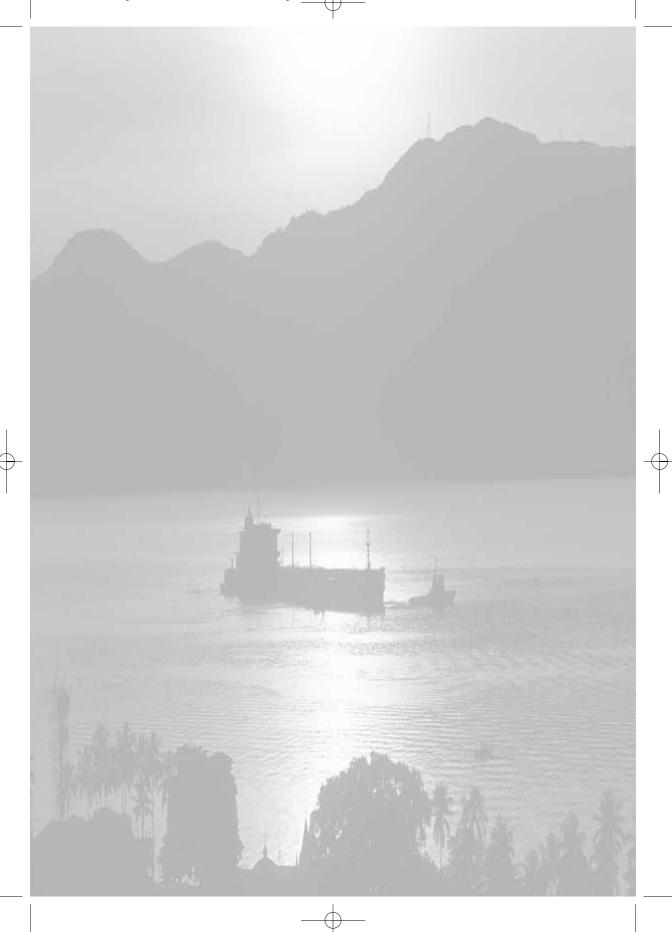


PORT INFORMATION

Terminal MACEIÓ

1st Edition



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This Port Information was prepared by and is property of Petrobras Transporte S.A. — Transpetro, which operates the Liquid Bulk Pier of the Marine Terminal of Maceió — DT/TA/NE/MCO, located within the facilities of Maceió Port, in the city of Maceió. It provides essential information to the ships operating at this terminal. This document is also distributed internally in the organization to the interested parties, port authorities, maritime authorities and other city, state and federal authorities.

The Port Information has versions in Portuguese and English languages.

The information contained herein serves to supplement, but never supersede or alter, any legislation, instructions, guidance or official publications, either national or international. Therefore, anything that conflicts with any item of the aforementioned documents should be ignored.

The Terminal holds itself the right to change any of its operational features herein presented, with no advance notification.

Where any information is found to be incorrect and requiring updating, please contact:

Transpetro/DT/TA/NE/Maceió Terminal

TA/Maceió Coordination

Avenida Industrial Cícero Toledo (Cais do Porto), s/n

ZIP Code: 57025-150 - Maceió- AL - Brazil

Route: (55 82) 831-7702

Phone (Ext.): (55 82) 3217-7702 Mobile: (55 82) 9983-2910

Petrobras Transporte S.A. – Transpetro

Av. Presidente Vargas, 328 / 9º andar – Centro Zip Code: 20091-060 - Rio de Janeiro - RJ - Brazil

Phone: (55 21) 3211-9085 Fax: (55 21) 3211-9067

Alagoas Harbor Master:

Rua do Uruguai, 44, Jaraguá

ZIP Code: 57.025-180 - Maceió - AL - Brazil

Phones: (55 82) 336-4005 / 336-5852 / 336-4375 / 221-6607

The most recent version of this Port Information can be obtained at the following address: www.transpetro.com.br .

DEFINITIONS

CDA – Environment Defense Center of Petróleo Brasileiro S.A. – Petrobras.

COW – Crude Oil Washing (cargo tank cleaning with crude oil).

CPAL – Harbor Master of Alagoas.

DHN – Diretoria de Hidrografia e Navegação.

DPC – Diretoria de Portos e Costa.

DWT – Deadweight Tonnage.

ICP - Individual Contingency Plan.

IMO – International Maritime Organization.

Infopae – Sistema Informativo de Apoio a Planos de Emergências.

Isgott – International Safety Guide for Oil Tankers and Terminals.

MBL - Minimum brake loading.

Mooring Master – Professional certified and qualified in compliance with STCW (Seafarers Training Certificate and Watchkeeping), to work as pilot on open sea.

Ocimf – Oil Companies International Marine Forum.

POB - Pilot on board.

MACEIÓ TERMINAL

 ${f Quarter\ tide}-{f A}$ condition in which the tide reaches the minimum amplitude at a certain time of the year.

Sinpep – Sistema Integrado de Padronização Eletrônica da Petrobras.

Sopep – Shipboard Oil Polution Emergency Plan.

Squat Effect — Increase of a ship's draft as a result of an increase in the displacement speed, especially in restricted waters.

STCW – Seafarers Training Certificate and Watchkeeping.

SWL – Safe Working Load.

Syzygy tide - A condition in which the tide reaches the maximum amplitude at a certain time of the year.

TA/MCO – Marine Terminal of Maceió.

UTC – Universal Time Control.

CHARTS AND REFERENCE DOCUMENTS

Information on the Terminal may be obtained in the following publications.

Charts

Area	Chart Number Brazil (DHN)
Vicinities of Maceió Port	920
Maceió Port	901

Other Publications

Type/Subject	Editor or Source
	Brazil (DHN)
Normas e procedimentos	NPCP
da Capitania dos Portos	

DOCUMENTS AND INFORMATION EXCHANGE

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

Information	Prepared by:		Delivered to		Comments		
	Terminal	Ship	Both	Terminal	Ship	Both	
			Before arr	ival			
Estimated Time of		Х		Х			
Arrival (ETA) and							
ship information							
Essential Terminal	Х				Х		
information							
		Before ca	argo or bur	nker transfer			
Details about on-board		Х		Х			
cargo/slop/ballast							
Essential operating	Х				X		
information							
(fill in locally)							
Ship/Shore Safety			Х			Χ	As per
Checklist							Isgott
							Appendix A

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Information		Prepare	ed by:		Delive	red to	Comments
	Terminal	Ship	Both	Terminal	Ship	Both	
	Г	Ouring ca	argo or Bu	nker transfe	r		
Repeat Ship/Shore			Х			Χ	As per Isgott
Safety Checklist							Appendix A
	After cargo or Bunker transfer, before departure						
Information required			Х			Χ	Quantity of fuel
for unberthing the							and water
ship							on-board
	After unberthing, on leaving Port						
Information		X		X			Pilot
concerning							disembarkation time,
departure data							port departure
							time and ETA on
							destination

DESCRIPTION OF THE PORT AND ANCHORAGE AREA

5.1 General Description

Maceió Port is comprised of 6 (six) berths for operation with liquid bulks, in which there are pipelines for moving liquid bulks, which are operated by Petrobras Transporte S.A. — Transpetro, as shown below:

Commercial Docks:

- → Berths: 201, 202 and 203 operates with diesel oil, gasoline, alcohol and oil;
- → Location: Latitude: 9° 41′ 08" South / Longitude: 35° 43′ 37 West
- → Depth: 10.5 m
- → Maximum Draft: 10.5 m
- → Maximum Length (LOA): 210 m
- → Maximum size: 50,000 DWT

Sugar Docks:

- → Berth: 903 operates with alcohol, oil and sugarcane syrup;
- → Location: Latitude: 9° 41' 05" South / Longitude: 35° 43' 20 West
- → Depth: 10.5 m
- → Maximum Draft: 10.5 m
- → Maximum Length (LOA): 200 m
- → Maximum size: 50,000 DWT

Liquid Bulk Pier:

- → Berths: PP-1 and PP-2 operates with diesel oil, gasoline, alcohol, oil and sugarcane syrup. PP-2 is deactivated since the Pier opened, due to shallow depth for not being dredged up to this date.
- → Location: Latitude: 9° 40' 58" South / Longitude: 35° 43' 30 West
- → Depth: 10.5 m
- → Maximum Draft: 10.5 m
- → Maximum Length (LOA): 200 m
- → Maximum size: 50,000 DWT

The terminal operates with tankers that transport diesel oil, gasoline, oil, alcohol.

The movement of these products has the purpose of supplying the State of Alagoas, Petrobras Refineries, nearby cities and other countries served by alcohol export.

5.2 Location

5.2.1 Coordinates

Maceió Port is located on the shore of the State of Alagoas, in the city of Maceió, between the Pajuçara and Avenida beaches, on the following coordinates:

Geographic coordinates:

Latitude 09° 40' 12" S Longitude 35° 42' 54" W

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

5.3 Approaching the Terminal:

5.3.1 By road:

Via highway BR-316 interconnected with highways BR-101 and AL-101, on the shore line. From the south shore, the access to the Port is direct

5.3.2 By railway:

The Port is served by Superintendência Regional Recife (SR 1), of Rede Ferroviária Federal S/A — RFFSA. The Port has a railway branch starting on Central Station of Maceió, on one way and metric gage, until the Sugar Terminal.

5.3.3 Maritime:

The channel to access the Port is 520 m long and 120 m wide, with depths ranging between 10.5 and 14 m. It has signaling on Maceió Lighthouse – flashing white and red lights; Ponta do Molhe Lighthouse – flashing red light and Peixe-Pau Buoy – flashing red light.

The Evolution Basin is limited by the Commercial Docks and the Sugar Terminal. It is 400 m long, 350 m wide and its average depth is 11 m, without mouth bar.

5.3.4 By airway:

The State of Alagoas is connected to the entire country through regular and daily flights from Zumbi dos Palmares Airport in Maceió.

Zumbi dos Palmares Airport

The airport is located approximately 25 km away from Maceió Port in the highway BR-104, Km 20, city of Rio Largo. It is considered a 2nd category airport, according to classification from DAC (Departamento de Aviação Civil — Civil Aviation Department), operating domestic and international flights on a signaled, asphalt-paved track, which is 2,200 meters long and 45 meters wide, enabling the landing and taking off of large airplanes (Boeing 767 and DC-10). Zumbi dos Palmares Airport operates around the clock, 24 hours a day. It has a Control Tower and Station for Responding to Emergencies.

5.3.5 Anchorage areas

The maritime access is approximately 520 m long, 80 m wide and its depth ranges from 10 m to 14 m, without mouth bar. It has a with 400 m long, 360 m wide and 10.5 m deep evolution basin.

5.3.6 Navigational Aids

5.3.6.1 Traffic on the Port (Chapter 3 of NPCP)

The traffic on the port will comply with the law in force, as well as with the rules determined on international conventions and confirmed by Brazil, in addition to the rules herein established and the ones issued by the Port Administration.

The vessels must use sound and visual signals, including communication via VHF, to define movements beforehand, especially in the case of close maneuvers, less than [02] two miles away from the port.

The use of the National Flag on the stern is mandatory for vessels with more than 5 AB., in the following situations:

→ when entering and leaving the ports;

- → when travelling at sight of other vessel; and
- \rightarrow on the port, from 8 am to sunset.

The foreign vessels on the port will hoist the national flag to the top of the forward mast.

All foreign vessels and the Long Run and Cabotage national vessels shall mandatorily keep contact with the Port Administration and/or Maritime Agency, via VHF call, in the following situations:

- > soon after anchoring to any of the anchorage areas authorized;
- → soon after casting off from the anchorage areas;
- → when approaching the Braskem Terminal;
- > soon after berthing at the port; and
- > when leaving the port.

The ships berthed are forbidden to keep ladders lowered on the sea edge. The pilot ladder must remain retracted in its cradle, during the ship laytime on the port. The gangway ladder, lowered to the docks, must have a protective net, and it is under the Captain's criteria to keep it lowered or hoisted during the night.

The ships anchored can lower a gangway ladder between sunrise and sunset. During the night, the ladder can only be lowered if necessary, and it must be hoisted soon after embarking/disembarking.

Treating and painting on the decks and hulls is authorized, and the ship must arrange for the necessary measures to prevent people and/or material from falling into the sea.

Wharf ladders and flat-bottomed boats can be lowered without prior license from CPAL. However, they must be hoisted at the end of the day.

Lifeboats can be lowered for crew training, regardless of license from CPAL. The exercises must be recorded on the Navigation Journal, in the dates they were done, with the most interesting details of the works performed.

The ship hull must be illuminated on the sea side, to enable better investigation from relevant authorities.

Barges or supply boats berthed alongside the ships for bunkering fuel, cleaning tanks or any other purpose, must be properly illuminated.

Collecting garbage and debris, bunkering lubricants, fuel and supplying general supplies must be, in principle, done during daytime.

It is not permitted to park ships out of service in ecologically sensitive areas or in Environment Protection Area.

To avoid risks to safety, the ships out of service shall:

- → keep their vital circuits operating;
- → keep their VHF equipment supplied;
- → display the signaling described on Ripeam;
- → keep the minimum personnel necessary on board, authorized by CPAL;
- → keep a pilot ladder in conditions to be readily used.

In addition to other responsibilities described on the pertinent legislation it is the vessel's Captain duty to comply with these rules and to make them be complied with, as well as to know and make the crew aware of the information in the Advice to Navigators and in the publication named "Roteiro" ("Route"), both issued by the Diretoria de Hidrografia e Navegação of the Brazilian Navy, related to regional peculiarities of coasts, ports and terminals in the State of Alagoas.

The safe navigation, especially on approaching and leaving ports, terminals, channels and anchorage areas, must mandatorily follow the ROTEIRO, the Advice to Navigators, these Rules and the knowledge on the area.

5.3.6.2 Operational restrictions (Chapter 4 of NPCP)

Purpose

Guide the procedures necessary for establishing operational limits on the ports and their accesses.

Coordination

It is up to the Port Captain to coordinate the establishment of operational limits on the ports in his jurisdiction, such as maximum draft recommended and evolution speed on the different stretches navigable.

For this purpose, he will hold meetings with representatives from the administrations of Maceió Port and Braskem Terminal, Maceió Pilots, dredging and bathymetry companies, other organizations, from MB or not, as necessary.

The Port or Terminal Administration will establish, based on the relevant documentation or on the consensus achieved, the limits under responsibility of each administration for purposes of disclosing the maximum drafts recommended on accesses and berths, as well as the traffic speeds.

It will be up to the Administrations of Maceió Port or the Braskem Terminal to disclose information on dredging and changes on beaconing, occurred on their area of responsibility, as well as to the Port Captain, where such responsibilities are up to the Brazilian Navy.

Eventual conflicts on these definitions will be judged by the Port Director and/or the Command of the 3rd Naval District, as per the case.

Maximum drafts recommended

a) Introduction

Guiding a vessel with a determined draft on a point with a certain depth is essentially a navigation problem, whose resolution is the responsibility of the Captain. For this purpose, one must have all information and aids possible, as well as adopt the procedures recommended by good practice.

Thus, it is not enough having a draft inferior to the depth of a determined point for passing safely through it. Speed, channel width, stability, the condition of the sea and possible changes on water density, which can cause draft variations and/or changes in the ship maneuverability, must be considered.

Considering that the characteristics of national ports and their accesses are quite varied, it also occurs with reactions from ships due to their shapes, cargo, draft and propulsion, thus making difficult to establish a single parameter that determines a minimum safety gap between draft and depth. Thus, on technical meetings established with this purpose, countless variables must be considered, which will enable to recommend the navigator a percentage of depth, named "safety factor", which shall be removed from it, defining a "maximum draft recommended".

b) Variables to be considered

Once the areas of responsibility of each administration are established, the studies necessary to establishing a safety factor value to be recommended to navigators must be conduced.

On this integration, the local experience, existing good practices and causes for accidents must be greatly considered.

The Captains must follow the variables mentioned on Annex E.

c) Draft recommended

The maximum draft recommended for each stretch will consider the application of the safety factor to the local depth.

In the access channel to the maneuver basin of Maceió Port and the Braskem Terminal, the average depth is 10 (ten) meters and the mud bed. It is recommended to use the safety factor of 2.6%.

In Alagoas, the official disclosure of the draft recommended shall be made by the Administração do Porto de Maceió (Maceió Port Administration — APMC) and by the Braskem Terminal for the stretches of their respective responsibilities. Along with this information, the typical tide variations in the area must always be mentioned.

The maximum draft recommended for Maceió Port is 10.5 m (33 feet), according to instruction APMC Number 36/96 of Administração do Porto de Maceió.

The maximum draft recommended for Braskem Terminal is $9.45\,\mathrm{m}$ (31 feet), according to resolution w/o number of JAN.12.1996 of Braskem S/A .

d) Responsibility

The non-compliance with the maximum draft recommended will be considered on the judgement of eventual maritime accidents, as well as any other act of imprudence, negligence or incompetence.

Restrictions for speed, crossing and overtaking

The shape of navigable channels, depth, type of stability and bank affect the behavior of vessels and vice-versa, so that traffic speed becomes an important factor for preventing accidents. Possible damages to the banks and to facilities located on them must also be considered.

On the access channel to Maceió Port and Braskem Terminal, the maximum speed permitted is five knots.

Time restrictions

Maceió Port	Non-Existing
Braskem Terminal	Nighttime for ships with tonnage
	superior to 15,000 DWT and/or length
	superior to 150 meters

Ship size restrictions

Maceió Port	Non-Existing
Braskem Terminal	Maximum length of 176.8 m
	and maximum beam of 32 m

Restrictions for anchoring – anchorage areas

a) Maceió Port

Vessels > 3000 AB				
Points	Latitude	Longitude		
A	09° 41′ 00" S	035° 44' 00" W		
В	09° 41′ 00" S	035° 44' 42" W		
С	09° 42′ 00″ S	035° 44' 00" W		
D	09° 42′ 00″ S	035° 44' 42" W		

Vessels with up to 3000 AB	
The entire area north from parallel 09° 41′ 00" S	

Sport and Leisure Vessels				
Points	Latitude	Longitude		
А	09° 40' 25" S	035° 43′ 52″ W		
В	09° 40′ 32″ S	035° 43′ 52″ W		
С	09° 40' 33" S	035° 43′ 46″ W		
D	09° 40' 25" S	035° 43' 45" W		

b) Braskem Terminal

All Vessels				
Points	Latitude	Longitude		
A	09° 42′ 18″ S	035° 44' 00" W		
В	09° 42′ 18″ S	035° 44' 39" W		
С	09º 43' 00" S	035° 44' 00" W		
D	09º 43' 00" S	035° 44′ 39" W		

c) Pilot embarking and disembarking point

Points	Latitude	Longitude
	09° 42′ 12″ S	035° 44' 17" W

MACEIÓ TERMINAL

d) Anchoring area for visit

Visit by Agência Nacional de Vigilância Sanitária (Anvisa)		
Points	Latitude	Longitude
A	09° 40' 51" S	035° 44′ 42″ W
В	09° 40′ 51″ S	035° 44' 24" W
С	09° 41′ 18″ S	035° 44' 24" W
D	09° 41′ 18" S	035° 44' 42" W

Other restrictions

The area targeted to anchoring ship with nuclear propulsion is limited by the following points:

Points	Latitude	Longitude
A	09° 44' 21" S	035° 45' 29" W
В	09° 44′ 21″ S	035° 44' 29" W
С	09º 45' 21" S	035° 45' 29" W
D	09º 45' 21" S	035° 44' 29" W

5.3.5 Port Limits

The Organized Port area on Maceió Port was established by the administrative rule number 1002, of 10/16/1993 and is limited by the following geographic coordinates:

Organized Port Area

Point	Geographic	Coordinate
Markers	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	09º 40' 27" S	35° 43′ 00″ W
9	09° 42′ 05" S	35° 43′ 00″ W

5.3.6 Pilotage

Pilotage zones and number of pilots necessary for ship maneuver (Item 0307 on Chapter 3 NPCP)

- a) In the jurisdiction of this CPAL there is the Pilotage Zone of Maceió Port and Braskem Terminal, from the point where the pilot waits to the berthing point.
- b) Pilotage is mandatory for foreign ships and for oil tankers, propane carriers and ships carrying explosive cargo, in any gross tonnage value.
- c) Pilotage is optional for the following vessels:
 - → vessels with Brazilian flag, in any tonnage value, except for the ones described on paragraph b;
 - → foreign vessels leased to Brazilian company, with gross tonnage value inferior to 2000, provided that they are guided by Brazilian mariner, of category equal or superior to 1st Nautical Officer, and do not fit paragraph b;
 - → on maneuvers for lifting to the docks for change of berthing, for national and foreign vessels;
- d) Vessels classified according to Norman-12, on the ply fishing, sport and leisure navigation class, of any nationality, are exempt from using a Pilot.
- e) It is determined a total of four (04) pilots for the Maceió Pilotage Zone; and
- f) Geographic coordinates of the Point where the Pilot waits: latitude 09° 42' 12" S and longitude 035° 44' 17" W.

Services available

The pilotage service consists on the set of professional activities of assisting the Captain, required due to local peculiarities that make it difficult to freely and safely move the vessel, and is comprised of the Pilot, the pilot boat and Atalaia (Pilotage Station).

In Maceió, the pilotage service is provided by Maceió Pilotas – Empresa de Praticagem do Estado de Alagoas S/C Ltda, located at Av. Dr. Antônio Gouveia, nº 61- Sl. 805, Pajuçara – Maceió, AL – Brazil – ZIP Code 57030-170 – Phone: (55 82) 3231-3293/Fax: (55 82) 3337-1582 – E-mail: maceiopilots@ maceiopilots.com.br

The Pilot, when in the Pilot company Presidency, is responsible for complying with the attributions imposed to the Presidency, on these and other rules from the Maritime Authority.

The Pilot, assigned for maneuvering, must immediately communicate to the Port Captain, on his respective ZP, all irregularities occurred or noticed during maneuver related to navigation safety, protection of human life at the sea and prevention of environmental pollution from the vessels.

5.3.7 Port Services

The Terminal does not provide any type of support service for vessels. Each and every service must be directly requested to the Agency that represents the ship. During the loading or discharging operation, the Terminal has a support man for the entire operation. The communication between Terminal, support man on the Pier area and the Ship is made via VHF radio channel 12.

- a) **Boats for transporting people and supporting ships** The boat service is usually carried out with support from the Agency.
- b) **Pilotage boat** These boats are used by the pilotage for transporting pilots when ships are berthing.

5.3.8 Navigation risks

The risks related to navigation are defined on item 5.3.

5.3.9 General restrictions

There are no general restrictions in berthing/unberthing. The only restrictions are: draft superior to 10.5 m and Ship capacity superior to 50,000 DWT;

Other restrictions can be referred to on item 5.3.

5.4 Maneuver Areas:

The maritime access is approximately 520 m long, 80 m wide and its depth ranges from 10 m to 14 m, without mouth bar. It has a 400 m long, 360 m wide and 10.5 m deep evolution basin.

a) Maceió Port

The maneuver areas are defined on item 0407 of Chapter 4 of NPCP, according to coordinates defined on the tables below:

Vessels > 3000 AB		
Points	Latitude	Longitude
Α	09° 41' 00" S	035° 44' 00" W
В	09° 41' 00" S	035° 44' 42" W
С	09° 42′ 00" S	035° 44' 00" W
D	09° 42′ 00" S	035° 44' 42" W

Vessels with up to 3000 AB
The entire area north from parallel 09° 41 ´ 00" S

Sport and Leisure Vessels		
Points	Latitude	Longitude
A	09° 40′ 25″ S	035° 43′ 52″ W
В	09° 40′ 32″ S	035° 43' 52" W
С	09° 40′ 33″ S	035° 43' 46" W
D	09° 40' 25" S	035° 43′ 45″ W

b) Braskem Terminal

All Vessels		
Points	Latitude	Longitude
A	09° 42′ 18″ S	035° 44' 00" W
В	09° 42′ 18″ S	035° 44' 39" W
С	09° 43′ 00″ S	035° 44' 00" W
D	09° 43′ 00″ S	035° 44' 39" W

c) Pilot embarking and disembarking point

Points	Latitude	Longitude
	09° 42′ 12″ S	035° 44' 17" W

d) Anchoring area for visit

Visit by Anvisa		
Points	Latitude	Longitude
А	09° 40′ 51″ S	035° 44' 42" W
В	09° 40' 51" S	035° 44' 24" W
С	09° 41′ 18″ S	035° 44' 24" W
D	09° 41′ 18″ S	035° 44' 42" W

5.4.1 Navigational and berthing aids

The Terminal does not have equipment to help navigation for approaching. The pilot will approach the ship to the pier with the help of tugs and Support boats. To help the correct ship positioning, aligned to the Pier manifold, the Terminal will make a man available for this purpose.

5.4.2 Controlling the depths

On Maceió Terminal, the maximum draft suggested is 9.5 meters on the arrival in ballast or cargo and 10.5 meters on departure. The depth on the anchorage area is 14 meters.

The Port has the depth control, performed by bathymetry study

5.4.3 Maximum dimensions

The maximum size (in DWT) for vessels to berth on the Liquid Bulk Pier and other berths is 50,000 with maximum length of 200 meters and maximum beam of 40 meters. Maximum draft of 10.5 m on departure.

5.5 Environmental Factors

The weather conditions and temperature on the anchorage area and evolution basin are good throughout the year

- → Atmospheric Pressure The annual average is around 1012.0 mb.
- → The average atmospheric temperature is 25.3° C, ranging from the minimum 17° C in the winter to 35° C in the summer.
- → The relative air humidity throughout the year is high, nearly 87%, specially in rainy months.

Other meteorological information about that area is described in the sub-items below:

5.5.1 Prevailing winds

Between April and August, the statistically prevailing winds are from E and SE quadrants. In the other months, the predominant winds come from E and NE quadrants.

5.5.2 Waves and swells

Waves on the anchoring areas result from the predominant wind forces, as well as from its direction and duration. If the wind is E-SSE, the average wave height ranges between 1.0 and 1.5 m.

5.5.3 Rainfall

The period with greater concentration of rains goes from March to August, considered in the region as winter, and the maximum rainfall is of 390 mm/month, related to June. In the summer, which goes from October to December, the rainfall level drops to the minimum of 48 mm/month, in November.

5.5.4 Visibility

The visibility is usually considered good to excellent, but may be dramatically reduced on the rainy period.

5.5.5 Tidal currents and other currents

Due to the coast configuration, the prevailing current is the tide current, whose direction is South during floods and north during fallings.

5.5.6 Variation on the tide levels

The reduction level used refers to the smallest height possible of low tides. The average level on the reduction level on Maceió Port is of 1.08 meter, related to Chart 901 DHN. Further details about the local tide can be found on the Table of Tides DH-29, publication of DHN.



6.1 Mooring Berths

Maceió Port is comprised of six (6) berths for operation with liquid bulks, in which there are pipelines for moving liquid bulks, which are operated by Petrobras Transporte S.A. — Transpetro, as shown below:

Commercial Docks:

- ightarrow Berths: 201, 202 and 203 operates with diesel oil, gasoline, alcohol and oil;
- → Location: Latitude: 9° 41′ 08″ South / Longitude: 35° 43′ 37″ West
- → Depth: 10.5 m
- → Maximum draft: 10.5 m
 → Length overall (LOA): 210 m
 → Maximum size: 50,000 DWT

Sugar Docks:

- → Berth: 903 operates with alcohol, oil and sugarcane syrup;
- → Location: Latitude: 9° 41′ 05″ South / Longitude: 35° 43′ 20 West
- \rightarrow Depth: 10.5 m
- → Maximum draft: 10.5 m
- → Maximum length (LOA): 200 m
- → Maximum size: 50,000 DWT

Liquid Bulk Pier:

→ Berths: PP-1 and PP-2 – operates with diesel oil, gasoline, alcohol, oil and sugarcane syrup. PP-2 is deactivated since the Pier opened, due to shallow depth for not being dredged up to this date.

→ Location: Latitude: 9° 40′ 58″ – South / Longitude: 35° 43′ 30 – West

→ Depth: 10.5 m

→ Maximum draft: 10.5 m

→ Maximum length (LOA): 200 m→ Maximum size: 50,000 DWT

The terminal operates with tankers that transport diesel oil, gasoline, oil, alcohol.

The movement of these products has the purpose of supplying the State of Alagoas, Petrobras Refineries, nearby cities and other countries served by alcohol export.

Note: The location coordinates for the Commercial Docks and the Liquid Bulk Pier were measured via GPS in 08/30/2002.

Loading arms

The connection between ships and terminal is made via 08" ASA 150# hoses for by-products, oil and alcohol. For bunkering MF-180 and MGO, ships are connected via ASA 150# hoses with 06" and 4", respectively. On berths 201 and 202 a hose line is assembled for every product. On berth PP-1, two hose lines are assembled for each product (oil, alcohol and diesel), and one hose line for gasoline. On berth PP-2, a hose line is assembled for every product (oil, alcohol, diesel and gasoline).

6.2 Storage Area

Storage Area TA/Maceió Terminal

Tank	Product	Capacity (m³)
4,801	Oil	4,725
4,802	Oil	4,695
4,803	Oil	4,661
631,401	Oil	4.743
4,805	Oil	4,741
4,810	Alcohol	5,090
4,811	Alcohol	5,086
4,812	Alcohol	5,389

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Tank	Product	Capacity (m³)
4,813	Alcohol	7,343
4,814	Alcohol	7,340
4,806	Fire fighting water	3,360

Total Storage Area TA/Maceió per Product

Product	Number of	Total Capacity	
	Tanks	(m ³)	
Alcohol	5	30,248	
Oil	5	23,565	
Fire fighting water	1	3,360	

Total Storage Area on Maceió Port (Including Distributors)

Product	Company	Storage Area (m³)	Total
Oil	TA/Maceió	23,565	23,565
Alcohol	TA/Maceió	30,248	
Fuel Alcohol	BR	1,100	2,404
	Pool	1,302	
Anhydrous Alcohol	BR	500	1,480
	Pool	980	
Diesel	BR	15,863	27,192
	Pool	11,329	
Gasoline	BR	4,683	8,134
	Pool	3,451	

Pipelines for Ship x Terminal Transfer (Operational Flows)

Product	Berth	Source / Destination	DN (IN)	Extension (km)	Flow (m ³ /h)
Gasoline	Commercial Docks	Distributor Companies' Storage Area	8"	1. 42	350
	Oil Pier	Distributor Companies' Storage Area	8"	1	400
Diesel Oil	Commercial Docks	Distributor Companies' Storage Area	10"	1.42	650
	Oil Pier	Distributor Companies' Storage Area	12'	1	1,000
Oil	Oil Pier	Storage Area TA/Maceió	14"	1	1,200
	Commercial Docks	Storage Area TA/Maceió	14"	1.42	1,100
	IAA Docks	Storage Area TA/Maceió	8"	0.80	700
Diesel	Commercial Docks	Distributor Companies' Storage Area	10"	1.42	650

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Product	Berth	Source / Destination	DN	Extension	Flow
			(IN)	(km)	(m^3/h)
Alcohol	Oil Pier	Storage Area TA/Maceió	12"	1	700
	Commercial Docks	Storage Area TA/Maceió	10"	1.42	600
	IAA Docks	Storage Area TA/Maceió	10"/8"	1.24	200

Notes:

Operations of loading ships with light by-products are not performed on Maceió Terminal.

The gasoline and diesel discharge operations through the Commercial Docks will only be performed in extreme cases, since there is not a mass balance system that enables good tracking of the discharge operations.

6.3 Management and Control

Maceió Terminal Control Room is within Transpetro Terminal facilities, which is, on its turn, at the port area. The operator in charge of controlling all terminal operations using the manual and automatic measurement systems is in this room. Also in this room, the operators of that section prepare the documentation, handle the communications and monitor the berthing and positioning of ships. During the ship operations, communications are checked every hour. Communications with the ships are carried out via VHF radios in maritime frequency channel 12, or other agreed with the ship, agreed and registered in advance. A secondary mean, via UHF radio supplied by the Terminal and operated on channel 3, is established for failure on the main system, or working simultaneously.

6.4 Major Risks

The major risks associated to the ship laytime on the berth of Marine Terminal of Maceió are:

- → Use of the ship's Bow-Thrust in replacing tows in berthing.
- → Loosening of mooring lines during the loading or discharge operation.
- → Unberthing with drafts superior to 10.50 m, which is the official berth depth.

PROCEDURES

During the ship laytime on the port, various steps are taken to make it possible to operate safely and manage the risks, in order to minimize them. At every stage, as described in the sub-items below, measures are taken so as to facilitate the operations and plan them adequately.

7.1 Before Arrival

- **7.1.1** When berthing, after the safety inspection conduced by the Gianot Operator or Inspector, based on the checklist from Isgott, the ship will not be authorized by the terminal to start its operations if there are pending issues not solved by the crew.
- **7.1.2** On-board repairs and washing the ship's cargo tank should be preferably carried out in the anchorage area. To carry out these services with the ship berthed, prior authorization from the terminal will be necessary.
- **7.1.3** The ships heading to the TA-COM facilities must indicate the estimated time of arrival (ETA) 72 and 48 hours in advance, directly to the Agency that represents them, via telex, Internet or other means available. Change to or confirmation of the ship's arrival shall be communicated at least 24 hours in advance. The ETA information must specify whether the time mentioned is local or GMT.

7.2 Arrival

- **7.2.1** The port authorities are brought into play by the ships' agents according to the arrival and berthing schedule. Generally, the visit is made before berthing.
- **7.2.2** The information from terminal to ship and vice-versa are detailed during the initial release.
- **7.2.3** The list of important addresses and telephone numbers in the port according to item 9.1.

7.3 Berthing

7.3.1 Ship mooring system

The mooring to be performed for each ship must be deemed satisfactory by the Captain and the Mooring Master as representative of the Terminal. The mooring lines must be looked after constantly so that they are always tight with the ship berthed.

All the lines must be kept under adequate tension during the operation, and winches with their brakes on. Using automatic tensioning winches is not permitted.

All the mooring lines shall be of the same type, gauge and material (fiber or wire); whenever possible, they must have the same length, and mixing mooring lines is not permitted.

For mooring the ship, usually 03 lines, 02 breast lines and 02 spring lines are used on bow and stern. This configuration may be changed according to the weather conditions during the mooring.

7.3.2 Ship/Pier access

The Terminal does not have access ladder. Thus, the gangway or the "ramp" ladder must be positioned by the ship.

7.4 Before Transferring the Cargo

- **7.4.1** Discontinuous hoses are used on the Marine Terminal of Maceió for shores x board connections. It is understood only hoses with hydrostatic test, vacuum and electric discontinuity, within validity, as recommended by Ocimf;
- **7.4.2** The information between ship and Terminal, with the purpose of establishing the criteria necessary for hose connection, will be established on the first contact between ship and terminal, during the initial release or the first contact with the Terminal.

The ship must provide the loading manifold diameters to enable the hoses connection.

After connecting the hoses, they will be tested for tightness, using the static terminal column pressure for this purpose.

One on-board representative must accompany the entire operation, and must be close to the ship's loading manifold.

The terminal will put one inspector onboard the ship to carry out a visual inspection on the deck and around the vessel.

- **7.4.3** Onboard measurements are executed by the ship's personnel, and inspected by the terminal's representatives and other inspectors in case of export cargo. The material used must be adequate, and the measuring instruments must be explosion-proof.
- **7.4.4** The operation can only start after the initial letter has been filled in by shore and onboard representatives.
- **7.4.5** The Ship/Shore Safety Checklist (Appendix A of "Isgott") is checked and filled by the on-board Mooring Master and by the officer during the initial ship release.
- **7.4.6** The prohibition on non-authorized small boats remaining alongside or near berthed ships shall be strictly observed. Only vessels authorized by the terminal can remain in the vicinity or alongside, provided that they meet all safety conditions. The violation of this rule shall be communicated to the competent authority.
- **7.4.7** The berthed ships should not start their propeller(s) while connected to the hoses. The jacking gear may be used, once the Mooring Master on board has been duly notified, however, the propeller must be turned slowly in order to ensure absolute safety. Ships will be held responsible for any damages resulting from these procedures.

7.5 Cargo Transfer

7.5.1 The monitoring of pressures during cargo transfer is recorded by the representatives aboard and onshore at the ship's manifold, hour by hour. The terminal controls the internal pressure variables via a centralized control system. The flow rates on both sides of the operation are measured hour by hour, and compared between the parties, and according to the system used, there will be a limiting parameter for operational control. Any changes to the operating conditions must be communicated and documented between the parties. It is expressly forbidden to close valves that may cause counterpressure to the system during the operation.

- **7.5.2** Check communication with the ship not to start operation without perfect communication;
- → Check the entire alignment before starting the operation;
- → Follow full time the line of hoses connected to the ship, during operation;
- → Negotiate an emergency stop with the ship (as suggested by the Isgott);
- → Track the volume moved in both ends of the pipeline;
- → Perform the preventive maintenance of lines, tanks and accessories. In case of any defect on the equipment and accessories, arrange for immediate corrective maintenance;
- → Do not use improper "straps" for handling the hoses.
- **7.5.3** Ballast and deballast pipes and tanks must be designated for this purpose only, and remain isolated from other pipes aboard. The water ballast to be discharged into the sea shall be totally free of oil, any oily residues or other substances that may pollute the seawater.
- **7.5.4** The Marine Terminal of Maceió does not receive slop discharge.
- **7.5.5** Usually, the conventional tank cleaning operation is not accepted. However, the COW operation is accepted on discharges, provided that there is prior request for this purpose and prior authorization from schedule for ship laytime on port purposes and from the Mooring Master for operational safety purposes.
- **7.5.6** No repairs or maintenance work involving a risk of sparks or other forms of ignition may be carried out while the ship is berthed at the terminal. In extreme cases, all the safety rules shall be complied with and fulfilled. Repairs involving the terminal facilities, or that imply any restriction on the ship during the laytime, must have prior authorization from the terminal.
- **7.5.7** The initial and final inspections will be held by the Mooring Master as representative from the Terminal;
- **7.5.8** Loading or discharging must be interrupted in any situation that might offer risk, either to the ship or to the terminal.

The operating personnel at the terminal are authorized to interrupt/suspend the operation in case of non-compliance with any safety-related rules and standards globally accepted and adopted in the maritime oil transportation.

The ship's Captain is entitled to interrupt the operation when there are reasons to believe that onshore operations are not safe, as long as he gives the terminal operators advance notification.

7.5.9 In any emergency situation, the Marine Terminal of Maceió will interrupt the ongoing operations so that all available resources are focused on mitigating the disaster. The actions and contacts for every type of emergency are described in the Terminal's LCP and the key telephones are listed in section 9.

7.6 Cargo Measurement and Documentation

7.6.1 The final onboard measurements will be carried out by the ship's personnel and monitored by the terminal representatives and other inspectors. The material used must be duly grounded, and the measuring instruments must be explosion-proof. The final release of the ship must occur after matching the quantities moved and complementing the laytime documentation.

7.7 Unberthing and Leaving the Port

- **7.7.1** During the unberthing and maneuvers for leaving port, the draft limits and hazards, listed in the section 5.3 and its sub-items, must be observed.
- **7.7.2** The Mooring Master disembarks soon after the signaling buoy, where the supporting boat will wait for him by the shade side.

PORT AND ANCHORAGE AREA ORGANIZATION

8.1 Maritime Authority

- **8.1.1** The maritime authority the terminal is subordinated to is the Harbor Master of the State of Alagoas.
- **8.1.2** The official port limits according to section 5.3.5.
- **8.1.3** The Harbor Master is the maritime authority within the limits of Maceió Port, and has responsibility for stipulating the actions to be taken and for penalizing those responsible for any incident within the port limits.

8.2 Pilotage

- **8.2.1** The pilotage is mandatory for all ship maneuvers as from the point of embarkation of the Mooring Master (Pilot) (section 5.3.6);
- **8.2.2** Regardless of nationality, type of vessel and destinations, the minimum sizes for which the pilotage service becomes mandatory is from 2,000 DWT on;
- **8.2.3** For all situations, the pilotage service is called into action by the Agency.
- **8.2.4** Pilotage organizations operating on Maceió Port.

8.3 Tugs and other Maritime Services

Tug services – section III chapter 3 of NPCP.

Mandatory use of tugs

All berthing and unberthing maneuvers on Maceió Port and Braskem Terminals will be performed with the help of tugs, except for vessels with up to 2000 DWT, while maneuvering on Maceió Port, complying with the correspondences between the vessel's DWT, minimum Bollard Pull value and the recommended number of tugs to be used, mentioned on the table in appendix F.

Requirements for operations

- a) All vessels classified in relation to services and/or activity as tugs, with installed power superior to 500 HP, shall have the certificate of Longitudinal Static Traction, certified by DPC, according to specific instructions. The tugs will be recognized by the rated values described on this Certificate.
- b) In case of change of tugs to other ports, whether within the jurisdiction of this Harbor Master or any other, it will be only necessary to inform the fact by the Captaincy, Department or Agency that has its registration for the one within the new jurisdiction area;
- c) Tugs with installed power equal or superior to 500 HP will not need to have the Certificate of Longitudinal Static Traction. They will be recognized by the estimated Bollard Pull, that is, using the practical rule of corresponding one metric ton of traction force for each 100 HP of engine power;
- d) For navigation safety purposes, even if temporarily, the tugs mentioned on the previous sub-item can only be used in tug operations in OPEN SEA navigation classes if they have the aforementioned Certificate of Static Traction certified by the Ports and Coasts Board; and
- e) The maneuvers with platforms, performed on ply waters, are considered special and must be planned beforehand between ship owners and/or maritime agents and their service providers. As a preventive safety measure, the Port Captain or Agent may assess the need of an open sea tug to follow all maneuvers performed by other tugs.

Application

a) It will be up to the Ship Owner, or his representative Maritime Agent, to request the tugs necessary to the maneuvers to be performed. During the maneuver, the ship Captain will decide the device for towing, that is, the number of tugs and their posi-

- tions to form the necessary force binary. It is recommended to listen to the Pilot's suggestion if the pilotage service is being used;
- b) The vessels with BOW THRUSTER and/or STERN THRUSTER devices in perfect conditions for operation may reduce the required Bollard Pull values at double the rate of the nominal power values of their organic devices, following the practical correspondence rule expected on paragraph c) on item (It is subtracted from the Bollard Pull required the double of the THRUSTER power divided by 100);
- c) Towing ropes and other materials to be used in tug-assisted maneuvers must be adequate for maneuvering safety requirements. Its provisioning shall be agreed between the contracting party, ship owner or agent and the contractor, tug company; and
- d) The final decision on using materials and devices suitable for maneuvering is up to the ship Captain.

Force majeure situations

- a) In cases of force majeure, the Port Captain may authorize maneuvers out of the rules established by this Standard, through requirement from the Ship Owner or the responsible for the vessel, with the Captain's agreement. The authorization to be granted, always considering the minimum safety conditions for navigation, will not exempt its requiring parties, Ship Owner and/or Maritime Agent, and its executor, the Captain, from their legal responsibilities;
- b) It is understood as force majeure, in this case, situations where there is no availability of tugs, or where the existing amount of Bollard Pull is below desirable, for reasons that cannot be avoided or forbidden; and
- c) On such cases, pilotage shall also manifest formally about the possibilities of conducing the intended maneuver safely.

Complementary provisions

- a) No Captain shall authorize a maneuver with the ship under his command and responsibility if he is not certain that the satisfactory navigation safety conditions are protected;
- b) We recommend that the Captain exchanges prior information with the pilotage (whenever used) and/or the tug masters, about the maneuver to be executed, the evolution basin and the ship's own characteristics;
- c) The Longitudinal Static Traction Force (Bollard Pull) of the tugs will be measured and verified according to instructions on Norman-01;

PORT INFORMATION

- d) When the tugs are maneuvering near the ships' bow, it is forbidden to pass the towing rope by lowering it from the bow to be caught with boat hook by the tug's crew. The rope must be fastened using a line thrown from the forecastle towards the deck of the tug, thus preventing excessive tug/ship approach, and reducing the hydrodynamic interaction effects between the vessels;
- e) List of towing companies that operate on Maceió port and Braskem Terminal.

Company	Address	Tug	(Bollard Pull)	
			in metric t	
Sulnorte Serviços	Rua Jangadeiros Alagoanos, 999	Araruama	17,75 t	
Marítimos Ltda.	ZIP Code 57.030-000 — Pajuçara			
	Phone/Fax: (55 82) 3327-6557			
Saveiros Camuyrano	Rua Barão de Jaraguá, 543	Afonso Sagitários	19,70 t	
Serviços Marítimos	ZIP Code 57.025-400 – Jaraguá		22,5 t	
S.A.	Phone/Fax: (55 82) 3326-3590			

8.4 Other Relevant Maritime Services from the Port

Ship repairs: Maintenance repairs or service that do not affect the operation safety can be performed, provided that there is permission from Transpetro, and these works may be suspended in some hours due to safety aspects.

EMERGENCY PLAN

9.1 Emergency Contacts

The table below indicates the essential contacts, with telephone number, fax number, and radio channels/frequencies

Organization	Operation	Identification	Telephone	Fax	Cellular	VHF/UHF Channel	
	Times	Acronym	(55 82)	(55 82)	(55 82)	Call	Conversation
Harbor Master	24 hours	CPAL	3336-4005	3336-4375	ı	_	_
Pilotage	24 hours	_	3231-3855	_	9983-9635	16	12
			3231-3293		9973-1977		
					9981-0361		
Terminal	24 hours	TA-MCO	3217-7712	3217-7744	_	16	12
Control Room		Operation					
Administrative	7:00:00 am	ADM	3217-7701	3217-7711	_	_	_
	to 5 pm						
Coordination of	7:30 am	_	3217-7702	_	9983-2910	_	_
TA-MCO	to 5:30:00 pm						
	Cell 24 hours						

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Organization	Operation	Identification	Telephone	Fax	Cellular	VHF/UHF	
	Times	Acronym	(55 82)	(55 82)	(55 82)	Call	Conversation
Supervision of	7:30 am to	_	3217-7719	_	9999-1001	_	_
TA-MCO	5:30 pm						
	Cell 24 hours						
Receita Federal	8:00 mm to	SRF	3216-9100	_	_	_	_
(55Internal	5:00 pm						
Revenue Service)	Cell 24 hours						
Federal Police	24 hours	DPF-AL	PABX	_	_	_	-
Cesportos			3216-6700				
Immigration							
Civil Defense	24 hours	-	3315-2822	-	_	_	-
IMA	24 hours	-	(0800)	-	9308-0943	_	-
			821-523				
			3221-8683				
Ibama	24 hours	Super	3241-1600	_	9971-1612	_	_

Environmentally Sensitive Areas 9.2

They are defined on Infopae.

9.3 General Description of the Emergency Combat Organization

The responsibilities for handling possible emergencies involving vessels arriving at the Terminal.

Incidents on the Liquid Bulk Pier Facilities in the TA-Maceió

Incident type	Organization	Other organizations involved				
	in charge					
Collision with	Harbor	Transpetro	Port	_	_	
the pier	Master		Administration			
Vessel running	Harbor	Transpetro	Port	_	_	
aground	Master		Administration			
Vessel Sinking	Harbor	Transpetro	_	_	-	
	Master					
Fire Onboard	Ship	Transpetro	Port	Harbor Master		
			Administration			
Fire in the Berth	Transpetro	Harbor	_	_	-	
		Master				
Pollution	Transpetro	Harbor	Ibama	lma		
	or Ship	Master				

9.4 Contingency Plans

- **9.4.1** The PEI (Individual Emergency Plan) is the emergency fighting plan of TA-COM in all of its facilities. It is available at Sinpep. The local SMS (health, environment and safety activity) is responsible for its updating.
- **9.4.2** The ships berthed must keep the emergency towing ropes available to be used in case of emergency.

The emergency and fire fighting equipment must be kept ready for use while the ship is berthed. The operational fire hoses must be extended, one forward and one aft on the load manifolds.

A pollution fighting kit (Sopep) (sawdust, rags, shovels, buckets, squeegees, transfer pumps, etc.) must be kept ready for use in case of oil spilling. Supplementary precautions must be taken to avoid polluting the seawater with oil.

TA-MCO has an Emergency Response Center (CDA) complete with modern equipment and various facilities for use in accidental terrestrial and maritime pollution. Intensive training sessions are held periodically to qualify the terminal employees to act according to the PEI (Individual Emergency Plan). Located at a strategic point, it can be ready for action to combat emergencies. Floating booms, oil collectors and other equipment and materials necessary to works are stored in its shed. Service and support boats, oil collecting equipment and cars with tow are located in the CDA yard in a permanent state of readiness.

9.4.3 The terminal does not have equipment for first-aid procedures in the Pier area. The equipment used by the terminal for first-aid procedures is located in the terminal, which is approximately 1Km away from the pier. In case of a more severe accident, an ambulance will be called by the Terminal.

9.5 Public Resources for Combating Emergencies

On Maceió port, only Transpetro and companies from Sindicom have resources that can be used to mitigate sea pollution events.

9.5.1 Local emergency services

The fire brigade, federal police and hospital units in Maceió have the resources they are destined to and are called through the telephone numbers listed on the table on section 9.1.

9.5.2 Mutual Assistance Plan

There is not a Mutual Assistance Plan defined in Maceió with the company operating in the port facilities.

9.6 Fight Against Oil Spills

The sub-items below describe the resources available for fighting against pollution at the areas adjacent to the terminal.

9.6.1 Combat capacity of the Terminal

The resources available at the Terminal for fighting oil spills are listed on the PEI, available in Sinpep.

9.6.2 Combat capacity of the Environment Agency

The Environmental Agency at Alagoas – IMA does not have resources for combating oil spillage on the sea.

9.6.3 Resources available from the mutual support plans at other Terminals

The resources available in other Transpetro terminals for fighting against pollution emergencies occurring at the terminal surroundings are listed in the PEI.

9.6.4 Tier-2 combat

Organization designated to combat significant pollution.

In such events, regional resources from Transpetro/Petrobras (CDA) are requested. These resources, their readiness and how they are called into action are described in the LCP.

9.6.5 Tier-3 combat

Organization designated to combat large-scale pollution.

In such events, national resources from Transpetro/Petrobras (CDA) are requested. These resources, their readiness and how they are called into action are described in the PEI.

9.7 Combating a Large Scale Incident

The LCP at the TA-MCO lists the actions and the entities with responsibility for every expected type of event that may occur in its units, pipelines or vessels, involving third parties. For events not foreseen in this document, Transpetro/Petrobras will provide all the national or international resources within its reach.

CONTACTS

The tables below indicate the organization, title, telephone, fax, e-mail and radio channel/frequencies.

10.1 Terminal

Location	Contact	Telephone	Fax	VHF/UHF Channels	
		(55 82)	(55 82)	Call	Conversation
Operational	Operator	3217-7712	217-7744	16	12
Control Center					
Coordinator	Coordinator	3217-7702	_	_	_
		9983-2910			
Supervisor	Supervisor	3217-7719	_	_	_
		9999-1001			
Security (SMS)	Security Technician	3217-7727	_	_	_
		3217-7726			

10.2 Port Services

a) Pilotage

Inside the port area, pilotage is mandatory for all ships headed to Maceió. The pilots for Maceió Port can be requested via vessel agent, 24 hours before the arrival. They can also be requested via channel 16 or 14 in VHF radio phone call. If the ship has mobile cellular phone, the pilot may be requested though the telephone numbers: $(55\ 82)\ 3231-3855\ 3231-3293\ /\ 9981.0361\ /\ 9981.1979\ /\ 9983-9635\ /\ 9973-1977$.

b) Access ladder

The Pier does not have access ladder. Thus, the ship's gangway ladder or wharf ladder must be used

c) Access ladder

Dry garbage can be discharge if the ship requests beforehand to the agent the necessary resources for its collection and the corresponding transportation.

d) Auxiliary mooring service

The teams that perform the ship mooring and casting off works may be requested via navigation agents or directly to Sindiporto – Sindicato dos Portuários (Port Workers Union), on the telephone (55 82) 3231.8891.

Throughout the docks there are mooring bollards with gaps of 25 m.

e) Boat service

The boat service is usually performed by the boats used by the pilots. In case of need, this service may be requested to the ship agent properly in advance or directly to Orion Serviços Portuários Ltda, owner of the boats, via telephone (55 82) 3327-7409 or via VHF radio, on channels 16 or 14.

f) Supply of docks material, machines, chamber and supplies

General supplies for docks, machine and navigation, as well as supplies for the crew, may be requested beforehand by the ship agent. There is a wide variety of suppliers for ships in Maceió. The times and conditions for delivery must be established in advance with Transpetro, due to operational safety aspects.

g) Naval repairs

Maintenance repairs or services that do not affect the terminal safety may be executed, as long as there is permission from Transpetro.

h) Oil inspectors

The following companies, among others, may be contracted via agent: SGS do Brasil S.A., Marine Survey, Data Marine and Survey Seed, etc. Transpetro performs the ship loading and discharging services in Maceió through Transpetro/DT/TA-NE, under contract, for companies that request so.

10.3 Selected Navigation Agents and Suppliers

Agembrás

Agência Marítima Brasileira Ltda. Rua Engenheiro Mário de Gusmão, 263 — Ponta Verde

ZIP Code: 57025-100 – Maceió – AL – Brazil Tel.: (55 82) 3327-0704 / 3327-7082 / 3327-7073

Agenave

Agência Alagoana de Navegação Ltda. Praça Dois Leões, 168 — Jaraguá

ZIP Code: 57025-400 – Maceió – AL – Brazil Phone: (55 82) 3223-5408 / 3326-7554

Williams & Cia. Ltda.

Rua Barão de Jaraguá, 292 – Jaraguá ZIP Code: 57025-40 – Maceió – AL – Brazil

Phone: (55 82) 3223-2299 Fax: (55 82)3221-9710 website: www.williams.com.br e-mail: willmcz@williams.com.br

Irmãos Britto Representações e Comércio Ltda.

Rua Sá e Albuquerque, 454 – Jaraguá ZIP Code: 57025-180 – Maceió – AL – Brazil Phone: (55 82) 3221-0009 / 3221-0917

Fax: (55 82) 3221-6951 website: www.ibritto.com.br e-mail: brittos@threenet.com.br

Sanvictor

Praça General Lavenere, 176 — Jaraguá ZIP Code: 57025-400 — Maceió — AL — Brazil

Phone: (55 82) 3221-4886

Sea Blue

Agenciamentos e Serviços Marítimos Ltda.

Avenida da Paz, 1.326 – Jaraguá

 ${\sf ZIP\ Code:\ 57020\text{-}440-Macei\'o-AL-Brazil}$

Phone: (55 82) 3326-5828 e-mail: seablue1@uol.com.br

Holland Agenciamentos e Representações Ltda.

Rua Maria Vitória F. Chaves, 27 — Poço ZIP Code: 57030-550 — Maceió — AL — Brazil

Phone: (55 82) 3231-6284 Fax: (55 82) 3327-4221

websites: www.hollandagency.com.br / www.hollandagency.cjb.net

e-mail: holland.agency@uol.com.br / holland@ofm.com.br / holland@wwrent.com.br

Semar Serviços e Despachos Marítimos Ltda.

Rua Melo Póvoas, 71/sala B — Jaraguá ZIP Code: 57025-180 — Maceió — AL — Brazil Phone: (55 82) 3337-1212 / 9961-5156 e-mail: semarmcz@terra.com.br

Operadores portuários:

Empat

Empresa Alagoana de Terminais Ltda.

Rua Sá e Albuquerque, 235/1º andar – Jaraguá ZIP Code: 57025-180 – Maceió – AL – Brazil

Phone: (55 82) 3231-3939 Fax: (55 82) 3231-0832

Agembrás

Agência Marítima Brasileira Ltda.

Rua Engenheiro Mário de Gusmão, 263 – Ponta Verde

 ${\sf ZIP\ Code:\ 57025\text{-}100-Macei\'o-AL-Brazil}$

Phone: (55 82) 3327-0704 / 3327-7082 / 3327-7073

Irmãos Britto Representações e Comércio Ltda.

Rua Sá e Albuquerque, 454 — Jaraguá ZIP Code: 57025-180 — Maceió — AL — Brazil Phone: (55 82) 3221-0009 / 3221-0917

Fax: (55 82) 3221-6951 website: www.ibritto.com.br e-mail: brittos@threenet.com.br

Agenave

Agência Alagoana de Navegação Ltda.

Praça Dois Leões,168 – Jaraguá

ZIP Code: 57025-180 – Maceió – AL – Brazil Phone: (55 82) 3223-5408 / 3326-7554

Fluxo Operadora Marítima Ltda.

Rua João Correia de Araújo, 779-A - Farol ZIP Code: 57025-150 - Maceió - AL - Brazil

Phone: (55 82) 3326-5450 / 3326-4272 / 9997-4757

e-mail: fluxooperadora@yahoo.com.br

Note: Same street as Eletro Motores, Lighthouse 441.

Maxport Serviços Portuários

Rua Hamilton B. Soutinho, 10 – Jaraguá ZIP Code: 57025-180 — Maceió — AL — Brazil

Phone: (55 82) 3231-9353

10.4 Local Authorities, State and National Agencies

The table in section 9.1 has the list of these authorities and their respective contacts.

10.5 Emergency Combat Organizations

The organizations available on the port for combating emergencies are listed in section 9.1.