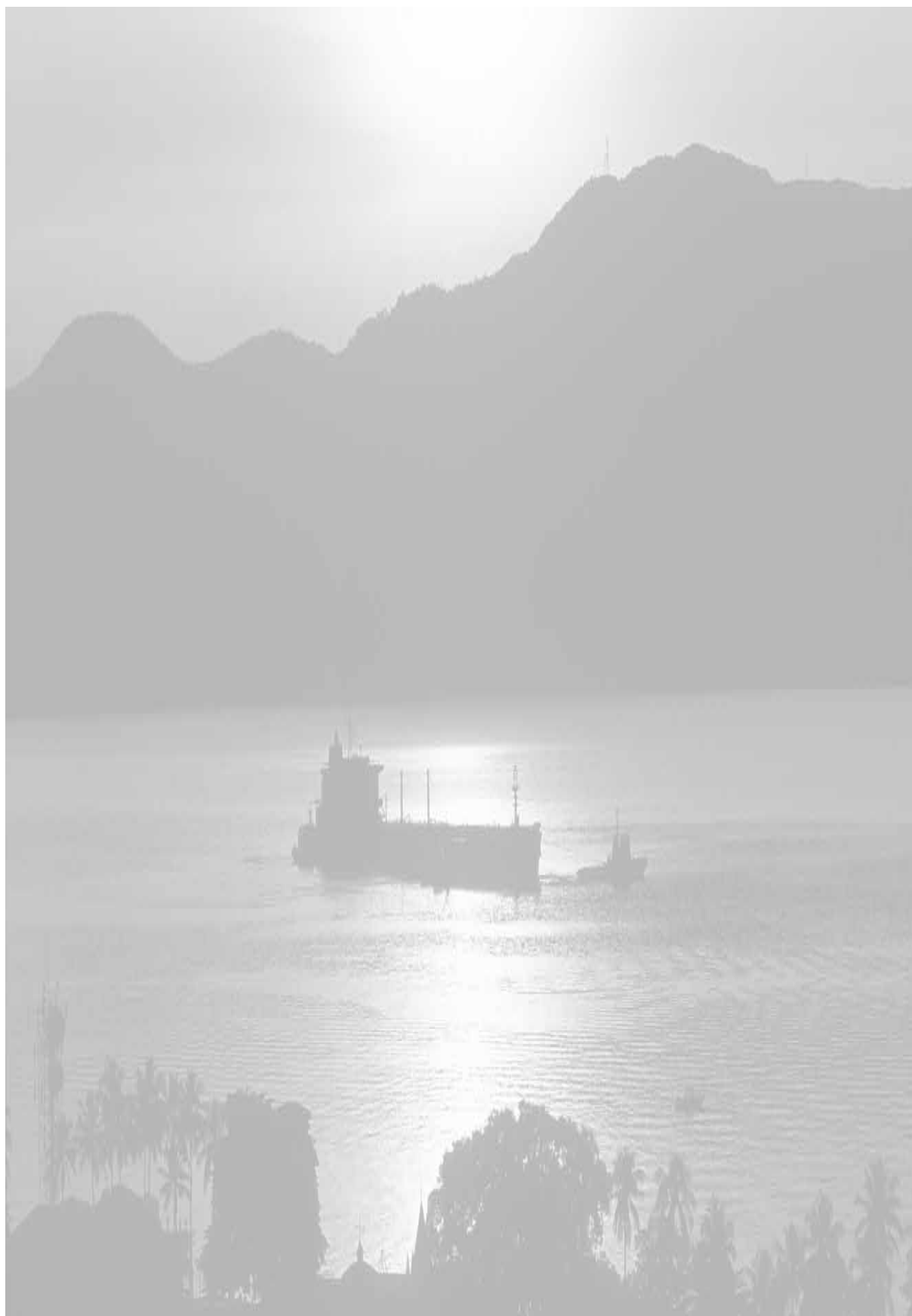


# PORT INFORMATION

Terminal  
**CABEDELLO**

*1<sup>st</sup> edition*



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## INTRODUCTION

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

The Port Information has versions in Portuguese and English languages.

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

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

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

**Supervisor do Terminal de Cabedelo**

Rua Coronel José Teles, 497 – Centro

ZIP Code: 58310-000 – Cabedelo – PB – Brazil

Phone.: [55 83] 228-2936

Fax: [55 83] 228-3493

**Petrobras Transporte S.A. – Transpetro**

Av. Presidente Vargas, 328 / 9º andar – Centro  
ZIP Code: 20091-060 – Rio de Janeiro – RJ – Brazil  
Phone: [55 83] 3211-9085  
Fax: [55 83] 3211-9067

The most recent version of this Port Information can be obtained at the following address: ([www.transpetro.com.br](http://www.transpetro.com.br)).

## DEFINITIONS

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

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

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

**DWT** – Dead Weight Tonnage.

**Giaont** – Generic designation for the professionals inspecting the operational safety. The name comes from "Safety Surveyor Staff".

**IMO** – International Maritime Organization.

**Isgott** – International Safety Guide for Oil Tankers and Terminals.

**LCP** – Local Contingency Plan.

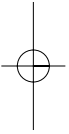
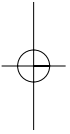
**SQUAT effect** – Increase of a ship's draft as a result of an increase in the displacement speed, especially in restricted waters.

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

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

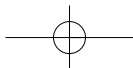
**UTC** – Universal Time Control.

**VTS** – Vessel Traffic Service.



PORT INFORMATION

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# CHARTS AND REFERENCE DOCUMENTS

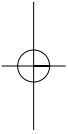
Terminal information may be obtained in the following publications.

## Charts

Area	Chart Number
	Brazil (DHN)
Ponta dos Três Irmãos to Cabo Branco	800
Coast maritime	806
Cabedelo port	830

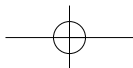
## Other Publications

Type/Subject	Publisher or Source
	Brazil (DHN)
(Normas e procedimentos da Capitania dos Portos)	NPCP
Navigation support on the East coast	East coast route
List of radio aids	List DH 8-8



PORT INFORMATION

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# DOCUMENTS AND INFORMATION EXCHANGE

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

Information	Prepared by:			Delivered to			Comments
	Terminal	Ship	Both	Terminal	Ship	Both	
<b>Before arrival</b>							
Estimated Time of Arrival (ETA) and ship information		X		X			According to specific documentation
Essential Terminal information	X				X		According to specific documentation
<b>Before cargo or bunker transfer/discharge</b>							
Details about on-board cargo/slop/ballast		X		X			According to specific documentation
Essential operating information (fill in locally)	X				X		According to specific documentation
Ship/Shore Safety Checklist			X			X	As per Isgott Appendix A

*continue*

Information	Prepared by:			Delivered to			Comments
	Terminal	Ship	Both	Terminal	Ship	Both	
<b>During cargo or bunker transfer/discharge</b>							
Repeat Ship/Shore Safety Checklist			X			X	As per Isgott Appendix A
<b>After cargo or bunker transfer, before departure</b>							
Information required for unberthing the ship			X			X	Quantity of fuel and water on-board
<b>After unberthing, on leaving Port</b>							
Information concerning Port departure data		X		X			Pilot disembarkation time and port departure time

PORT INFORMATION

# DESCRIPTION OF THE PORT OR ANCHORAGE AREA

## 5.1 General Description

Cabedelo port is comprised of two berths for operation with liquid bulks and operated by Petrobras Transporte S.A. – Transpetro.

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

The transport of these products aims at serving the State of Paraíba and the cities nearby, and the MGO is used for bunkering vessels.

## 5.2 Location

### 5.2.1 Coordinates

The terminal facilities are located at the following coordinates:

Latitude 06° 58' 21" S and Longitude 34° 50' 18" W.

### 5.2.2 General Geographical Location

Cabedelo Terminal is located on the right bank and near the mouth of the Paraíba do Norte river, in the State of Paraíba, and is integral part of Cabedelo Port. It is located in front of Restinga island, in the Northeast part of the city of Cabedelo. Its influence area extends to the States of Paraíba, Rio Grande do Norte and Pernambuco.

## 5.3 Approaching the Terminal

### 5.3.1 By road

Via federal highway BR-230, integrated to BR-101 highway, in the periphery of João Pessoa (PB).

### 5.3.2 By railway

The port is served by Companhia Ferroviária do Nordeste (Northeast Railway Company), former Superintendência Regional Recife (SR 1), of Rede Ferroviária Federal S.A. (RFFSA).

### 5.3.3 By river

Via Paraíba do Norte river, presenting good conditions of navigability for vessels with maximum draft of 7.5 m. Only small boats travel upstream from the Port, not influencing the volume of cargo transported.

### 5.3.4 By sea

The bar, in the mouth of the Paraíba do Norte river estuary, is 170 m wide and 9.5 m deep. The access channel has total extension of 5.5 km, minimum width of 120 m and depth of 9.0 m at low tide.

### 5.3.5 Anchorage areas

- Ships with less than 5000 ton or in quarantine – 06° 58' 67" S – 034° 50' 34" W  
Depth: 4 to 6 m  
Seabed nature: mud, the anchorage area is limited by a circle with 01 mile of radius.
- Ships with more than 5000 ton or in repair or dispute – 06° 57' 92" S – 034° 51' 02" W  
Depth: 3 to 8 m  
Seabed nature: mud, sheltered for all winds, except the N wind. The anchorage area is limited by a circle with 01 mile of radius.

Sport and leisure vessels must anchor at S of the port docks, in front of Ribeira beach. In the anchorage area near the bar, it will be recommended the use of 4 anchor chain fathoms; in the remaining areas, only 3 fathoms.

It is forbidden to anchor in the range of 280 m throughout the docks, as well as in the channel to access the port.

### 5.3.6 Navigational aids

The navigators heading to Cabedelo port coming from the N have Traição lighthouse as an aid to landing, located in Ponta da Trincheira.

During the day, the Sagi river net, located in the N from the Guaju river and similar to a liferaft sail, the churches in the village of Traição and the barriers of Miriri can be identified and help on approaching the bar, where there are noticeable points, such as the church of N. S. da Guia (Our Lady of Guidance), two silver tanks on Santa Catarina beach, the monastery in the W of Cabo Branco and the Teone mill. These points are more noticeable than Pedra Seca lighthouse near the bar, which, for being small, may be confused with the liferafts that eventually sail in the region.

Navigators must be very careful when approaching, since the constant quadrant winds that blow in the region make the ship rake towards near the dangerous coast, because in the N of Cabedelo, near Ponta de Lucena, the waters are deep, and there are countless shoals and stones. At night, the lights from lighthouses and towers and João Pessoa city lights help the navigator.

In case of haze, it is wise to use the radio lighthouse of João Pessoa airport to help landing, using the necessary caution. The use of echo-bathymeter and radar cannot be dismissed.

When coming from the S, the navigator first sees Cabo Branco and, then, the monastery, the church in the S of the lighthouse and the lighthouse itself. When Cabo Branco is marked athwart, one can identify Pedra Seca lighthouse in the mouth of the bar, near Cabedelo.

Such as in landing when coming from N, it is recommended caution when approaching with strong winds and the use of echo-bathymeter, radiogoniometer and radar.

In flood tide, the vessels must have the following features in order to be safely admitted to the port:

- **Must be up to 160 m long** – Maximum draft on flood tide: 8.50 m.
- **Must be between 160 and 170 m long** – Maximum draft on flood tide: 8.10 m.
- **Must be between 170 and 180 m long** – Maximum draft on flood tide: 7.70 m.
- **Must be between 180 and 190 m long** – Maximum draft on flood tide: 7.30 m.
- **Must be between 190 and 200 m long** – Maximum draft on flood tide: 7.00 m.

At low tide, the ships up to 200 m long and 30 meters of beam must have maximum draft of 7.00 m.

### 5.3.7 Pilotage

Inside or outside the port area, pilotage is mandatory for all ships headed to Cabedelo. The pilots for Cabedelo port can be requested via vessel agent, 24 hours before the arrival. They can also be requested via channel 16 in VHF radio phone call. If the ship has mobile cellular phone, the pilot can be requested via telephone number (55 83) 3228-4261 or fax (55 83) 3228-1349 from Cabedelo.

The location where the pilot waits and is released is defined as the anchorage point, located 1.6 mile in the NE from Ponta de Mato, mentioned on chart DHN 830. When anchoring for receiving the pilot, it is recommended to conduct a bed research before anchoring, when the location is still unfamiliar, because there are stones that may burrow the ship's anchor near this point.

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

### 5.3.8 Tugs and Port services

The tug services available are arranged by the ship agents for berthing and unberthing. The agents provide the tugs for berthing based on their estimated time of arrival (ETA informed by the ships). On unberthing, the tugs are requested via estimated time for concluding the operation supplied by the ship and time for releasing the ship.

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

#### Call:

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

#### Before passing the towing rope:

- 2 short whistles – prepare to push forward or catch the bow rope.
- 3 short whistles – prepare to push backwards or catch the aft rope.

#### After passing the towing rope:

- 1 long whistle – pull towards starboard.
- 2 short whistles – pull towards port side.
- 3 short whistles – stop pulling.

#### Maneuvering alongside the ship:

- 1 short whistle – pull.
- 2 short whistles – push.



Other whistle signals are also used for auxiliary vessels:

**Call:**

→ 2 long whistles, followed by a short one – to call the pilot boat.

→ 1 long whistle, followed by a short one – to call the boat.

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

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

Pilotage boat – The pilot uses the pilotage boat from Cabedelo.

The port has a mooring service that is carried out by the company SEAPORT, and the pilot boat helps maneuvering the ropes. This service is called by Agência Paraibana.

### 5.3.9 Navigation risks

As mentioned on 5.3.5, navigators must be extremely careful when landing towards Cabedelo, using the echo-bathymeter, radar and other modern positioning equipment.

There are constant quadrant winds that make the ship rake towards near the coast, which is very shallow and dangerous due to shoals and stones.

SE from Baixo do Lucena there is a sunken wreck dangerous to navigation. When navigators approach Cabedelo port, they must pay attention to two shoals with 4.1 m and 4.6 m that exist at positions latitude 06° 56' 62" S and longitude 034° 49' 52" W, and latitude 06° 56' 52" S and longitude 034° 49' 31" W, respectively defended by buoys numbers 4 and 6.

E from Ponta do Bessa and outside the 10m isobath, there is the burned wreck shoal, probing 8 m.

The entire coastal maritime area located within the 10 m isobath (chart 806) is dotted with rocky and submersed zones that produce breaks and offer high danger for ships with draft higher than 7 m that approach the coast.

### 5.3.10 General restrictions

Every ship must arrive at the terminal with ballast enough to keep maximum TRIM of three meters (3 m), and a safe draft during the maneuvers.

The maximum speed limit recommended for port maneuvers:

→ Wind = 20 knots.

→ Current = 30 knots.

## 5.4 Maneuver Areas

The maneuver basin, next to the pier, is approximately 300 m long and is located in front of the berths, between 101 and 103, and is approximately 9.5 meters deep.

This area is used for the ship to rotate around its axis, enabling it to berth on the pier at the port or at starboard sides.

### 5.4.1 Navigational and berthing aids

The equipment used for helping the ship to berth are all propriety of the Cabedelo port pilotage, controlling the depths.

Cabedelo terminal does not have equipment to help ships berthing, equipment such as docking radar, an equipment used for measuring the ship speed and approach angle.

### 5.4.2 Controlling the depths

The Harbor Master controls through bathymetry the depth of the channel that provides access to the docks, as well as the depth of the berthing and maneuver points.

The depth on Cabedelo port is variable throughout the year due to the silting up caused by the Paraíba river, which in rainy periods increases the stream when flowing into the sea. Thus, the channel, the maneuvering area and the berthing point need to be dredged in time intervals determined by the bathymetry study from the Harbor Master.

### 5.4.3 Maximum dimensions

The maximum vessel size for berthing on TA/Cabedelo is of 40,000 SWT for berthing on berths 101 and 103.

## 5.5 Environmental Factors

The annual average atmospheric pressure is around 1,012 mb.

The temperatures observed during the year oscillate from 17° C, in June, to 38° C, in February. The relative air humidity throughout the year is of approximately 82%.

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

### 5.5.1 Winds

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

### 5.5.2 Waves

The waves on the anchoring area result from the predominant wind forces, as well as from its direction and duration. If the wind is E-SSE, the average wave height ranges between 0.9 and 1.4 m.

### 5.5.3 Rainfall

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

### 5.5.4 Light storms

Lightning storms are rare and have low intensity during the year, and they may occur occasionally in the winter time.

### 5.5.5 Visibility

The visibility is usually considered good to excellent, but may be reduced on the rainy period. There is no fog in Cabedelo.

### 5.5.6 Tide currents

Due to the coast configuration, the prevailing current is the tide current, which direction is south during floods and north during ebbs.

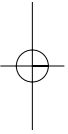
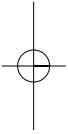
### 5.5.7 Tide level variation

Tide of semi-daytime nature. The reduction level refers to the smallest height possible of low tides. The average level on the reduction level in Cabedelo Port is of 1.25 m, related to chart 830 DHN. The tide variation on Cabedelo port ranges from 2.0 at high tide to 1.0 m at low tide.

Further details can be found on the table of tides DH-29, DHN publications.

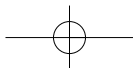
### 5.5.8 Measurements

The terminal does not provide instant information about wind and current intensity and direction. When vessels approach for berthing, this information can be made available by pilotage via VHF radio to the on-board representative.



PORT INFORMATION

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## TERMINAL DESCRIPTION

### 6.1 General Description

Cabedelo Terminal started its operations in 1981. In the beginning, its operations were restricted to receiving fuel alcohol from tanker trucks coming from production mills in Paraíba and transporting it through ships to other States, thus making the commercialization of alcohol production in Paraíba feasible. In that time, Petrobras Distribuidora (BR) was responsible for operating the Terminal, on a service provision deal with the holding.

In 1993, Petrobras assumed the terminal facilities, expanding its attributions. Petrobras started receiving oil by-products via cabotage (gasoline and diesel) for all distributing companies, storing products for some of these companies and bunkering ships on Cabedelo port with MGO.

In 2001, the terminal started being operated by Petrobras Transporte S.A – Transpetro, integral subsidiary of Petrobrás, a company created to comply with the described on article 65 of Law 9478 from 1997 (ceasing of oil monopoly).

The terminal remains completely responsible for supplying oil by-products to the State of Paraíba, with its influence area extending to the States of Pernambuco and Rio Grande do Norte.

The Terminal has a storage area, comprised of two tanks from Transpetro with capacity for 10.5 million liters and six tanks from BR with capacity for 12 million liters, targeted to storing gasoline, diesel, MGO, fuel alcohol and anhydrous alcohol.

The bunkering is made via ducts or Tanker Trucks that transport the product from the storage area to the port.

The Terminal currently receives an average of 41,000 m<sup>3</sup>/month of Oil by-products and Alcohol through tankers and trucks, being:

- 1,500 m<sup>3</sup>/month of alcohol by trucks.
- 18,000 m<sup>3</sup>/month of gasoline by tankers.
- 21,500 m<sup>3</sup>/month of diesel oil by tankers.

## 6.2 Physical Details of the Berths

The table on the next page presents the features of Cabedelo port mooring berths.

## 6.3 Berthing and Mooring Arrangements

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

## 6.4 Berth Features for Loading, Discharging and Bunker

The table on the next page indicates per berth: the products moved, the hoses available, the connections, reductions and flange details, the temperature limits, the maximum loading/discharging flows and pressures, etc.

## 6.5 Management and Control

The TA/Cabedelo operation room is located on the area near the diesel/MGO storage area, nearly 1 km away from Cabedelo port. In this center the operator responsible for controlling all terminal operations is located. In the pier, there are contracted assistant operators, who prepare the connection of hoses to the ship and guide the ship berthing and positioning, and also visually track the discharge.

Communications with the ships are carried out via VHF radios in maritime frequencies previously agreed and registered. A secondary mean, via cellular telephony, is established in case of failure of the main system.

### Physical Details of the Berths

Berth No.	Type	Berth Length (meters)	Depth (meters)	Tide (meters)		Beam (max.)	Ship length (max.)	Products Moved	Displacement (max.)	Note
				Syzygy	Dry					
101	L	200	11	2.7	0.0	N/A not applicable	200	Diesel / MGO, gasoline	40,000 tonnes	The terminal does not have equipment that record the ship speed and approach distance, this registration is made by observation
103	L	200	11	2.7	0.0	N/A not applicable	200	Diesel / MGO, gasoline	40,000 tonnes	

R

### Berthing and Mooring Arrangements

Berth No. (example)	Requires Pilot for maneuvering	Ship Size example: DWT (maximum)	Number and BP of Tugs				Approach		Mooring Points			Mooring Lines (Recommended, bow and stern)	
			Berthing		Unberthing		Speed (max.)	Angle (max.)	Bollards	Hooks	Line	Breast Line	Spring
			No.	BP	No.	BP							
101	Yes	Up to 40,000	2	14	2	14	-	-	6	-	3	-	2
103	Yes	Up to 40,000	2	14	2	14	-	-	6	-	3	-	2

### Berth features for Loading, Discharging and Bunker

Berth No.	Products	Hose flanges	Reductions available in the berth	Receives or sends	Temperature	Flow (maximum) (m <sup>3</sup> /h)	Pressure (maximum) (kgf/cm <sup>2</sup> )	Note
101	Diesel/MGO, Gasoline	4 X 8"	-	Receives and sends	Environment	2,600	7	
103	Diesel/MGO, Gasoline	4 X 8"	-	Receives and sends	Environment	2,600	7	

## 6.6 Major Risks

The major risks associated with the ship laytime on berths 101 and 103 of Cabedelo port operated by TA/Cabedelo are:

- When exposed due to the absence of a larger ship on berth 105, the ship tied up at berths 101 and 103 becomes more vulnerable to the risk of pulling away from the docks fenders, when there is incidence of strong current in the south-north direction.
- The risks previously described require greater attention from the ships' crews where the mooring lines are concerned.



# PROCEDURES

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

## 7.1 Before Arrival

**7.1.1** When berthing, and after the safety inspection based on the checklist from Isgott is undertaken, the ship will not be authorized by the terminal to start its operations if there are pending issues not solved by the crew.

**7.1.2** On-board repairs and washing the ship's cargo tank should preferably be carried out at the anchorage area. To carry out these services with the ship berthed, prior authorization from the terminal and the port will be necessary.

**7.1.3** The ships heading to the TA/Cabedelo facilities must indicate the estimated time of arrival (ETA) 24 hours in advance, directly to the respective agent. The local time must be specified on the ETA information.

## 7.2 Arrival

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

MGO bunkering requests must be forwarded to UN-Bunker via its agent.

**7.2.3** The information from terminal to ship and vice-versa are described on the initial chart from Siscope and on the annex to the initial chart based on N-2689.

Please find below the list of important addresses and telephone numbers in the port:

**Receita Federal (Internal Revenue Service)**

Rua Presidente João Pessoa, 75 – Centro

ZIP Code: 58310-000 – Cabedelo – PB

Phone: [55 83] 3228-1208

**Police Department**

Travessa João Vitaliano, s/n – Centro

ZIP Code: 58310-000 – Cabedelo – PB

Phone: [55 83] 3228-1963

**Cabedelo General Hospital and Emergency Services**

Rua Juarez Távora, 84 – Centro

ZIP Code: 58310-000 – Cabedelo – PB

Phone: [55 83] 3228-3900

**Cabedelo Fire Department**

Rua Prefeito Enivaldo F. de Miranda, 70 – Centro – PB

ZIP Code: 58310-000 – Cabedelo – PB

Phone: [55 83] 3228-2762

## 7.3 Berthing

### 7.3.1 Ship mooring system

The mooring lines must receive permanent care so that the ship is always berthed. All the lines must be kept under adequate tension during the operation, with the winch brakes on. The use of automatic tensioning winches is not permitted.

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

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

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

In Cabedelo port the bollards are very close to the docks edge, therefore its placement perpendicular to the ship's longitudinal axle is not possible, and they are passed as much as possible forward and aft.

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

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

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

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

The Cabedelo port piers do not have ladders for easy access to the ships berthed. The crew that disembarks uses the ship ladders, whether they are gangway or wharf ladder.

## **7.4 Before Load Transfer**

**7.4.1** Electric insulation between ship and terminal is carried out through celeron (phenolic laminate) joints, ensuring electric discontinuity.

**7.4.2** The resources necessary for connection are established on the first contact between ship and terminal, according to specific documentation from the terminal for discharge operation, such as initial chart from Siscope and the annex to the chart based on N-2689.

The ship must have discharge manifolds compatible with the ones from the terminal to enable hose connection.

**7.4.3** Onboard measurements are executed by the ship's personnel, and inspected by the terminal's representatives and other inspectors. The material used must be duly grounded, and the measuring instruments must be explosion-proof.

**7.4.4** The operation can only start after the entire documentation has been filled in and delivered by the shore and onboard representatives.

**7.4.5** The Ship/Shore Safety Checklist. (Appendix A of "Isgott") is checked and filled in by the ship's chief officer and by the terminal representative during the initial ship release. Cabedelo terminal does not have Safety Inspector (Giaont).

**7.4.6** The prohibition on non-authorized small boats remaining alongside or near berthed ships shall be strictly observed. Only the terminal service vessels or the vessels authorized can be in the vicinities or side by side, provided that they meet all safety conditions. Any violation of this rule shall be communicated to the competent authority.

**7.4.7** The berthed ships should not run their propeller(s) while connected to the discharge hoses.

## 7.5 Transfer on discharge

**7.5.1** The monitoring of pressures during product transfer is recorded by the representatives on board and on shore at the ship's manifold, hour by hour. The terminal follows the pressure and density variables on the on-board and on shore manifold, respectively, through a specific form. The flow rates on both sides of the operation are measured hour by hour and compared between the parties, and according to the systematics used there will be a limiting parameter for operational control. Any changes in the operating conditions must be communicated and documented between the parties. It is expressly forbidden to close the valves that cause system counter pressure during the operation.

**7.5.2** Ballast and deballast pipes and tanks must be designated for this purpose only, and remain isolated from other pipes aboard. The water ballast to be discharged into the sea shall be totally free of oil, any oily residues or other substances that may pollute the seawater.

**7.5.3** The TA/Cabedelo does not have tanks for receiving slop residues from the ships.

**7.5.4** Usually, the conventional tank cleaning operation is not accepted on Cabedelo port, for the reason mentioned on item 7.5.3. However, if necessary, the ship shall move the residue to its slop.

**7.5.5** No repairs or maintenance work involving a risk of sparks or other forms of ignition may be carried out while the ship is berthed at the port piers. In extreme cases, all the safety rules shall be complied with and fulfilled. Repairs involving the pier facilities or implying in a ship restriction during the laytime must be informed in advance to the terminal by the port, or, in case of service from the terminal, it must communicate the port.

**7.5.6** The intermediate inspections, according to the Appendix A of Isgott, will be carried out by the chief officer and the operator during the ship operation as agreed.

**7.5.7** Loading or discharging must be interrupted in any situation that might offer risk, either to the ship or the terminal.

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

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

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

**7.5.8** In any emergency situation, the TA/Cabedelo interrupts the on-going operations so that all available resources are focused on mitigating the disaster. The actions and contacts for every type of emergency are described in the Terminal's LCP.

## **7.6 Measurements and Documentation**

**7.6.1** When the operation is finished, the draining of the loading hoses used must commence. The terminal operators will arrange for the used hoses to be drained to a closed system on the pier. The ship representative shall arrange for drainage of the onboard section.

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

## **7.7 Unberthing and Leaving Port**

**7.7.1** During the unberthing and maneuvers for leaving port, the channel limits and hazards, listed in the section 5.3 and its sub-items, must be observed.

**7.7.2** Usually, the pilot disembarks at the same embarkation point described in section 5.3, where the pilotage boat will be waiting for him.

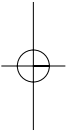
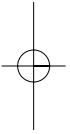
## **7.8 Compliance with the ISPS Code**

Cabedelo Terminal has implemented corporate safety protection measures applicable to ships and port facilities, in compliance with the requirements of the International Maritime Organization – IMO, by adopting the ISPS – International Ships and Port Facilities code.

When required, these protection measures may be taken by the ship, via the Port Facility Security Officer (PFSO), or VHF radio, channels 16 or 09.

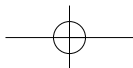
Usually, Cabedelo Terminal operates at safety level 01. For further details, the Port Facility Security Officer (PFSO), who is qualified according to the requirements stipulated by the IMO, may be contacted:

Phone: (55 83) 228-2936 – Mobile: (55 83) 9982-5626



PORT INFORMATION

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# PORT OR ANCHORAGE AREA ORGANIZATION

## 8.1 Port Control or VTS

This section does not apply to TA/Cabedelo.

## 8.2 Maritime Authority

**8.2.1** The maritime authority the terminal is subordinated to is Paraíba Harbor Master.

**8.2.2** Paraíba Harbor Master officer determines when authorities will make a visit after the ship berths the Cabedelo port pier.

**8.2.3** The official Cabedelo port limits go from the Paraíba river estuary to the coordinates of latitude 06° 59" S and latitude 06° 55" S.

The Harbor Master is the maritime authority within Cabedelo port limits, and it is up to this authority to determine the actions and charge the people liable for any incident within the port limits.

## 8.3 Pilotage

**8.3.1** The pilotage is mandatory for all ship maneuvers as from the pilot's point of embarkation (section 5.3).

### 8.3.2 Pilotage organizations operating at Cabedelo port.

#### Cabedelo Pilotage

Rua Maura Viana Medeiros, 176 – Centro  
 ZIP Code: 58310-000 – Cabedelo – PB – Brazil  
 Phone: [55 83] 3228-2195 / 3228-1801

#### Paraíba Pilotage

Rua Presidente João Pessoa, 27 – Centro  
 ZIP Code: 58310-000 – Cabedelo – PB – Brazil  
 Phone: [55 83] 3228-1478 / 3228-1349

**8.3.3** In all situations, the pilotage service is called into action by the ship's agent. In case of emergencies, and depending on the availability, the pilot will embark on the ship at the earliest opportunity.

## 8.4 Tugs and other Maritime Services

### 8.4.1 List of the tugs available at the anchorage area and/or Terminal.

Operator	Name	Type	Total HP	Static Traction (Bollard-Pull)
Sobrare	Mercurius	Pusher	1,200	13.5
Sobrare	Leones	Pusher	1,200	15.5

### 8.4.2 Other relevant maritime services of the port:

Support boats: The boat service is executed by the pilot boat. If necessary, such service may be requested directly to the ship agent with the proper advance.

### 8.5 Other Oil/Gas Terminals

Not applicable to TA/Cabedelo.

### 8.6 Other Major Users

Not applicable to TA/Cabedelo.



# EMERGENCY AND COMBAT PLANNING

## 9.1 Emergency Contacts

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

Organization	Business Hours	Identification Acronym	Telephone (55 83)	Fax (55 83)	Cell phone (55 83)	VHF/UHF	
						Call	Conversation
Harbor Master	24 hours	–	3241-1293	–	9981-5359	16	14
Tugs	24 hours	–	3228-8844	3228-8848	–	16	14
Pilots	24 hours	–	3228-2195	–	–	16	14
Terminal control room	7:20 am to 4:20 pm	CCO	3228-3343	3228-3493	9979-2261	16	9
Administrative	7:20 am to 4:20 pm	–	3228-3936	3228-3493	–	–	–
TA/Cabedelo supervision	7:20 am to 4:20 pm	–	3228-3936	3228-3493	9981-3245	–	–
Fire Department	24 hours	–	3228-8632	–	–	–	–
Civil Defense	24 hours	–	3218-4679	–	9979-0994	–	–
Cabedelo City Hall	8 am to 5 pm	–	3250-3200	–	–	–	–
Sudema	24 hours	–	3218-5581	–	9985-0032	–	–
Ibama	24 hours	–	3218-7200	–	–	–	–

## 9.2 Environmentally Sensitive Areas

On the LCP (Maps, Drawings and Annexes), the areas most sensitive to an environmental impact are described on the environmental sensitivity map, highlighting, according to the area selected, the points subject to greater impact when this type of event occurs on the Cabedelo area.

## 9.3 General Description of the Emergency Combat Organization

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

### Incidents within Cabedelo Port/Terminal area

Incident type	Organization in charge	Other organizations involved			
Collision in the channel	Harbor Master	Civil Defense	Transpetro	–	–
Vessel running aground	Harbor Master	Civil Defense	Transpetro	–	–
Collision at the berth	Harbor Master	Transpetro	Civil Defense	–	–
Vessel Sinking	Harbor Master	Civil Defense	Fire Department	Transpetro	–
Fire onboard	Ship	Transpetro	Fire Department	Civil Defense	Harbor Master
Fire in the berth	Transpetro	Fire Department	Civil Defense	Harbor Master	Cia. Docas da Paraíba
Pollution	Transpetro or ship	Harbor Master	Sudema	Ibama	Civil Defense

## 9.4 Contingency Plans

**9.4.1** The LCP (Local Contingency Plan) is the TA/Cabedelo plan for combating emergency situations at all its facilities. It is available in all the operational areas, affixed on notice boards located at the entrance to the operation rooms, maintenance and administrative buildings. The responsible for its update is the local SMS (health, environment and safety activity).

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

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

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

TA/Cabedelo has an Emergency Response Center (CRE) complete with modern equipment and various facilities for use in accidental pollution. Periodically, an intensive training program is carried out, which equips the terminal employees to act according to the LCP (Local Contingency Plan). Located at a strategic point, it can be called into action quickly when combating emergencies. Floating booms, oil collectors and other equipment and materials necessary to works are stored in its shed. The collector vessels are available at a marina for immediate use. The supporting vessel is located within Cabedelo port for immediate use.

**9.4.3** The terminal does not have equipment for first-aid procedures in the pier area. The equipment used by the terminal for first-aid procedures is located at the Terminal, which is approximately 1 Km away from the pier. In case of a more serious accident, the fire department, located nearly 100 m from the terminal, is called.

## **9.5 Public Resources for Combating Emergencies**

### **9.5.1 Port administrator**

The Cabedelo port administrator entity does not have emergency-fighting resources.

### **9.5.2 Maritime authority**

The maritime authority in Cabedelo does not have resources to fight emergency on Cabedelo port.

### **9.5.3 Local emergency services**

The fire department, the police and the Paraíba hospital unit have the resources they are targeted to and are called according to the LCP. They do not have equipment for fighting environmental pollution.

### **9.5.4 State and National Combat Organizations**

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

### 9.5.5 Mutual support plans

The institutions listed below are part of the PAM-CIC (Mutual Support Plan of the city of Cabedelo) and their resources are available as previously agreed upon in this plan:

- Fire Department of the State of Paraiba
- Transpetro/TA/Cabedelo
- ESSO Terminal
- Petrobras Distribuidora terminal
- Cabedelo City Hall
- Civil Defense
- Cabedelo Terminal

## 9.6 Fight Against Oil Spills

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

### 9.6.1 Combat capacity of the Terminal

The resources available at the terminal for combating oil spillage situations are listed in the LCP, which is available in all the administrative, operational and maintenance areas of TA/Cabedelo.

### 9.6.2 Combat capacity of the environment agency

The Environmental Agency of Paraiba does not have resources for combating oil spillage in the sea.

### 9.6.3 Resources available from the Mutual Support Plans of other Terminals

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

### 9.6.4 Tier-2 combat

Organization designated to combat significant pollution.

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

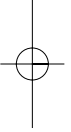
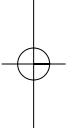
### **9.6.5 Tier-3 combat**

Organization designated to combat large-scale pollution.

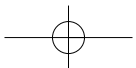
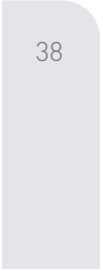
In such events, national resources from Transpetro/Petrobras are requested. These resources, their readiness and how they are called into action are described in the LCP.

## **9.7 Combating a Large Scale Incident**

The LCP from TA/Cabedelo lists the actions and the entities in charge of every expected event type that may occur within its unit, pipelines or vessels. For events not foreseen in this document, Transpetro/Petrobras will provide all the national or international resources within its reach.



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# CONTACTS

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

## 10.1 Terminal

Location	Contact	Telephone (55 83)	Fax (55 83)	VHF/UHF Channels	
				Call	Conversation
Berth 101 e 103	Operator	–	–	16	9
Control Center (CCO)	Operator	3228-3343	–	16	9
Supervisor	Supervisor	3228-2936	3228-3493	16	9
Security (SMS)	Operator	3228-3343	–	16	9

## 10.2 Port Services

Organization	Contact	Telephone (55 83)	Fax	E-mail	VHF/UHF Channels	
					Call	Conversation
Harbor Master	Official on duty	3241-1293	–	–	16	9
Pilot Association	Agency	3228-2195	–	–	16	9
Tugs	Agency	3228-8848	–	–	16	9

### 10.3 Selected Navigation Agents and Suppliers

Company	Business	Telephone (55 83)	Fax (55 83)	E-mail	VHF/UHF Channels	
					Call	Conversation
Paraibana	Agent	3228-4261	3228-3716	apdm@veloxmail.com.br	16	9
Heitor Gusmão	Agent	3228-3030	–	–	–	–
Willians	Agent	3228-1350	–	–	–	–
Ton	Agent	3228-1960	–	–	–	–

### 10.4 Local Authorities, State and National Agencies

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

### 10.5 Emergency Combat Organizations

The organizations available at the port for combating emergencies are listed in section 9.3.



# APPENDICES

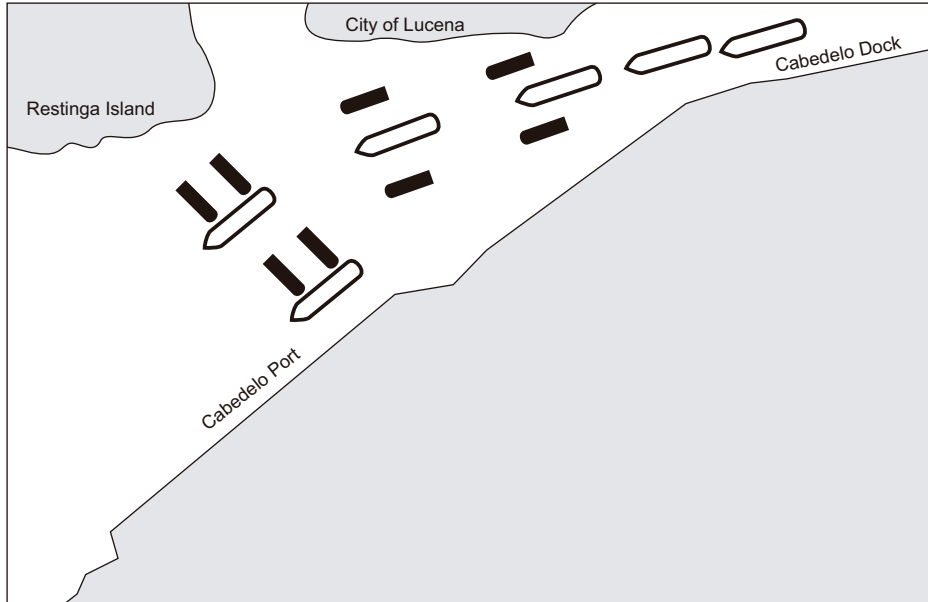
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## A – Cabedelo pier location.

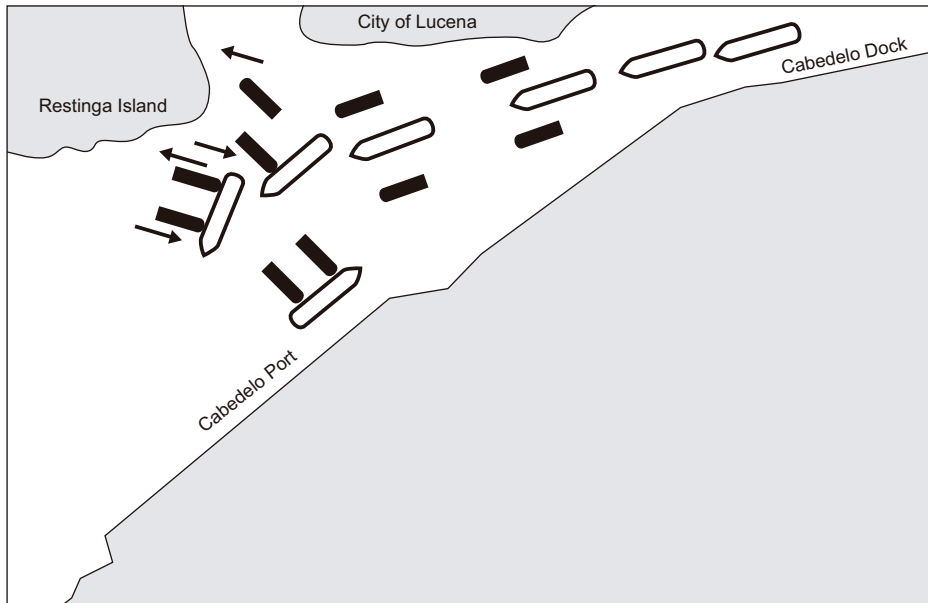


CABEDELÓ TERMINAL

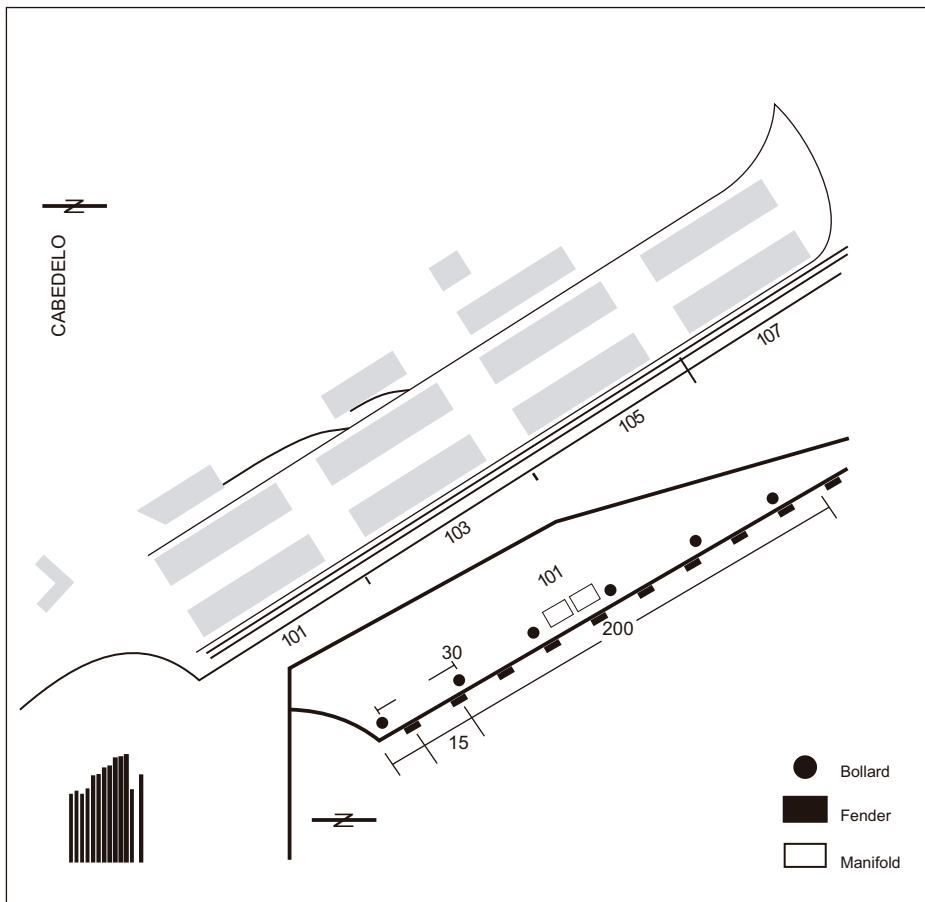
**Scheme for towing ships on berths 101 and 103 berthed on the port side**



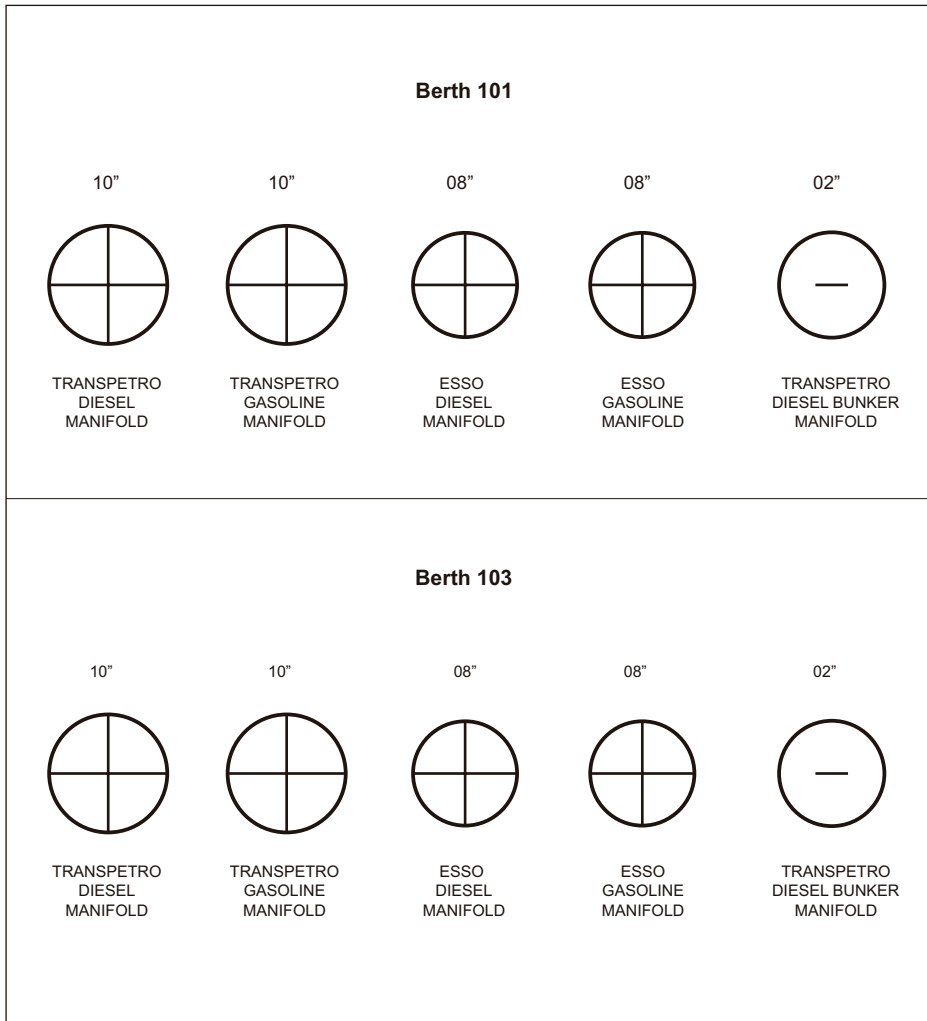
**Scheme for towing ships on berths 101 and 103 berthed on the starboard side**



**B – Diagram of berth 101 with length, fenders, location of mooring points and manifolds. The measures indicated on the figure below are in meters (m). The same configuration and measures are valid for berth 103.**



### C – Diagram with loading/discharge connections, dimensions and sizes of flanges



PORT INFORMATION