PORT INFORMATION

Terminal Information Booklet

Marine Terminal of **SÃO LUIS / TASELIS**

TA- SÃO LUIS

Full Terminal Address: Porto do Itaqui s/n – Itaqui
65085-370 – São Luis – MA – Brazil
Telephones: Tel: (+55 98) 3217-6501 FAX (+55 98) 3217-6502
E-mail: optsl@petrobras.com.br

Contacts

Organization	Time	Telephone / Fax	Cellphone	VHF/ UHF Call Channel	VHF / UHF Talk Channel
Management – Transpetro – TA SLUIS	24/7	(+55 98) 3217-6501	(+55 98) 984784958	-	-
Control Room	24/7	(+55 98) 3217-6507	Supervisor 991126584	16 & 06	06
TA SLUIS Programming	07:30 a.m. to 04:30 p.m. Monday to Friday	(+55 98) 3217-6502	(+55 98) 991148158	-	-
CPMA - Port Authority	24/7	(+55 98) 2101-0107	-	16	-
City Government of São Luis	08:00 a.m. to 06:00 p.m.	(+55 98) 3212-8000	www.prefeituradesaoluis.org (website)	-	-
EMAP – CCO – Control Center	24/7	(+55 98) 3216-6032	(+55 98) 984574841	16	-

INTRODUÇÃO

This Port Information has been prepared by Petrobras Transportes S.A. **(TRANSPETRO)** which operates the **TASELIS** Marine Terminal in the port of **SÃO LUIS**.

It contains essential information for ships seeking to operate at the Terminal and is distributed to the port's stakeholders, national and local authorities, and the various branches of the company.

This Port Information has versions in Portuguese and English.

The information contained in this publication is intended to supplement, never replace or alter any type of official, national or international legislation, instructions, guidelines, or publications. Therefore, anything that contradicts any of the aforementioned documents should not be taken into consideration.

The Terminal reserves the right to change any operational information presented herein without prior notice.

TRANSPETRO will analyze any suggestions, recommendations, or corrections to the subjects covered herein with a view to improving the information presented. If you find incorrect information that needs to be updated, please contact us:

Marine Terminal of SÃO LUIS – TA- SELIS
Porto de Itaqui, s/n - Itaqui
65085-370 – São Luis – MA – Brazil

Petrobras Transportes S/A - TRANSPETRO

Av. Presidente Vargas, nº 328, Centro, CEP 20091-060, Rio de Janeiro – RJ – Brazil Communication Office

Telephones +55 (21) 3211-9039 and +55 (21) 3211-9000.

The latest version of this Port Information and the Port Information of other **Transpetro** Terminals can be obtained at the following address:

https://transpetro.com.br/transpetro-institucional/nossas-atividades/dutos-e-terminais/informacoes-portuarias.htm

SUMMARY

REVISIONS

Revision	Alterations	Date	Preparation	Approval
V.0	Initial Version	12/May/2025	Nautical Advisor CMT Newton de Oliveira Camara - M272 Nautical Inspector Diana Paula Alves da Silva Pinto - M426 Deck Officer Jacqueline Ferreira Vieira – C3JG Ives Marcelo Xavier – T2YN	Nautical Advisor CMT Newton de Oliveira Camara - M272

1. Emergency Procedures

1.1 GENERAL

EMERGENCY CONTACTS

Organization	Operating Hours	Telephone	Cellphone	VHF / UHF Call	VHF / UHF Talk
APEM - Pilotage Association of Maranhão	24/7	(+55 98) 3223-8586 (+55 98) 3226-8587	(+55 98) 981238745 (+55 98) 981110356	16	14
Emergency Management Agency	24 hours	(+55 98) 3212-1517	193	-	-
Federal Revenue Office	08:00 a.m. to 05:00 p.m.	(+55 98) 3231-6001	-	-	-
Military Police (GTA)	24 hours	(+55 98) 3235-2159 (+55 98) 3235-8113	193 (+55 98) 9112-5510	-	-
Firefighters	24 hours	(+55 98) 3228-2154	193	-	-
SEMA	24 hours	(+55 98) 3218-8745	-	-	-
IBAMA	24 hours	(+55 98) 3231-3207 (+55 98) 3231-3070 (+55 98) 3231-3010	(+55 98) 9991-1296 (+55 98) 9971-5509 (+55 98) 9991-2543	-	-

ENVIRONMENTALLY SENSITIVE AREAS

We can define vulnerable areas as areas linked to various economic activities, namely ports, fishing, and the naval industry, as well as places of historical and tourist importance, which could be affected in the event of a spill of hydrocarbons and other products that are dangerous for the marine environment.

The following are vulnerable areas:

· The access channel to the Port of Itaqui;
· The entire area of Oil Piers 106 and 108;
. The entire dock area of Berths 100, 101, 102, 103, 104, 105;
· Fishing Port of Porto Grande;

- Port of Alumar

Sensitive Areas

In the area of influence of the Port of Itaqui, sensitive areas are considered to be areas of great biological activity or of special occurrence of sea birds, leisure beaches, marinas, and to which priority should be given in terms of protection and cleaning, in the event of a spill of hydrocarbons and other products that are dangerous for the marine environment.

The following areas are considered sensitive according to the region's Sensitivity Map:

· Mangrove area adjacent to the Port of Itaqui;
· “Estreito dos Coqueiros” and “Rio dos Cachorros”.

Environmental Sensitivity Map

In the PCL, the areas most sensitive to environmental impact are listed in sheets (Maps, Drawings, and Annexes) that contain environmental sensitivity maps, highlighting, according to the selected area, the points that are subject to the greatest impact when this type of event occurs in the São Marcos Bay.

GENERAL DESCRIPTION OF THE EMERGENCY RESPONSE ORGANIZATION

Type of Incident	Responsible Organization	Other Organizations Involved			
Collision in the Channel	Port Authority	Emergency Management Agency	TRANSPETRO		
Vessel Running Aground	Port Authority	Emergency Management Agency	TRANSPETRO		
Collision in the Berth	Port Authority	TRANSPETRO	Emergency Management Agency	EMAP	
Vessel Sinking	Port Authority	Emergency Management Agency	Fire Department	TRANSPETRO	
Vessel on Fire	Vessel	TRANSPETRO	Fire Department	Emergency Management Agency	Port Authority
Fire in the Berth	TRANSPETRO	Fire Department	Emergency Management Agency	Port Authority	EMAP
Pollution	TRANSPETRO or Vessel	Port Authority	SEMA	IBAMA	EMAP

EMERGENCY PLANS

PEI (Individual Emergency Plan)

This is the plan of TA SLUIS for combating emergencies in all its facilities. It is available in all operational areas, on boards located at the entrances of operating rooms, maintenance rooms, and administrative buildings. The local SMS (health, environment, and security activity) is responsible for updating it.

The terminal has an **Emergency Response Center (CRE)** that is equipped with modern equipment and various facilities for first response in the event of accidental pollution. Intensive training sessions are carried out periodically, which enable terminal employees to act in accordance with the PCL (Local Contingency Plan). Located at a strategic point, it allows for rapid action in combating emergencies. Containment booms, oil skimmers, and other equipment and materials necessary for the work are stored in its warehouse. The work vessels, support vessels, tanker, and oil skimmer boat are stowed on road trailers in a permanent state of readiness next to the Berth 101 ramp.

INTEGRATION WITH OTHER PLANS

- **Petrobras Corporate Emergency Plan (PCCOR)**
- **Mutual Aid Plan (PAM) of the Port of Itaqui**

EMERGENCY COMMUNICATION

In any emergency, the Terminal may interrupt operations so that all resources can be focused on mitigating the loss.

The actions and contacts for each type of emergency are described in the Terminal's PEI and in the Communication flow as explained in the Flowchart delivered to the Captain at the time of the initial release of the vessels.

SEE APPENDIX A: Communication in Emergencies

PUBLIC RESOURCES FOR FIGHTING THE EMERGENCY

In the port of Itaqui, only TRANSPETRO, through the Terminal of São Luis and other operational units, contacted through the local contingency plan, has resources that can be used to mitigate marine pollution events. For other emergencies, public organizations offer the resources for which they are intended.

LOCAL EMERGENCY SERVICES

The fire department, emergency management agency, police, and hospital unit of São Luis have the resources for which they are intended and are contacted according to the table in section 9.1.

The Established Port of Itaqui has an Ambulance equipped to provide first aid in the Primary Area of the Port (area located near the pier). A Nursing Technician works in shifts. The most serious cases will be referred to the general hospital, located in the city of São Luis, approximately 11 km from the site, or to the hospital where the injured person is associated.

MARITIME MUTUAL SUPPORT PLANS

PAM EMERGENCY (Mutual Aid Plan of the Port of Itaqui)

TELEPHONES		
CCO EMAP	**(+55 98) 3231 – 7444**	**(+55 98) 98457 - 4841**
COSET EMAP	**(+55 98) 3216 – 6500**	**(+55 98) 98454 - 3310**

The institutions listed below participate in the PAM and their resources are available as previously agreed in this plan.

- Military Fire Department of the State of Maranhão
- TRANSPETRO/TA-NE/SLU
- City Government of São Luis (Emergency Management Agency)
- EMAP – Maranhão Port Administration Company
- PETROBRÁS DISTRIBUIDORA S.A.
- TEXACO DO BRASIL
- SHELL S.A.
- ESSO S.A.
- MOINHO DE TRIGO DO MARANHÃO S.A.
- GRANEL QUÍMICA LTDA
- CONAB
- COMPANHIA DE PETRÓLEO IPIRANGA
- PETRÓLEO SABBÁ
- RAÍZEN

1.2 OIL SPILLAGE AND STEAM RELEASE

In the event of a spill caused by the vessel, the vessel will be unconditionally responsible for reimbursing the costs involved.

The subitems below describe the resources available to combat pollution in the areas next to the Terminal.

TERMINAL COMBAT CAPACITY

The resources available in the Terminal to combat oil spill situations are listed in the PCL, which is available in all administrative, operational, and maintenance areas of the Terminal.

COMBAT CAPACITY OF THE ENVIRONMENT AGENCY

The Environmental Agency of Maranhão does not have resources to combat oil spills at sea.

AVAILABLE RESOURCES FROM MUTUAL SUPPORT PLANS OF OTHER TERMINALS

The resources available at other TRANSPETRO terminals to respond to pollution emergencies occurring in the vicinity of the Terminal are listed in the PAM.

COMBATING MEDIUM-SIZED AND LARGE SPILLS

Organization designated to combat significant pollution.

Regional resources from TRANSPETRO / PETROBRAS are requested at these events. These resources, their readiness, and how they are contacted are described in the PCL.

COMBATING OTHER LARGE EMERGENCIES

TRANSPETRO has a Special Contingency Group (GEC) which, if contacted, will provide support in major emergencies. The Terminal's Individual Emergency Plan (PEI) lists the actions and those responsible for each type of anticipated event that may occur within their unit, pipeline, or vessels and involving third parties.

For events not covered by this document, TRANSPETRO / PETROBRAS will make available all national or international resources within its reach.

1.3 FIRE AND EXPLOSION

Procedures to be adopted are found in the Emergency Response Plan (PRE) and Individual Emergency Plan (PEI) of the Terminal of São Luis.

See item 1.1 General/Emergency Plans

1.4 EVACUATIONS (EVACUATION ROUTE AND MAP OF ASSEMBLY POINTS)

If you need to know what resources are available at the Terminal, your representative will ask for a copy of the document containing instructions for combating a particular emergency.

1.5 COLLISION / BERTH DAMAGE

If you need to know what resources are available at the Terminal, your representative will ask for a copy of the document containing instructions for combating a particular emergency.

1.6 MEDICAL EMERGENCY

The Terminal has resources available for minor medical emergencies.

1.7 SECURITY BREACH

See item **8.13 ISPS CODE COMPLIANCE**

1.8 MAN OVERBOARD

If you need to know what resources are available at the Terminal, your representative will ask for a copy of the document containing instructions for combating a particular emergency.

1.9 MOVING AWAY FROM A MOORED SHIP

If you need to know what resources are available at the Terminal, your representative will ask for a copy of the document containing instructions for combating a particular emergency.

1.10 EMERGENCY STOP (ESD)

Emergency stop will be negotiated with the vessel at the time of initial release.

1.11 ACCIDENT NOTIFICATION PROCEDURES

Your representative will ask for a copy of the document containing instructions for a particular emergency.

2. Safety, Environment, and Health Policies

2.1 PERSONAL PROTECTION EQUIPMENT (PPEs)

They must be used throughout the vessel's stay.

2.2 TERMINAL ACCESS (CREW AND VISITORS)

For more information, contact the Terminal's Port Facility Security Officer, who is trained in accordance with the requirements set out by IMO.

2.3 DECLARATION OF SECURITY (ISPS CODE)

The Terminal has implemented corporate security protection measures applicable to vessels and port facilities, in accordance with the requirements of the International Maritime Organization (IMO), through the adoption of the ISPS (International Ship and Port Facility Security) Code.

If necessary, these protective measures may be contacted by the vessel through the Terminal's Port Facility Security Supervisor (PFSO) or through VHF radio, call channel 16.

The Terminal operates normally at security level 1. For more information, contact the Terminal's Port Facility Security Officer, who is trained in accordance with the requirements set out by IMO.

2.4 ALCOHOL AND OTHER DRUGS

According to ISGOTT, item 13.4,
for crew health and safety reasons, the use of alcohol and drugs has a dangerous effect on the performance, behavior, and insecurity in the workplace. Therefore, the consumption of alcohol or the use of illicit drugs is not permitted at the **Transpetro** Terminal**.**

Transpetro, to support the efforts of international authorities to combat illicit drug trafficking and the use of alcohol in non-permitted places, complies with the relevant preventive measures to avoid the use, possession, and distribution of these criminal substances.

2.5 SMOKING

Smoking areas must be identified and smoking requirements must be observed.

2.6 PORTABLE ELECTRONIC EQUIPMENT AND UNPROTECTED LIGHTS

All portable electrical equipment used must be intrinsically safe and explosion-proof.

Only intrinsically safe and explosion-proof electric lighting may be used on deck while the vessel is at the pier.

2.7 MAINTENANCE ON BOARD WHILE MOORED

Repairs or maintenance work of any nature that involves or may involve the risk of sparks or other means of ignition may not be carried out while the vessel is moored at the terminal piers. In extreme cases, all safety standards must be observed and met. Repairs involving pier facilities or implying any restrictions on the vessel during its stay must be previously assessed and authorized by the Terminal, the Port Authority, and the Maritime Authority.

Maintenance repairs may be carried out if the following conditions are met (provided that they do not affect the safety of operations):

- Authorization from the Port Authority;

- Authorization from EMAP;

- In compliance with assumptions from TRANSPETRO’s PMO;

- Preparation of a Preliminary Risk Analysis, by the Terminal (Nautical Inspector) and the Ship's Captain, to release and monitor this maintenance.

2.8 PROVISIONS AND EQUIPMENT HANDLING

Agreed with the Terminal.

2.9 MATERIAL SAFETY DATA SHEET (MSDS)

The MSDS is compulsory for all chemical products classified as hazardous or whose intended or recommended uses give rise to risks to the health and safety of workers.

2.10 BENZENE AND H2S

The risks associated with toxic substances present in the cargo being handled must be properly identified and understood.

2.11 STATIC ELECTRICITY

Precautions must be **taken** to prevent the risk of ignition by static electricity sparks during measurements, sampling, connections, and loading/unloading operations.

3. General Information

3.1 CHARTS AND REFERENCE DOCUMENTS

Information about Port of Itaqui can be found in the publications listed by the Brazilian Navy, listed below:

Charts

Area	Chart Number
	Brazil (DHN)
From Cape Gurupi to Santana Island	400
Proximity to São Marcos Bay	410
São Marcos Bay	411
Proximity to the Ports of São Luis and Itaqui	412
Port of Itaqui	413

Other Publications

Type / Subject	Publisher or Source		
	Brazil (DHN)	US Hydrographic Office	British Admiralty
NPCP-RS – Standards and Procedures of the Port Authority of the State of Maranhão	NPCP - MA		
Navigation Support on the East Coast	East Coast Itinerary		
List of Lighthouses in Brazil	**DHN**		
Oiapoque Bay to Parnaíba River	**DHN**	**24020**	
Santana Island to Camocim	**DHN**	**24260**	
Cape Gurupi to Santana Island	**DHN**	**24270**	
São Marcos Bay	**DHN**	**24271**	
British Admiralty Chart			**3958**
British Admiralty Chart			**535**
Guide to Port Entry – ed. 2019/20 Shipping Guide		**Wihterby Seamanship International**	

3.2 SHIP/TERMINAL COMMUNICATION POLICY

See items below.

3.3 DOCUMENTS AND INFORMATION EXCHANGE

Information	Prepared by:			Delivery to:			Comment
	Terminal	Vessels	Both	Terminal	Vessels	Both	
Before Arrival							
Pre-Operational Information	X				X		The agent sends to the vessel
Estimated Time of Arrival (ETA) and information about the vessel and operations.		X		X			The vessel's agent receives and passes it on to the Terminal
Before Transfer of Cargo or Bunker							
Essential information about the Terminal	X				X		SISCOPE initial chart.
Details on cargo / slop / ballast on board		X		X			During initial release
Essential operational information. *(complete on site)*	X				X		During initial release
Ship/Shore Safety Checklist (LVSO)			X			X	According to Item 26.3 of ISGOTT.
During Transfer of Cargo or Bunker							
Recheck The Ship/Shore Safety Checklist (LVSO)			X			X	According to Item 26.3 of ISGOTT.
After Transfer of Cargo or Bunker, Before Departure							

Information needed for unberthing the vessel			X			X	Quantity of fuel and water on board
After unberthing, when departing the Port							
Information regarding Port departure data		X			X		Timetable for pilot disembarking and departing the Port

3.4 OPERATING HOURS

In the STS (Ship-to-Ship) operation, the docking of the daughter vessel alongside the mother vessel will only occur during **daytime**.

There are no restrictions on ship maneuvers during nighttime, except under specific conditions. See item **5.5 Main risks, subitem General Restrictions.**

3.5 LOCAL TIME

Brasília Time in UTC-03:00

3.6 COMMUNICATION LANGUAGES

Ship/Terminal communication must be in Portuguese or English.

3.7 USEFUL PHONE NUMBERS

See item 10. **Contacts**

3.8 ENVIRONMENTAL MONITORING PROCEDURES

The Port of Itaqui has the SIMPOT system that provides real-time information on tide height and the speed and direction of currents. It consists of a radar gauge located at berth 106 and two ADCPs, one located between berths 99 and 100 and the other located at the north end of berth 108.

4. Description of the Port or Anchorage

4.1 GENERAL DESCRIPTION

The TA/SELIS is located in the Port of Itaqui, near the city of São Luís (MA/Brazil) and operated by Petrobras Transporte S.A. – TRANSPETRO.

Its activities consist of receiving, storing, and delivering petroleum derivatives and LPG, providing labor services in the Warehousing and Transfer of Petroleum Derivatives for distribution companies established at the Port, supplying Bunker to vessels and tugboats in the Port of Itaqui, and operating cargo in train wagons. It acts as an export and cabotage warehouse for smaller terminals. Its area of influence covers the states of Maranhão, Piauí, Tocantins, southwest of Pará, north of Goiás, and northeast of Mato Grosso.

Double banking ship-to-ship operations may be carried out, as long as they are on piers authorized by the Maritime Authority and the Federal relevant environmental agency.

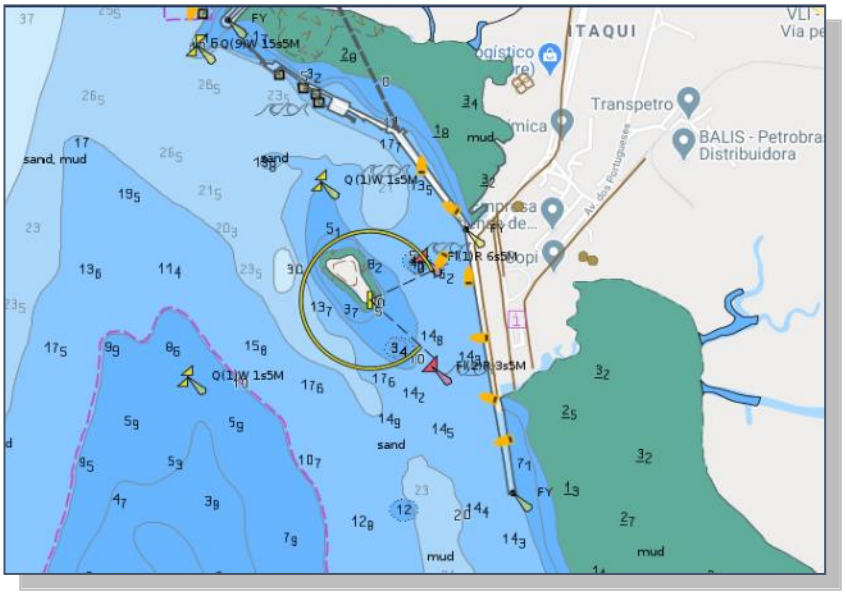
4.2 LOCATION

The Marine Terminal of São Luís – TA/SELIS is located next to São Marcos Bay, State of Maranhão on the North/Northeast coast of Brazil. It is located 11 km west of the city of São Luis and is connected to it by a highway.

Coordinates

Terminal facilities are located at the following coordinates:

- ✓ Latitude: 02° 35’ 12” S
- ✓ Longitude: 044° 23’ 30” W



PORT LIMITS

The area of the Established Port of Itaqui is defined in Ordinance No. 238, of 05/May/94, of the Ministry of Transport and is made up:

a) By the land port facilities delimited by the polygon defined by the vertices A, F, G, 6, H, J, L, and C, with the UTM coordinates listed below:

POINT	X COORDINATE	Y COORDINATE
A	569,463.723	9,716,244.655
F	570,804.613	9,716,841.685
G	571,437.291	9,715,973.294
6	570,689.926	9,715,165.913
H	571,460.874	9,710,563.814
J	570,859.257	9,710,463.028
L	570,034.806	9,715,384.435
C	569,719.675	9,715,669.811

The polygon covers the entire dock, berthing and mooring pier, warehouses, buildings in general, and internal road and rail circulation routes, as well as the land along these areas and in their surroundings belonging to the Federal Government, incorporated or not into the assets of the Port of Itaqui or under its care and responsibility.

b) By the maritime infrastructure, within the ABCD polygon defined by the geographic coordinate vertices indicated below:

POINT	**LATITUDE**	**LONGITUDE**
A	02º37'00'' S	44º23'00'' W
B	02º34'15'' S	44º23'00'' W
C	02º34'15'' S	44º22'00'' W
D	02º37'00'' S	44º22'00'' W

The polygon covers water accesses, anchoring areas, turning basin, main access channel, and areas surrounding it, up to the banks of the land facilities of the Established Port of Itaqui.

4.3 TERMINAL APPROACH

GENERAL DESCRIPTION

The Port of São Luís is located in a recess in the coast, to the NW of the São Luís island, which is formed by the estuary of the Anil and Bacanga rivers with geographical position 02°35'00" S and 044°22'00" W.

The request for the Port of São Luís can be made at any time of the day or night, in accordance with the maneuvering and anchoring rules determined by the Port Authority of the State of Maranhão.

The request for the Port of São Luís, for vessels coming from W and E, is made by approaching buoy # 01 at the entrance to the channel, when they then turn towards the other pairs of buoys that demarcate the channel and, according to the vessel's draft, to the anchorages determined by the Port Authority, or to the pair of buoys 19/24 for mandatory boarding of a pilot for berthing.

After deepening dredging of the entire area around Guarapirá Island, between July 12 and 13, 2022, the EMAP beacon components (three buoys) were moved to their new definitive positions, in order to provide a larger maneuvering area for vessels that berth and unberth at the Port of Itaqui. There has been no change in the signal anchoring equipment, given that the post-dredging depths found in the new positions were the same as the depths observed in the previous positions of the aforementioned aids.

The channel signaling and notable points, geographical features, and dangers encountered when approaching the Port of Itaqui are described in section 5.3.8. of the East Coast Itinerary (DHN). Moreover, information about changes made to buoys near Guarapirá Island is described in the Notices to Navigators (DHN).

ANCHORAGE AREAS

In almost the entirety of the São Marcos Bay, anchoring ships is quite difficult due to the inadequate nature of the seabed, which is almost always of poor holding quality. Furthermore, throughout the São Marcos Bay, the strong currents of the flood or ebb tide, which can reach 6 knots, have caused the loss of anchor when vessels anchor, with a high risk of running aground on the numerous sandbanks and shoals in the bay. The Port Authority recommends that Captains, when anchoring their vessels, keep the crew in "Travel Mode" in order to have qualified personnel on board in sufficient numbers for emergency maneuvers.

The best time to reach these anchorages is approximately four (4) hours before high tide.

Vessels with only one (1) anchor or with engine problems should preferably use anchorages # 1, 2, or 3.

"IT IS EXPRESSLY FORBIDDEN FOR ANY VESSEL TO ANCHOR IN THE MANEUVERING AREA AND ALONG THE ENTIRE LENGTH OF THE PORT ACCESS CHANNEL."

Vessels using the Terminals and
Ports of São Marcos Bay must observe the specific anchorage areas provided for in the 400 series charts of the Board of Hydrography and Navigation.

The anchoring areas designated by the Port Authority for the Port of Itaqui are as follows:

Recommended or Designated Anchorage Areas						
Name of the Area	***Latitude & Longitude***			**Anchorage Radius in Miles**	**Minimum Depth in meters**	**Notes**
	Points	LAT S	LONG W			
ONE (1)	A	01°58'5	044° 07.0'	12.2 X 3.6	19 X 31	• For vessels over 80,000 DWT and draft over 11 m • Vessels in dispute • Vessels undergoing major repairs
	B	01°55.5	044°09.0'			
	C	01°49.2'	043°58.4'			
	D	01°51.8'	043°56.5			
TWO (2)	A	02°02.9'	044°03.4'	4.37 X 2.2	31 X 34	• For vessels with a draft greater than 20m. In this area, navigators must be careful considering the existence of submarine cables in the western sector.
	B	02°05.4'	044°03.4'			
	C	02°06.0'	044°07.2'			
	D	02°04.4'	044°06.1'			
THREE (3)	A	02°08.3'	044°08.7	4.40 X 1.10	26 X 33	
	B	02°10.9'	044°09.'			
	C	02°12.1'	044°10.0'			
	D	02°12.1'	044°11.0'			
FOUR (4)	A	02°19.2'	044°12.2'	2.18 X 1.15	15 X 38	• Vessels with a DWT of less than 80,000 metric tons and/or 11m draft.
	B	02°21.4	044°09.8			
	C	02°24.4'	044°12.8'			
	D	02°27.4'	044°17.2'			
	E	02°26.6'	044°19.4'			
FIVE (5)	A	02°22.2'	044°20.3'	4.90 X 1.0	14 X 32	
	B	02°25.0'	044°21.3'			
	C	02°24.4'	044°22.2'			
	D	02°20.1'	044°20.4'			

Recommended or Designated Anchorage Areas						
Name of the Area	***Latitude & Longitude***			**Anchorage Radius in Miles**	**Minimum Depth in meters**	**Notes**
	Points	LAT S	LONG W			
SIX (6)	A	02°28.6'	044°24.5'			Vessels with displacement of up to 80,000 DWT and draft of less than 11 meters Note: Anchoring in this area requires express authorization from the Port Authority and additional precautions that will be determined upon request.
	B	02°29.2	044°24.0'			
	C	02°30.6'	044°25.4'			
	D	02°29.6'	044°26.0'			
SEVEN (7)	A	02°33.6'	044°25.0'			Vessels with displacement of up to 80,000 DWT and/or maximum draft of 9 meters
	B	02°34.0'	044°23.6'			Note: Anchoring in this area requires express authorization from the Port Authority and additional precautions that will be determined upon request.
	C	02°35.5'	044°24.3'			
	D	02°34.8'	044°25.7'			
EIGHT (8)	A	02°35.4'	044°26.0'			Loading and unloading of fuels and explosives
	B	02°34.8'	044°25.7'			
	C	02°35.5'	044°24.3'			
	D	02°36.8'	044°24.8'			

Note: There are other areas in the channel, which can only be used if authorized by the Port Authority.

Shipping agencies and pilotage keep the Port Authority informed about the areas in which the aforementioned vessels are anchored.

NAVIGATION AIDS

Nautical signaling for the Port of Itaqui and surrounding terminals, Ponta da Madeira and Alumar, is based on lighthouses and light buoys.

Lighthouses

The following lighthouses are installed in the São Marcos Bay and nearby areas: Apeú, São João, Mangunça, Pirajuba, Pirarema, Alcântara, Medo Island, Ponta da Areia, São Marcos, Araçagi, and Santana.

Light buoys

The access channel, the turning basin, and the anchoring areas are marked by light buoys, six of which are equipped with radar reflectors.

The Brazilian Navy publishes the characteristics of the nautical signaling of the Itaqui area in its list of Lighthouses (DHN).

OTHER TERMINALS

There are two other ports in the port complex. The Port of **Ponta da Madeira**, belonging to VALE, handles solid bulk cargo (iron ore), copper, and soybeans, and the Port of **ALUMAR**, belonging to the BILLITON/ALCOA group, handles aluminum and bauxite, occasionally handles fuel oil, and can handle petroleum derivatives for vessel bunker.

4.4 MANEUVERING AREAS

The turning basin is located between the Terminal of Ponta da Madeira (chart 413) to the east, parallel 02°34’5 S to the south and buoys # 23 and 25 to the west; depth varies from 23 m at the pier’s mooring line to 35 m near buoy 25.

The width of the basin is 0.8 nautical miles and the length is approximately 2 miles.

It is forbidden to anchor any vessel in this area, except with authorization from the Port Authority.

4.5 ENVIRONMENTAL FACTORS

CLIMATE CONDITIONS

Maranhão has several climate patterns, all tropical, but with different amounts of rainfall and varied vegetation cover, with a hot and semi-humid tropical climate and an average temperature of 26.7°C varying between 23.4°C (in winter) and 31°C (in summer) in the capital, São Luís, and on the coast, with good weather conditions in the Port of Itaqui and surrounding areas.

AIR TEMPERATURE PORT OF ITAQUI			
MONTHS	AVERAGE MAXIMUM	AVERAGE MINIMUM	MONTHLY AVERAGE
January	30.6	23.7	26.8
February	30.2	23.3	26.4
March	**30.2**	**23.3**	**26.3**
April	30.4	23.3	26.3
May	30.9	23.2	26.3
June	31.2	23.0	26.4
July	30.9	22.7	26.2
August	31.4	22.9	26.6
September	31.5	23.7	27.0
October	31.5	24.0	27.2
November	31.4	24.0	27.3
December	31.3	24.1	27.2
SOURCE DHN			

ATMOSPHERIC PRESSURE

The annual average is approximately 1,012mb

RELATIVE HUMIDITY

It is approximately 82% during the year

AGGRADATION RATE

The aggradation rate of the Port of Itaqui is considered insignificant, meaning that dredging and maintenance are only necessary along the berths and only every five (5) years. Aggradation in

the berths varies according to the
time of year (rainy season and dry season), and our dredging is carried out on demand, after the bathymetry we carry out every 3 months. The last dredging campaign at berths 100 to 104 was carried out in July 2022.

Other meteorological information for the area is described in the subitems below:

PREVAILING WINDS

In the maritime region, prevailing winds come from the East, with an average annual frequency of 54.25% and a Beaufort scale between 3 and 4; and from the Northeast, with an average annual frequency of 19.41% and a Beaufort scale variable between 3 and 4.

WAVES & SWELLS

The Port of Itaqui, because of its location, is protected from waves generated offshore. The waves that exist in the area, measuring 1.10 m with periods of 6.0 seconds, are formed in the São Marcos Bay itself, caused by local winds.

PRECIPITATION

The period of greatest rainfall concentration runs from January to May, known in the region as winter rains, where intense short-term rains occur, and maximum precipitation is 472.6 mm/month in April. During the dry season, which runs from August to November, the level of precipitation decreases to a minimum of 10.5 mm/month in November. The month of December is considered a transition month.

STORM AND LIGHTNING

They are not frequent and can occur in the summer, in the afternoon and early evening. The elements that contribute to their incidence are rare cold fronts and possible high temperatures during the day.

VISIBILITY

Visibility is considered good, but may be reduced during the rainy season. The months of February, March, and April have the highest percentage of overcast skies, which coincides with the heaviest rainy season in that area. During this period of the year, measurements record variations of approximately 77%. The following table shows the average cloud cover at the Port of Itaqui (Source: DHN):

AVERAGE CLOUDINESS PORT OF ITAQUI	
MONTHS	TOTAL INDEX (0-10)
January	5
February	6
March	6
April	6
May	5
June	4
July	3
August	3
September	3
October	4
November	4
December	5

TIDAL CURRENTS AND OTHER CURRENTS

The circulation of water in the São Marcos Bay is governed by tidal variations.

The minimum current values occur close to the slack tide and the maximum values occur 3 to 4 hours after high tide in ebb tides, and 2 to 3 hours after low tide in flood tides. Currents are reversed: they present a North to Northeast direction during ebb tides and, after the slack tide, they reverse direction to South to Southwest during flood tides.

In the turning basin, flood currents vary from 4.3 knots in spring tide to 3.7 knots in neap tide, and in the ebb tide, they vary from 5.1 knots in spring tide and 4.2 knots in neap tide. Nautical chart 413 provides more information about the currents in the Port of Itaqui.

VARIATION OF TIDE LEVELS

The maximum draft for berthing
(18.5 meters) at berth 106 has been calculated based on the worst tide conditions.

The tide at the Port of Itaqui is semidiurnal, with the following data observed in the vicinity of the Port of Itaqui and at the Terminal of Ponta da Madeira:

Highest astronomical tide (HAT)	7.00 m
Lowest astronomical tide (LAT)	-0.20 m
Mean High Water Springs (MHWS)	6.27 m
Mean High Water Neaps (MHWN)	5.02 m
Mean Low Water Springs (MLWS)	0.59 m
Mean Low Water Neaps (MLWN)	1.84

Source: Vale

Tides vary in phase and range along the access channel. The tides of the initial section of the channel, buoys # 1 and 2, occur 75 minutes earlier and with a range of approximately 60% of those observed at Port of Itaqui. The slack tide is approximately 69% of the range for the same tide.

Maximum tides reach 7.1 m in the months of March and September, with an average tidal variation of 3.4 m.

MEASUREMENTS

The Port of Itaqui has the **SIMPOT** system that provides real-time information on tide height and the speed and direction of currents. It consists of a radar gauge located at berth 106 and two ADCPs, one located between berths 99 and 100 and the other located at the north end of berth 108.

5. Terminal Description

Itaqui has eight operating berths with depths ranging from 12 to 19 meters, and the port has a docking pier with 06 berths, designed to receive vessels of up to 100,000 DWT and 02 liquid bulk piers with a designed capacity for vessels of up to 155,000 DWT.

At berth 106 we operate STS with vessels:

- SUEZMAX x 1 MR-2 alongside

- AFRAMAX x 1 MR-2

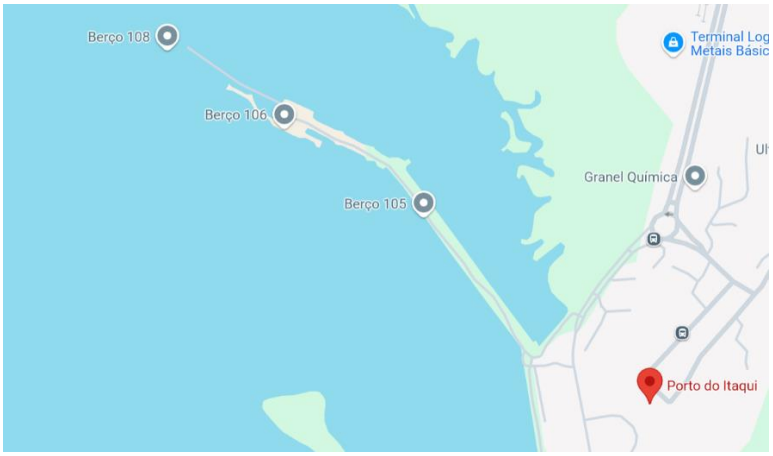
alongside

At berth 108 we operate STS between vessels:

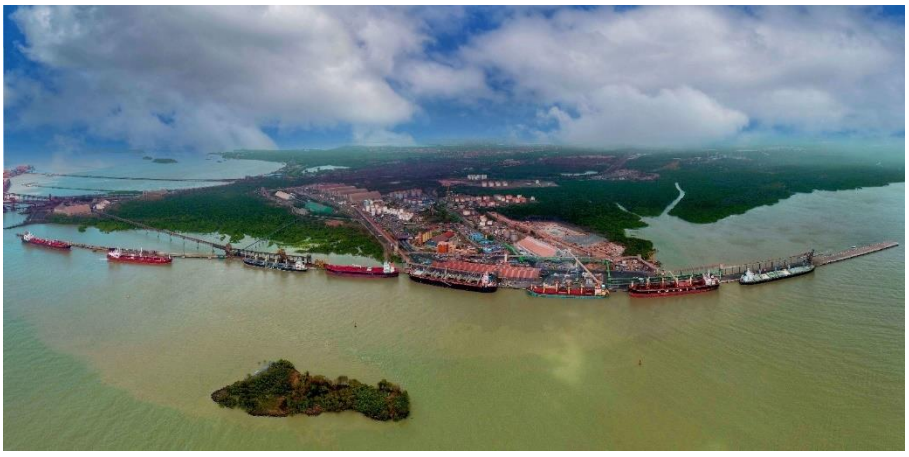
- Panamax x MR2

5.1 TERMINAL LOCATION

The Terminal is located at GPS position Lat. 02º 35'12" S and Long. 044º 23' 30" W



5.2 TERMINAL LAYOUT



5.3 VESSEL ACCEPTANCE CONDITIONS

During the vessel's stay at the Terminal, several actions are carried out to enable safe operations and manage risks in order to minimize them.

Vessels that have previous problems will not be accepted and will be denied permission to operate at the oil pier. Actions that do not respect the normal deadlines for this purpose will not be the responsibility of Petrobras/Transpetro.

At all stages, as described in the subitems below, measures are taken in order to facilitate operations and plan them appropriately.

See item **7.1.1 REFUSAL OF OPERATION**

5.4 MANAGEMENT AND CONTROL

The Terminal Control Room (Cargo Control Center) is located in the Administrative area near the tank area, approximately 1.5 km from the Port. The shift supervisor and the room operator work in this room, where operations are controlled at the various berths, using the radar measurement system and mass balance system; they also control product pumping operations to other neighboring Terminals, in accordance with the operational planning defined by Transpetro's logistics in Recife and Rio de Janeiro. Attached to this room is the Operations Programming and Logistics Room, where the CTO (Technical Operations Coordinator), the Terminal Operator, and the Administration and Control Technicians who carry out the entire documentary process for the Terminal's operations are located.

Communications with vessels and other Terminals and other operators involved in the operation are carried out via VHF radios on a maritime frequency (channel 06) previously agreed on and registered. A secondary method, via telephone +55 98 3217-6508/ +55 98 3217-6507, is agreed upon in case of failure of the main system. This channel is also used in Emergencies.

5.5 MAIN RISKS

The maximum tidal variation of approximately seven meters is a vulnerable point for the vessel that is moored at the berth. When there is a current at low tide, there is a risk of the ship moving from the pier's fenders at the stern or bow, regardless of which side it is moored on.

When mooring at berths 102 and 104, the vessel's crew is required to pay greater attention to the mooring lines, as the same bollard is generally used by two different vessels moored at consecutive berths, and it may be necessary to relieve the bollard lines to facilitate the maneuvering of another ship. Vessels may also be involuntarily moved by another vessel passing through the channel at a short distance and at a speed above the limit, or they may be rammed by another vessel out of control in the channel.

When berthing alongside at piers 106 and 108, the vessel must remain parallel to the berthed vessel and approach at a maximum speed of 10 cm/s or 0.2 knots.

NAVIGATION RISKS

The environmental conditions and seabed characteristics, as well as the dimensions of the access channel and maneuvering area do not offer restrictions to navigation. However, special attention must be paid to the speeds of currents caused by large tidal variations.

The main risks for vessels that will operate at the terminal are the following:

CHART 440

Extensive and close shoals, between the 038° and 066° markings of the Pirajuba lighthouse and at distances of 24.7 to 52 miles, where a minimum of 10 meters is assumed.

Extensive and close shoals, between the 016° and 046° markings of the Araçagi lighthouse and extending to a maximum distance of 43.1 miles, at the 039° marking, where a minimum of 8.9 meters is assumed.

Shoal, between the 015° and 020° markings of the Araçagi lighthouse and at distances of 20.7 and 23.2 miles, where a minimum of 8.1 meters is assumed.

Extensive shoal, between the 027° and 031° markings of the Araçagi lighthouse and at distances of 24.5 and 26.9 miles, where a minimum of 7.6 meters is assumed.

Shoal, at the 317° marking of the Santana lighthouse and at a distance of 6 miles, where a minimum of 5.9 meters is assumed.

Extensive shoal between the 006.5° and 060° markings of the Santana lighthouse and at distances of 11.5 and 16.8 miles, where a minimum of 11.8 meters is assumed.

Shoal, at the 068° marking of the Santana lighthouse and at a distance of 13.4 miles, where 9.9 meters is assumed.

Shoal, at the 075° marking of the Santana lighthouse and at a distance of 12.4 miles, where 8.8 meters is assumed.

CHART 411

Coroa dos Ovos – Extensive shoal, whose SE limit is at the 352° marking of the Pirajuba lighthouse and at a distance of 5.6 miles with a large area that it covers and uncovers at low tide.

Pedras de Itacolomi – With an ENE limit at the 342° marking of the Pirajuba lighthouse and at a distance of 3.7 miles, which can be uncovered at low tide.

Banco de Itacolomi – With N end at the 028° marking of the Pirajuba lighthouse and at a distance of 5.4 miles, where a minimum of 2.9 meters is assumed.

Banco das Almas – Extensive shoal of fine sand, extending to the NE, with NE and SW limits at the 065° and 127° markings of the Pirajuba lighthouse and at distances of 11.1 and 7.3 miles, where a minimum of 3.9 meters is assumed.

Sunken hull, at the 320° marking of the Araçagi lighthouse and at a distance of 8.8 miles, dangerous to navigation.

Banco do Meio – An extensive sandbar that extends to the NE and SW and is at the 010° and 311° markings of the Araçagi lighthouse and at distances of 13.9 and 8.8 miles, where a minimum of 2.1 meters is assumed, with breaking waves at low tide.

Banco Darlan – Extensive shoal of fine sand, between the 358° and 342° markings of the Araçagi lighthouse at distances of 9.2 and 7.9 miles, where a minimum of 3.7 meters is assumed.

Bancos Coral do Norte and Coral
do Meio – Extensive shoals of fine sand, with a SW limit at the 352° marking of the Araçagi lighthouse and at a distance of 5.4 miles, where a minimum of 0.2 meters is assumed, with breaking waves at low tide.

Banco Coral do Sul – With a SW limit at the 330° marking of the Araçagi lighthouse and at a distance of 3.9 miles, with bollards that are uncovered at low tide and with breaking waves.

CHART 412

Banco da Cerca – Extensive shoal, with SW and NE limits at the 007° and 038° markings of the Medo Island lighthouse and at distances of 1.7 to 5.2 miles, where a minimum of 0.2 meters is assumed, with breaking waves at low tide.

Banco de São Marcos (bollards) – Between the 030° and 054° markings of the São Marcos lighthouse and at distances of 0.9 to 1.8 miles, which is uncovered and breaking waves at low tide.

Extensive shoal, between the 050° and 055° markings of the São Marcos lighthouse and at distances of 3.4 to 3.8 miles, where a minimum of 3 meters is assumed.

Shoal at the 060° marking of the São Marcos lighthouse and at a distance of 3.7 miles, where 4.5 meters is assumed.

Shoals at the 072° marking of the São Marcos lighthouse and at a distance of 3.7 miles, where 4.5 meters is assumed.

Shoal at the 152° marking of the Alcântara lighthouse and at a distance of 2.7 miles, where 5 meters is assumed.

CHART 413

Shoal at the 018° marking of the Medo Island lighthouse and at a distance of 1 mile, where 8.6 meters is assumed.

Pedra do Severino – At the 033° marking of the Medo Island lighthouse and at a distance of 1 mile, where 2.4 meters is assumed.

Extensive shoal with rocks, between the 054º and 062° markings of the Medo Island lighthouse and at distances of 1.1 mile and 1.6 miles, respectively, where 1.4 meters is assumed.

Medo Island Reefs – Surrounding the island and extending NE to within 0.58 miles of the lighthouse, covering and uncovering.

Sunken ship “Hyundai New World”, at the 262° marking of the Medo Island lighthouse and at a distance of 3.3 miles, where 2.5 to 8 meters is assumed.

Cabeço Mearim – Extensive shoal with rocks, between the 213º and 218° markings of the Medo Island lighthouse and at distances of 1 mile and 1.3 miles, respectively, where 4.4 meters is assumed. Marked with a light buoy for isolated danger.

Shoal with rocks, surrounding Guarapirá Island, where 3.4 to 10 meters is assumed. Its NNW, NE, and SE ends are marked with light buoys.

Rock at the 172° marking of the Guarapirá Island lighthouse and at a distance of 0.43 miles, where 12 meters is assumed.

Banco dos Lanzudos – Extensive
sandy shoal, which undergoes periodic changes. Its N part is formed by two points, where less than 10 meters is assumed and from which the depths decrease until the area that is uncovered at half low tide. The northernmost point to the E is at the 257° marking of the Guarapirá Island lighthouse and at a distance of 0.55 miles, marked with a North cardinal light buoy.

GENERAL RESTRICTIONS

At berths 106 and 108, transshipment operations take place between ships moored alongside each other (STS). There is no mooring maneuver alongside at nighttime, in the case of STS.

There are no restrictions on ship maneuvers during nighttime, except in specific conditions, such as: absence of light markings, occurrences of cyclical events, natural or otherwise, or other joint decisions between the Pilotage and the Companies involved that may require time restrictions.

The maximum recommended speed for vessels in the mandatory pilotage area must be a maximum of eight (8) knots.

Ship captains and pilots decide on the current and wind conditions for each case, with no minimum or maximum value stipulated as a general or specific rule.

MANEUVER RESTRICTIONS

Specific cases for maneuvers in the Port Complex of São Marcos Bay.

The Port of Itaqui uses the Vale tide table, approved by the Navy Hydrography Center, as a reference for defining high tide and low tide times. This defines the maneuvering windows in the Port Complex of São Marcos Bay, according to Ordinances issued by the CPMA (see item 4.3.6.)

On **EMAP**'s website http://www.portodoitaqui.ma.gov.br/ you can find the updated Tide Table and other information.

NAVIGATION AND BERTHING AIDS

The Terminal does not have navigation aid equipment. However, tugboats are used to assist in ship berthing/unberthing maneuvers, depending on the size of the vessel and the pilotage rules approved by the Port Authority. The Terminal Operator, together with the mooring team and Transpetro's Safety Inspector, assists the ship's Captain and Pilot in positioning the vessel in a way that allows safe mooring and access, as well as the connection of hoses for operation.

The Terminal STS Superintendent assists the vessel during alongside berthing to position the vessel in a way that allows the connection of the loading hoses.

6. Description of Berths

6.1 BERTH DETAILS: SOUTH POINT, NORTH POINT, AND BARGE PIER

Berth	Type	Berth length (meters)	Depth (meters)	Maximum draft (meters)	Breadth Maximum)	LOA (Maximum)	Products Transferred	Maximum DWT (Metric tons)
102	Pier	223	12	11.5	40	200	LPG, BUNKER	80,000
104	Pier	200	15	14.5	40	183	LPG, CLEAN, BLACK, BUNKER	100,000
105	Pier	280	18	17.5	45	229	BUNKER	150,000
106	Pier	340	19	18.5	50	280	CLEAN, BLACK, and BUNKER	155,000
108	Pier	300	15	14.5	40	245	CLEAN	91,600

DEPTH CONTROL

The points that limit the maximum draft for berthing and unberthing in the Established Port of Itaqui are in the access channel and are described in the nautical charts according to the items: **5.5 Main Risks subitems: General Restrictions and Navigation and Berthing Aids.**

EMAP, together with the Port Authority, carries out periodic bathymetric recording of the depths and drafts of the access channel, turning basin, and berths of the Port of Itaqui.

MAXIMUM DIMENSIONS

The access channel has a minimum natural depth of 23 m, an approximate width of 500 m, and a length of 101 km. The maximum authorized draft is 22.3 m.

The Inner Channel offers a minimum depth of 15 m, an approximate width of 280 m, and the maximum authorized draft is 14.5 m.

The maximum DWT, Length, Breadth, and Maximum Draft allowed for each berth are listed in table **6.1 Berth Details**.

6.2 BERTHING AND MOORING ARRANGEMENT

Berth 102, 104, and 105

VESSEL DIMENSIONS		BERTHING (FWD / AFT)
LOA	DWT	
≤ 150 m	≤ 20,000 metric ton	3 – 1 - 1
> 150 m and ≤ 190 m	> 20,000 and ≤ 40,000 metric ton	3 – 2 - 2
> 190 m	> 40,000 metric ton	4 – 2 – 2

Berth 106 and 108

VESSEL DIMENSIONS		BERTHING (FWD / AFT)
LOA	DWT	
≤ 190 m	≤ 40,000 metric ton	3 – 2 - 2
> 190 m	> 40,000 metric ton	4 – 3 - 2

SOURCE: EMAP

6.3 CHARACTERISTICS OF THE BERTH FOR LOADING, UNLOADING, AND BUNKER

Berth #	Products	Lines	Hose/Flange of Berths	Receive and/or Send	Temperature (ºC)		Flow Rate (max) m³/h	Pressure (max) kgf/cm2
					(min)	(max)		
102	LPG	1 X 8	2 X 8" API	RECEIVE	+5	45	300	17
	MGO	1 X 6"	1 X 4" API	SEND	15	40	100	7
	MF	1 X 10"	1 X 4" API		40	60	200	
104	CLEAN	1 X 12" AND 1 X 18"	8 X 8" API	RECEIVE AND SEND	15	40	1200	7
	MGO		1 X 4" OR 1 X 8"				100	7
	BLACK	1 X 14"	3 X 8" API		60	70	800	7
	MF		1 X 4" or 1 X 8"		35	60	200	7
	LPG	1 X 8"	1 X 8"	RECEIVE	+5	45	300	17
105	MF	1 X 10"	2 X 6"	SEND	30	60	300	7
	MGO	1 X 4"	2 X 4"	SEND	30	45	200	7
106	CLEAN	1 X 14" 1 X 18"	7 X 8" API	RECEIVE AND SEND	15	40	800	7
	MGO		1 X 4" or 1 X 8"	SEND			100	7
	BLACK	1 X 10"	1 X 8" API	RECEIVE AND SEND	60	70	1200	7
	MF		1 X 8"	SEND	35	60	200	**7**
108	CLEAN	3 X 8" 2 X 14"	5 X 8"	RECEIVE AND SEND	15	40	1200	7

7. Communication before Arrival

The vessel intending to operate at the Terminal must send, in advance and completed, through the Agent, the information described in **Appendix B**, as this information is essential for preparing the operation.

7.1 INFORMATION FROM THE TERMINAL TO THE SHIP

During the ship's stay at the Terminal, several actions are carried out to enable safe operations and manage risks in order to minimize them. At all stages, as described in the subitems below, measures are taken in order to facilitate operations and plan them appropriately.

7.1.1 REFUSAL OF OPERATION

Based on information from SIRE and SIS3, the Vetting sectors of Transpetro and Petrobrás, in RJ, evaluate the vessel's history from several aspects, request updated information from the vessel's operator, and if there are any pending issues that could compromise the operation, the vessel will not be accepted for operation by Transpetro, at the Port of Itaqui. Weekly, the aforementioned sectors send the terminals the List of Vessels accepted to operate in a given period, and near its end, and if the vessel has not yet operated, the agent requests a new assessment, explaining the reasons and submitting them for assessment by the Vetting areas of Transpetro and Petrobrás. After docking and before operation, the vessel must be inspected by the Safety Inspector, in accordance with ISGOTT applying the LVSO, and if any item is detected as not met, the vessel will not be released to start any operation.

7.1.2 BEFORE ARRIVAL

ETA - Vessels bound for the Port of Itaqui facilities must inform the estimated time of arrival (ETA) 72 and 48 hours in advance, directly to the respective agent, by email. Any change or confirmation of the vessel's arrival must be communicated at least 24 hours in advance. In the ETA information, it must be specified whether the time mentioned is local or GMT.

Pre-operational Information – 48 hours before arrival, the Agency is instructed to send the Pre-operational Information to the vessel, for the exchange of essential, prior information to facilitate and speed up the vessel's operation. If the vessel is scheduled for bunker, the **Bunker Preliminary Information Exchange** is also sent for the same purpose.

7.1.3 CONDITIONS FOR THE RECEIPT AND CHARACTERIZATION OF SLOP

The terminal does not have facilities for receiving ship **slop**.

7.1.4 ON ARRIVAL

Visit of Port Authorities
The vessel informs the **HOC** and issues the **NOR** to the Agent, who in turn informs the Port Authorities, the Maritime Authority, and the Terminal, which then sends the berthing estimate.

Visits are generally only carried out after the ship has berthed.

Ship/Terminal Information Exchange

Information from the terminal to the vessel and vice versa is exchanged before arrival and during initial release after berthing, in addition there is the exchange of relevant safety information, such as escape routes, emergency flowchart, emergency contacts, list of port telephone numbers in accordance with item **1. Emergency Procedures**, and details of Exit Routes in case of emergency evacuation of the vessel's crew.

7.1.5 SHIP MOORING SYSTEM

The mooring to be effectively carried out for each vessel must be considered satisfactory and safe by the Captain and the Pilot, considering the operational needs between Vessel and Terminal, as well as provide safe access in all situations, including Emergency, in accordance with ISGOTT.

Mooring lines must be maintained at all times to keep the vessel berthed at all times. They must be kept under adequate tension during operation, with the use of the winch brake, and the use of automatic tension mooring winches is not permitted.

All lines must be of the same type, nominal diameter, and material (fiber or wire), and, whenever possible, of the same length, and the use of mixed mooring lines is not permitted.

All lines must be long enough to reach the furthest dolphins or bollards and be arranged as symmetrically as possible in relation to the middle of the vessel.

Breast lines should be oriented as perpendicularly as possible to the longitudinal axis of the vessel and moved as far forward and aft as possible.

Spring lines should be oriented as parallel as possible to the longitudinal axis of the ship.

The maximum tension applied to the lines should be 55% of their MBL. If fiber ropes are used on wire cables, the ropes must be of the same type, with a nominal diameter 25% greater than the minimum breaking strength of the wire cables, of the same material and length.

The horizontal angle of the bow and stern lines in relation to the direction of a beam perpendicular to the longitudinal axis of the vessel must not exceed 45°.

Approach, berthing, and unberthing maneuvers must be performed at low speed, preferably against the current.

Care must be taken when passing the mooring lines from the stern of the vessel to the mooring boats, in order to avoid accidents with the propellers of the vessel and the mooring boats.

The use of an automatic tension mooring winch is not permitted. Recommended moorings assume that the vessel' cables and winches are in good condition.

Extra care should be taken with the breast and spring lines in the period 1.5 to 4.5 hours before high tide and low tide. Especially 1.5 hours after high tide, when the strongest ebb currents begin.

If the vessel does not have a sufficient number of lines, or if the lines are not preferably steel, or if lines and winches are in poor condition, or if the crew is not able to maintain the mooring as recommended, additional measures will be adopted by the Terminal's Operations Safety Inspectors, such as:

a) No starting of the operation;
b) Interruption of the operation if it has already started;
c) Tugboats on standby or alongside and/or as a last resort;
d) Unberthing of the vessel.

The costs and time arising from these additional safety measures will be the sole responsibility of the Captain/Shipowner.

While berthed, vessels must keep their machinery on standby at all times, ready to come into operation in the event of an emergency.

EMAP has personnel available and qualified to handle the vessels' mooring lines during berthing and unberthing maneuvers. All handling of the lines on board during this maneuver must be carried out by the vessel's crew.

7.2 INFORMATION FROM THE SHIP TO THE TERMINAL

Terminal Form (ISGOTT Chapter 22)
See Appendix B

8. Operational Information

8.1 SHIP / PORT ACCESS

The Port does not have an access ladder, and the vessel must use its own accommodation ladder or gangway in accordance with the EMAP Welcome Letter.

8.2 INITIAL RELEASE

The operation only begins after the initial chart has been completed by the shore and onboard representatives. The Cargo Plan and the sequence of operation must be presented to the Terminal Operator and discussed before beginning the opereation. **See item 8.3**

8.3 OPERATIONAL SAFETY CHECKLIST (LVSO)

Immediately after Berthing and before the Start of Operation, in order to verify the vessel's operational safety conditions, equipment, and procedures, GIAONT carries out the Safety Inspection, in accordance with the Operational Safety Checklist, based on the latest edition of ISGOTT, and in accordance with the type of vessel.
In the end, this must reflect the exact condition of the vessel, at which time the GIAONT Inspector must present the result to the ship's Captain or the ship's legal representative; if any non-compliant item is observed that may affect the safety of the operation, operation will only begin after the issue is resolved and the ship is considered safe to operate. The Inspector must

immediately report this pending
issue to the Nautical Advisor and the Shift Supervisor, and even if resolved, it must be recorded in Annex IV and considered in the assessment of the ship in Annex V of the PMO, and recorded in the SIGO system.

8.4 BALLASTING / DEBALLASTING POLICY

The vessels' ballast and deballast tanks and systems must be used only for this purpose, when they are isolated from the other systems on board. Water ballast to be discharged into the sea must be completely free of oil, any oily residue, or other substance capable of polluting sea water.

8.5 HOSE CONNECTION/DISCONNECTION PROCEDURES

HOSE CONNECTION

The Terminal uses an insulating joint or a line of electrically continuous hoses containing a discontinuous hose in the shore to board connections. The hoses have records and control of hydrostatic, vacuum, and electrical discontinuity tests, and are tested at intervals of no more than 1 year. Test Certificates are available for consultation or copying.

The resources required for connection are agreed upon when the vessel first contacts the Terminal, during initial release.

The vessel must arrange the diameter of the cargo manifolds in such a way as to allow the connection of the hoses. (Inform in advance).

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

An onboard representative must monitor the entire operation and must be close to the vessel's cargo manifold.

8.6 CARGO TRANSFER PROCEDURES.

See Appendix C.

PRESSURE AND FLOW MONITORING

The transfer of cargo is recorded by representatives on board and shore on the vessel's manifold **every hour**. The Terminal controls the internal pressure variables through the centralized control system. The flow rates on both sides of the operation are measured hourly and compared between the parties, having, according to the system used, a limit parameter for operational control. Any change in operating conditions must be communicated in advance and documented between the parties. It is expressly forbidden to close valves that cause back pressure in the system during operation. If necessary, the vessel must inform in advance in order to avoid pressure surges. Similarly, the Terminal must inform the vessel in advance, requesting a reduction in the flow rate and informing the need to carry out maneuvers on shore.

TRANSSHIPMENT OPERATIONS

The transshipment operation may
be carried out with the vessels moored at different berths or alongside each other, using the interconnection alignments of the Terminal berths or hoses directly between the vessels.

SPECIAL REQUIREMENTS FOR LPG

The Terminal will check its LPG system, keeping the relief system adequate and aligned.

The vessel must not exceed a pressure of 17 Kgf/cm² when in operation. If it does so, the Terminal will request the vessel to immediately reduce the pressure or stop pumping;

Communication must be checked as well as all alignment before starting operation;

The hoses connected to the vessel are monitored at all times during operation and the product temperature must always be kept above +5 °C.

Emergency stop will be negotiated with the vessel at the time of initial release. The volume trasnferred at both ends of the pipeline is monitored throughout the operation. There is an Inspection and Maintenance Plan for Tanks, Lines, and accessories and in case of any defects maintenance is immediately contacted to carry out the adjustment.

RESTRICTION ON EXCESSIVE SMOKING AND SOOT BLOWING

It is prohibited to perform soot blowing or cleaning of boiler pipes while the vessel is berthed. All precautions must be taken to prevent sparks from escaping through the funnel. Failure to comply with this regulation will result in one or more of the following sanctions:

- Immediate interruption of operations;

- Communication of the breach to shipowners;

- The vessel is held responsible for fines, loss of time, and all other related expenses arising from this fact.

RESTRICTION / CONDITION OF THE VESSEL ON THE SIDE

The prohibition on the presence of unauthorized small boats on the side or in the vicinity of berthed ships must be strictly observed. Only vessels authorized by the Terminal may remain nearby or alongside, provided they meet all safety conditions. Any breach of this rule must be reported to the relevant authority.

PROPELLER MOVEMENT RESTRICTION

Moored vessels may not move their propeller(s) while they remain connected to the hoses. A ratchet may be used, after due notice to the Terminal operator, but the propeller must be moved so slowly that absolute safety is achieved. Vessels will be held liable for any damage resulting from these procedures.

INTERMEDIATE INSPECTIONS

According to appendix A of “ISGOTT”, they are carried out by GIAONT during the operation of the vessel at intervals agreed upon at the time of initial release that may not exceed 6 hours, in

accordance with operational safety
criteria and recorded in the LVSO. In STS operations, inspection cannot exceed 4 hours.

INTERRUPTIONS OF OPERATIONS

The interruption of the vessel's loading or unloading operations may occur in any situation, whether on the Vessel or at the Terminal, such as:

- Temporarily during storms, with incidence of lightning and/or strong winds (According to parameters listed in the ISGOTT LVSO);
- In the event of non-compliance with any of the rules and regulations concerning safety, universally accepted and adopted in the maritime transport of oil;
- If the ship's Captain has reason to believe that operations on shore are not safe, as long as the Captain notifies the pier operators in advance;
- Product leak on the vessel or at the Terminal;
- Large difference between what was unloaded and what was received on land or received on the vessel;
- Failure to comply with any item of the LVSO Rechecking

For cargo transfer activities between vessels positioned alongside each other – Berthed STS – the Terminal has an operational meteorological protocol aimed at disconnecting cargo lines and eventual unmooring and anchoring of the ship moored alongside, before the onset of bad weather. The application of the protocol with the ships' Captains is the responsibility of the Terminal's STS Superintendent, and will be informed directly on board or via VHF radio if necessary.

8.7 CARGO MEASUREMENT, SAMPLING, AND DOCUMENTATION

The drainage of hoses used in transshipment (ship-to-ship) is the responsibility of on-board personnel. After on-board release, the pier personnel hired for connection and disconnection are authorized to proceed with the disconnection.

Final onboard measurements will be carried out by vessel personnel and monitored by representatives of the Terminal and other inspectors. The material used must be properly grounded and the measuring accessories must be explosion-proof. The final release of the vessel must take place after comparing the quantities transferred and completing the stay documentation.

8.8 ENVIRONMENTAL LIMITS

Berth	*TYPE OF OPERATION*	*Current (knots)*	*Wind (knots)*
106	*Suezmax x MR2*	*3.6*	*49*
	Aframax x MR2	*3.6*	*53*
108	*Panamax x MR2*	*3.6*	*50*

When the wind and/or current limits established in the table above are reached, the vessel must:

- Stop operation (25 knots - wind);
- Disconnect the hoses (30 knots - wind);
- Unberth the Vessel (35 knots - wind);

8.9 TANK CLEANING AND ENTRY POLICY

Conventional tank cleaning operations are not normally accepted. However, the COW operation is accepted, subject to prior authorization of the schedule for the vessel's stay in port and of the GIAONT for operational safety.

8.10 INERT GAS

In the event of difficulties or problems in the vessel's inert gas system, operations will be suspended until the system meets the minimum acceptable standards.

8.11 BUNKER POLICY

Bunker requests

Bunker requests must be forwarded to Petrobrás Bunker in RJ through the vessel's agent or Shipowner/Operator.

8.12 POLLUTION PREVENTION

The ship will send a summary of its emergency plans in advance.

8.13 DRINKING WATER

There is no supply of drinking water at the terminal.

8.14 UNBERTHING AND DEPARTURE FROM THE PORT

When leaving the berth or port, the same precautions must be taken as those adopted when entering the berth or port.
In normal or emergency unberthing, ship 2 must first be unmoored and unberthed, and only then ship 1 may be unmoored and unberthed.
Unberthings must occur during the 1-hour maneuvering period before high tide.

SIDE	DWT	MANEUVER PERIOD
PORT	UP TO 50K	30 min after LT until 1 h before HT
STBD	-	30 min after LT 1 h before HT

During the maneuver of unberthing and departure from port, the channel limits and dangers reported in section **5.5 MAIN RISKS** subitem **RISKS TO NAVIGATION** must be observed.

The pilot's disembarking spot is the
same as the boarding spot, where a motorboat will be waiting for the pilot. See item **9.3 PILOTAGE**

8.15 ISPS CODE COMPLIANCE

The Terminal has implemented corporate security protection measures applicable to vessels and port facilities, in accordance with the requirements of the International Maritime Organization (IMO), through the adoption of the ISPS (International Ship and Port Facility Security) Code and electronics

Contact: See item **2.3 DECLARATION OF SECURITY (ISPS CODE)**

9. Port or Anchorage Organization

9.1 PORT CONTROL OR VTS

Port control is carried out by EMAP - Tel: PABX (+55 98) 3216-6000 Fax: (+55 98) 3232.4758 CEP 65085-370 and by the Port Authority.

VTS – Vessel Traffic System – The Port Complex of Itaqui does not have this resource.

9.2 MARITIME AUTHORITY

The maritime authority is the Port Authority.

It is responsible for determining actions and prosecuting those responsible for any incident within the port limits.

The Port Authority of Maranhão determines that the visit of authorities must take place after the vessel is berthed at the port.

The Port Authority of Maranhão also defines the official limits of the port.

9.3 PILOTAGE

Inside or outside the Port area, Pilotage is mandatory for all vessels heading to the Port of Itaqui.

Pilots can be requested through the vessel's **Agency** at least 4 hours before arrival. They can also be requested via VHF Channels 16 or 14.

In unberthings, Pilotage is requested by the Agency according to the estimates for completion of the operation provided by the Terminal and/or Vessel.

The Pilot's boarding time follows
that determined in the **Rules for Maneuvers at the Port Complex of São Marcos Bay**, updated by the Port Authority of Maranhão, through Ordinances that can be consulted on the website: www.marinha.mil.br › capitania-dos-portos-do-maranhao

BOARDING OF THE PILOT

The pilot's boarding and disembarking point is defined as the point 1.2 miles W of the Medo Island lighthouse or another designated point shown on the nautical chart DHN 412. For all maneuvers, from this point onwards, pilotage is **mandatory**.

Regardless of nationality, type of vessel, and destination, the minimum size for which pilotage service is mandatory is from 2,000 DWT.

RESPONSIBILITY FOR THE MANEUVER

The ship's Captain is solely responsible for the maneuvers, and is responsible for providing all information to the pilot regarding any peculiarities, specific conditions, or difficulties that may arise; such as: deficiencies in any machinery, problems or malfunction in navigation aid devices, mooring lines, or any element that may affect the safety of the berthing or unberthing maneuver, as well as the loading or unloading operation of the vessel.

Once berthed, the vessels must be securely moored and positioned to carry out their operations without risks to persons, equipment, and the environment.

If the Captain does not accept the pilot's instructions, in order to preserve the safety of the ship's maneuver, the Port Authority, through the ship's agency, must be notified in writing. This fact must also be reported to the Terminal by the vessel's agent.

CONTACT

Pilotage organization that operates in the port of Itaqui and has 36 Pilots.

ASSOCIATION OF PILOTS OF THE STATE OF MARANHÃO - APEM

Rua Montes Altos, nr. 08 – Quintas do Calhau – Calhau – São Luis – MA – Brazil.

(+55 98) 3223 8586 After Hours (+55 98) 981110356 (24/7)

VHF: Channel 16 and 14

Email: plantao@apem-ma.com.br

In cases of EMERGENCY, the means of contact are listed above and must be made directly with the Pilotage on Duty. Contact can be made directly from the vessel or through the agent.

9.4 TUGBOATS AND OTHER MARITIME SERVICES

TUGBOATS

Their Company informs the
Agencies, Terminal, EMAP, and Pilotage of the date and time of their withdrawal from operation and their return to activities.

The available tugboat services are provided by the vessel's agency, in accordance with the Maneuvering Rules ratified by the CPMA through Ordinances. The rules regarding the number of tugboats to be used are described in these Ordinances.

Tugboats and towing services for the maneuvers of vessel berthing, unberthing, and turning at the Port of Itaqui are provided by specialized companies.

The Standards/Rules for the use of tugboats are established by the "Standards and Procedures of the Port Authority of Maranhão – NPCP-MA", which can be acquired at the Port Authority or by directly contacting the Agent or directly on the Port Authority's website on the Internet.

Vessels must have good quality mooring lines in good condition, as well as in sufficient quantity to ensure safe mooring of the vessel. Tugboats do not provide towing lines for these maneuvers.

The tugboats available in São Luís have a fire-fighting system.

The available tugboats are listed below and this list may be subject to occasional changes depending on the needs of emergency or scheduled repairs. Shipping Agencies and Pilotage are always updated on this availability.

The type of communication between tugboats and vessels during berthing and unberthing maneuvers is via VHF radio on channels defined by the Pilotage and Port Authority. These devices remain on continuously in order to respond to any call from a vessel berthed at the pier or from Terminal operations personnel. As an alternative in the event of failure of the vessel's or tugboat's communication equipment during the maneuver, vessels must use the internationally recognized regulatory whistle signals for this purpose.

LIST OF COMPANIES THAT OPERATE THE TUGBOATS

Camorim Serviços Marítimos Ltda
Contact: +55 (98) 99972 7604

SAAM TOWAGE BRASIL S/A
Contact: Stef Sperka stef.sperka@saamtowage.com - +55 98 99132 3314
Erika Viegas erika.viegas@saamtowage.com - +55 98 9191 7927

Wilson Sons Serviços Marítimos
Contact: Caiuá Araujo – Branch Manager
+55 81 98112 8824
caiua.araujo@wilsonsons.com.br

The use of tugboats must be done through a request to the tugboat companies by shipping agencies, in accordance with the provisions of the *Rules for Maneuvers of the Port Complex of São Marcos Bay*.

MOTORBOAT SERVICES

a) **Boats for transporting personnel** – The boat service is normally carried out by the pilot's boat. If necessary, this service can be requested from the vessel's agent in advance.

b) **Pilotage Boat** – The pilot uses the pilotage boat from the Port of Itaqui.

c) **Boats for delivering provisions** – There are several companies that transport various materials to anchored ships and these can be requested in advance by the vessel's Agency. **TRANSPETRO** does not recommend these options, due to the weather conditions, characteristics of the São Marcos Bay, which make these maneuvers unsafe. It is recommended that provisions and various materials be supplied to vessels when they are moored. There are EMAP procedures that must be followed for this type of service, and when the vessel is in operation, the Transpetro procedures prescribed in PMO TA & TM 2011 must be observed and the EMAP and TRANSPETRO Operational Control Center must be consulted for safety guidelines. Companies contracted to perform the service must be registered with EMAP and duly authorized to operate in the primary area of the Port.

SUPPORT MOTORBOATS

Support boats for supplying spare parts, food and removing waste are contacted via the vessel's agent and may not dock alongside the berthed vessel while the vessel is in operation without first obtaining authorization from EMAP and the Terminal Security Inspector.

MOORING SERVICES

EMAP has its own team to assist with lines during ship berthing and unberthing tasks. Today, moorings are carried out by registered companies, contracted directly by Shipping Agencies. We currently have 4 registered companies:

- Company: Internacional Marítima: Contact: (+55 98) 3089-3411 – 99225-1532 E-mail: comercial@internacionalmaritima.com.br;

- Smart Sea: Contact: (+55 98) 98177-4692 – 99910-3125 E-mail: comercial@smartsea-ma.com;

- Starmar Navegação – Contact: (+55 98) 99175-4787 – 88115-4448 E-mail: starmar@starmarservicos.com.br;

- Venus Marítima – Contact: (+55 98) 98520-9147 – 98781-3290 E-mail: venus@venusmaritima.com;

9.5 OTHER RELEVANT INFORMATION

DIVERS

Company	TELEPHONES	Contact person	Ability to mobilize immediately
FIRE DEPARTMENT ***GRUPO DE BOMBEIROS MARÍTIMOS - GBMAR***	(+55 98) 3212-1530/ 3212-1531/ 3212-1532 or After Hours 193	Capt. Reis	3 men on duty 24 hours a day. In case of major contingency (15 divers)

OTHER MAIN USERS – PORT OPERATORS

Other users also operate vessels in the Port of Itaqui, sharing the use of the berths in line with the interests of the Port Authority – EMAP, as listed below:

- **Tequimar / Ultracargo -** Liquid bulk;
- **ALZ Terminais Portuários -** Solid bulk;
- **Brasil Marítima -** Solid bulk, general cargo, and containers;
- **COPI -** Solid bulk, general cargo, and containers;
- **Corredor Logística e Infraestrutura S.A -** Solid bulk, general cargo, and containers;
- **DATA Operações Portuárias LTDA -** Solid bulk, general cargo, and containers;
- **G5 Soluções Logísticas -** Solid bulk, general cargo, and containers;
- **Glencore -** Solid bulk;
- **Granel Química** - Liquid bulk;
- **Itaqui Geração de Energia -** Solid bulk;
- **Pedreiras Transportes do Maranhão LTDA -** Solid bulk, general cargo, and containers;
- **TEGRAM -** Solid bulk;
- **Termaco Operações Portuárias S.A -** Solid bulk, general cargo, and containers;
- **Terminal Corredor Norte S.A -** Solid bulk;
- **Transglobal Operações Portuárias LTDA -** Solid bulk, general cargo, and containers;
- **VLI Multimodal S.A -** General cargo and solid bulk;

COMPANIES REGISTERED TO PROVIDE VARIOUS SERVICES TO VESSELS

Service providers for vessels are listed on the website of EMAP – Maranhão Port Administration Company – Port of Itaqui – Port Community – Registered Companies:

- Agencies
- Lessees
- Assignees
- OGMO (Labor Management Agency)
- Operators,
- Registered Companies
- Pilotage

10. Contacts

TERMINAL

Place	Contact	E-mail	Telephone
Operations Management	-	souzajr@transpetro.com.br	(+55 98) 3217 - 6501
Technical Operational Coordinator	-	sergilsondasilva@transpetro.com.br	(+55 98) 3217-6502 (+55 99) 998279-0013
Shift Supervisor	-	-	(+55 98) 3217-6508 (+55 98) 99112 6584
Nautical Advisor	CMT Newton (Peninha)	newton.camara@transpetro.com.br	(+55 21) 97236-2584
GIAONT	After Hours	-	(+55 98) 99152 3959
SMS	Security	-	(+55 98) 3217-6514
SMS	Environment	-	(+55 98) 3217-6516 (+55 98) 3217-6530

LOCAL AUTHORITIES, STATE AND NATIONAL AGENCIES. AND SHIPPING AGENTS

Place	E-mail	Telephone
ANVISA	carlos.bouman@anvisa.gov.br	(+55 98) 3221-0855
Port Authority	antonilda@cpma.mar.mil.br	(+55 98) 2107-0101
Federal Police	portodoitaqui.srma@dpf.gov.br	+55 98 3222-4407
Federal Revenue Office	aldenora.moura@receita.fazenda.gov.br	(+55 98) 3216-6089
VIGIAGRO	vigiagro-ma@agricultura.gov.br	(+55 98) 3216-6054
SYNGAMAR	syngamar@syngamar.com.br administrativo@syngamar.com.br	(+55 98) 3231-6885 / (+55 98) 3222-4747

Note: For information on other Shipping Agencies, consult Syngamar.

11. DEFINITIONS

ANP - National Agency of Petroleum, Natural Gas and Biofuels.
BP – Bollard pull.
BTX – Benzene, Toluene, and Xylene.
Bunker – Marine fuel for ships.
Port Authority – Maritime authority.
INTERCO – International Code of Signals.
COW (Crude Oil Washing) - Cleaning of the ship's cargo tanks with the product it is carrying
CRE – Emergency Response Center
Squat Effect – Increase in a vessel's draft as a result of an increase in its displacement speed.
Accommodation Ladder – A straight metal structure with handrails on both sides. The steps are self-leveling, according to the slope, and have a non-slip tread. This type of ladder is placed parallel to the side of the ship, from a retractable platform fixed to the deck.
Pilot Ladder - A flexible ladder made up of cables with wooden and/or rubber rungs in accordance with the Safety of Life at Sea (SOLAS) convention.
Beaufort Scale – A scale that measures wind intensity from the condition of the sea
ETA – Estimated Time of Arrival
FEPAM - State Foundation for Environmental Protection.
GIAONT – Ship/Terminal Operational Inspection and Monitoring Group
IMO – International Marine Organization.
IBAMA - Brazilian Institute of Environment.
ISGOTT – International Safety Guide for Oil Tankers and Terminals.
ISPS Code – International Ship and Port Facility Code
Neap tide – Tide of small range, which follows the day of the waxing or waning moon.
Spring tide – The largest tidal ranges, which are observed during new and full moons, producing the highest high tides and the lowest low tides.
NPCP – Rules and Procedures of the Port Authority.
NT – Tanker.
OCIMF – Oil Companies International Marine Forum.
PRE – Emergency Response Plan.
Pilot – Professional duly qualified and authorized by the maritime authority to carry out maneuvers.
SIGTTO – Society of International Gas Tanker and Terminal Operators
Slop – Waste tank.
Safety of Life at Sea (SOLAS) — International Convention addressing the safety of human life at sea.
SIGTTO – Society of International Gas Tanker and Terminal Operators
STCW – International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers
DWT – Deadweight Tonnage.
VHF (Very High Frequency) – Radio frequency used in maritime operations.
VTS – Vessel Traffic Service.

APPENDICES

APPENDIX A – Communication in Emergencies

COMMUNICATION IN EMERGENCIES

TYPES OF COMMUNICATION IN EMERGENCIES

AT THE BEGINNING OF THE EMERGENCY: STOP X STOP X STOP

.... THEN DESCRIBE THE EMERGENCY.

AT THE END OF THE EMERGENCY: ALL CLEAR

EVACUATION OF AREA AND SHIP ABANDONMENT

EVACUATION OF THE AREA

The Shift Supervisor or Terminal Manager, when ordering the evacuation of the area where the Emergency is occurring in the Port, must ensure that all operations support personnel, employees of service provider companies, maintenance personnel listed in the PTs (Work Permits) released on the dock, Operation Technicians, and Nautical Inspectors have left the Port area, thus ensuring that no one has been left behind, contacting those responsible for the employees using the VHF on the work channel and channel 06.

Instruct them to go to the Support Stations located at the junction of berths 103/104 and 105/106 using the escape routes marked on the platforms and routes. According to the Emergency Control Plan (PCE) of the Port of Itaqui.

SHIP ABANDONMENT

When ordering abandonment, the ship's Captain must ensure that all crew members on board have left the ship, thus ensuring that no one remains on board.

Instruct them to go to the Support Stations located at the junction of berths 103/104 and 105/106 using the escape routes marked on the routes and platforms of the berths, in order, together, and using PPE's, also following the instructions of the Port's emergency monitors.

APPENDIX B – Information from the Vessel to the Terminal

PETROBRAS TRANSPORTE S/A - TRANSPETRO TERMINAL OF SÃO LUIS- TELIS SÃO LUIS - BRAZIL	
Request for Vessel Information	
Ship Name:	Estimated Time of Arrival (ETA):
Flag:	Last Port:
Captain's Name:	Next Port:
Shipowner:	Agents:
Does the ship have an inert gas system?	Oxygen content in cargo tanks:
Does the ship intend to do crude oil washing?	If the vessel is to use COW, has the pre-arrival checklist been satisfactorily completed?
Ship displacement upon arrival:	Length between perpendiculars:
Length Overall (LOA):	Maximum draft during transfer:
Bow < = > manifold distance:	Arrival freeboard:
Arrival draft:	Exit draft:
Propulsion	**Transverse Propulsion**
Number of motors: Number of propellers: Type of pitch:	Bow (# and Power): Stern (# and Power):
Quantity and size of manifold flanges	**Safe working load of the crane (SWL)**
Loading schedule	
• Type and quantity:	(m^3)
• Type and quantity:	(m^3)
• Type and quantity:	(m^3)
Unloading schedule	
• Type and quantity:	(m^3)
• Type and quantity:	(m^3)
• Type and quantity:	(m^3)

APPENDIX C – Information to be exchanged before cargo transfer

Information between Vessel and Terminal			
Ship Name: Voyage Number:		Mooring Berth: Berthing Date:	
Contract Data			
Number of pumps on board:			
98% Volumetric capacity: **m^3**			
Guaranteed unloading pressure: (for unloading operation): **Kgf/cm^2**			
Simultaneous ballast/deballast capacity with loading/unloading			
Voyage information			
Type of charter (VCP, TCP, COA, etc.):			
Type of voyage (Cabotage/Long Haul):			
Origin and destination ports or locations:			
Did the ship request bunker?			
Means of communication between ship and Terminal:			
Cargo information			
Product:	Quantity:	Temperature:	API:
WASTE - SLOP			
Quantity:	Temperature:	API:	
Fluidity:	Origin: Contaminants:		
Ballast			
Dirty Ballast: Quantity: Temperature:		**Segregated Ballast:** Quantity:	
Operation Information			
For unloading: Will the ship carry out a special operation? (COW, Inertization, etc.)			
Estimated time for the special operation:			
Required pump downtime:			
For loading: Advance notice time for TOP:			
Flow rate during TOP period:			
Quantity of ballast to be discharged:			
Maximum flow rate allowed for deballasting:			
Are there any restrictions on electrostatic properties?			

Are there any restrictions on the use of self-closing valves?	
Vessel and Terminal conditions for the operation of loading and unloading of products	
Vessel: Pressure: Flow Rate: **Temperature:** MAX: MIN:	**Terminal:** Pressure: Flow Rate: **Temperature:** MAX: MIN:
Sequence of operations by product	
Quantity to be loaded/unloaded: Mother / Daughter Tanks: Ship / shore lines: Loading arms / hoses used: Forecast for start and end of operation:	
Additional information on operation and safety	