.

The ships' ballast and de-ballast nets and tanks must be intended only for this purpose, being isolated from the other nets on board. The water ballast to be discharged into the sea must be completely free of oil, any oily residue or other substance capable of causing pollution of sea water. All ballast water control standards must be strictly complied with by the Masters and evidence of compliance may be requested at any time by the shore team.

Repairs or maintenance work of any nature, involving or likely to involve, risk of sparks or other means of ignition may not be carried out while the ship is berthed at the terminal's piers. Cold repairs involving the Terminal facilities or implying any restriction of the ship during the stay must be previously authorized by the shore crew and the request for such repairs must be requested at least 24 hours in advance. Any repair must be carried out in accordance with the recommendations of ISGOTT, the most recent edition.

The diving activity may be authorized in case of emergency involving risk to ships and will depend on the prior release of the Port Authority Police Station and the management of the Terminal.

The interruption of cargo transfer must occur in any situation that may pose a danger, either to the ship or to the Terminal. The shore crew is authorized to interrupt or suspend the cargo transfer operation in the event of non-compliance with any of the rules and standards concerning safety universally accepted and adopted in the maritime transport of oil. The master of the ship has the right to stop the cargo transfer operation if he has reason to believe that the shore operations do not offer safety, provided he gives advance notice to the shore crew.

In any emergency situation, the Terminal interrupts operations so that all resources are focused on mitigating the claim. The actions and contacts for each type of emergency are described in the TA-MACEIÓ Emergency Response Plan (pre) and the Individual Emergency Plan (PEI), and the main phones are provided in item 9.

#### **7.6 Measurement of the Load and Documentation**

Onboard measurements will be performed by ship personnel and accompanied by shore crew. The final release of the ship will take place after the completion of the exchange of the documentation inherent to the operation.

#### **7.7 Unmooring and Departure from the Port**

During the unberthing maneuver and leaving the port, the information reported in items 5.3, 5.4 and 5.5 must be observed.

#### **7.8 ISPS CODE**

The terminal has in place corporate security measures applicable to ships and port facilities, in accordance with IMO requirements, through the adoption of the *ISPs Code*. In case of need, security measures can be triggered by the ship through the Terminal's port security supervisor - PFSO – or via VHF radio. The Terminal normally operates at SECURITY LEVEL 01.

### **8. PORT OR ANCHORAGE ORGANIZATION**

#### **8.1 Port Control or VTS**

As described in item 5.3.5.

#### **8.2 Maritime Authority**

The Maritime Authority to which the Terminal is subordinate is the Port Authority of the State of Alagoas, in Maceió.

The Captain of the Ports of Alagoas determines that the visit of the authorities is carried out when the vessel is anchored at the limits of the port area or after the ship is moored at the TA-MACEIÓ pier.

#### **8.3 Pilotage**

The pilotage service is described in item 5.3.6

The existing pilotage companies in the Port of Maceió are Maceió Pilots and Alagipe Pilots, whose contacts are available in item 7.2.4

In case of emergencies, pilotage is triggered on the call channel (VHF CH 16) or on the pilotage channel (VHF CH 13).

#### 8.4 Tugboat Services

The procedures and requirements for the use of tugboats in the Port of Maceió is described in item 5.3.7.

List of tugboat companies operating in the Port of Maceió and Braskem Terminal.

Company	Address	Tugboat	Bollard Pull
Sulnorte Serviços Marítimos Ltda.	Rua Jangadeiros Alagoanos, 999 57.030-000 – Pajuçara	S/N Palmares	40.20 tf
Saveiros Camuryano Serviços Marítimos S.A.	Rua Barão de Jaraguá, 543 57.025-400 –	Mirzan	41.8 tf
		Omega	33.1 tf

Semi-annual inspections are carried out on the tugboats available at the Port of Maceió, by the Nautical Inspector, in order to certify them to act safely in the maneuvers of ships or vessels destined for the Transpetro pier/pier.

#### 8.5 Other Tanker/Gas Carrier Terminals

At the Port of Maceió there are no other Fuel Liquid Bulk Terminals, only TA-Maceió, however, we have two Distribution Bases that receive, store and load trucks with diesel, gasoline and ethanol.

BAMAC is a base controlled by Vibra Energia. In addition to Vibra, Alesat and Dislub have space for storage on this base. BAMAC operates on S500 diesel, S10 diesel, marine diesel, gasoline and hydrated ethanol. It has 2 S500 diesel tanks, 2 gasoline tanks, one S10 diesel tank and one hydrated ethanol tank, as well as 8 road loading bays.

The Maceió Pool is a base controlled by Ipiranga. In addition to Ipiranga, Raízen and Vibra have space for storage. The Pool operates on S500 diesel, S10 diesel, gasoline and hydrated ethanol. It has 3 S500 diesel tanks, 2 gasoline tanks, one S10 diesel tank and one hydrated ethanol tank, as well as 6 road loading bays.

#### 8.6 Other Principal Users

The Maceió Terminal makes use of PGL – Liquid Skins Pier (Berth 007) – to carry out the loading, unloading and supply operations of vessels. Only Transpetro operates in THE PGL, and there is no other terminal that uses it for its activities.

Cais Açucareiro – Berth 006 – is a solid bulk pier exclusively for sugar and operated by EMPAT. At this quay, TA-Maceió supplies vessels and, after issuing a preliminary risk analysis, can carry out loading and unloading of diesel, gasoline and oil.

## 9. EMERGENCY PLANNING AND RESPONSE

### 9.1 Emergencies on the ship

Any and all emergencies on the ship must be reported immediately via VHF to the Safety Inspector and the Terminal Operational Control. Ships must have the emergency plans (SOPEP) required by MARPOL and SOLAS, as well as meet the recommendations established in their safety management system.

At the discretion of their Masters, moored ships may leave emergency towing lines running on the on-board bollards and pending up to 2 m above sea level throughout the operation, by the amura and the flap of the opposite edge of the mooring. The ships must keep ready for use the equipment provided for in the SOPEP kit, as established by MARPOL.

### 9.2 Emergencies at the Terminal

The TA- Maceió has an Emergency Response Plan (pre) and an Individual Emergency Plan (PEI) to combat emergencies in all its facilities. The Organized Port of Maceió does not have a Mutual Aid Plan (Pam), therefore, all resources for emergency response come from the Emergency Response Center (CRE) of the Maceió Terminal, equipped with equipment and facilities for use in case of terrestrial pollution and in water bodies.

### 9.3 Sensitive Areas for the Environment

The PEI of TA-MACEIÓ has Environmental Sensitivity Charts that indicate the environmentally sensitive areas, showing, according to the selected area, the points subject to the greatest impact in case of oil leaks in the Port of Maceió and adjacent areas and priorities for protection.

### 9.4 General Description of the Emergency Response Organization

Incidents within the Port of Maceió area					
Type of Incident	Responsible Organization	Other Organizations Involved			
Collision in the Channel	Harbour Master	Port Authority	Rebbar Setter		
Ship Stranding	Harbour Master	Port Authority	Rebbar Setter		
Collision in the Berth	Harbour Master	Port Authority	Maceió Terminal	Rebbar Setter	
Vessel Sinking	Harbour Master	Port Authority	Rebbar Setter		
Fire in the Vessel	Harbour Master	Port Authority	Rebbar Setter	Maceió Terminal (Support)	
Fire in the Berth	Harbour Master	Maceió Terminal	port authority	Fire Brigade	
Pollution	Harbour Master	Port Authority	Maceió Terminal	Rebbar Setter	Environmental agency.



## 9.5 Emergency Plans

The Maceió Waterway Terminal Emergency Response Plan is available from SINPEP under the code PE-5TP-01360. A copy is available in the Pier Control Room and can be consulted whenever necessary.

The minimum pollution-fighting resources required of vessels are described in the MARPOL convection and are defined in the SOPEP of each ship.

The minimum pollution response resources required of the Terminal are defined in CONAMA Resolution 398 and are available in the PEI – Individual Emergency Plan, which is an annex of the PRE – Emergency Response Plan.

## 9.6 Response to Oil and Chemical Spills

### 9.6.1 Terminal Combat Capability

Appeal	Unit Measurement	Mobilization Time (min)	Minimum qty
Inflatable Floating Temporary Storage	m <sup>3</sup>	30	49.0
Portable Inshore Temporary Storage for Liquids	m <sup>3</sup>	20	5.0
Tow bar	un	5	10.00
Absorbent Barrier 8"	(m)	20	1,154.00
Inshore Containment Barrier	(m)	20	900.00
Permanent Containment Barrier	(m)	40	300.00
Inshore Boat Support Vessels	un	20	3.0
Portable Air Blower	un	20	1.00
Absorbent mat	un	20	1,154.00
Motorcycle Portable Transfer Pumps	un	20	4.00
Full Spillway Collector Inshore	un	20	1.00
Inshore Complete Oleophilic Collector	un	30	-
Absorbent roll	(m)	10	-
Anchor for Barrier Anchoring	un	10	3.00

### 9.6.2 Combat large spills

If the resources listed in item 9.6.1 are not sufficient, the Contingency Coordinator may call other Transpetro Units, other bodies of the Petrobras System, Mutual Assistance Plans, Advanced Bases, CDA, CRE, service providers and other entities to provide emergency relief for any deficiencies.

## 9.7 Response to Other Large-Scale Emergencies

When the actions of the first response are not sufficient for emergency control, an action plan must be prepared to ensure the continuity of response operations.

The action plan must be prepared at pre-established time intervals of 6 hours, 12 hours or 24 hours, and is used to define and share common priorities, objectives and goals, as well as to define and organize the use of resources.

The elaboration of the action plan allows planning within a more reliable time horizon and ensuring emergency management in successive cycles of emergency planning, organization, execution and control.

**10. CONTACTS:****10.1 Terminal**

Location	Contact	Phone	E-mail	Communication channel
<b>Management</b>	Rafael Vinha	55 81 99969-0521	rafaelvcosta@transpetro.com.br	CH(12)
<b>Control Center</b>	Supervisor	55 82 3217-7890	tamaceio@transpetro.com.br	CH(12)
<b>Gatehouse</b>	Guard	55 82 3217-7754	-	CH 09
<b>Port Security Supervisor</b>	Paulo Mac Arthur Piramar	55 82 98839-5188	<u>paulo.mpiramar@transpetro.com.br</u>	CH 09
<b>Nautical Inspector</b>	Hisolda Almeida	55 82 99902-2255	<u>hisolda.almeida@transpetro.com.br</u>	CH(12)

**10.2 Port Services**

Location	Contact	Phone	E-mail	Communication channel
<b>Port Control</b>	Jeferson Ramos	55 82 98187-3824	setope@portodemaceio.com.br	CH 16
<b>Port Administration</b>	Diogo Netherlands	55 82 2121-2500	office@portodemaceio.com.br	-
<b>Association of Practitioners</b>	Maceio Pilots	55 82 3311-8014	maceiopilots@maceiopilots.com.br	CH 13
	Alagipe Pilots	55 82 3313-2312	paulohansen_22@hotmail.com	
Tugboats	Sulnorte Servicos	55 82 3327-6557		CH 16
	Saveiros Camuryano Servicos	55 82 3326-3590		CH 16

### 10.3 Navigation Agents and Selected Suppliers

Company	Business	Phone	E-mail	Person in charge
Williams Marine Services	Agent	55 82 3221-2137	willmcz@williams.com.br	Haggai Laurindus
Britto Brothers Representations	Agent	55 82 3221-0009	lbritto.com.br	Luciano Britto
Sanvictor Maritime Agency	Agent	55 82 3223-4407	sanvictor@globo.com	Cristovão Cavalcante
Agenbras	Agent	55 82 3327-7082	agenbras@agenbras.com.br	André Luiz Macena
North Star Shipping Service	Agent	55 82 3317-2054	maceio@nsshopping.com.br	Edmilson Lima
Marine Services	Agent	55 82 98888-8540	vcservicosmaritimos@gmail.com	Victor Cavalcante
Consegi Serviços C S	Agent/Provisions	55 82 99999-1282	agency@consegi.com	Gustavo Casado
Safemares Marine Services	Agent	55 82 99982-6522	safemares@safares.cm.br	Edson de Carvalho
Transpmar	Mooring and Siege	55 71 3042-5790	empresaatranspmar@gmail.com	Jacineide Vieira
Marine Service Port Support	Mooring	55 82 99393-0606	marceloalvarez@marineservicemacio.com.br	Marcelo Alvarez
Environmental Health	Pest Control	55 82 99971-8187	vr4service@vr4service.com.br	Osman Savio
Clean Sea Waste Collection and Transportation	Waste Collection	55 82 98876-9908	sales@cleanseamcz.com.br	Adriano Flávio
Logan Waste and Oil Remover	Waste Collection	55 81 99966-7546	Loganremoval2020@gmail.com	Márcio Marques

### 10.4 Local Authorities, State and National Agencies

**Fire Department - 193**  
**Civil Defense;**  
**MILITARY POLICE: 190**  
**SAMU 192:**  
**Maritime Authority: 55 82 3215-5800**

**APPENDIX A Charts including Berths and approaches**

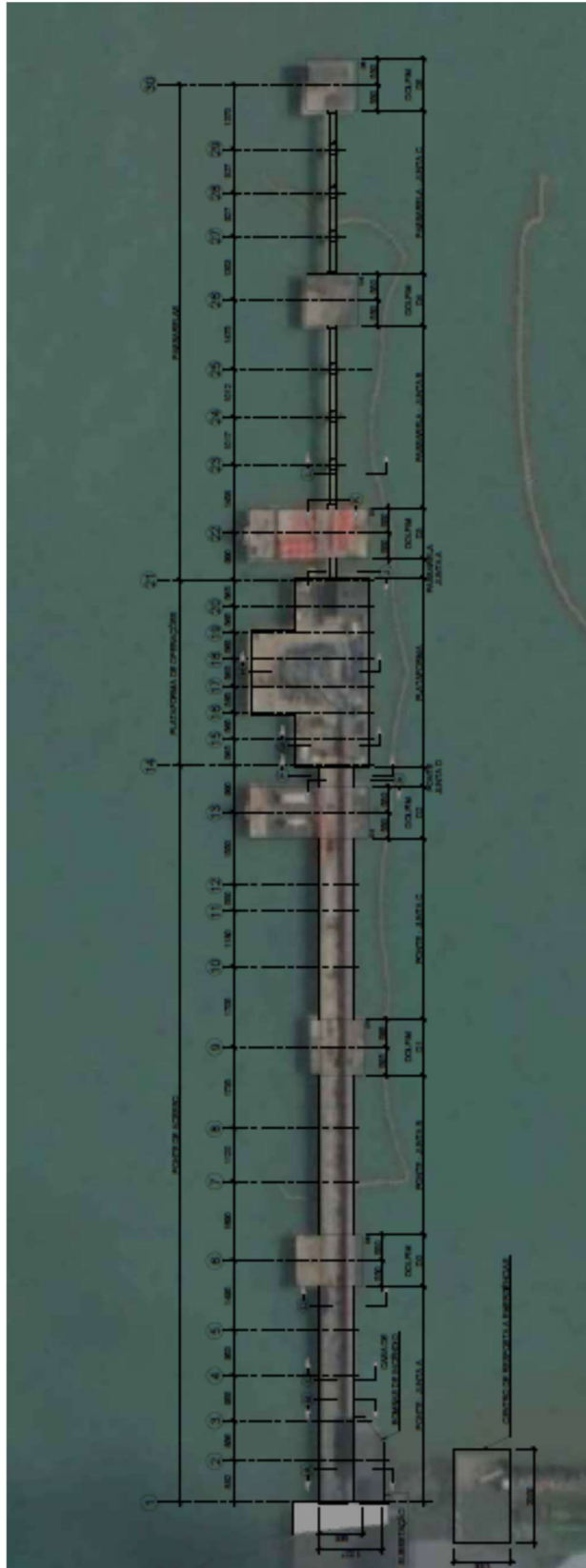
DHN 901 – Port of Maceió



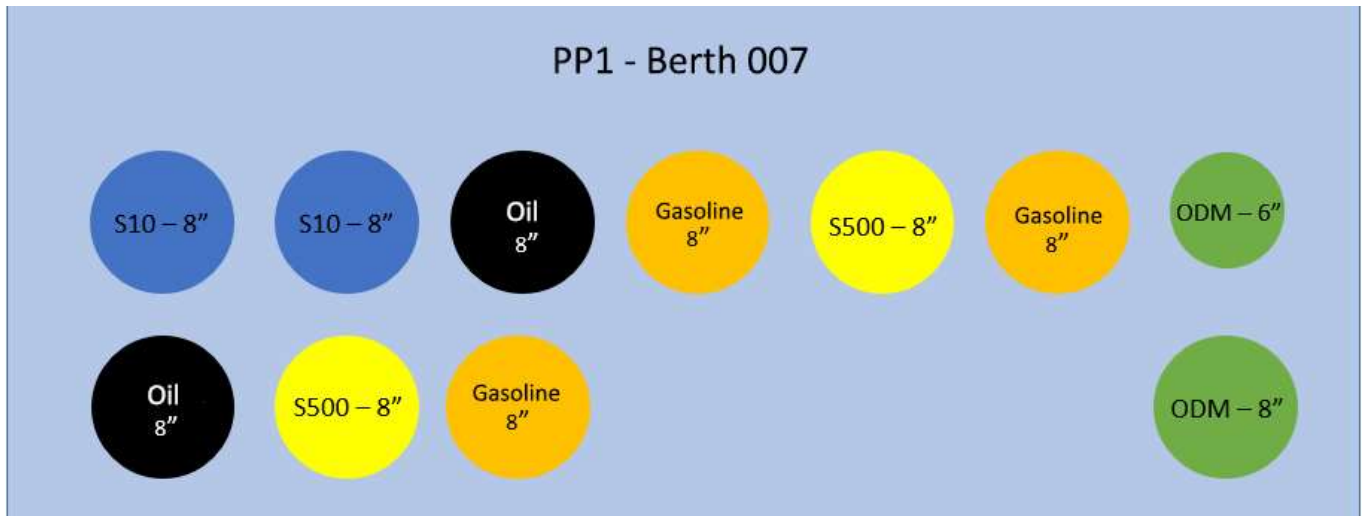
DHN 920 – Near the Port of Maceió



**APPENDIX B**      **Diagram of each Berth that includes the lengths, fenders / dolphins, and manifold.**



## APPENDIX C      Diagram with load connections, dimensions and flange sizes



## APPENDIX D Essential Vessel Information for the Terminal

<b>MACEIO PORT AND TERMINAL</b>		
<b>Requesting Information about the Vessel</b>		
<b>Ship's name:</b>	<b>Estimated Time of Arrival (ETA):</b>	
<b>Flag:</b>	<b>Last Port:</b>	
<b>Name of the Commander:</b>	<b>Next Port:</b>	
<b>Shipowners:</b>	<b>Agents:</b>	
<b>Does the ship have an inert gas system? Oxygen content:</b>		
<b>Total Length (LOA): Length between Perpendiculars:</b>	<b>Arrival Draft:</b>	
<b>Breadth:</b>	<b>Maximum Draft during Transfer:</b>	
	<b>Output Draft:</b>	
<b>Number of engines:</b>	<b>Transverse Propulsion:</b>	<b>Tugboats- minimum defandant; respondent (No. and static traction Pull</b>
<b>Number of propellers:</b>	<b>Prow (No. and power)</b>	
	<b>Stern (No. and power)</b>	
<b>Number and Size of the Manifold anques:</b>	<b>Distances:</b>	
<ul style="list-style-type: none"> <li>• Time</li> <li>• Balast</li> <li>• Bunkers</li> </ul>	<ul style="list-style-type: none"> <li>• Prow to Manifold</li> <li>• Against the Manifold</li> <li>• Manifold Height to Main Deck</li> </ul>	
<b>LOAD PROGRAMMING (fill in what applies)</b>		
<b>Nomination:</b>	<b>Discharge of the ballast into the sea:</b>	<b>Slop / ballast discharge to ground land:</b>
<b>Type and quantity</b>	<b>Quantity:</b>	<b>Quantity:</b>
<b>Type and quantity</b>	<b>Estimated time:</b>	<b>Estimated time:</b>
<b>Type and quantity</b>		
<b>UNLOAD PROGRAMMING (fill in what applies)</b>		
<b>Type and quantity</b>	<b>Ballast:</b>	
<b>Type and quantity</b>	<b>Volume/Time</b>	
<b>Type and quantity</b>		
<b>Provisioned supplies (bunkers)</b>		
<b>Type and quantity</b>	<b>Type and quantity</b>	
<b>Additional information (if any):</b>		

Please send email to Terminal Supervisor,  
Email [tamaceio@transpetro.com.br](mailto:tamaceio@transpetro.com.br)

## APPENDIX E (Information to be exchanged before load transfer)

## INFORMATION OF THE TERMINAL

<b>Information between ship and terminal</b>			
Vessel Name: Voyage Number:		Berth: Date of berthing:	
<b>Contract details</b>			
Number of pumps on board:			
Volumetric capacity 98%:		<b>M3</b>	
Pressure guaranteed at discharge: (When it's a discharge operation)		<b>kgf/cm2</b>	
Simultaneous ballast / discharge capacity with loading / unloading			
<b>Travel information</b>			
Type of charter (VCP, TCP, COA, etc.)			
Type of trip (Coastal/ Long-haul)			
Ports or places of origin and destination			
Ship Requested for supply?			
Means of communication between ship and terminal			
<b>Cargo information</b>			
Produto:	Quantity:	Temperature:	API
<b>SLOP</b>			
Quantity:	Temperature:	API:	
Fluidity:	Origin: Contaminants:		
<b>Balast</b>			
<b>Dirty Ballast:</b> Quantity:		<b>Segregated ballast:</b> Quantity:	
Temperature:			
<b>Information on the operation</b>			
For unloading: Will the ship do a special operation? (COW, Inertization, etc.)			
Estimated Time for the operation			
Time required to stop the pumps			
For Loads:	Advance notice time for TOP		
Flow for the TOP period			
Amount of ballast to be discharged			
Maximum permitted flow for debris			
Are there restrictions on electrostatic properties?			
Are there any restrictions on the use of valves with automatic closing?			
<b>Ship / Terminal conditions for loading / unloading operation by product</b>			
Pressure Vessel:	Max. Temperature	Terminal Pressure:	Max. Temperature
Flow rate:	MIN:	Flow rate:	MIN:
<b>Sequence of operations by product</b>			
Quantity to be loaded/unloaded Source / Destination Tanks			
On-board lines / land			
Hoses used Forecast for start and end of operation			
<b>Further information on operation and safety</b>			



## APPENDIX F (Berth Information 007 - PGL)

BerthInformation	
Berth Name	Oil Tanker Pier - Berth 007
Berth Type	Finger Pier Type
Berth Position	E - W
Operated Products	Oil Ethanol (Anhydrous and Hydrated) Petrol Diesel Oil (Marine, S500 and S10)
Overall Length (LOA)	210 m
Maximum Breadth	40 m
Maximum Displacement	60,000 MT
Minimum Parallel Edge	58 m
Minimum Below Keel Distance (UKC)	0,3 m
Water Density	1.025 kg/dm <sup>3</sup>
Maximum draft	10.5 m
Loading Flows	Oil - 1,000 m <sup>3</sup> /h Hydrated Ethanol - 1,000 m <sup>3</sup> /h Anhydrous Ethanol - 1,200 m <sup>3</sup> /h Marine Diesel Oil - 200 m <sup>3</sup> /h Gasoline - 500 m <sup>3</sup> /h
Discharge Flows/Maximum Pressures	Hydrous Ethanol - 1,000 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup> Anhydrous Ethanol - 1,400 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup> Gasoline 1 - 500 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup> Gasoline 2 - 1,200 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup> S500 Diesel Oil - 1,000 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup> Marine Diesel Oil - 250 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup>
Hoses Diameter	8" – Oil (2x) 8" - Ethanol (Anhydrous and Hydrated) (2x) 8" – Gasoline (1x) 8" - Diesel Oil (S500 and S10) (2x) 6" - Marine Diesel Oil (1x)
Duct Diameter	Oil – 14" Hydrated Ethanol/Gasoline 2 – 12" Anhydrous Ethanol/ Diesel S10 – 12" Diesel Oil S500 – 12" Marine Diesel Oil 1 – 6" Marine Diesel Oil 2 – 8" Gasoline 1 – 8"
Does the Berth have an Insulating Flange?	Yes
Berth with Vapor Recovery System?	No
Do you get Slop?	No
Water Supply	Tank Truck
FO Supply	No
DO Supply	Pipeline

## APPENDIX G (Berth Information 006 – Sugar Wharf)

BerthInformation	
Berth Name	Sugar Wharf - Berth 006
Berth Type	Pier
Berth Position	E - W
Operated Products	Oil Gasoline Diesel Oil (Marine, S500 and S10)
Overall Length (LOA)	210 m
Maximum Breadth	40 m
Maximum Displacement	60,000 MT
Minimum Parallel Edge	__ m
Minimum Below Keel Distance (UKC)	0.3 m moored – 1.0 m maneuvering
Water Density	1.025 kg/dm <sup>3</sup>
Maximum draft	10.5 m
Loading Flows	Oil - 750 m <sup>3</sup> /h Marine Diesel Oil - 200 m <sup>3</sup> /h Gasoline - 500 m <sup>3</sup> /h
Discharge Flows/Maximum Pressures	Gasoline - 750 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup> Diesel Oil S500/S10 - 300 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup> Marine Diesel Oil - 250 m <sup>3</sup> /h / 7.0 kgf/cm <sup>2</sup>
Hoses Diameter	8" – Oil (1x) 8" – Gasoline (1x) 6" - Diesel Oil (S500 and S10) (1x) 6" - Marine Diesel Oil (1x)
Duct Diameter	Oil/Gasoline – 8" Marine Diesel Oil/S500/ S10 – 6"
Does the Berth have an Insulating Flange?	Yes
Berth with Vapor Recovery System?	No
Do you get Slop?	No
Water Supply	Tank Truck
FO Supply	No
DO Supply	Duct (Box 1 and Box 2)

## APPENDIX H (PRE ARRIVAL INFORMATION)

## PRE ARRIVAL INFORMATION – TA-MACEIÓ

BERTH: PP1

SHIP: \_\_\_\_\_ IMO No.: \_\_\_\_\_ Date: \_\_\_/\_\_\_/\_\_\_\_\_

Maximum rate per line (Vazão máxima)	
Maximum pressure (Pressão máxima)	
Arrival draft (Calado na chegada)	
Wich manifolds will be used for each grade? (Quais manifolds serão usados para cada produto?)	
How many tanks will be load/discharged? (Quantos tanques serão carregados/descarregados?)	
Time to stripping cargo. (Tempo para drenar os tanques)	
In case if there´s one more grade, the operation will be simultaneous? (No caso de mais de um produto, as operações serão simultâneas?)	
Will the ship use a fixed gangway or a portable ladder? (O navio usará escada de portaló ou prancha?)	

**Attach :**

- Cargo Plan;
- Ship's Particulars;
- Ullage Report – Last Port (RMQB of the last port);
- Quality Certificate from origin cargo, only for discharge ;
- Calibration Certificate – ICU (tape measure calibration certificate);
- Vessel Experience Factor;
- Last Port State Control: \_\_\_\_\_
- Petrobras/Transpetro vetting approval expiry date: \_\_\_/\_\_\_/\_\_\_\_\_

**Remarks :**

- **The use of crane is not allowed during the operation.** (Use of crane is not allowed during operation)
- **The use of crane provisions, if the cargo flash point is less than 60°C, is permissible only after Petrobras Safety Inspector authorizations and vessel preliminary risk analyzes.** (The use of the provision crane, if the flash point of the cargo is less than 60°C, will be allowed only after authorization from the Nautical Inspector of the terminal and Preliminary Risk Analysis carried out by the ship).
- **The terminal doesn't have a gangway to access the vessel.** (The terminal does not have a ladder to access the ship).
- **Pilot on board for departure: three hours after complete operation.** (Pilot on board for departure: three hours after the end of the operation).

GRADE	QUANTITY X SIZE HOSES
CRUDE OIL	2 X 8"
GASOLINE	2 X 8"
MARINE GASOIL	1 x 8
GASOIL S500	2 X 8"
GASOIL S10	2 X 8"
Ethanol	2 X 8"