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INTRODUCTION

This Port Information was prepared by Petrobras Transporte S.A. (Transpetro), which operates the Marine Terminal of Suape, at Suape port. It provides essential information to the ships operating at the Terminal. This document is also distributed internally in the Organization, and to the interested Port parties, local and national authorities.

The Port Information has versions in Portuguese and English languages.

The information contained herein serves to supplement, but never to supersede or alter, any legislation, instructions, guidance or official publications, either national or international. Therefore, anything that conflicts with any 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:

Coordenação do Terminal Aquaviário de Suape

Complexo Industrial Portuário de Suape – Rodovia PE-60 km 10, s/n – Suape ZIP Code: 54500-000 – Ipojuca – PE – Brazil Phone: (55 81)3527-6330 Fax: (55 81)3527-6029

Petrobras Transporte S.A. – Transpetro

Av. Presidente Vargas, 328 / 9° andar – Centro Zip Code: 20091-060 – Rio de Janeiro – RJ – Brazil Phone: (55 21) 3211-9085 Fax: (55 21) 3211-9067

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





Definitions

BP – Bollard Pull – Ship's longitudinal Static Traction.

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

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

DWT – Dead Weight Tonnage.

IEP – Individual Emergency Plan.

IMO – International Maritime Organization.

Isgott – International Safety Guide for Oil Tankers and Terminals.

Giaont - Safety Surveyor Staff.

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

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

UN-Bunker – Petrobras department that trades the bunker stored in the Transpetro Terminals.**UTC** –Universal Time Control.

VTS – Vessel Traffic Service.



Charts and Reference Documents

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

Charts

Area	Chart Number
	Brazil (DHN)
Anchorage & Port Approach	906
(Mouth of the Port and Channels	906
Terminal and Approach Area	906
East Bar	906

Other Publications

Type/Subject	Editor or Source
igpe/ Subject	
	Brazil (DHN)
Normas e Procedimentos da	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	
		Be	efore arriv	val			
Estimated Time of		Х		X			As per
Arrival (ETA) and ship							Appendix D
information							
Essential information	Х				Х		As per
on the Terminal							Appendix D
		Before ca	argo or bur	nker transfer			
Details about onboard		Х		X			As per
cargo/slop/ballast							Appendix F
Essential operating	Х				Х		As per
information							Appendix F
(fill in locally)							
Ship/Shore Safety			Х			Х	As per Isgott
Checklist							Appendix A
							continu

SUAPE TERMINAL

Information	Pre	epared b	oy:	Deliv	ered to:		Comments			
		Duri	ng cargo o	r bunker trar	nsfer					
Repeat Ship/Shore			Х			Х	As per Isgott			
Safety Checklist							Appendix A			
	After ca	rgo or bu	nker trans	fer, before de	eparture					
Information required			Х			Х	Quantity of fuel			
for unberthing the							and water			
ship							onboard			
	After unberthing, when leaving the port									
Information		Х		х			Pilot			
concerning port							disembarkation			
departure data							time and port			
							departure time			

Description of the Port and Anchorage Area

5.1 General Description

The Marine Terminal of Suape is an administrative and operational organization from Petrobras Transporte S.A. – Transpetro, with facilities located near the city of Recife, in the State of Pernambuco, located at the following address:

Petrobras Transporte S.A. – Transpetro

Rodovia PE-60 km 10, s/n – Suape ZIP Code: 54500-000 – Ipojuca – PE – Brazil Phone: (55 81)3527-6330 Fax: (55 81)3527-1150 / 3527-6029 www.transpetro.com.br

In addition to Transpetro, there are other port operators working at Suape Port.

Suape Port is an artificial external Port of public use, property of the Government of the State of Pernambuco, whose Port Authority is:

Suape – Complexo Industrial Portuário

Rodovia PE-60 – km 10 - s/n - SuapeZIP Code: 54500-000 – Ipojuca – PE – Brazil

The External Port of Suape is basically comprised by an L-shaped protection jetty, with 2,950 meters of extension, from the original shore line, which houses two berthing facilities, both in pier shape, with two (2) mooring berths each, and a Multiple Use Dock, with two (2) mooring berths on the basin formed by it. The channel to access these piers and dock is 16.5 m deep.

The Internal Port houses an Internal Dock, with three (3) mooring berths: Berth 1, Berth 2 and Berth 3.

The Port operates twenty-four (24) hours a day, every day of the year.

In summary, the Marine Terminal of Suape has the responsibility of operating the loading/discharge from tankers, storing oil by-products and alcohol, loading/discharging oil and alcohol into tanker trunks and wagons, transfer oil by-products to Distributor Companies, transshipment between tankers and bunkering ships.

The by-products transportation aims at supplying the local market and the vicinity market, exporting the national production surplus and meeting the demand for supply to ships operating with the Terminal and other Terminals, installed at Suape Port.

The terrestrial access to the Terminal can be made via federal highway BR-101 and state highway PE-60, which connects the cities of Recife and Ipojuca.

The local time is three (3) hours behind the Greenwich meridian time (GMT: -3 hours). The State of Pernambuco does not adopt daylight saving time.

5.2 Location

5.2.1 Coordinates

The geographic position of Suape Port corresponds to the coordinates 08°23'50"S and 34°57'30"W.

5.2.2 General geographical location

Suape Port is located near the extreme east of the Brazilian coast, approximately 25 miles south from Recife.

5.3 Approaching the Terminal

5.3.1 General Description

Suape Port can be approached based on the local beacon signaling, and the Port entrance is reached without difficulty, from any direction.

A light buoy signals the Sitiba bank, marking 117° from the jetty head lighthouse.

The port limits are established by the maritime area located between latitudes 08° 22' 0" S and 08° 25' 0" S, the breakwater and longitude 034° 55' 0" W (Nautical chart 906-DHN).

Ships coming both from North and South must wait at the pilot embarking line, located one mile away from the breakwater head, defined by latitude point 08° 23' 12" S and longitude 034° 56' 45" W. The pilot usually embarks 0.7 to 1.0 mile NE from the breakwater end.

5.3.2 Anchorage areas

There is no area marked for anchoring. The ships can anchor at the points that mark Cabo de Santo Agostinho on a 330° angle, at a distance greater than one mile from the Suape jetty head. Inside the Port, in the area reserved for evolution, ships are forbidden to anchor, except in exceptional situations, with formal permission from the Harbor Master, which must be obtained at least twenty-four (24) hours beforehand with the ship agent.

Inside the Port there can only be movement of ships, regardless of its size or type, if they are assisted by a tug.

The areas reserved for anchoring have good securing bed (sand, mud). However, it is recommended to keep surveillance on the moors and the anchoring position, considering the stormy winds of the ESE quadrant, when the maritime current can become very intense and make the anchor drag (anchor dragging).

5.3.3 Navigational Aids

Cabo de Santo Agostinho lighthouse is a great aid to navigators that can be easily identified at a distance of twenty-four (24) miles. For details, refer to the list of lighthouses, DH-2, of the Brazilian Navy.

5.3.4 Port limits

The official Port limits are located between latitudes 08° 22' 0" S and 08° 25' 0" S, the breakwater and longitude 034° 55' 0" W (Nautical chart 906-DHN).

5.3.5 Pilotage

Pilotage is mandatory for all ships maneuvering at the Port, berthing or anchoring, from the access channel mouth. The organization that offers this service is described on section 8.3.

Pilotage is arranged for berthing and unberthing by the ship's cargo agents. The agents provide pilotage for berthing based on the ships' estimated time of arrival (ETA informed by the ships) and on the berthing schedule from the Terminal, informed by the Terminal's shift supervisor, 24 (twenty-four) hours beforehand. On unberthing, pilotage is requested via estimated time for concluding the operation supplied by the ship and time for releasing the cargo. The minimum time for requesting a pilot is four (4) hours.

Pilotage can also be requested via channel 16 or 13 in VHF radiotelephony. If the ship has mobile cellular phone, the pilot may be requested via telephone (5581) 3424.5010.

The pilots wait for the ships on a pilotage boat from the access channel mouth. The ships must receive enough ballast and be properly equipped concerning mooring equipment and respective accessories.

The ships must have clean, safe and efficient gangway ladders for embarking and disembarking the pilot, with steps and ropes in perfect condition, fastened tightly to the approximated point in the hull and with proper length to reach the pilot boat, being one (1) meter above water level.

A life buoy with safety line and self-ignition light must be equally at hand on the top of the ladder reserved to the pilot, as well as a VHF communication device for contact with the command cabin.

The ships must take a position that offers the pilot shelter against wind when he climbs from the boat to the ship, and they must also reduce the speed to facilitate his embarking and disembarking.

Each captain is solely responsible for the maneuvers and is in charge of all the information to be provided to the pilot about any peculiarity, specific conditions or existing difficulties, such as: engine or boiler problems, problems or damage to navigation aid instruments, mooring lines or any element that may offer risks for mooring, rope release, loading/discharging the ship.

After they are berthed, the ships shall remain in conditions deemed satisfactory by the pilot and Terminal operators.

If the Captain does not agree with the pilot's instructions, in order to ensure that the ship maneuvers safely, the Port Captain and the Terminal shall be informed in writing by the ship's Agency.

5.3.7 Tugs and Port services

Tugs and towing services targeted to ship berthing, unberthing and evolution maneuvers at Suape Terminal are provided by an specialized company.

The tug services available are arranged by the cargo ship agents for berthing and unberthing. The agents provide the tugs for berthing based on the vessel size, its estimated time of arrival (ETA informed by the ships) and on the berthing schedule from the Terminal, informed by the Terminal's shift supervisor. On unberthing, the tugs are requested via estimated time for concluding the operation supplied by the ship and time for releasing the cargo. The rules concerning the number of tugs to be used are described on section 6.3.

The communication form between tugs and ships during berthing and unberthing maneuvers is via VHF radio. This equipment remains permanently turned on in order to answer any call from ships berthed or from the Terminal's operating personnel. Alternatively, in case of failure of the radiotelephony equipment aboard the ship or tug during the maneuver, the ships will use the following whistle signals:

Call:

→ four (4) long whistles, followed by one (1) or two (2) short ones – the number of short whistles decides if one (1) or two (2) tugs, respectively are called.

Before passing the towing rope:

- \rightarrow two (2) short whistles prepare to push forward or catch the bow rope.
- \rightarrow three (3) short whistles prepare for push backwards or catch the aft rope.

After passing the towing rope:

- \rightarrow one (1) long whistle pull towards starboard.
- \rightarrow two (2) short whistles pull towards port side.
- \rightarrow three (3) short whistles stop pulling.

Maneuvering alongside the ship:

- \rightarrow one[1] short whistle pull.
- \rightarrow two (2) short whistles push.
- \rightarrow Other whistle signals can also be used for auxiliary vessels:

Call:

- \rightarrow two (2) long whistles, followed by one (1) short whistle to call the pilot boat.
- \rightarrow one (1) long whistle, followed by one (1) short whistle to call the boat.

All the orders received by the tug must be acknowledged by one (1) short whistle. Since the tugs have VHF radios, the maneuvering orders are usually transmitted by phone.

The tugs available at Suape Port do not have fire fighting system.

The tugs are equipped with Aldis lamps for communication in Morse code.

The ships must have towropes of good quality, since the tugs do not provide this item.

Boats for transporting people – The Terminal does not have boats for transporting people. This service may be requested via the ship's protector agent for rental. The Terminal has a list of providers of this type of service.

Pilotage boat - The pilot uses its own pilotage boat, berthed at Suape Port.

5.3.7 Navigation risks

There is no evidence of risks for navigation from the anchoring area to the berthing facilities at Suape Port.

5.3.8 General restrictions

The table on the next page presents the current restrictions.

5.4 Maneuver Areas

The evolution basin, near the piers, has approximately 14.40 m (48 feet) of minimum depth and maximum drafts of 14.03 m (46.77 feet) at low tide and 15.90 m (53 feet) at flood tide.

The transshipment operations are performed with the vessels berthed, using the alignments of property of Transpetro, which interconnect the pier berths or via loading/ discharge hoses.

5.4.1 Navigational and berthing aids

Suape Port has equipment to measure the speed, distance and angle the vessel approaches the berths, viewed via display in each port facility, except on the Internal Dock.

The Transpetro operator assists the ship when it is berthing so as to position it in such a way that the loading arm and/or loading/discharge hoses can be connected.

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Maximum Maximum
Length [m] Jay Night
time time
1
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260
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200 165 (*)
200 165 (*)

Note: [1] Equipped with instruments that record ship approach speed, angle and distance in relation to the longitudinal axis of the Pier.

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General Restrictions (continuation)

				Drafts	ts		Ber	Berthing	Unbe	Unberthing	Type		Phy:	sical I	Details c	Physical Details of the Berths		Notes
Maximum	Maximum	Maximum	Maximum	mn			Мах	Maximum	Maxi	Maximum		Berth	Tid	Tides	Beam	Product	Displacement	
Tide Level	Tide Level	Tide Level	Tide Level	evel		1	Leng	Length [m]	Leng	Length (m)		Length	٦ س	Ē		Moved		
0.00 m 2.50 m	2.50 m	2.50 m	2.50 m				Day	Night	Day	Night		٦ س	Syzygy Dry	J Dry			(tones)	
ters Feet Meters Feet	Meters Feet Meters Feet	Meters	Meters	Meters Feet	Feet		time	time	time	time								
.64 45.47 – –		I	I		I		300	300	300	300	I	I	2.50	0.00	NA (Oil	80,000 t	[1]
																by-products, vegetable oil, huokar		
96 29.87	1	29.87 –	1		I		160	160	160	160	I	I	2.50	0.00	AN 0	Oil	25,000 t	[1]
																by-products,		
																vegetable oil,		
																bunker		
1	I	1	1	I			280	280	280	280	_	570	2.50	0.00	NA	liO	90,000 t	[1]
																by-products		
.83 46.10	I	46.10 -	I		I		280	280	280	280	_	570	2.50	0.00	NA (lio	90,000 t	[1]
						I										by-products		
1	I	1	1	I		• •	300	300	300	300	I	Ι	2.50	0.00	NA (lio	170,000 t	Ι
																by-products and containers		
.25 44.17 – –		1	1		I		300	300	300	300	I	I	2.50	0.00	AN 0	Containers	170,000 t	1
.76 42.53		I	I		1		300	300	300	300	I	I	2.50	0.00	NA (Containers	170,000 t	I

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5.4.2 Controlling the depths

The draft limits for berthing and unberthing at Suape Port are described on item 5.3.9, and are valid for any time of the year.

5.4.3 Maximum dimensions

The maximum ship sizes for berthing at Suape Port are listed below, for each port facility:

Po	ints	Deadweight Tonnage	Length Overall
			(LOA)
		(DWT)	(m)
Tank	Vessel	-	260
Mooring berth	PGL-1 East	45,000	200
	PGL-1 West	45,000	200
	CMU East	80,000	300
	CMU West	25,000	160
	PGL-2 East	90,000	280
	PGL-2 West	90,000	280
	Berth 1 Pl	170,000	300
	Berth 1 Pl	170,000	300
	Berth 3 Pl	170,000	300

PGL – Liquid Bulk Pier CMU – Multiple Use Docks PI – Internal Port

5.5 Environmental Factors

The region where Suape Port is located has relative air humidity of 80% throughout the year, average atmospheric pressure of approximately 1,012 mb, with good weather, and variation of local temperature during the year ranging between 17° C (62.6° F) in June and July and 35° C (95° F) in December and January, recording an annual average of 26° C (78.8° F).

The weather conditions at Suape Port and adjacent areas are good. There is constant rain during the winter.

Other meteorological information about that area is described in the sub-items on the next page:

5.5.1 Prevailing winds

The predominant winds are from east quadrant, and Suape Port is located at the trade winds formation area. Winds of any force tend to create small swells, which develop with the wind intensity, duration and speed, especially the swells coming from the north.

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-SE, 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 July, considered in the region as winter, and the maximum rainfall is 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 Lightning storms

There are no lightning storms at the Suape Port.

5.5.5 Visibility

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

5.5.6 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.

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5.5.7 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 at Suape Port is 1.25 meter, related to Chart 930 DHN.

Further details about the local tide can be found on the Table of Tides DH-29, publication from DHN.

5.5.8 Measurements

Suape Port provides instant information about wind and current intensity and direction. When the berths approach for berthing, this information can be made available via display on the berthing facilities to the on-board representative, except on the Internal Dock.

Description of Port and Terminal

Suape Port has the following Port Facilities for ship berthing:

- a) Internal Port (PI), with three (3) mooring berths (1, 2 and 3);
- b) Multiple Use Dock (CMU), with two (2) mooring berths (East/West);
- c) Liquid Bulk Pier 1 (PGL-1), with two (2) mooring berths (East/West);
- d) Liquid Bulk Pier 2 (PGL-2), with two (2) mooring berths (East/West); and
- e) Tank Vessel, property of Petrobras, anchored at the Port's South Jetty, operating with floating storage of LPG for berthing alongside, for LPG transshipment operations.

6.2 Physical Details of the Berths

Physical details of the Port's mooring berths are described in the tables on sub-items 5.3.9 and 5.4.3.

6.3 Berthing and Mooring Arrangements

Tugs, maximum speed and angle of approach, mooring hooks/bollards, number of lines required for mooring the ships. See table on the next page.

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Arrangements
Mooring ,
g and
Berthing

es	and stern)	Spring line	2		2		2		2		2	
Mooring Lines	(recommended, bow and stern)	Breast line	2		Ι		I		2		2	
	[recomr	Line	2		4		с		m		m	
ring	nts	Hooks	I		Ι		Ι		4		4	
Mooring	Points	Bollards	4		4		4		I		Ι	
ching	(mn	Angle	o the	thority	o the	thority						
Approaching	[Maximum]	Speed	Refer to the	Port Authority	Refer to the	Port Authority						
er and	BP of Tugs	Unberthing	2 tugs from 22 t to 33 t		2 tugs from 22 t to 33 t		2 tugs from 22 t to 33 t		2 tugs from 22 t to 33 t		2 tugs from 22 t a 33 t	
Number and	BP of	Berthing	2 tugs from		2 tugs from							
Requer	Prático para	Manobras	Yes		Yes		Yes		Yes		Yes	
Berth			PGL 1 West		CMU East		CMU West		PGL-2 East		PGL-2 West	

6.4 Berth features for Loading, Discharging and Bunker

The characteristics of the products moved, hoses and arms available, temperature limits, flows, and minimum and maximum discharge pressures are described on the table on the next page.

6.5 Management and Control

Transpetro Control Center at Suape Terminal is located in the internal area of the Terminal, nearly 2 km away from Liquid Bulk Pier – 1. The operator responsible for controlling all operations in Transpetro Terminal, through the supervision system, is located in this Center. There is a room in Liquid Bulk Pier 1 (PGL-1), where Transpetro operators in that area prepare the documentation, communications, monitor the berthing/unberthing, the ship position and track all operations on that Pier.

The own ships track the transshipment operations at PGL-2 and Tank Vessel.

The operations in the Multiple Use Dock are tracked by an operator from Transpetro in the dock.

Communications with the ships are carried out via VHF radios in maritime frequency previously agreed and registered. A secondary means, using land-based VHF radio, is agreed upon if the main system fails.

6.6 Major Risks

The major risk associated with the ship laytime at Suape Port berths is:

→ When unprotected due to absence of ship of equal or superior size on the external berths (east) on both piers and Multiple Use Dock, the ship berthed at the internal berth (west) becomes more vulnerable, due to the position at the berth, the prevailing incidence of strong wind in the east-west direction, and the risk of distancing from the pier fenders.

The risk previously described requires greater attention from the ships' crews, where the mooring lines are concerned.

Pier	Berth	Arm	Product	Diameter	Class	Flow	Pres	Pressure	Temperatura	Pressure	Pressão	
				Rated	Pressure	minimum	maximum normal	normal	máxima	Test	Teste	Chart
						maximum			mínima	Manufacture Maximum	Maximum	Initial
				(lod)	(Ibs)	[m ³ /h]	[kgf/	[kgf/cm ^{2]}	(ງ.)	[kgf/cm ^{2]}	[kgf/cm ²] [kgf/cm ²]	[kgf/cm ²]
PGL-1	West	1A	GLP	8	300	560	23.0	20.0	38/5	34.5	34.5	13.0/5.0
		Hose	GLP	9	300	560	23.0	20.0	38/5	(*)	(*)	13.0/5.0
PGL-1	East	1B	GLP	8	300	560	23.0	20.0	38/5	34.5	34.5	13.0/5.0
		Hose	GLP	9	300	560	23.0	20.0	38/5	(*)	(*)	13.0/5.0
PGL-1	West	ZA	MGO	9	300	560	15.0	15.0	38/5	22.5	22.5	2.0
		Hose	MGO	4	150	560	15.0	15.0	38/5	*	*	7.0
PGL-1	East	2B	MGO	9	300	560	15.0	15.0	38/5	22.5	22.5	7.0
		Hose	MGO	4	150	560	15.0	15.0	38/5	(*)	(*)	7.0
PGL-1	West	ЗA	MF-380	14	150	240/1,250	18.0	13.8	80/65	27.0	2.0	7.0
		Hose	MF-380	8	150	240/1,250	18.0	13.8	80/65	(*)	[*]	7.0
PGL-1	East	3B	MF-380	14	150	240/1,250	18.0	13.8	80/65	27.0	27.0	7.0
		Hose	MF-380	8	150	240/1,250	18.0	13.8	80/65	(*)	(*)	7.0
PGL-1	West	4A	Diesel/Gasoline/	10	150	192/750	9.0	6.2	30/25	13.5	13.5	2.0
			Aviation Gasoline/QAV/QI									
		Hose	Diesel/Gasoline/	8	50	192/750	9.0	6.2	30/25	[*]	(*)	2.0
			Aviation Gasoline/QAV/QI									
(*) Check	on the Insp	ection Certifi	$\left(* ight)$ Check on the Inspection Certificate of each hose to be used.									c ontinue

Berth features for Loading, Discharging and Bunker

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Informações Portuárias

PGL-1 East		Product	Diameter Rated	Class Pressure	Flow minimum	maxii	Pressure num normal	Temperatura máxima	Pressure Test	Pressão Teste	Chart
					maximum				Manufacture Maximum	Maximum	Initial
			(lod)	(Ibs)	(m ³ /h)	[kgf/cm ^{2]}	cm ²]	(ງ.)	[kgf/cm ²] [kgf/cm ²]	[kgf/cm ²]	[kgf/cm ²]
	48	Diesel/Gasoline/	10	150	192/750	0.6	6.2	30/25	13.5	13.5	2.0
		Aviation Gasoline/QAV/QI									
	Hose	Diesel/Gasoline/	ω	150	192/750	9.0	6.2	30/2	*	*	7.0
		Aviation Gasoline/QAV/QI									
PGL-1 West	5Α	Diesel/Gasoline/	10	150	192/750	9.0	6.2	30/25	13.5	13.5	7.0
		Aviation Gasoline/QAV/QI									
	Hose	Diesel/Gasoline/	œ	150	192/750	9.0	6.2	30/25	*	*	2.0
		Gasoline/QAV/QI									
PGL-1 East	58	Diesel/Gasoline/	10	150	192/750	9.0	6.2	30/25	13.5	13.5	7.0
		Aviation Gasoline/QAV/QI									
	Hose	Diesel/Gasoline/	ω	150	192/750	9.0	6.2	30/25	*	*	2.0
		Aviation Gasoline/QAV/QI									
PGL-1 West	БА	Diesel	10	150	750	8.0	2.0	30/25	12.0	12.0	2.0
	Hose	Diesel	ω	150	750	8.0	2.0	30/25	*	*	2.0
PGL-1 East	68	Diesel	10	150	750	8.0	2.0	30/25	12.0	12.0	2.0
	Hose	Diesel	8	150	750	8.0	2.0	30/25	12.0	12.0	2.0
PGL-2 West	Hose	By-products	8	150	1,100	9.0	6.2	30/25	(*)	[*]	2.0
East	Hose	By-products	8	150	1,100	9.0	6.2	30/25	(*)	(*)	2.0
CMU East	Hose	By-products	ω	150	750	9.0	6.2	30/25	*	*	7.0

Berth features for Loading, Discharging and Bunker (continuation)

[*] [*] Check on the Inspection Certificate of each hose to be used.

SUAPE TERMINAL





Procedures

During the ship laytime at the Port, various steps are taken by Transpetro 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 After berthing and safety inspection made by the Safety Inspector (Giaont), based on the checklist from Isgott, the ship will not be authorized by Transpetro Terminal to start its operations in case of pending issues not solved by the crew.

7.1.2 On-board repairs and washing the ship's cargo tank should be carried out preferably in the anchorage area. For making repairs with the ship berthed, a prior authorization from Transpetro Terminal will be necessary, with registration of formal notification to the Harbor Master, if the ship cannot move by its own means.

7.1.3 Ships heading to Transpetro Terminal facilities in Suape must indicate their estimated time of arrival (ETA) 72 and 48 hours in advance, directly to the respective agent. 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 informed is local or UTC.

7.2 Arrival

7.2.1 The port authorities are called by the ships' agents according to the arrival and berthing schedule. Usually, the visit is made after berthing.

7.2.2 Bunkering requests must be forwarded to UN-Bunker from Petrobras via its agent.

7.2.3 The information from the Terminal to the ship, and vice-versa, are described in the appendices "D", "E" and "F", respectively.

7.2.4 Please find below the list of important addresses and telephone numbers at Suape Port:

Receita Federal (Internal Revenue Service)

Rodovia PE-60 km 10, s/n – Suape ZIP Code: 54.500-000 - Ipojuca – PE – Brazil Phone: $(55\ 81)3527-1310 / 3527-1131$

Police Department

Rua Francisco Alves de Souza, 270 – Centro ZIP Code: 54.500-000 – Ipojuca – PE – Brazil Phone: (55 81)3551-1155

Military Police of Cabo

Estrada Pirapane, km 02 – s/n – Centro ZIP Code: 54.500-000 - Cabo - PE - Brazil Phone: (55 81)3521-2101

Hospital Unidade Mista do Cabo Mendes Sampaio

Avenida Presidente Vargas, 864 – Centro ZIP Code: 54.500-000 – Cabo – PE – Brazil Phone: (55 81)3521-0430 / 3521-0355

Pernambuco Harbor Master — Pilot Association

Praça Arthur Oscar, 35 / 12º andar – Recife Antigo ZIP Code: 54.500-000 – Recife – PE – Brazil Phone: (55 81)3424-5010

Capitania dos Portos de Pernambuco

Rua São Jorge, 25 – Recife Antigo ZIP Code: 54.500-000 – Recife – PE – Brazil Phone: (55 81)3424-7111

Agência Nacional de Vigilância Sanitária — Anvisa

Rodovia PE-60, km 10, s/n – Suape ZIP Code: 54.500-000 – Ipojuca – PE – Brazil Phone: (55 81)3551-0706

7.3 Berthing

7.3.1 Ship mooring system

The mooring lines must be looked after constantly so that the ship always remains berthed. All the lines must be kept under adequate tension during the operation, and winches with their brakes on. The use of automatic tensioning winches is not permitted.

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

Mixed mooring lines are those in which the lines performing the same function are of different type, gauge and materials.

The mooring lines must be arranged as symmetrically as possible in relation to the middle of the ship.

The breast lines must be deployed as perpendicularly as possible to the longitudinal axis of the ship, and passed far forward and aft as possible.

Spring lines must be set up in the most parallel position possible to the longitudinal axis of the ship.

When tails are used on the wire lines, the tails shall be of the same type, with gauge 25% greater than the minimum breaking load of the wire, same material and length.

The horizontal angle of bow and stern lines relative to a breast line perpendicular to the ship's longitudinal axis should not exceed 45°.

7.3.2 Auxiliary mooring service.

Transpetro Terminal in Suape has a team for mooring and casting off works for ships that operate for the Terminal. The mooring of propane carriers on the tank vessel (floating storage) is usually executed by the ship crew itself.

7.3.2 Access between ship and land

The gangway ladder or ship's wharf ladder must be used. At disembarking, the crew members must wear closed leather shoes, long pants, sleeved shirts and circulate only by the area marked up to the Port's surveillance station, where there will be a vehicle to be requested by the ship agent, to take them to the exit gateway.

7.4 Before Transferring the Cargo

7.4.1 The loading arms and hoses are grounded individually.

7.4.2 The resources required for the connection are agreed to in the first contact of the ship with Terminal, as per the appendices "D", "E" and "F".

The ship must inform the loading/discharge manifold diameters to enable the cargo loading arms or hoses from the Terminal to be connected.

After connecting the cargo loading arms or hoses, they will be tested for tightness, using the static pressure of Terminal column for this purpose.

One on-board representative must accompany the entire operation, and must be near the ship's load manifold.

The ship shall have one inspector on board 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 also by inspectors in import operations. The material used must be duly grounded, and the measuring instruments must be explosion-proof. The measurement equipment shall have valid certifications of gauging.

7.4.4 The operation can only start after the Notice of Readiness and the Initial Chart have been filled in by shore and onboard representatives.

7.4.5 The Ship/Shore Safety Checklist. (Appendix A of "Isgott") is checked and filled out by the Safety Inspector (Giaont) during the initial release of the ship.

7.4.6 Boiler pipes should not be cleaned while the ship is berthed. Precautions for preventing the escape of sparks through the smokestack must be taken. The non-compliance with this regulation will result in one or more of the sanctions below:

- \rightarrow Immediate interruption of the operations;
- \rightarrow Fines by the competent authorities;
- \rightarrow Ship will be obliged to unberth from the pier;
- \rightarrow Ship owners will be informed about the infraction;
- → The ship will be held responsible for the fines applied, demurrage and all other related expenses resulting from this fact.

7.4.7 The prohibition on non-authorized small boats remaining alongside or near berthed ships shall be strictly observed. Only the authorized vessels 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.

7.4.8 The berthed ships should not run their propeller(s) while connected to the loading arms. The jacking gear may be used, once the Terminal operator 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 onboard and onshore representatives at the ship's manifold, hour by hour. The Terminal controls the internal pressure variables via centralized supervision 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 in the operating conditions must be communicated and documented between the parties. It is expressly forbidden to close valves that may cause counter-pressure in the system during the operation.

7.5.1.1 In operations simultaneous with other terminals installed at Suape Port, Transpetro Terminal tracks and controls the differences of time flows and volumes accumulated, discharged by the ships and received by the terminals. The operations must be interrupted when they exceed the difference limits pre-established for each operation.

7.5.2 In discharges of LPG to the Terminal, the minimum temperature of +5° C must be registered and verified. After the discharge of LPG, the displacement of liquid LPG must be made by the ship, from the arm or hose stretch, between the ship manifold and the terminal facilities, to the first blocking valve, for disconnection.

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 Suape Terminal has neither system nor storage for receiving Slop from Ships.

7.5.5 The COW operation is not accepted at Suape Port.

7.5.6 Não poderão ser efetuados reparos ou trabalhos de manutenção de qualquer natureza, que envolvam ou venham a envolver risco de centelhas ou outros meios de ignição, enquanto o navio estiver atracado aos píeres e cais do porto. Em casos extremos, todas as normas de segurança devem ser observadas e atendidas. Reparos que compreendam as instalações dos píeres ou impliquem alguma restrição do navio durante a estadia têm de ser previamente autorizados pelo Terminal e pelo navio.

7.5.6 No repairs or maintenance work involving risk of sparks or other forms of ignition may be carried out while the ship is berthed on the Port piers and dock. In extreme cases, all the safety rules shall be complied with and fulfilled. Repairs involving the pier facilities, or that imply any restriction on the ship during the laytime, must have prior authorization from the Terminal and from the ship.

7.5.7 The intermediate inspections, according to appendix A of the "Isgott", will be performed by GIANT during the ship operation every six (6) hours.

7.5.8 Loading or discharging must be interrupted in any situation that might offer risk, either to the ship or the Terminal.

The operations may be temporarily suspended during lightning storms, thunderstorms and/or squalls.

The operating personnel at Transpetro 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, jointly notifying Transpetro Terminal.

7.5.9 In any emergency situation, Transpetro Terminal will interrupt the on-going operations, so that all available resources are focused on mitigating the disaster, immediately informing the ship. The actions and contacts for every type of emergency are described in the Terminal's Individual Emergency Plan – IEP and the key telephone numbers are listed in section 9.

7.6 Cargo Measurement and Documentation

7.6.1 After finishing the operation, the loading arms or loading/discharge hoses used must be drained. The Terminal operators will arrange for the used arms or hoses to be drained to a closed system on the pier. The ship representative must see to the drainage of the onboard section.

7.6.2 Final onboard measurements are executed by the ship's personnel, and inspected by the Terminal's representatives and also by inspectors, in case of import. 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 channel limits and hazards, listed in the section 5.3 and its sub-items, must be observed.

7.7.2 The pilot usually disembarks at the same embarking point described in section 5.3.5, where the pilotage boat will be waiting for him.



Port and Anchorage Area Organization

8.1 Port Control or VTS

This section does not apply to the Suape Terminal.

8.2 Maritime Authority

8.2.1 The maritime authority the Terminal is subordinated to is the Harbor Master of the State of Pernambuco.

8.2.2 The Naval Inspection Division of the Harbor Master of the State of Pernambuco determines that visit from authorities is made after the ship berths on the piers and docks of Suape Port.

8.2.3 The official Port limits are located, according to section 5.3.4., between latitudes $08^{\circ} 22' 0"$ S and $08^{\circ} 25' 0"$ S, the breakwater and longitude $34^{\circ} 55' 0"$ W (Nautical Chart 906-DHN).

8.2.4 The Harbor Master is the maritime authority within the Suape Port limits, and it is responsible for determining the actions and charge the people liable for any incident within the Port limits.

8.3 Pilotage

8.3.1 The pilotage is mandatory for all ship maneuvers as from the pilot's point of embarkation (section 5.3.5).

8.3.2 The Pilotage organization operating at Suape Port is located at this address:

Pernambuco Pilots Empresa de Praticagem S/C Ltda. Praça Arthur Oscar, 35 / 12º andar – Recife Antigo ZIP Code: 50030-460 – Recife – PE – Brazil Phone/Fax: (55 81)3424-5010

8.3.3 For all the situations, the pilotage service is called into action by the ship's agent. In case of emergencies, and depending on the availability, the pilot will embark on the ship in at least one (1) hour.

8.4 Tugs and other Maritime Services

Under regular operational conditions, only two (2) tugs are necessary for berthing and unberthing on the piers, Multiple Use Dock, Internal Port and floating storage. Large propane carriers, in operations of berthing and unberthing alongside the tank vessel (floating storage), can only be moved with the help of 3 (three) tugs, according to determination from the port authority

There will always be three (3) tugs permanently parked at the Port, twenty-four (24) hours a day. If requested beforehand, another tug can be sent to Recife Port.

Name	LOA	GRT	BHP	Static Traction	Approval by
	(m)			(t)	Transpetro
Signus	24.30	184.56	1,840	22	Yes
Phenix	30.90	267.00	2,170	33	Yes
Lagoa Capixaba	31.00	265.00	2,100	33	Yes

8.4.1 Other relevant maritime services from the Port:

Support boats: The support boats for bunkering general supplies, deck, machines and removing garbage are called via ship agent. The garbage removal is linked to prior authorization from the sanitary inspection.

8.5 Other Oil By-product Terminals

In addition to Transpetro Terminal, other Terminals from third parties operate at Suape Port, such as: Temape – Terminais Marítimos de Pernambuco; Pandenor – Importação e Exportação Ltda; Teape – Pool do Sindicom, and Tequimar – Terminal Químico de Aratu.

8.6 Other Key Users

The Terminals mentioned on item 8.5 share the Suape Port facilities with Transpetro Terminal.





9.1 **Emergency Contacts**

The table below indicates the essential contacts, with telephone number, fax number, and Radio Channels/Frequencies:

Organization	Operation Times	Telephone	Fax	Cellular	V	HF/UHF
		(55 81)	(55 81)	(55 81)	Call	Conversation
Suape Port	24 hours	3527-5000	3527-1264	9973-0623	-	-
		3527-1280		9966-2804		
Harbor	24 hours	3424-7111	3424-7754	9966-804	16	-
Master						
Tugs	24 hours	3424-1609	3419-1335	9126-2704	16	13
Pilots	6 AM to 18 PM	3424-5010	3424-5010	9109-3118	16	13
Terminal	24 hours	3527-6321	3527-6029	-	16	9/6
control room						
Terminal	24 hours	3527-6323	_	_	16	9/6
control room						
the Pier						

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continues

Organization	Operation Times	Telephone	Fax	Cellular	VHF/UHF	
		(55 81)	(55 81)	(55 81)	Call	Conversation
Terminal	7h20 AM	3527-6330	3527-6029	9967-0101	-	_
Coordination	to 16h20 PM					
Nordeste	7h20 AM	3527-6201	3527-1051	9971-4675	-	_
Management	to 16h20 PM					
Fire Department	24 hours	3476-1564	3476-1818	I	-	_
Civil Defense	24 hours	199	_	I	-	_
Ipojuca	8 AM	3521-6254	-	-	-	_
City Hall	to 17 PM					
CPRH	24 hours	3441-5877	3441-6088	_	_	_
Ibama	24 horas	3441-5033	3441-5057	_	_	_

9.2 Environmentally Sensitive Areas

In the IEP – Individual Emergency Plan, and the SIE – Computerized Emergency System, the areas most sensitive to environmental impact are listed by sheets and on electronic media, respectively, with environmental sensitivity maps, illustrating, according to the area selected, the points subject to greater impact in emergency cases.

9.3 General Description of the Organization for Combating Emergencies

The responsibilities for dealing with possible emergencies involving vessels arriving at the Terminal are defined on the table below:

Incident type	Organization		Other organizations involved						
	in charge								
Collision in	Ship and	Civil	Port	Transpetro	-	-			
the channel	Harbor Master	Defense	Authority						
Vessel running	Ship and	Civil	Port	Transpetro	CPRH	Ibama/ANP			
aground	Harbor Master	Defense	Authority						
Collision at	Ship and	Transpetro	Port	Civil	CPRH	Ibama/ANP			
the berths	Harbor Master		Authority	Defense					
Vessel	Harbor Master	Civil	Port	Fire	Transpetro	CPRH/Ibama/ANP			
sinking		Defense	Authority	Department					
Fire	Ship and	Transpetro	Port	Fire	Civil	CPRH/Ibama/ANP			
Onboard	Harbor Master		Authority	Department	Defense				
Fire	Transpetro	Fire	Port	Civil	Harbor	CPRH/Ibama/ANP			
in the Berths		Department	Authority	Defense	Master				
Pollution	Transpetro	Harbor	Port	CPRH	Ibama	ANP			
	or Ship	Master	Authority						

9.4 Individual Emergency Plan (IEP)

9.4.1 The IEP (Individual Emergency Plan) of the Terminal has the purpose of determining actions for fighting emergency situations during operations with Transpetro Terminal. The IEP is available in all the operational areas, affixed on notice boards located at the entrance to the operation rooms, maintenance and administrative buildings. The Terminal operation activity is responsible for its update.

9.4.2 Berthed ships must maintain their emergency tow ropes fast to the onboard bollards and hanging down to the waterline during the entire operation, by the bow and quarter on the side opposite to the mooring side.

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 (sawdust, rags, shovels, buckets, squeegees, transfer pumps, etc.) must be kept for use in case of an oil spillage. Supplementary precautions must be adopted aimed at preventing seawater pollution by oil.

The Terminal has Emergency Response Centers (CRE) with modern equipment and various facilities for use in accidental pollution. Intensive training sessions are held periodically to qualify the Terminal employees to act in compliance with its IEP (Individual Emergency Plan). Located at strategic points, they enable quick action to combat emergencies. Floating booms, oil collectors and other equipment and materials required for the house are stored in the CREs. The support vessels and collector vessel are berthed on the Multiple Use Dock, in permanent state of readiness.

Two Catamaran vessels, berthed on the Multiple Use Dock, store three hundred and fifty (350) meters of floating booms for immediate release at the sea in case of sea pollution during operations with the ships. Other four (4) smaller and faster vessels will also be close by, for inspections and to help launch the barriers.

9.4.3 The Terminal has an ambulance available, which is equipped for first-aid assistance. A nurse works on a rotary basis during those periods with the greatest concentration of people due to maintenance and work services. The most severe cases or out of the administrative work time will be sent to the hospital units listed at the IEP – Individual Emergency Plan.

9.5 Public Resources for Combating Emergencies

At Suape Port, only Transpetro, via Terminal, has resources that can be used to mitigate sea pollution events. For other emergencies, the public organizations offer resources they are destined to.

9.5.1 Local emergency services

The Port Authority, Maritime Authority, Fire Department and Civil Defense have the resources they are targeted to and are called according to the table on section 9.1.

9.5.2 Mutual assistance plans

The institutions listed below participate on the PAM (Mutual Assistance Plan):

- → Petrobras Transporte S.A. Transpetro
- → Minasgas S.A. Indústria e Comércio
- \rightarrow Bahiana Distribuidora de Gás Ltda.
- → Copagaz Distribuidora de Gás Ltda.
- \rightarrow Agip do Brasil S.A.
- → NGB Nacional Gás Butano Distribuidora Ltda.
- \rightarrow Shell Brasil S.A.
- \rightarrow Texaco Brasil S.A.
- → Petrobras Distribuidora S.A. BR
- → Companhia Brasileira de Petróleo Ipiranga
- → Esso Brasileiro do Petróleo S.A.
- → Temape Terminais Marítimos de Pernambuco
- → Pandenor Importações e Exportações Ltda.
- → Tequimar Terminal Químico de Aratu
- → Tecon Terminal de Contêineres

9.6 Combating Oil Spillage

The sub-items below describe the resources available by Transpetro Terminal for fighting against pollution

9.6.1 Combat capacity of the Terminal

The resources available at the Terminal for fighting oil spill situations are listed in the IEP – Individual Emergency Plan and in the SIE – Computerized Emergency System.

9.6.2 Combat capacity of the Environment Agency

The Environment Agency of Pernambuco – CPRH does not have resources for combating oil spillage in the sea.

9.6.3 Resources available at the Mutual Assistance Plan

The Terminals operating at Suape Port participate on the Mutual Assistance Plan by providing human resources from their brigades.

9.6.4 Combating medium-size oil spillage

In these cases, resources from the PAM - Mutual Assistance Plan and/or from the regional units of Transpetro / Petrobras can be requested. These resources, their state of readiness and how they are brought into play, are described in the IEP - Individual Emergency Plan.

9.6.5 Combating large-scale oil spillage

In such events, national resources from Transpetro/Petrobras will be requested. These resources, their state of readiness and how they are brought into play, are described in the IEP – Individual Emergency Plan.

9.7 Combating a Large Scale Incident

The IEP – Individual Emergency Plan lists the actions and people responsible for each type of expected event that can occur in the area covered by the Terminal, involving vessels or 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 81)	(55 81)	Call	Conversation
Píer operator room	Operator	3527-6323	-	16	9/6
Control room	Supervisor	3527-6321	3527-6029	16	9/6
Security SMS	Technician	3527-6291	3527-6147	14	14

10.2 Port Services

Organization	Contact	Telephone	Fax	E-mail	VHF/UH	F Channels
		(55 81)	(55 81)		Call	Conversation
Harbor Master	Official	3424-7111	3424-7754	-	16	-
	on duty					
Pilot	Pilot	3424-5010	3424-5010	pilot@terrasystem.com.br	16	13
Association						
Tugs	Assistant	3424-1609	3419-1335	_	16	13

10.3 Selected Navigation Agents and Suppliers

Company	Business	Telephone	Fax	E-mail	VHF/UHF Channels	
		(55 81)	(55 81)		Call	Conversation
Ed. Batista	Agent	3224-4144	3224-2032	edbatista@edbatista.com.br	16	8
Compartilhado	Agent	3527-6264	3527-6265	agente@suape.com.br	_	-

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 at the Port for combating emergencies are listed in section 9.1.



11.1 Provision of general supplies, 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 Recife. The times and conditions for delivery must be determined in advance with Transpetro, due to operational and Port safety aspects.

11.2 Compensation for needles and radiogoniometer

There are no resources in Suape for performing these services.

11.3 Oil Inspectors

The following companies, among others, may be contracted via agent: SGS, Calleb Brett do Brasil, Chas. Martin & Co, E. W. Saybolt, etc.

11.4 Classification Entities

There are no offices of classification entities at the Port. However, requests for inspection can be made via agent to the Entities Lloyd's Register of Shipping, Bureau Veritas and Germanisher Lloyd, which have representation in Rio de Janeiro or in Santos. SUAPE TERMINAL

11.5 Consulates

Most maritime nations have consulate representation in the city of Recife.

11.6 Deratting

Deratting services can be obtained in the city of Recife, if requested to the agent in advance.

11.7 Medical and Dental Assistance

Medical and dental treatments can be obtained in Recife, a city with excellent infrastructure conditions in this aspect. First aid procedures and minor medical emergencies in business hours can be performed by the medical team of Transpetro or, in case of need, in the neighbor city of Cabo de Santo Agostinho. The ship agent must be contacted.

11.8 Laundry

Laundry services are only possible in the city of Recife, where there is availability twenty-four (24) hours a day. The ship agent must be contacted in major advance.

11.9 Post Office Service

There is a Post Office service station in the neighbor city of Cabo de Santo Agostinho, and it must be requested to the agent.

11.10 Exchange

The exchange of foreign currency by local currency can be made via Agent, when requested beforehand.

11.11 Laboratory

Transpetro Terminal has a complete laboratory, qualified for conducing analyses in samples from oil by-products and in carburetant ethyl alcohol.

11.12 Fuel Bunkering

The Terminal has conditions for Bunkering (MGO – Marine Gas Oil and MF- Marine Fuel). The requests must be made to the bunker unit of Petrobras via ship agent.

Bunkering stations available: Liquid Bulk Pier -1 (Berths "East" and "West") and Multiple Use Dock.

11.13 Lubricating Oil

The requests for maritime lubricants must be sent with major advance via agents, and are subject to confirmation.

11.14 Water Supply

The Terminal has conditions of supplying potable water without restrictions at Liquid Bulk Pier -1 ("east" and "west") at maximum flow of 70 m³/h.

11.15 Barges

This service is not available at Suape Port

11.16 Ballast and Deballast Facilities

The Brazilian laws are very strict in relation to pollution. Heavy fines will be applied to ships that break these laws. There are no facilities for receiving dirty ballast at Transpetro Terminal nor at Suape Port.

11.17 Requirements to Ships when Arriving at the Port

11.17.1 The following information is required by Transpetro to the Ship Captains at the arrival:

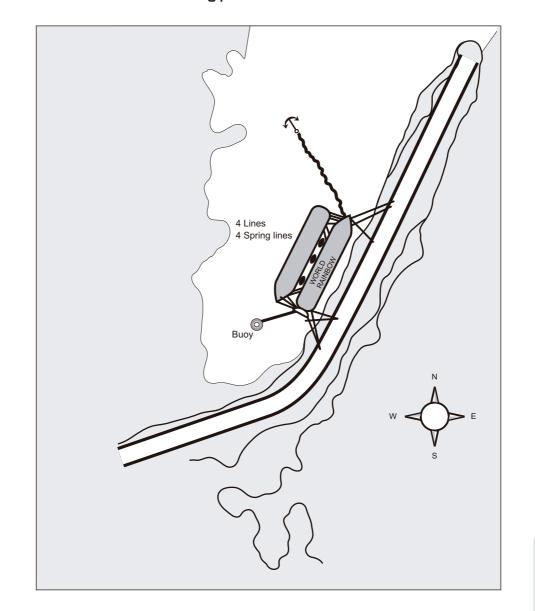
- \rightarrow Name and indication of the ship radio;
- \rightarrow Flag of origin;
- \rightarrow Nature of cargo;
- Distribution of cargo on board, with indication of property, which will be discharged and which will remain on board;
- \rightarrow If the vessel has inert gas system, inform if it is in perfect operational conditions;
- → Any defect on the motor propeller system, other equipment or wreck that may affect the safety of maneuver, of other vessels or present risk to the environment, people or properties;
- \rightarrow Draft on arrival and expected draft on departure;
- \rightarrow Any repair that may delay the start of loading and/or discharging;
- → Details of the onboard manifold, including types of flanges, valves, diameter and connection equipment to be used;
- \rightarrow Maximum operation flows for the ship, and,
- \rightarrow Time for issuing the Notice of Readiness.

11.17.2 The ships must be aware of the operational procedures listed below:

- → A minimum number of crew members capable of executing safely the loading and discharging operations and of acting in case of emergencies, including unberthing the ship if necessary, must be kept on board of the ship.
- → Radio transmission equipment and radars must not be used while the ship is berthed on the pier, except for portable equipment for communication with the shore personnel.
- → All cargo tank openings must be kept safely closed during the loading and ballast operations, except if one of them needs to be kept opened due to operational reasons.
- → The ullage ports must also be kept closed. If they need to be kept opened, due to operational reasons, they must be protected by flame-retardant screens.
- → The inlets of central air conditioning and mechanical ventilation systems must be adjusted to prevent the entrance of gases from the external environment, if possible, kept through air recirculation inside closed environments.
- → Hydraulic hammers that may cause vibrations to the loading arms and terminal lines must be avoided.
- → In case of storms with lightning, the discharge will be interrupted, whether the ship is rendered inert or not.
- → During the loading and discharging operations, one must always pay attention to prevent oil from escaping through the sea valves.
- \rightarrow The deck scuppers must be kept safely plugged and sealed.
- \rightarrow The operation for degassing tanks is not permitted while the ship remains berthed.

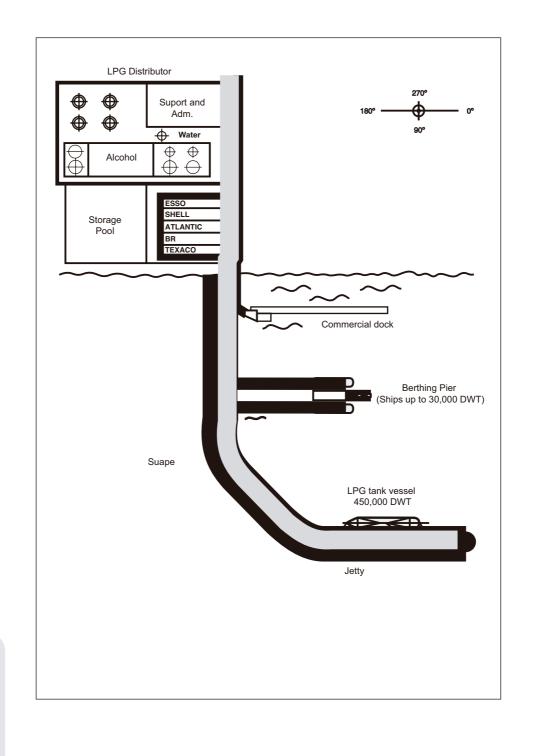
APPENDICES

A – Tank vessel – Mooring plan recommended.



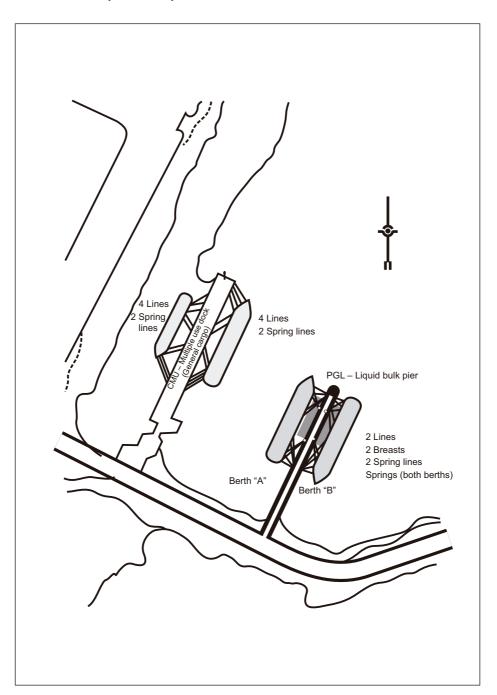
SUAPE TERMINAL

B - Plant for location of terminals and port facilities.

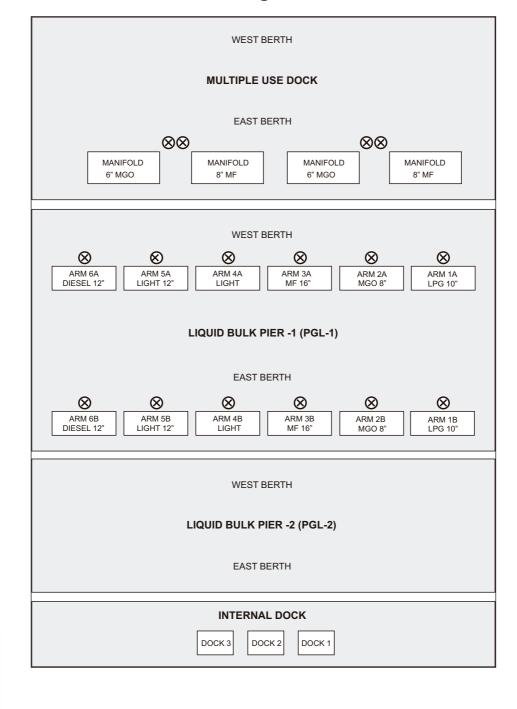


PORT INFORMATION

C – Mooring plan recommended for the multiple use dock and liquid bulk pier.



D – Diagram with the loading/discharging connections, dimensions and sizes of flanges



PORT INFORMATION

E – Essential Terminal information for the ships

Ship/Terminal Information Exchange

Item 3,1,4 of Isgott (Information from the Terminal to the ship before arrival)

To the Ship:								
From the Marine Termi	nal :							
Mooring berth:	Latitude:		Longitude:					
	Low tide draft:	(m)	Water salinity	J: (mg/l)				
Berthing board	Port side:	Starboard:	Ассо	rding to the tide:				
	Maximum speed whe	en berthing:			(m/s)			
	Maximum angle whe	n berthing:			(°)			
	Speed/angle indicate	or position:						
Tugs available for	Towing lines used in	the maneuvers:						
maneuvering	Auxiliary vessels ava	ailable for maneuve	rs:					
	Call the ship's agend	:y						
Mooring	Number of mooring lines required:							
	Line: Breast line:							
	Spring line: Material:							
Terminal equipment av	ailable for mooring							
	Bollards:		Hooks:					
	Additional mooring d	letails:						
Access ladder	Terminal:		Ship:					
Connection details	Hoses: Arms:							
	Diameter:		Pressure Clas	SS:				
Operating	Product:	Loading 1º:	m ³	Discharging 1º:	m ³			
sequence	Product:	Loading 2°:	m ³	Discharging 2º:	m ³			
	Product:	Loading 3°:	m ³	Discharging 3º:	m ³			
	Product:	Loading 4º:	m ³	Discharging 4º:	m ³			
	Has the sequence be	een changed?	Yes:	No:				
On-board	Ship without inert ga	s system: Follow the	e recommenda	ations in item 7,2,2 of	f Isgott,			
tank measurement	Ship with inert gas s	ystem: Follow the r	ecommendati	ons in item 7,2,3 of I	sgott,			
Necessidade de tanque	es desgaseificados		Yes:	No:				
Berthed COW	Yes: Follow the recor	nmendations in iter	n 9,4 of Isgott	,				
operations permitted?	No:							
Tank washing permitted	Yes: Follow the recor	nmendations in iter	n 9,4 of Isgott	- ,				
for berthed ships?	No:							

Environmental wind	Speed:	knots	knots	knots
condition limits	Action:	Interruption	Disconnection	Unberthing
Environmental wave	Height:	> m	> m	> m
condition limits	Action:	Interruption	Disconnection	Unberthing
Operational limits	Variable:	Pressure >	Flow >	Temperature >
(Product 1)	Action:	Interruption	Interruption	Interruption
Operational limits	Variable:	Pressure >	Flow >	Temperature >
(Product 2)	Action:	Interruption	Interruption	Interruption
Possibility of receiving	g dirty ballast o	r slop?		
	Yes	Minimum fluidity	Maximum volume	
	No	0	m ³	
The product must be fre	ee of chlorinate	d or organo-chlorinated	l, or oxygenated solvents	(ethanol, methanol
and MTBE), machine re	sidues contami	nated with lubricant oil	and metals, inorganic/or	ganic chloride

Responsible for the information:

$\mathsf{F}-\mathsf{Essential}$ Information from the Ship to the Terminal

	Port and 1				
	essel Infor	1			
Ship name:				of Arrival (ETA):	
Flag:		Last por			
Captain's name:		Next por	rt:		
Ship owners:		Agents:			
Does the ship have an inert gas su	ystem?				
Oxygen content:					
Length overall (LOA):		Draft at			
Length between perpendiculars:				during transfer:	
Beam:		Draft wh			
Number of engines:		Transvei			
Number of propellers:		-		nd power):	
		Stern (n	umber a	nd power):	
Tugs, minimum required:					
No. and static traction (bollard pul	ll):				
Number and size of manifold flang	ges:	Distances:			
Cargo:		Bow to manifold:			
Ballast:	Hull to n	nanifold:			
Bunkers:		Manifold height to main deck:			
Loading	g schedule	(fill whe	n applic	able):	
Naming:					
Type and quantity: m ³ Ty	ype and qua	ntity:	m ³	Type and quantity:	m ³
Ballast discharge at sea:					
Quantity: m ³		Estimate	ed time:		
Slop/ballast discharge ashore:					
Quantity: m ³		Estimate	ed time:		
Dischargi	ng schedu	le (fill wh	nen app	licable):	
Type and quantity: m ³ Ty	ype and qua	ntity:	m ³	Type and quantity:	m ³
Ballast: Vo	olume:	m ³		Time:	
	Bunker	s reques	ted:		
		-			
Type and quantity:		Type and	d quanti	ty:	

Please, send via fax or e-mail to the Terminal Supervisor.

${\rm G}-{\rm Information}$ to be exchanged before cargo transfer

	In	formation betwo	een ship and te	rminal		
Ship name:			Mooring berth:			
Voyage number:						
		Contra	actual data			
Number of on-bo	ard pump	5:				
Volumetric capac	ity 98%:				m ³	
Guaranteed disch	narge pres	sure (for discharge	e operation):		kgf/cm ²	
Simultaneous bal	last/deba	llast capacity with	loading/dischargii	ng:		
		Voyage	information			
Freighting type (VCP,TCP,CC	IA, etc.):				
Voyage type (cab	otage/lon	g run):				
Origin and destin						
Did the ship requ						
Communication r	nean betv	veen ship and Term				
			nformation			
Product:	Quar	itity:	Temperature:		API:	
			SLOP		1	
Quantity:		Temperature:			API:	
Fluidity:	•					
		Contaminants:				
		B	allast			
Dirty Ballast:				Segregated	d Ballast:	
Quantity:	Temp	erature:		Quantity:		
			n information			
For discharging:		ship perform specia	al operation			
		ertization, etc.)?				
		ed time for the spec	cial operation:			
E. I. I	-	l pump downtime:				
For loading:		notice time for TOI	P:			
		ing TOP period:	l			
		of ballast to be dis	0			
And the ne we strict		n flow allowed for o				
		erning electrostatio	<u> </u>			
		ing valves with au litions for the ope		discharging	nor product	
Ship Ship	Pressure		Terminal	Pressure:		
Suh	Flow:	. .	ICITIIII	Flow:		
		ture Max ·			· Max ·	
	rempera	ture: Max.: Min.:		Temperature	Min.:	
		IMIT I.:			IMIII1.:	

continue

Operation sequence per product

Quantity to be loaded/discharged:

Origin/destination tanks:

Onboard/onshore lines:

Loading arms/hoses used:

Operation forecasted to start/end:

Complementary operating and safety information