PORT INFORMATION

Terminal Information Booklet

OUTEIRO MARINE TERMINAL

MARINE TERMINAL OUTEIRO

Full Terminal Address: Caratateua Island, Road BL 10 -
66845-840 - Icoaraci / Pará
Phone numbers: Tel: (91) 3215-3900
E-mail: dario@cdp.com.br - Dário dos Santos Martins Júnior - **Port Administrator**

Contact us

Organization	Timetable	Telephone / Fax	Mobile	VHF/ UHF Call Channel	VHF / UHF Talk Channel
Outeiro Terminal Manager	24 hours / 7 days	-	(91)98886-7918	N/A	N/A
Port Control	24 hours / 7 days	(91) 3182-9000	-	16	To be agreed
Association of Practitioners	24 hours / 7 days	(91) 4006-6550	-	16 / 06 / 11	06 / 11
Eastern Amazon Port Authority	24 hours / 7 days	(91) 3218-3950	-	16	To be agreed
Outeiro Operations Supervision Supervisor	08 a.m. to 5 p.m	(91) 3215- 3901	(91)98201-1313	N/A	N/A
Security Supervisor for Miramar and Outeiro	24 hours / 7 days	(91) 3115-3928	(91)98886-7931	N/A	N/A

INTRODUÇÃO

This Port Information was prepared by Petrobras Transportes S.A. **(TRANSPETRO)** which operates the Waterway Terminal in the port of **OUTEIRO**

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.

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 legislation, instructions, guidelines or official national or international publications. Therefore, anything that contradicts any of the aforementioned documents should not be taken into consideration.

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

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

OUTEIRO Waterway Terminal -
Caratateua Island, Road BL 10 - Brasília - Outeiro
66845-840 - Icoaraci District / Belém / Para
Phone numbers: Tel: (55) (91) 3215-3936;
Site: www.cdp.com.br/terminal-de-outeiro
CNPJ: 04.933.552/0001-0;

Petrobras Transportes S/A - TRANSPETRO

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

Telephone numbers (021) 3211-9039 and (021) 3211-9000.

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

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

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REVIEWS

Review	Changes	Date	Elaboration	Approval
V.0	Initial version	15/05/2025	Nautical Advisor Ana Claúdia - ACGR IN Rubia Camila dos Santos - C3AG ON Jacqueline Ferreira Vieira - C3JG Ives Marcelo Xavier - T2YN	Nautical Advisor Ana Claúdia - ACGR

1. Emergency procedures

1.1 GENERAL

EMERGENCY CONTACTS

Organization	Opening Hours	Telephone	Mobile	VHF / UHF Call	VHF / UHF Conversation
Port Control VTS					
Tugboats					
Association of Practitioners	24 hours / 7 days	(91) 4006-6550	-	16 / 06 / 11	06 / 11
Fire Brigade - Miramar	24 hours / 7 days	3251-3919	-	N/A	N/A
State Civil Defense	24 hours / 7 days	190	-	N/A	N/A
SEMAS	08 am to 5 pm	(91)3184-6106 (91)3184-6115	-	N/A	N/A
IBAMA	08 am to 5 pm	(91) 3284-5800	-	N/A	N/A
SAMU	08 am to 5 pm	192	-	N/A	N/A

ENVIRONMENTALLY SENSITIVE AREAS

Vulnerable areas can be defined as those linked to various economic activities, such as ports, fisheries and the shipbuilding industry, as well as sites of historical and tourist importance, which could be affected in the event of a spill of hydrocarbons or other dangerous products into the marine environment.

GENERAL DESCRIPTION OF THE EMERGENCY RESPONSE ORGANIZATION

Type of Incident	Responsible Organization	Other Organizations Involved			
Canal collision	Port Authority	Civil Defense	TRANSPETRO		
Boat running aground	Port Authority	Civil Defense	TRANSPETRO		
Cradle collision	Port Authority	TRANSPETRO	Civil Defense		
Sinking Vessel	Port Authority	Civil Defense	Fire Brigade	TRANSPETRO	
Vessel fire	Ship	TRANSPETRO	Fire Brigade	Civil Defense	Port Authority
Fire in the cradle	TRANSPETRO	Fire Brigade	Civil Defense	Port Authority	
Pollution	TRANSPETRO or Ship	Port Authority	SEMAS	IBAMA	

EMERGENCY PLANS

The IEP (Individual Emergency Plan)

This is TA OUTEIRO's plan for combating emergencies in all its facilities. It is available in all operational areas, on boards located at the entrances to the operating rooms, maintenance and administrative buildings. The local HSE (health, environment and safety activity) is responsible for updating them.

The terminal has an **Emergency Response Center (CRE)** equipped with modern equipment and various facilities for the first response in the event of accidental pollution. Intensive training sessions are held periodically to enable terminal employees to act in accordance with the LCP (Local Contingency Plan). Located at a strategic point, it allows rapid action to combat emergencies. Its shed houses containment booms, oil collectors and other equipment and materials needed for the work.

EMERGENCY COMMUNICATION.

In the event of an emergency, the terminal may halt ongoing operations so that all resources are focused on mitigating the incident.

The actions and contacts for each type of emergency are described in the Terminal's IEP.

The following actions should be taken or considered in the event of an emergency during the operation of a moored STB:

- Stop the transfer;
- Sound the emergency signal;
- Inform the ship's and barge's crew of the nature of the emergency;
- Staff the emergency stations;
- Start emergency procedures;
- Drain and disconnect the charging hose line;
- Sending moorers to the unmooring maneuvering stations;
- Confirm that the ship's and barge's machinery is ready for immediate use.

LOCAL EMERGENCY SERVICES

The fire department, civil defense, police and the table in item **1.1 GENERAL**.

1.2 OIL SPILLAGE AND STEAM RELEASE

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

The ship's and barge's fire-fighting equipment and SOPEP must be ready for immediate use throughout the transhipment operation, on both vessels.
The ship's foam cannons must be aimed at the load sockets in use and prepared for operation without human assistance. Foam fire-fighting equipment must also be available and lined up for immediate use on deck

The sub-items below describe the resources available to combat pollution in the areas adjacent to the terminal.

TERMINAL COMBAT CAPACITY

The resources available at the terminal to combat oil spills are listed in the PCL, which is available in all the terminal's administrative, operational and maintenance areas.

COMBATING MEDIUM-SIZED SPILLS AND LARGE

Organization designated to combat significant pollution.

Regional resources from TRANSPETRO / PETROBRAS are requested for these events. These

features, their readiness and how they are activated are described in the PCL.

FIGHTING OTHER MAJOR EMERGENCIES

TRANSPETRO has a Special Contingency Group - GEC which, if called upon, will provide support for major emergencies. The terminal's Individual Emergency Plan (PEI) lists the actions and those responsible for each type of event that is expected to occur within the terminal's facilities, pipeline lanes or vessels and involves 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 can be found in the Outeiro Terminal Emergency Response Plan - PRE & Individual Emergency Plan - PEI

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 you for a copy of the document containing instructions for combating a particular emergency

1.5 COLLISION / CRADLE DAMAGE

If you need to know what resources are available at the Terminal, your representative will ask you 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 AT SEA

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

1.10 EMERGENCY STOP (ESD)

The emergency stop will be negotiated with the ship at the time of initial release.

1.11 INCIDENT NOTIFICATION POLICY

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

2. Safety, Environment and Health Policies

2.1 INDIVIDUAL PROTECTION EQUIPMENT (PPE)

They must be used throughout the ship's stay.

2.2 TERMINAL ACCESS (SHORE CREW AND VISITORS)

For more information, the Terminal's port security supervisor, who is trained in accordance with IMO requirements, can be contacted by calling

2.3 SAFETY DECLARATION (ISPS CODE)

The Terminal has implemented corporate security protection measures applicable to ships 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 security measures can be activated by the ship through the terminal's port security supervisor (PFSO - Port Facility Security Officer) or via VHF radio, call channel 16.

The terminal operates normally at security level 1. For more information, contact the Terminal's port security supervisor, who is trained in accordance with the requirements of the IMO.

2.4 ALCOHOL AND OTHER DRUGS

According to ISGOTT, item 13.4, for staff health and safety reasons, the use of alcohol and drugs has a dangerous effect on 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 SMOKE

Smoking areas must be identified and the smoking requirements 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 ship is at the pier.

2.7 MAINTENANCE ON BOARD WHILE MOORED

While the ship is at berth, no repairs or maintenance work may be carried out which involve or may involve the risk of sparks or other means of ignition. In extreme cases - where maintenance is imperative - all safety regulations must be observed and complied with. Any type of repair that involves restricting the ship during its stay must be authorized in advance by the Port Authority. It should be noted that, in all cases, it is expressly forbidden to carry out any type of maintenance that restricts the machinery or prevents or hinders the ship from moving by its own means.

2.8 MATERIAL HANDLING

Awake by the terminal.

2.9 SAFETY DATA SHEET (FDS)

The SDS is mandatory for all chemicals 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 charging/discharging operations.

3. General Information

Information about the Terminal can be found in the following publications

3.1 LETTERS AND REFERENCE DOCUMENTS

The Outeiro Terminal and its accesses can be found on DHN Nautical Chart No. 304, and you should consult the Roadmap, Chapter IV, as well as the information published in the Notices to Mariners.

Letters

Area	Letter number			
	Brazil (DHN)	US Hydrographic Office	British Admiralty	Other
From Salinópolis to the Swordfish Canal	302	-	-	-
From Cabo do Maguari to Mosqueiro	303	-	-	-
From Mosqueiro to Vila do Conde	304	-	-	-
Abaetetuba (Fundeadouro)	305	-	-	-
Port of Belém	320	-	397	-
Port of Vila do Conde	321	-	-	-

SOURCE: Catalog of Letters and Publications - DHN - 14th ED. 2021-2025.

Other Publications

In addition to the information contained in the Nautical Charts mentioned above, other information and data about the Terminal can be obtained from the documents below:

Type / Subject	Editor or Source
	Brazil (DHN)
Port Captaincy Rules and Procedures - CPAOR	NPCP - CPAOR - 2022, Revision 1
NORMAM - Norms of the Maritime Authority	Maritime Authority - Eastern Amazon Port Authority
Itinerary - North Coast	Directorate of Hydrography and Navigation - DHN
List of headlights	Directorate of Hydrography and Navigation - DHN
Tide Table	Hydrography Directorate of the Brazilian Navy

3.2 SHIP/TERMINAL COMMUNICATION POLICY

See items below.

3.3 DOCUMENTS AND EXCHANGES OF INFORMATION

Vessels calling at the port/terminal of Belém, Miramar, Agropalma, Tapanã, Outeiro, Vila do Conde, Ponta da Montanha, Imerys Rio Capim Caulim (RCC), Fronteira Verde terminal

(TERFRON) and other ports located in the municipalities under the jurisdiction of the CPAOR, must comply with the procedures set out below in addition to the Maritime Authority's Norms for the Traffic and Stay of Vessels in Brazilian Jurisdictional Waters (NORMAM)*/DPC), regarding entry, dispatch and exit procedures.

Information	Prepared by:			Delivered to :			Comment
	Terminal	Ships	Both	Terminal	Ships	Both	
Before Arrival							
Estimated Time of Arrival (ETA) and vessel information		**X**		**X**			According to ANNEX E
Essential information about the Terminal	**X**				**X**		See ANNEXES B and C
Before Cargo or Bunker Transfer							
Details of cargo, slop or ballast on board		X		X			According to ANNEX E
Information essential to the operation. (complete on site)	X				X		According to ANNEX E
Ship/Terminal Security Checklist			X			X	According to ISGOTT ED. 6 REV 0.
Details of cargo, slop or ballast on board		X		X			According to ANNEX E
During Cargo or Bunker Transfer							
Repeat the Safety Checklist			X			X	According to ISGOTT ED. 6 REV 0
After Cargo or Bunker Transfer, before departure							
Information needed to unberth the ship			X			X	Quantity of fuel and water on board
After unmooring, at the port exit							
Information on port departure data		X		X			Official time of departure from the Port and time of disembarkation of the Pilot.

3.4 OPERATING HOURS

There are no restrictions on docking/disembarking times, but the tide must be observed;

3.5 LOCAL TIME

Brasilia Time in UTC-03:00

3.6 COMMUNICATION LANGUAGES

Communication from the ship/terminal must be in Portuguese or English.

3.7 USEFUL PHONE NUMBERS

See item 10. **Contact us**

3.8 ENVIRONMENTAL MONITORING PROCEDURES

Outeiro Port does not have a system that provides real-time information on the height of the tide and the speed and direction of the currents.

4. Port or anchorage description

4.1 GENERAL DESCRIPTION

The Outeiro Terminal is located on the river island of Caratateua, also known as Outeiro Island, on the right bank of Guajará Bay, about 40 km from the port of Belém, downstream from the Miramar Terminal and upstream from Mosqueiro Island. The site where the terminal is located has a clear vocation for the foreign market, mainly due to its excellent conditions of shelter and depth. This terminal is an extension of the organized port of Belém and specializes in general cargo.

4.2 LOCATION

Located in the municipality of Belém-PA, on the right bank of Guajará Bay, downstream from the Val de cães Naval Base and upstream from the Outeiro Terminal.

Coordinates

The terminal facilities are located at the following coordinates:

- ✓ Latitude: 01° 16' 40.8" S
- ✓ Longitude: 048° 29' 39.0" W

4.3 APPROACHING THE TERMINAL

ACCESS CHANNEL

The port and its accesses can be found on DHN nautical charts 302, 303 and 304. Chapter IV of the Roadmap should be consulted, as well as the information published in the Notices to Mariners.

- Swordfish Channel - Nautical charts no. 302. Compulsory use of pilotage for all ships up to a maximum draft of 11.0m.

- Quiriri Channel - Nautical Charts 302 and 303. Compulsory use of pilotage for ships with drafts greater than 12.2m and optional for ships with drafts up to 12.2m. The maximum authorized dynamic draft is 13.8 m*. Ordinance in force

- Mosqueiro Channel, Tapanã Bar, Jararaquinha and Guajará Bay - Nautical Charts Nos. 304 and 320. Pilotage is compulsory for all ships. The maximum draught will be the same as that permitted for the terminal or anchorage in demand.

OBS: Transportation of dangerous cargo - the use of pilotage is compulsory for all ships carrying dangerous cargo, regardless of the access channel used and the draft.

TERMINAL ACCESS

FLUVIAL:

River and sea access: from the mouth of the Pará River, which flows into the Atlantic, and from there through the Mosqueiro Canal to Guajará Bay, where the terminal is located.

Swordfish Channel - Nautical Chart no. 302. Compulsory use of pilotage for all ships up to a maximum draft of 11.0m;

Quiriri Channel - Nautical Charts 302 and 303. Compulsory use of pilotage for ships with drafts greater than 12.2m and optional for ships with drafts up to 12.2m. The maximum authorized dynamic draft is 13.8 m*. According to the ordinance in force;

Mosqueiro Channel, Tapanã Bar, Jararaquinha and Guajará Bay - Nautical Charts Nos. 304 and 320. Pilotage is compulsory for all ships. The maximum draught will be the same as that permitted for the terminal or anchorage in demand.

OBS: Transportation of dangerous cargo - the use of pilotage is compulsory for all ships carrying dangerous cargo, regardless of the access channel used and the draft.

***Observe the recommendations in Item 6.1.6 of the NPCP-AOR.**

ROAD

The first is via the BR-316 highway, which is in good condition. The cargo is heading towards Rodovia Mario Covas, Rodovia Transcoqueiro, Avenida Brasil and then Avenida Augusto Montenegro. At the junction complex, you take the Maracacuera road and the Outeiro road, arriving in Outeiro. Access is via Avenida Paulo Costa, Avenida Conceição and, finally, Avenida BL-10. The route is 28 km long and it takes an average of 40 minutes for the cargo to reach the terminal. The route within the city has poorly designed streets and is in terrible condition.

The second option is to take Avenida Augusto Montenegro, the junction complex, Estrada da Maracacuera and Estrada do Outeiro, arriving in Outeiro. Access is also via Avenida Paulo Costa, Avenida Conceição and, finally, Avenida BL-10. This route is 26 km long and takes an average of 30 minutes.

FUNDRAISERS

The anchorage areas designated by the Port Authority for the port of Outeiro are as follows:

Anchoring area	Observations
Anchoring No. 1 Letter no. 304	- For health, customs and maritime police inspection. a) LAT 01º 05,00'S and LONG 048º 30,00'W; b) LAT 01º 05,00'S and LONG 048º 28,50'W; c) LAT 01º 06.50'S and LONG 048º 28.50'W; and d) LAT 01º 06.50'S and LONG 048º 28.50'W
Anchorage No. 2 (ICOARACI) Letter No. 304	- For oil and propane tankers waiting to dock at the MIRAMAR Terminal. a) LAT 01º 16,00' S and LONG 048º 30,40' W; b) LAT 01º 16.30' S and LONG 048º 30.00' W; c) LAT 01º 17.65' S and LONG 048º 30.40' W; and d) LAT 01º 17,65' S and LONG 048º 30,00' W. - Maximum draught 12,6m
Anchoring No. 3 Letter no. 304	For degassing tankers.
Anchorage No. 1 (Miramar 2) Charter No. 320	- For ships undergoing repair, maintenance, litigation or awaiting orders. a) LAT 01º 23.75' S and LONG 048º 31.25' W; b) LAT 01º 23.75' S and LONG 048º 31.00' W; c) LAT 01º 24.50' S and LONG 048º 31.00' W; and d) LAT 01º 24.50' S and LONG 048º 31.25' W. - Maximum draught 7.92m.
Anchoring No. 2 Letter no. 320	- For warships or merchant ships authorized by the representative of the Maritime Authority.
Anchoring No. 3 Letter no. 320	- For ships awaiting berthing or in loading or unloading operation: - Area 3A (Miramar 1) a) LAT 01º 23.75' S and LONG 048º 30.50' W; b) LAT 01º 23.75' S and LONG 048º 30.25' W; c) LAT 01º 23.50' S and LONG 048º 30.25' W; d) LAT 01º 23.50' S and LONG 048º 30.00' W; e) LAT 01º 24.25' S and LONG 048º 30.00' W; f) LAT 01º 24.25' S and LONG 048º 30.25' W;

	g) LAT 01º 24.50' S and LONG 048º 30.25' W; and h) LAT 01º 24.50' S and LONG 048º 30.50' W. - Maximum draught 7.40m. - Area 3B (Minas Gerais) a) LAT 01º 26.10' S and LONG 048º 31.70' W; b) LAT 01º 26.10' S and LONG 048º 31.40' W; c) LAT 01º 27.00' S and LONG 048º 31.50' W; d) LAT 01º 27,00' S and LONG 048º 31,80' W
Anchor No. 4 Letter No. 320	- Quarantine area: a) LAT 01º 25,00' S and LONG 048º31,40' W; b) LAT 01º 25.00' S and LONG 048º 31.20' W; c) LAT 01º 25.85' S and LONG 048º 31.30' W; and d) LAT 01º 25.85' S and LONG 048º 31.50' W. - Maximum draught 7.92m.

ANCHORING PROHIBITED

Anchoring is prohibited in the following areas (nautical chart 320):

Between the Val-de-Cães Naval Base and the Miramar terminal, in the area delimited on the chart by the restricted area boundary line;
Southwest of the Igarapé do Una (01°25.3'S - 048°29.9'W), in the area delimited on the chart by the restricted area boundary line; and
In the dredged channel, without express authorization from the Port Authority. (North Coast Roadmap 2020 - 2024).

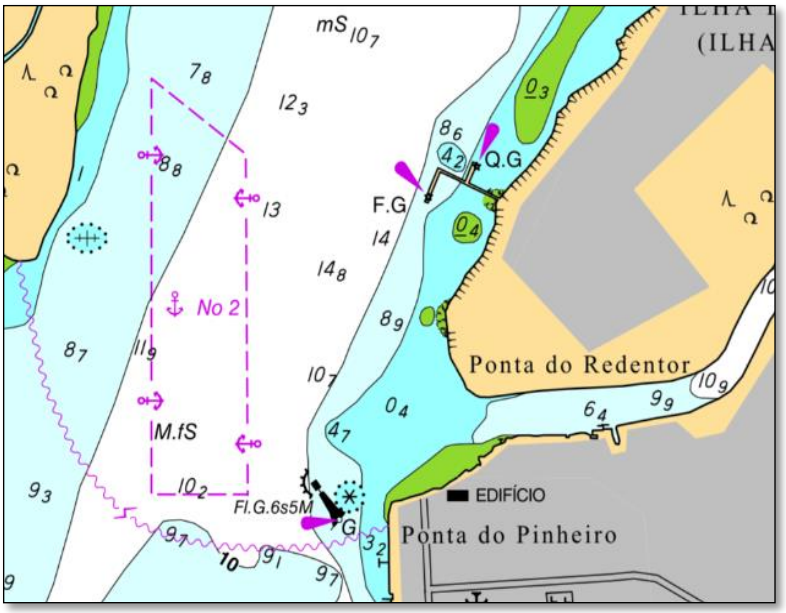


FIGURE 02: Anchorage area No. 2 according to nautical chart 304 - Mosqueiro anchorage.

NAVIGATION AIDS

The right bank of the Pará River is normally used for positioning sailors bound for the port of Belém.

The most characteristic points on this shore are the following:

- Letter 302

Crown of Seagulls lighthouse: (00°34.65'S - 048°01.81'W) 8m high and green flashing light at an altitude of 8m with a range of 8m. It marks the west bank of the Gulls' Crown;

Ponta Taipú: (00°40'S - 048°03'W) - It can be seen from the bottom of the Espadarte, initially appearing as an island; then there are two distinct elevations. The white Taipú lighthouse (0:60) is located on the northern shore of the tip, 30m high and with a group light of 3 white flashes at an altitude of 39m with a visibility of 16m.

- Letter 303

Ponta Maria Teresa Lighthouse - 9.4m SW of the Taipú lighthouse, near the tip of Maria Teresa, a white flash at an altitude of 42m with a range of 15m and a visibility sector of 164° (057° to 221°);

Colares (00°55.7'S - 048°17.3'W) - Town on the river bank, where a white church stands out. There are a few islets off the coast; on Quati Island there is the Colares lighthouse, a metal tube with a visibility sign, on a white reinforced concrete base, 10m high with a group light of two white flashes at an altitude of 14m and a range of 10m.

- Letter 304

Mosqueiro Island (01°09'S - 048°28'W) - At the tip of Chapéu Virado, in the northern part of Mosqueiro, is the Chapéu Virado Lighthouse, a white metal tube on reinforced concrete, with a visibility sign with white and red stripes, 10m high and green isophasic light at 11m latitude with a range of 13m. 3m to the ENE of the lighthouse there is a remarkable tower.

Tatuoca Island - 4m SSW of the Chapeu Virado lighthouse, marks the northern end of the left bank of the channel that gives access to the port of Belém, known as the Mosqueiro channel. At the northern tip of the island is the Tatuoca lighthouse, 11m high, with 2 groups of rapid white lights at an altitude of 12m with a range of 9m and a visibility sector of 220° (081° to 301°);

Icoaraci - 8m to the S of Mosqueiro, on the river bank, well built and lit. With Icoarací on the ship's side, you can already see the highest buildings, church towers and some notable chimneys in the city of Belém.

- Letters 304 and 320

Forte da Barra lighthouse (01°22.65'S - 048°29.56'W) - 12m high and fast white light at an altitude of 13m with a range of 9m, over a small rocky island, Forte da Barra island, located near the right bank of the access channel to the port of Belém;

Belém Lighthouse (01°27.92'S - 048°30.32'W) - 42m high with a white flash at an altitude of 45m and a range of 15m, on Guajará Bay.

The left bank of the Pará River is normally used only by inland waterway vessels bound for the city of Soure and other towns on the island of Marajó.

The most characteristic points on the left bank are the following:

- Letter 303

Soure (00°44'S - 048°31'W) - town located on the Paracauari River (or Igarapé Grande), on the left bank of the mouth of this river, which flows into the Pará River. It has several moorings for inland waterway vessels;

Soure Lighthouse (00°44.52'S - 048°30.32'W) - 30 meters high group light of 2 white flashes at an altitude of 35 meters with a range of 14 meters with a range of 5 miles, on the island of Amores, on the right bank of the mouth of the Paracauari River;

Salvaterra lighthouse - 0.65m to the S of the Soure lighthouse, with a visibility sign, 8 meters high and a white flash light at an altitude of 14 meters with a range of 5 miles, on the island of Amores, on the right bank of the mouth of the Paracauari river;

Ponta de Joanes - 9 miles south of Soure, it is taken by the town of Joanes. It is home to the Joanes lighthouse, with a visibility sign, 17 meters high and a white flash light at an altitude of 23 meters with a range of 14 miles.

- Letters 303 and 304

Coroa Grande Island - 10 miles SSW of the tip of Joanes, on the south-eastern tip of the island of Marajó. On its southern shore is the Coroa Grande lighthouse, a group light with 3 white flashes at an altitude of 18 meters with a range of 10 miles and a visibility sector of 136° (255° to 031°);

- Letter 320

Ilha das Onças - This island occupies the entire left bank of the river in front of Belém. Its NNE shore, where several sunken hulls are visible, is marked by a luminous east cardinal buoy.

4.4 MANEUVERING AREAS

See items below.

4.5 ENVIRONMENTAL FACTORS

Being located north of the Tropic of Capricorn, the region's climate is tropical. The average annual temperature is over 26°C and the average temperature of the coldest month is over 18°C. The relative humidity is high, usually above 85% in the early afternoon.

Table with the main weather information for the Outeiro Terminal:

MAIN WEATHER INFORMATION	
Average temperature	25,7 °C
Atmospheric pressure	1.009.5 mb
Relative humidity	84,2 %
Rainfall	2.800 mm
Mean high water (syzygy), high tide	3,22 m
Mean high water (syzygy), low tide	2,42 m
Maximum high tide (18.03.20)	+ 4,21 m
Minimum low-water mark (16.07.20)	- 0,37 m

Source: CDP website.

Prevailing winds

NE winds predominate. Winds are generally moderate and visibility is good, except for equatorial showers which can be preceded by strong gales and cause a sharp drop in visibility. The winds in the afternoon (in general) usually intensify to gusts of force 4 to 5, especially in the months of September to December ("bro" weather).

Waves and waves

There are no records of waves capable of hindering berthing, unberthing or ship operations.

Precipitation Rainfall

In winter, there is constant rain in the region. The period of greatest rainfall concentration is from December to April, considered in the region as winter, with the maximum rainfall of 470mm/month in April. In the summer, which runs from June to September, the level of precipitation decreases to a minimum of 48mm/month in September.

Lightning storms

There are few occurrences, but they are more frequent during the rainy season, which runs from December to April.

Visibility

Normally considered good to excellent, it can be drastically reduced during the rainy season, from December to April, when there is also an average of 2 days of fog per month. We have no records of operations that have been affected by limited visibility.

Tidal and other currents

In the region, the main component of the elevation is the astronomical tide, defined as a variation in sea level in the form of long-period waves, basically generated by the influence of the gravitational attraction of different celestial bodies on the Earth, mainly the Moon and the Sun. The fluctuations in the rise and fall of sea levels are known as the flood and the ebb, respectively. These oscillations are related to the tidal currents resulting from these astronomical forces (FEMAR, 2020)

The tide is semi-diurnal, strongly influenced by wind and rain, with a maximum amplitude of 3.7m and a current of up to 3.5 knots, which lasts for up to two hours after the tide reverses. The heights of the average level over the reduction level of the letter are as follows: 2.75m in Salinópolis, 2.26m in Colares, 1.84m in Mosqueiro and 1.80m in Belém.

In the Swordfish Channel, the speed of the tidal current can reach 3.5 knots at low tide. At the quay in the port of Belém, the flood and ebb currents push the ship towards the quay and can reach up to 3.5 knots, lasting for two hours after high tide (PORT INFORMATION TERMINAL DE MIRAMAR, 2022)

5. Terminal Description

The Outeiro Port Terminal is an extension of the organized port of Belém, located at Ponta do Redentor, on the river island of Caratateua or Outeiro in the district of Belém, state of Pará, in the estuary of the Guajará-Açú river, on the right bank of Guajará Bay, at a distance of 19 km from the port of Belém area of 313,826.24 m². Its territory is made up of paved and lighted traffic routes available for use in cargo handling.

The Outeiro Port Terminal is located on the river island of Caratateua, also known as Outeiro Island, on the right bank of Guajará Bay, about 40 km from the port of Belém. The site where the Terminal is located has a clear vocation for the foreign market, mainly due to its excellent shelter and depth conditions.

Road**access:** from Estrada do Outeiro to the BL-010 highway or Rua da Balsa, where the terminal is located.
River and**sea access:** from the mouth of the Pará River, which flows into the Atlantic, and from there through the Mosqueiro Canal to Guajará Bay, where the terminal is located.

5.1 TERMINAL LOCATION

The Terminal is located at GPS position Lat. 01º 16'40.8" S and Long. 048º 28' 39".0 W

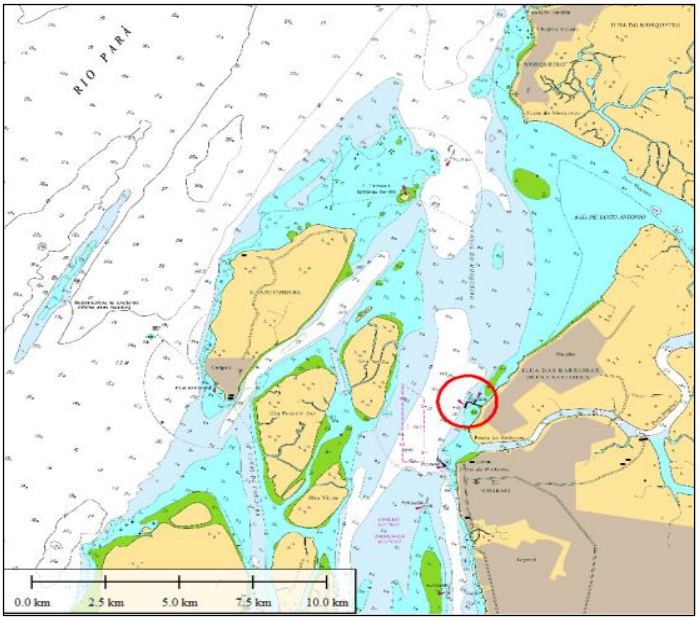


Figure 04: Location of the Outeiro Terminal (DHN Chart 304).

5.2 TERMINAL LAYOUT

5.3 CONDITIONS FOR ACCEPTANCE OF THE VESSEL

During the ship's stay in port, various actions are taken to ensure safe operation and to manage risks in such a way as to minimize them.

Ships with previous problems will not be accepted and will not be allowed to operate at the oil pier. Petrobras/Transpetro will not be responsible for any actions that do not comply with the normal deadlines for this purpose.

In all phases, as described in the following sub-items, steps are taken to facilitate operations and plan them properly.

See item **7.1.1 REFUSAL OF OPERATION**

5.4 MANAGEMENT AND CONTROL

During the vessels' stay at the Outeiro Terminal, various actions are taken to ensure safe operation and to manage risks in such a way as to minimize them. In all phases, as described below, steps are taken to facilitate operations and plan them properly. Planned actions include

the exchange of appropriate information and agreement between the parties involved on the safety standards to be carried out. Some of the items to be dealt with, although not exhaustive, are mentioned below, and others that are considered relevant to ensuring safe operating conditions may be agreed between the parties carrying out the operations.

5.5 MAIN RISKS

RISKS TO NAVIGATION

From the North Bar of the Amazon River to the Pará River Bar

When sailing offshore, depths below 20m should be avoided due to the frequent variations in depth and changes in the position of the banks. The existence of drifting vegetation and tree trunks uprooted from riverbanks, on the surface or submerged, is another danger to navigation that requires special attention.

From the practical embarkation and disembarkation point, in front of the town of Salinópolis, to the bar of the Pará River, you shouldn't sail between the coast and the 10m isobath; in this area there are numerous banks, the bottom is dirty and the sea is rough. The following dangers should be avoided at depths above 10m (according to the North Coast Route):

- ✓ Corvina Rock
- ✓ Piraquembáua de Fora Bank
- ✓ Baixo do Espadarte (or Bragança bank)
- ✓ C.S Rio Guaíba (00°27.09'S - 047°52.85'W)
- ✓ Banks in Tijoca.

Pará River, from Barra to the Port of Belém:

Letter 303*:* The Pará River separates the east, southeast and south coasts of the island of Marajó from the mainland. It is very wide and there are stretches where the navigator in the middle of the river cannot see its banks; it communicates with the Amazon River through channels called narrows and holes, which separate the numerous islands located between the southwest coast of the island of Marajó and the mainland; it is the mouth of the Tocantins River and several smaller rivers.

Letter 21300*:* Coming from the north, reconnaissance of the coast for landing is made difficult by its characteristics - low, with uniform vegetation and no notable geographical features - and by the muddy color of the waters of the Amazon and Pará rivers, which penetrate the sea, making it difficult to see areas of lesser depth.

You should sail at depths of more than 20 meters to avoid the banks located on the northern bar of the Amazon River and the Pará River bar. Sailors coming from the east can safely stay within 10 miles of the coast, at depths of more than 10 meters and within the range of the lighthouses, until they recognize Salinópolis.

Letter 303*:* Next to the island of Marajó there is an alternative channel, the Quiriri channel, which begins at the Quiriri (Águas seguras) light buoy and is marked by starboard and port light buoys

as far south as Coroa Seca. Pilotage in this channel is optional for national and foreign ships not carrying dangerous cargo, up to the anchorage off Mosqueiro.

Ships whose pilotage is not compulsory must navigate with great caution, because the depths of the channels and the positions of the banks near the usual navigation areas change very frequently.

Letter 302*:* At the Pará river bar, navigate the Espadarte channel, whose critical stretch, between the lower Espadarte (Bragança bank) and the Tijoca banks, is marked by 2 starboard and 4 port light buoys. The Poções canal should only be invested in with local knowledge, as it is subject to variations. Between the bottom of the Swordfish and the crown of the Seagulls, pay attention to the drop of the ship over the crown when the tide is out.

Letter 303*:* In the Quiriri channel, light buoys 8, 10, 5 and 12 guide navigation.

Letter 304 and 302*:* In the Mosqueiro channel, avoid approaching the rocks to the northeast of Tatuoca Island, marked by a light buoy on the starboard side. In the channel parallel to the island of Barra, look out for the bank that surrounds this island, whose northern and eastern limits are marked by starboard light buoys.

Letter 320*:* When approaching the Val-de-Cães Naval Base, pay special attention to the Barra and Forte rocks, marked by light buoys on the port side; and the Val-de-Cães rocks, marked by light buoys on the port side, cardinal North and cardinal South.

When approaching the port quay, pay attention to the banks bordering the dredged channel, especially the Cidade bank, which occupies the entire area bordering the quay.

Navigators should be aware that the contours of the immersed parts of the river represented on nautical charts are subject to constant changes due to intense geomorphological, erosive and sediment deposition activities, which can cause phenomena such as the appearance, growth and displacement of sandbanks, the growth of islands, bank erosion, etc?

From the bar to the Port of Belém, the following hazards, located close to the right bank and the navigable channel, should be avoided: (According to Costa Norte Itinerary)

- Crown of Seagulls
- Swallow Reefs;
- Stones;
- Stones;
- Stones of Barra;
- Val-de-Cães stone;
- High background;
- Sunken hull.

Port limits

According to Decree No. 5.230, of October 5, 2004, the polygonal area of the Organized Port of Belém has its vertices defined by the following geographical coordinates:

- Point A: Latitude 1°14'16.31" S Longitude 47°29'06.45" W
- Point B: Latitude 1°14'16.09" S Longitude 47°32'59.99" W

- Point C: Latitude 1°17'34.24" S Longitude 47°32'59.99" W
- Point D: Latitude 1°17'34.34" S Longitude 47°31'18.24" W
- Point E: Latitude 1°17'32.03" S Longitude 47°31'18.67" W
- Point F: Latitude 1°24'32.05" S Longitude 47°30'30.35" W
- G-spot: Latitude 1°26'34.05" S Longitude 47°30'30.35" W
- Point H: Latitude 1°27'33.05" S Longitude 47°29'43.35" W
- Point I: Latitude 1°27'33.05" S Longitude 47°27'46.35" W
- Point J: Latitude 1°16'45.91" S Longitude 47°29'06.59" W

The port and its accesses can be found on DHN nautical charts 304 and 320.

FIGURE 03: Polygonal area of the Organized Port of Belém.
Source: GEPLAM/CDP.

GENERAL RESTRICTIONS

The terminal is already approved for the operation of dry bulk ships of up to 40,000 DWT. It has a maximum length of 200 m and a draft of up to 10.6 m. The ships that operate at the terminal are mostly dry bulk.

- There are no restrictions on docking/disembarking times, but the tide must be observed;
- The maximum bottom speed (Vf) in the vicinity of the terminal is 4 knots;
- Berth 101 (external): berthing/unberthing should always be carried out on the high tide line and only by BE;
- Berth 102 (internal): mooring/unmooring must always be carried out at high tide and only by BB. - It is compulsory to use appropriate speedboats equipped with VHFs for spying;
- The region is subject to semi-diurnal tides influenced by wind and rain, resulting in maximum amplitudes of around 3.7m and currents of around 3.5 knots;
- Winds are generally moderate and visibility is good, except for equatorial showers which can be preceded by strong gales and cause a sharp drop in visibility.

NAVIGATION AND MOORING AIDS

There is no equipment to assist/monitor at the Piers to help with approach/docking maneuvers.

6. Description of the berths

6.1 BERTH DETAILS

The use of docking facilities will be due for port facilities consisting of access bridges, piers, fenders and mooring bollards, electrical, hydraulic and safety installations and will be charged per linear meter of quay occupied, or fraction of a day, or by any other means contracted or agreed. See figure below:

Figure 05: Outeiro Terminal berths

Source: Master Plan 2017

- ✓ **Berthing structures:** it has two berthing facilities (piers), connected to a single access bridge, all of which is made of reinforced concrete and has pre-cast reinforced concrete piles in its infrastructure.
- ✓ Pier 100 - Ships: It is 261m long and 16.5m wide. Built at the end of the access bridge in an "L" shape, it has two berths 101 (depth 10.6m) and 102 (depth 6.8m) to receive ships of up to 40,000 DWT and 16,000 DWT respectively, and is designed to handle general cargo and dry bulk. The pier was designed for an overload of 4.0 t/m², with mooring bollards with a capacity of 100 t and 60 t installed in berths 101 and 102, respectively.
- ✓ Pier 200 - Barges: It is 175.35m long and 23.45m wide. Built in the middle section of the access bridge and parallel to pier 100, it has two berths 201 (depth 4.2m) and 202 (depth 3.2m) to receive vessels of up to 2,700 DWT, and is designed to handle general cargo and solid bulk. The pier was designed for an overload of 2.5 t/m², mooring bollards with a capacity of 25 t installed in the cradles (information available at www.cdp.com.br).

The table below shows the characteristics of the Terminal's berths.

Features	101	102	201	202
Boats	Ships	Smaller ships	Balsas	Pushers
Length (m)	261,00	261,00	175,35	175,35
Width (m)	16,50	16,50	23,45	23,45
Depth	11,60	6,80	4,20	3,20
Maximum recommended draught*	10,60	6,80	4,20	3,20
Year built	1980 - 1981	1980 - 1981	1980 - 1981	1980 - 1981
Water intake	None	None	None	None
Load capacity	4.0 t/m²	4.0 t/m²	2.5 t/m²	2.5 t/m²
Capacity (dwt)	40.000	16.000	----	------
Maximum vessel length (m)	200	160	-----	-------

Source: Data compiled by the Port Authority, which is subject to variations according to hydrographic conditions.

*Characteristic - Maximum recommended draught: According to the Norms and Procedures of the Captaincy of Ports of the Eastern Amazon - NPCP - Year 2015.

Storage

- **Warehouse:** made up of seven semi-detached sheds measuring 21.50m x 105.00m, with a total built area of 19,560m², a load capacity of approximately 300t and a beam height of 3.10m. The façade of the six central warehouses is made up of an additional covered area with the same type of construction for the loading and unloading area, with a raised platform and access for trailers, measuring approximately 1,500m². Inside the warehouse are two three-storey administrative buildings, measuring 10.00m x 37.50m and 10.00m x 16.00m, with total areas of 480m² and 1,125m² each.
- **Storage yards 03, 04, 05 and 06:** rectangular areas of 10,200m² each, located in sequence to the warehouse, 24.50m apart and 14.50m between them.
- **Storage Yards 02 and 01:** rectangular areas of 9,800m² each, located next to warehouse number 03, 14.20m away from it, with a side setback of 12.50m in relation to the alignment of the other areas.

Cargo handling

The Outeiro Port Terminal is geared towards dry bulk and general cargo operations. The terminal also carries out cargo transhipment operations in support of the Port of Belém, in accordance with the Port Operating Regulations (Regulamento de Exploração dos Portos - REP).

FIGURE 06: Ship in operation moored at pier 100.
Source: Structural and Foundation Engineering Technology (dynamistechne.com)

DEPTH CONTROL

Local depth control is the responsibility of the port authority, which will work together with port operators and pilotage to keep the maximum permitted draft up to date.

6.2 MOORING AND BERTHING ARRANGEMENTS

The Outeiro Terminal has a mooring structure made up of two piers described below:

- Pier 100 - 255 m long with the following characteristics:

Crib 101 (external): 10.0 meters deep and designed to berth vessels of up to 40,000 DWT, and can receive vessels of up to 200.0 m in length. Berthing by BE with flood current is recommended; unberthing should also be carried out with flood current;

Crib 102 (internal): 8.0 meters deep and designed to berth vessels of up to 15,000 DWT, with a maximum length of 160.0 meters. Mooring by BB with flood current, and unmooring must also be carried out with flood current.

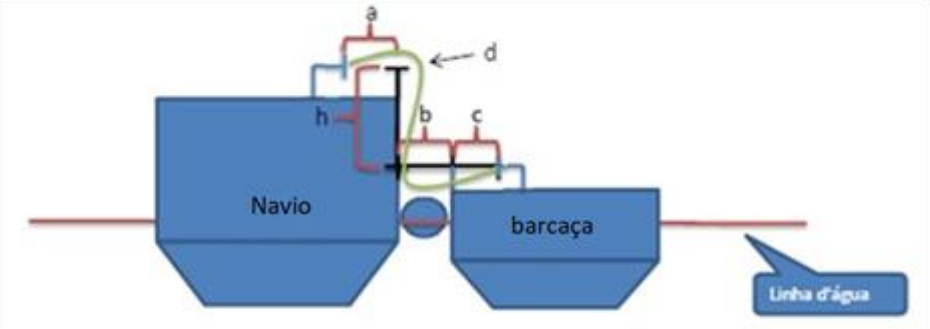
- Pier 200 - 154 m long with the following characteristics:

Crib 201 (external): 8.0 meters deep and designed for berthing vessels up to 6,000 DWT;

Crib 202 (internal): 5.0 meters deep and designed for mooring vessels up to 250 DWT. The speed of transit in the access channel must be appropriate to the tide growth at that time, in order to eliminate the effect of the ship sinking ("squatting") in shallow water, guaranteeing a minimum safety factor of 1.4 m in relation to the bottom. The maximum speed when approaching for mooring should not exceed 4 knots.

6.3 CHARACTERISTICS OF THE CRADLE FOR LOADING, UNLOADING AND REFUELING

The products that can be operated at the docked STB are petroleum products and alcohol.



a) Distância do manifild até a borda do navio = 4,6 metros
b) distância entre navio e barcaça (diâmetro das defensas) = 1,5 metros
c) Distância do manifld até a borda da balsa = Usado 4,6 metros também
h) altura xentre manifolds = variável (diferença da borda livre no navio e da barcaça)
d) Comprimento do mangote = 20 metros

Figure 7 - Schematic for ship compatibility

7. Communication before arrival

Ships wishing to operate at the Terminal must send the information in **Appendix B** in advance and fill it in via the Agent, as this information is essential for preparing the operation

7.1 INFORMATION FROM THE TERMINAL TO THE SHIP

During the ship's stay in port, various actions are taken to ensure safe operation and to manage risks in such a way as to minimize them. In all phases, as described in the sub-items below, steps are taken to facilitate operations and plan them accordingly

7.1.1 REFUSAL TO OPERATE

The start of operations will only be authorized when all possible pending issues on the Safety Checklist - LVSO (ISGOTT) have been resolved by the ship.

7.1.2 BEFORE ARRIVAL

The Terminal will send a list of information based on ISGOTT (Pre-Arrival Exchange of Information) before the ship arrives. It will also send the Terminal's Port Information Booklet via the Agency after confirming the operation at the terminal. As well as the list of documents required for clearance with the local authorities

ETA - Ships destined for the facilities of the Port of Outeiro must inform the estimated time of arrival (ETA) 48 and 24 hours in advance, directly to the respective agent, by email. Changes or confirmation of the ship's arrival must be communicated at least 24 hours in advance. In the ETA information, the ship must specify whether the time mentioned is local or GMT. The time of arrival is considered to be the moment the ship reaches the anchorage area or, in bad weather that makes anchoring impossible, the moment of the end of the ship's voyage plan (End of Sea Passage - EOSP). The notification of readiness to operate will only be accepted if the ship really is, in all respects, ready to start operating. The order in which ships dock at the Outeiro Terminal is defined by the Port Authority (CDP).

7.1.3 CONDITIONS FOR RECEIVING AND CHARACTERIZING SLOP

The Outeiro Terminal does not have an oily waste reception facility (SLOP).

7.1.4 ON ARRIVAL

The Port Operator, shipowner or their Agent must provide the Port Administration:

a. The technical name of the cargo, in Portuguese, according to the International Maritime Organization (IMO) code classification, if applicable, and the UN No. (identification number established by the United Nations Committee);

b. The quantity of dangerous goods on board, indicating which are to be unloaded at the port and which are to remain on board, with the location of the latter on the vessel;

c. The type of packaging;

d. The condition of the dangerous goods and the possibility of claims; e. Information on whether the vessel has an insurance certificate for the transportation of the dangerous goods;

f. Emergency sheet.

Failure to provide any of the information listed above in the appointment will release the Port Authority from its obligation to provide the service.

When the omission or inaccuracy of the data results in a damaging event, the responsibility for the resulting damages or accidents will lie with the Port Operator or the Shipowner or their Agent, specifically with whoever requested the service from the Port Administration

Vessels in port with dangerous goods or which, once unloaded, are not entirely free of flammable vapors, must display the "B" flag of the International Code of Signals during the day and a red light visible over the entire horizon at a distance of at least three (3) nautical miles at night when moored, at anchor or in motion.

Authorization for this type of operation can only be issued by the Port Administration if this type of operation is provided for in the Port's Operating License (REP, 2020).

The port authorities are called upon by the ships' agents because of their arrival and expected berthing. As a general rule, the visit and clearance are carried out by the shipping agency after docking.

There is no bunker supply at the Outeiro Terminal, and this operation is carried out by barges for the ships.
The information to be exchanged between the Terminal and the Ship prior to arrival is described in **APPENDIX C - Information to be exchanged prior to Cargo Transfer**, in accordance with ISGOTT recommendations.

Emergency contacts, see item **1.1 GENERAL**

7.1.5 SHIP'S MOORING SYSTEM

The mooring lines deserve constant care in order to keep the ship moored within safe distance of the pier. All the cables need to be kept under adequate tension during operation, bearing in mind that the beams have short lengths and, consequently, less elastic capacity, resulting in a greater likelihood of breakage when subjected to excessive stress.
All mooring lines must be of the same type, gauge and material (fiber or steel); mixed mooring lines are not permitted. The mooring lines must be arranged as symmetrically as possible in relation to the ship's midships. The beams should be oriented as perpendicular as possible to the longitudinal axis of the ship. The sprues should be oriented as parallel as possible to the longitudinal axis of the ship.

Cradle No	Does it require practice to maneuver ?	TPB (max.)	Getting closer		Lashing points		Lashing Ropes		
			Veloc. (max.)	Angle (max.)	Head	Cat	Launcher	Crossbars	Spring
101	YES	40.000 T	4 WE	-	6	-	8	-	4
102	YES	16.000 T	4 WE	-	6	-	8	-	4
201	NO	-	-	-	-	-	-	-	-
202	NO	-	-	-	-	-	-	-	-

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 terminal does not have telescopic ladders for accessing docked vessels. Access is then via the ship's gangplank, which is positioned directly on the pier. These boards must be properly supported on the ship's balcony and with a protective net installed. Crew members who use the Terminal's facilities when disembarking must not circulate through the industrial area, but must use the pedestrian lanes that lead to the Main Gate.

8.2 INITIAL RELEASE

The start of the operation only takes place after the initial letter has been completed by the ground and on-board representatives. The loading plan and the sequence of the operation must be presented to the terminal operator and discussed before the start. **See item 8.3**

8.3 OPERATIONAL SAFETY CHECKLIST (LVSO)

The Vessel/Terminal Security Checklist (Vessel/Terminal

ISGOTT Safety) is checked and completed by the terminal representative (Safety Inspector) during the initial release of the ship, when all safety recommendations are addressed.

8.4 BALLAST AND DEBALLAST POLICY

The Port Authority does not allow the loading/unloading of ballast water inside the port. This action can cause a microbiological imbalance in the region, damaging the marine fauna and flora and having a negative impact on the local community and the port's estuarine area of influence.

8.5 HOSE CONNECTION/DISCONNECTION PROCEDURES

HOSE CONNECTION

The resources needed for the connection are agreed upon during the ship's first contact with the terminal, during initial clearance.

The ship must arrange the diameter of the load sockets in such a way as to make it possible to connect the hoses. (Inform in advance).

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

An on-board representative must accompany the entire operation and must be close to the ship's loading socket.

8.6 CARGO TRANSFER PROCEDURES.

See APPENDIX C - Information to be exchanged before Load Transfer

THERE IS NO CARGO TRANSFER AT THE OUTEIRO TERMINAL.

TRANSHIPMENT OPERATIONS

The transhipment operation will be carried out with the vessel moored and the barge tied to its back (Ship- to - barge).

SPECIAL REQUIREMENTS FOR LPG

Not applicable.

RESTRICTING THE EXCESS OF FUNAÇA AND RAMONAGEM

It is forbidden to clean boiler pipes while the ship is moored. Every precaution must be taken to ensure that no sparks escape from the chimney. Failure to comply with these regulations will result in one or more of the following sanctions:

- Immediate cessation of operations;

- Reporting the infringement to the shipowners;

- Liability of the ship for fines, loss of time and all other related expenses arising from this fact.

RESTRICTION / CONDITION OF VESSEL ON THE SIDE

The prohibition on unauthorized small vessels being on the side or in the vicinity of moored ships must be strictly observed. Only vessels authorized by the terminal will be allowed to stay in the vicinity or alongside, provided they meet all the safety conditions. Any breach of this rule must be reported to the competent authority.

RESTRICTION OF PROPELLER MOVEMENT

Ships at berth will not be able to move their propeller(s) while they are connected to the hoses. A ratchet may be used, after due warning to the terminal operator, but the propeller must be moved so slowly that absolute safety is achieved. Ships will be held responsible for any damage resulting from these procedures.

INTERMEDIATE INSPECTIONS

According to Appendix A of "ISGOTT", they are carried out by the GIAONT during the ship's operation at intervals agreed at the time of initial release which may not exceed 6 hours, in accordance with operational safety criteria and recorded in the LVSO. In STS operations, the inspection may not exceed 4 hours.

INTERRUPTIONS TO OPERATIONS

The interruption of the ship's loading or unloading operations can occur in any situation, whether on the ship or at the terminal, such as:

- Temporarily during storms, with incidence of lightning and/or strong winds (According to parameters listed in ISGOTT's LVSO);
- In the event of non-compliance with any of the universally accepted safety rules and standards adopted in the maritime transportation of oil;
- If the ship's captain has reason to believe that operations on land are unsafe, he may notify the pier operators in advance;
- Product leak on the ship or at the Terminal;
- High difference between what is unloaded and what is received on land or on the ship;
- Failure to comply with any item of the LVSO Re-check

8.7 LOAD MEASUREMENT, SAMPLING AND DOCUMENTATION

Drainage of hoses used in transhipment (ship/barge) is the responsibility of on-board personnel. After being released on board, the pier's contracted connection and disconnection personnel are authorized to proceed with the disconnection.

The final on-board measurements will be carried out by the ship's personnel and monitored by the terminal representatives and other inspectors. The material used must be properly grounded and the measuring accessories must be explosion-proof. The final release of the ship must take place after the quantities handled have been compared and the documentation for the stay has been completed.

8.8 ENVIRONMENTAL LIMITS

Cradle	Type of operation	Current (knots)	Wind (knots)
101	MR X Barge	3,5	35

When the wind and/or current limits set out in the table above are reached:

- Stop operation (25 knots - wind);
- Disconnect the hoses (30 knots - wind);
- Unmooring the ship (35 knots - wind);

8.9 TANK CLEANING AND ENTRY POLICY

On-board repairs and washing of the ship's cargo tanks cannot be carried out while the ship is docked. They should preferably be carried out in the anchorage area. To carry out these services while the ship is docked, prior authorization from Terminall is required.

8.10 INERT GAS

In the event of difficulties or problems with the ship's inert gas system, operation will be suspended until the system is up to the minimum acceptable standard.

8.11 SUPPLY POLICY

Supply requests

Check with the terminal.

8.12 POLLUTION PREVENTION

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

8.13 DRINKING WATER

The terminal has no drinking water supply.

8.14 UNMOORING AND LEAVING THE PORT

When unberthing and leaving the port, the limits of the channel and the hazards described in section **5.5 MAIN RISKS / PORT LIMITS and**its sub-items must be observed. Once the above-mentioned exit conditions have been met, the pilot normally begins the unmooring maneuver as soon as the final clearance has been completed, i.e. when the documents have been filled in/signed.

Safe conditions must be observed for the pilot to disembark.

8.15 COMPLIANCE WITH THE ISPS CODE

At the Outeiro Terminal, ISPS CODE controls are the responsibility of Companhia Docas do Pará (CDP), which owns the port operated by TRANSPETRO. The Outeiro Terminal is not ISPS certified due to its unenforceability and is therefore prevented from issuing the Declaration of Security (DOS). However, the Terminal has implemented corporate security measures applicable to ships and port facilities. If necessary, these protective measures can be triggered by the ship via the Terminal's Port Facility Security Officer (PFSO), or via VHF radio (channels 15/16). For further details, the Terminal's Port Facility Security Officer (PFSO) - trained in accordance with the requirements of the IMO - can be contacted on the telephone number below: - Tel: +55 91 XXXXXXXXX.

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

9. Port or anchorage organization

9.1 PORT CONTROL OR VTS

The Port of Belém has no special traffic and navigation control service. Port control at the Miramar terminal is the responsibility of Companhia Docas do Pará - CDP, which communicates via VHF channel 16 radio, with a central unit and three mobile units.
For further information, current regulations and notices, please consult the Port Authority's website directly: http://www.cpaor.mar.mil.br or e-mail **secom@cpaor.mar.mil.br.**

9.2 MARITIME AUTHORITY

The maritime authority is the Captaincy of Ports of the Eastern Amazon

It is responsible for determining the actions and penalizing those responsible for any incident within the port's boundaries.

9.3 PRACTICE

It includes access via the Quiriri (or Marajó) canal, or the Espadarte canal, on the Pará river, from the practical waiting points downstream of the outer end of the Xingu and Cabeço do Norte banks and the one downstream of the Lower Espadarte, to the port of Belém, the port of Vila do Conde

and access to the Estreitos region to the southwest of Marajó Island. The Tocantins River is considered an extensive waterway in this ZP.

The Quiriri (or Marajó) channel is considered optional, given the existence of a beacon (according to DHN Permanent Notice No. 065/02), for national and foreign ships not carrying dangerous cargo. Pilotage in this ZP is compulsory, except for the section considered optional.

The compulsory pilotage zone is limited to the following places of embarkation and disembarkation of the pilot and the ports of Belém and Vila do Conde and the lumber mill in the Strait of Breves.

BOARDING THE PILOT

PRACTICAL WAITING POINTS			
ZP *	**PORTO/TERMINAL**	**LAT./LONG.**	**REMARKS**
3	Port of Belém, Vila do Conde and the Breves Strait Lumber Mill.	00°17'00" S 047º49'00" W	Point 01 - ships coming from the north and west, calling at the Pará River.
3	Port of Belém, Vila do Conde and the Breves Strait Lumber Mill.	00°24'30" S 047°46'00" W	Point No. 02 - ships coming from the east, basically from Brazilian ports, calling at the Pará River.
3	Port of Belém, Vila do Conde and the Breves Strait Lumber Mill.	01°06'00" S 048°29'30" W	Vessels coming from the high seas that have not received practice for the optional stretch receive practice off the coast of Vila de Mosqueiro, marking the Ponta do Chapéu Virado lighthouse, at 146° true, at a distance of 2.5 MN.

SOURCE: NORMAM 12/DPC Mod. 21; NPCP-CPAOR AND NORTH COAST ROADMAP, 2020 - 2024.

*** PILOTAGE AREA.**

The Pilotage Service in ZP-03 is carried out by the following companies:

I) Baia do Marajó Serviços de Praticagem S/S Ltda - MARAJÓ PILOTS;

II) Espadarte Serviços de Praticagem S/S Ltda - ESPADARTE PILOTS;

III) Canal do Quiriri Serviços de Praticagem S/S Ltda - QUIRIRI PILOTS;

IV) Rio Pará Serviços de Praticagem S/S LTDA;

V) Empresa de Praticagem do Rio Pará e Portos da Região S/S Ltda (PARÁ RIVER PILOT);

VI) CRISTIAN ANTONIO CIPRIANO S/S LTDA

Ships sailing to or from the Amazon Basin, through the straits region: will carry out the pilot exchange near Ponta do Pinheiro, in Icoaraci.

The request for practical entry must be made by the company, its agent or representative, on a specific form, 48 hours before the ship's arrival in Salinópolis, the time of which must be confirmed 24 hours, 12 hours and 8 hours in advance. For departures from Belém or Vila do Conde, the request must be made 24 hours in advance.

9.4 TUGS AND OTHER MARITIME SERVICES

The Port Units have a tugboat service provided by Wilson Sons, which must be booked 3 hours in advance.

According to NPCP 2022, the assistance of at least one tugboat is mandatory during berthing and unberthing maneuvers.

Port Services are available on the Port Authority's website: www.cdp.com.br

The Port Authority is Companhia Docas do Pará. - Address: Ilha de Caratateua, Estrada BL 10 - Outeiro - Icoaraci - Belém-PA - CEP: 66845-840 - Telephone: (91) 3215-3901 / 3215-3902/ 3215-3606 - E-mail: plantaoout@cdp.com.br

10. Contact us

Below is a list of the telephone numbers of the main authorities.

CONTACT THE AUTHORITIES	
AUTHORITY	**PHONE**
Eastern Amazon Port Authority	(91) 3218-3950
IBAMA	(91) 3284-5800
Federal Police - Immigration Sector of the Port of Belém	(91) 3214-8000/8002
Federal Revenue Service - Customs at the Port of Belém	(91) 99309-0430
Fire Brigade	(91) 4006-8399
Val-de-Cães Naval Base	(91) 3216-4444
Health surveillance	(91) 3184-6106/3184-6115
Barra do Pará Pilotage	(91) 4006-6550
União dos Práticos da Bacia Amazônica Oriental Ltda	(91) 3116-6360/99225-5991
CDP - Companhia Docas do Pará - Port Authority	(91) 3182-9000
Northern Nautical Signaling Service (4th Naval District)	(91) 3216-4062
Military and Civil Police (CIOPE)	190

11. DEFINITIONS

ANP - National Petroleum Agency.
BP (Bollard-Pull) - Static traction.
BTX - Benzene, Toluene and Xylene.
Bunker - Marine fuel for ships.
Port Authority - Maritime authority.
CIS - International Code of Signals.
COW (Crude Oil Washing) - Cleaning the ship's cargo tanks with the product it is carrying.
CRE - Emergency Response Center.
Squat effect - An increase in a ship's draft as a result of an increase in displacement speed.
Portal staircase - Straight metal structure with side balusters and handrails. 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.
Breakwater ladder - 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 state of the sea.
ETA (Estimated Time of Arrival) - Estimated time of arrival.
FEPAM - State Foundation for Environmental Protection.
GIAONT - Ship/Terminal Operational Inspection and Monitoring Group.
IMO - International Marine Organization.
IBAMA - Brazilian Environmental Institute.
ISGOTT - International Safety Guide for Oil Tankers and Terminals.
ISPS (International Ship and Port Facility Code) - International Code for the Security of Ships and Port Facilities.
Quadrature tide - A small tide that follows the rising or waning quarter day.
Syzygy t ide - The greatest tidal amplitudes during the new and full moons, producing the highest high tides and the lowest low tides.
NPCP - Port Captaincy Standards and Procedures.
NT - Tanker.
OCIMF - (Oil Companies International Marine Forum) - International Oil Companies Forum.
PRE - Emergency Response Plan.
Pilot - A professional duly qualified and authorized by the maritime authority to carry out maneuvers.
SIGTTO - (Society of International Gas Tanker & Terminal Operators) - International Society of Gas Tanker & Terminal Operators
Slop - Waste tank.
Safety of Life at Sea (Solas) -- International Convention dealing with the safeguarding of human life at sea.
SIGTTO - Society of International Gas Tanker and Terminal Operators
STCW - (Standards of Training, Certification and Watchkeeping) - International Convention for Standards of Training, Certification and Watchkeeping for Seafarers
SUPRG - Superintendence of the Port of Rio Grande, port authority.
DWT - Deadweight tonnage.
VHF (Very High Frequency) - Radio frequency used in maritime operations.
VTS (Vessel Traffic Service) - Vessel Traffic Service.

APPENDICES

APPENDIX A - Communication in Emergencies

COMMUNICATION IN EMERGENCIES

FORMS OF EMERGENCY COMMUNICATION

AT THE BEGINNING OF EMERGENCE: PARA x PARA x PARA (STOP X STOP X STOP)

.... THEN DESCRIBE THE EMERGENCY.

AT THE END OF THE EMERGENCY: END OF EMERGENCY (ALL CLEAR)

EVACUATION OF AREA AND ABANDON SHIP

EVACUATION OF THE AREA

The Shift Supervisor or Terminal Manager, when ordering the evacuation of the area where the Port Emergency is taking place, must make sure that all operations support personnel, employees of service providers, maintenance personnel listed on the PTs (Work Permits) released on the quay, Operations Technicians and Nautical Inspectors, have left the port area, making sure that no one has been left behind, contacting those responsible for the employees, using the vhf on the work channel and 06.

Instruct them to go to the Support Stations in accordance with the Outeiro Port Emergency Control Plan (ECP).

ABANDON SHIP

When ordering abandonment, the ship's Cmt must ensure that all crew members on board have left the ship, ensuring that none remain on board.

Instruct them to go to the Support Stations in accordance with the Outeiro Port Emergency Control Plan (ECP).

APPENDIX - B Vessel Information for the Terminal

PETROBRAS TRANSPORTE S/A - TRANSPETRO HILLTOP TERMINAL PARÁ - BRAZIL	
Ship Information Request	
Name of Ship:	Estimated time of arrival (ETA):
Flag:	Last port:
Commander's name:	Next Port:
Armorer:	Agents:
Does the ship have an inert gas system?	Oxygen content in cargo tanks:
Does the ship intend to wash with crude oil?	If the ship is to carry out COW, has the pre-arrival checklist been satisfactorily completed?
Displacement of the ship on arrival:	Length between perpendiculars:
Total length (LOA):	Maximum draught during transfer:
Manifold bow distance:	Freeboard on arrival:
Quiet on arrival:	Quiet on the way out:
Propulsion	**Transverse propulsion**
Number of motors: Number of propellers: Step type:	Bow (Quantity and Power): Stern (Quantity and Power):
Number and size of manifold outlets	**Maximum crane capacity (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 Load Transfer

Information between the ship and the terminal			
Name of ship: Trip number:		Berth: Date of docking:	
Contract data			
Number of pumps on board:			
Volumetric capacity 98%: m3			
Guaranteed discharge pressure: (when unloading): Kgf/cm2			
Ballasting/deballasting capacity simultaneous with loading/unloading:			
Travel information			
Type of charter (VCP, TCP, COA, etc):			
Type of trip (Cabotage/Long Haul):			
Ports or places of origin and destination:			
Did the ship request supplies?			
Means of communication between ship and terminal:			
Cargo information			
Product:	Quantity:	Temperature:	API:
WASTE - *SLOP*			
Quantity:	Temperature:	API:	
Fluidity:	Source: Contaminants:		
Ballast			
Dirty ballast: Quantity: Temperature:		**Segregated ballast:** Quantity:	
Information about the operation			
For discharges: Will the ship carry out a special operation? (COW, Inertization, etc.)			
Estimated time for the special operation:			
Time needed to stop the pumps:			
For Loads:Time in advance for TOP notice:			
Flow for the TOP period:			
Quantity of ballast to be unloaded:			
Maximum flow rate allowed for deballasting:			
Are there any restrictions on electrostatic properties?			
Are there any restrictions on the use of self-closing valves?			
Ship and terminal conditions for loading and unloading products			

Ship: Pressure: Flow rate: **Temperature:** MAX: MIN:	**Terminal:** Pressure: Flow rate: **Temperature:** MAX: MIN:
Sequence of operations by product	
Quantity to be loaded/unloaded: Origin / Destination Tanks: On-board / ground lines: Loading arms / hoses used: Forecast for start and end of operation:	
Further information on operation and safety	