



# PORT INFORMATION

Terminal Information Booklet (TIB)

Vitória Waterway Terminal -  
(TEVIT/TGL)  
Vitória, ES.

# VITÓRIA TERMINAL

**Full Address of TEVIT Management:** Rodovia ES-010, Km 60, s/n – Barra do Riacho – Aracruz - ES  
**Telephone:** (55 27) 3194-4153

## Contacts

| Organization                                                | Time                                                                                     | Contact                    | Email                           | Telephone<br>(55 27)      | VHF/ UHF<br>Calling<br>Channel | VHF / UHF<br>Working<br>Channel |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------|---------------------------------|---------------------------|--------------------------------|---------------------------------|
| <b>Terminal<br/>Operations<br/>Control<br/>Center (CCO)</b> | 24 hours                                                                                 | Operator<br>TEVIT / TGL    | operacaotevit@transpetro.com.br | 9.9507.6670<br>9.99431439 | 16                             | 15                              |
| <b>Coordination</b>                                         |                                                                                          | Operations<br>Manager      | marco.vieira@transpetro.com.br  | 9.9718.1831               | 16                             | 15                              |
| <b>Terminal</b>                                             |                                                                                          | Operations<br>Manager      | marco.vieira@transpetro.com.br  | 9.9718.1831               | 16                             | 15                              |
| <b>Port Master</b>                                          | 08:20 AM to<br>3:00 PM<br>(Monday to<br>Thursday)<br>08:20 AM to<br>11:30 AM<br>(Friday) | Port<br>Authority of<br>ES | -                               | 9.2124.6500               | 16                             | 11                              |

Table 1

# INTRODUÇÃO

This Port Information was prepared by Petrobras Transporte S.A. (**TRANSPETRO**) which operates the Liquid Bulk Terminal – TGL, also known as Vitória Waterway Terminal – TEVIT.

It provides essential information for vessels seeking to operate at the terminal. It is distributed to stakeholders in the Organized Port and to national authorities. The Port Information is available 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 publications, national or international.

The dangers to navigation and collision with port facilities or other vessels operating in the vicinity must be considered, as well as the limitations of the vessels involved.

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

**TRANSPETRO** will analyze any suggestions, recommendations or corrections to the matters addressed herein, in order to improve the content. If mistaken information is found that needs to be corrected, please contact:

## **Management of the Espírito Santo Waterway Terminals**

Rodovia ES-010, Km 60, s/n  
Barra do Riacho – Aracruz – ES, CEP 29197-554

## **Petrobras Transportes S/A - TRANSPETRO**

Av. Presidente Vargas, nº 328, Centro.

CEP 20091-060, Rio de Janeiro – RJ.

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

<https://transpetro.com.br>

[Port Information | default](#)

## Table of Contents

|        |                                                                    |    |
|--------|--------------------------------------------------------------------|----|
| 1.     | Emergency Procedures .....                                         | 9  |
| 1.1.   | GENERAL.....                                                       | 9  |
| 1.2.   | GENERAL DESCRIPTION OF THE EMERGENCY RESPONSE ORGANIZATION .....   | 9  |
| 1.3.   | LOCAL EMERGENCY SERVICES.....                                      | 12 |
| 1.4.   | STATE AND NATIONAL EMERGENCY ORGANIZATIONS.....                    | 12 |
| 1.5.   | MUTUAL AID PLANS .....                                             | 12 |
| 1.6.   | OIL AND CHEMICAL SPILL .....                                       | 12 |
| 1.6.1. | TERMINAL RESPONSE CAPABILITY. ....                                 | 12 |
| 1.6.2. | RESPONSE CAPACITY OF THE ENVIRONMENTAL AGENCY .....                | 12 |
| 1.6.3. | RESOURCES AVAILABLE FROM MUTUAL AID PLANS OF OTHER TERMINALS ..... | 12 |
| 1.6.4. | POLLUTION RESPONSE .....                                           | 12 |
| 1.6.5. | COMBATING MEDIUM-SIZED SPILLAGE .....                              | 12 |
| 1.6.6. | FIGHTING A MAJOR ACCIDENT .....                                    | 12 |
| 1.6.7. | COMBATING OTHER MAJOR EMERGENCIES .....                            | 13 |
| 1.7.   | FIRE AND EXPLOSION .....                                           | 13 |
| 1.8.   | BERTH COLLISION / DAMAGE.....                                      | 13 |
| 1.9.   | MEDICAL EMERGENCY .....                                            | 13 |
| 1.10.  | SECURITY BREACH .....                                              | 13 |
| 1.11.  | MAN OVERBOARD.....                                                 | 13 |
| 1.12.  | REMOVAL OF BERTHED VESSEL .....                                    | 13 |
| 1.13.  | EMERGENCY SHUTDOWN (ESD).....                                      | 13 |
| 1.14.  | INCIDENT NOTIFICATION POLICY .....                                 | 14 |
| 2.     | Health, Safety and Environment Policies .....                      | 14 |
| 2.1.   | PERSONAL PROTECTIVE EQUIPMENT (PPE) .....                          | 14 |
| 2.2.   | ACCESS TO TERMINAL (CREW ASHORE AND VISITORS TO VESSEL) .....      | 14 |
| 2.3.   | DECLARATION OF SECURITY (ISPS CODE).....                           | 15 |
| 2.4.   | ALCOHOL AND OTHER DRUGS .....                                      | 15 |
| 2.5.   | SMOKING.....                                                       | 15 |
| 2.6.   | PORTABLE ELECTRONIC EQUIPMENT AND NAKED LIGHTS.....                | 15 |
| 2.7.   | MAINTENANCE ON BOARD WHILE BERTHED.....                            | 16 |
| 2.8.   | MATERIAL HANDLING .....                                            | 16 |
| 2.9.   | SAFETY DATA SHEET (SDS) .....                                      | 16 |

|        |                                                                |    |
|--------|----------------------------------------------------------------|----|
| 2.10.  | BENZENE AND H2S .....                                          | 16 |
| 2.11.  | STATIC ELECTRICITY .....                                       | 16 |
| 3.     | General Information.....                                       | 17 |
| 3.1.   | REFERENCE LETTERS AND DOCUMENTS .....                          | 17 |
| 3.2.   | VESSE/TERMINAL COMMUNICATION POLICY .....                      | 18 |
| 3.3.   | DOCUMENTS AND EXCHANGES OF INFORMATION .....                   | 18 |
| 3.4.   | OPERATING HOURS .....                                          | 18 |
| 3.5.   | LOCAL TIME .....                                               | 18 |
| 3.6.   | COMMUNICATION LANGUAGES .....                                  | 19 |
| 3.7.   | USEFUL PHONE NUMBERS .....                                     | 19 |
| 3.8.   | ENVIRONMENTAL MONITORING PROCEDURES .....                      | 19 |
| 4.     | Description of the Port and Anchorages .....                   | 19 |
| 4.1.   | GENERAL DESCRIPTION .....                                      | 19 |
| 4.2.   | LOCATION OF ANCHORAGES.....                                    | 19 |
| 4.2.1. | COORDINATES .....                                              | 19 |
| 4.2.2. | AREA WHERE ANCHORING OR STAYING BY VESSELS IS PROHIBITED ..... | 20 |
| 4.2.3. | EXTERNAL ANCHORAGE .....                                       | 20 |
| 4.2.4. | INTERNAL ANCHORAGE.....                                        | 20 |
| 4.3.   | APPROACH TO TERMINAL .....                                     | 22 |
| 4.3.1. | GENERAL DESCRIPTION .....                                      | 22 |
| 4.4.   | MANEUVERING AREA.....                                          | 23 |
| 4.5.   | ENVIRONMENTAL FACTORS.....                                     | 24 |
| 5.     | Terminal Description .....                                     | 26 |
| 5.1.   | GENERAL DESCRIPTION .....                                      | 26 |
| 5.2.   | TERMINAL LOCATION.....                                         | 26 |
| 5.3.   | TERMINAL LAYOUT.....                                           | 27 |
| 5.4.   | VESSEL ACCEPTANCE CONDITIONS .....                             | 28 |
| 5.5.   | MANAGEMENT AND CONTROL.....                                    | 28 |
| 5.6.   | MAIN RISKS.....                                                | 29 |
| 5.7.   | NAVIGATION HAZARDS .....                                       | 29 |
| 5.8.   | ACCESS CHANNEL .....                                           | 29 |
| 6.     | Description of Berths .....                                    | 30 |
| 6.1.   | PHYSICAL DETAILS OF THE BERTHS .....                           | 30 |

|                                                                                 |    |
|---------------------------------------------------------------------------------|----|
| GENERAL RESTRICTIONS.....                                                       | 30 |
| 6.2. BERTHING AND MOORING ARRANGEMENT .....                                     | 33 |
| 6.3. CHARACTERISTICS OF THE LOADING AND DISCHARGING BERTH .....                 | 33 |
| 7. Communication Before Arrival.....                                            | 34 |
| 7.1. TERMINAL INFORMATION FOR VESSEL.....                                       | 35 |
| 7.2. VESSEL INFORMATION FOR TERMINAL.....                                       | 35 |
| 8. Operational Information .....                                                | 35 |
| 8.1. BERTHING .....                                                             | 35 |
| VESSEL MOORING SYSTEM.....                                                      | 35 |
| 8.2. VESSEL / PORT ACCESS .....                                                 | 36 |
| 8.3. INITIAL CLEARANCE .....                                                    | 36 |
| 8.4. OPERATIONAL SAFETY CHECKLIST (OSC).....                                    | 36 |
| 8.5. TANK MEASUREMENT .....                                                     | 36 |
| 8.6. BALLASTING, DEBALLASTING AND SLOP POLICY .....                             | 37 |
| 8.7. PROCEDURES FOR CONNECTING/DISCONNECTING HOSES .....                        | 37 |
| 8.8. CARGO TRANSFER PROCEDURES. ....                                            | 38 |
| 8.9. DRAINAGE, LOAD MEASUREMENT, SAMPLING AND DOCUMENTATION .....               | 40 |
| 8.10. TANK WASHING.....                                                         | 40 |
| 8.11. REPAIRS IN THE PORT.....                                                  | 41 |
| 8.12. INERT GAS .....                                                           | 41 |
| 8.13. BUNKER SUPPLY .....                                                       | 41 |
| 8.14. POLLUTION PREVENTION .....                                                | 41 |
| The vessel will send, in advance, a summary of its emergency plans (SOPEP)..... | 41 |
| 8.15. DRINKING WATER .....                                                      | 41 |
| 8.16. UNBERTHING AND LEAVING THE PORT .....                                     | 41 |
| 8.17. COMPLIANCE WITH THE ISPS CODE .....                                       | 42 |
| 9. PORT OR ANCHORAGE ORGANIZATION.....                                          | 42 |
| 9.1. PORT CONTROL OR VTS.....                                                   | 42 |
| 9.2. MARITIME AUTHORITY.....                                                    | 45 |
| 9.3. PILOTAGE.....                                                              | 46 |
| 9.4. SUSPENSION OF PILOTAGE OPERATIONS .....                                    | 47 |
| 9.5. TUGS AND OTHER MARINE SERVICES .....                                       | 48 |
| 9.6. OTHER MARITIME SERVICES .....                                              | 48 |

|      |                                        |    |
|------|----------------------------------------|----|
| 9.7. | OTHER OIL / GAS TERMINALS .....        | 49 |
| 9.8. | OTHER KEY USERS .....                  | 49 |
| 10.  | Contacts.....                          | 49 |
|      | Emergency Response Organizations ..... | 49 |
| 11.  | DEFINITIONS .....                      | 51 |
| 12.  | APPENDICES .....                       | 53 |

## REVISIONS

| Revision | Changes                                                                                                                                                                                                                                       | Date       | Preparation                                                                                          | Approval                                     |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 3rd      | Phone updates                                                                                                                                                                                                                                 | 01/06/2023 | Helder Martins                                                                                       | Felipe José Silveira Lapa                    |
| 4th      | Chapter 5 Updates (items 5.3.5, 5.3.9, 5.4.3 and 5.5.8)<br>Chapter 6 Updates (items 6.2, 6.3, 6.4 and 6.5)<br>Chapter 7 Updates (items 7.3.2 and 7.8)<br>Chapter 9 Updates (items 9.1 and 9.5.1)<br>Appendix D Inclusion<br>Chapter 10 Update | 07/29/2026 | CMT Isabelle Rosane Carmo dos Santos Resedal                                                         | CMT Isabelle Rosane Carmo dos Santos Resedal |
| 5th      | Layout Standardization                                                                                                                                                                                                                        | 09/14/2026 | CMT Isabelle Rosane Carmo dos Santos Resedal<br>ON Jacqueline Ferreira Vieira<br>Ives Marcelo Xavier | CMT Isabelle Rosane Carmo dos Santos Resedal |

# 1. Emergency Procedures

## 1.1. GENERAL

### EMERGENCY CONTACTS

The primary contacts at the terminal and port authorities that the vessel should contact in case of an emergency are as follows:

| Organization             | Opening Hours | Identification Acronym | Telephone (+55 27) | VHF / UHF Calling | VHF / UHF Working |
|--------------------------|---------------|------------------------|--------------------|-------------------|-------------------|
| Port Authority (ES)      | 24 hours      | CPES                   | 2124.6500          | 16                | 11                |
| Military Police (CIODES) | 24 hours      | PM                     | 190                | -                 | -                 |
| Federal Highway Police   | 24 hours      | PRF                    | 191                | -                 | -                 |
| Federal Police           | 24 hours      | PF                     | 3041.8033          | -                 | -                 |
| SAMU                     | 24 hours      | SAMU                   | 192                | -                 | -                 |
| Fire Department (CIODES) | 24 hours      | PM                     | 193                | -                 | -                 |
| Vitória Civil Police     | 24 hours      | PC                     | xxx                | -                 | -                 |
| ANVISA                   | 24 hours      | ANVISA                 | 3235-9404          | -                 | -                 |

Table 2

### ENVIRONMENTALLY SENSITIVE AREAS

In the Emergency Response Plan (PRE), the areas most vulnerable to environmental impact are listed in separate sections, which contain environmental sensitivity maps highlighting, depending on the selected area, the locations most susceptible to significant impact should such an event occur along the coast of Espírito Santo.

## 1.2. GENERAL DESCRIPTION OF THE EMERGENCY RESPONSE ORGANIZATION

The responsibilities regarding the various contingencies listed in the Emergency Response Plan (PRE) are described in the following table:

| Type of Incident          | Responsible Organization         | Other Organizations Involved     |                 |                                  |   |
|---------------------------|----------------------------------|----------------------------------|-----------------|----------------------------------|---|
| <b>Channel Collision</b>  | Port Authority of Espírito Santo | Fire Department                  | Transpetro      | -                                | - |
| <b>Stranded Vessel</b>    | Port Authority of Espírito Santo | Fire Department                  | Transpetro      | -                                | - |
| <b>Berth Collision</b>    | Port Authority of Espírito Santo | Fire Department                  | Transpetro      | -                                | - |
| <b>Vessel Sinking</b>     | Port Authority of Espírito Santo | Fire Department                  | Transpetro      | -                                | - |
| <b>Fire on the vessel</b> | Vessel                           | Transpetro                       | Fire Department | Port Authority of Espírito Santo | - |
| <b>Fire at Berth</b>      | Terminal                         | Fire Department                  | Transpetro      | Port Authority of Espírito Santo | - |
| <b>Pollution</b>          | Terminal and Vessel              | Port Authority of Espírito Santo | IEMA            | PROAMMAR                         | - |

Table 3

## EMERGENCY PLANS

### EMERGENCY ON THE VESSEL

The Emergency Response Plan (PRE) is the TP/DOP/DTNNESE/UO-BAES/OPBR/TEVIT Terminal's plan for responding to emergencies at all of its facilities. It is available in the operational areas, in the control room, and through computerized systems. The local SMS (Safety, Environment, and Health) department is responsible for updating it.

The vessel's emergency and firefighting equipment must be kept in working order and readily available at all times while the vessel is docked.

Fire hoses should be deployed, with one at the bow and one at the stern of the vessel, unless fire monitors can satisfy this requirement.

A sufficient amount of absorbent material must be kept on hand, ready for use in the event of an oil spill.

Additional precautions must be taken in order to avoid pollution of seawater.

The Terminal periodically conducts emergency drills and training sessions to ensure that personnel are prepared to respond quickly and effectively to emergencies when necessary, in accordance with the Emergency Response Plan (PRE). Available resources are listed in the PRE.

## TERMINAL EMERGENCY

The Vitória Waterway Terminal - TEVIT/TGL – has a CRE (Emergency Response Center) that is equipped with various equipment and facilities for use in accidental pollution.

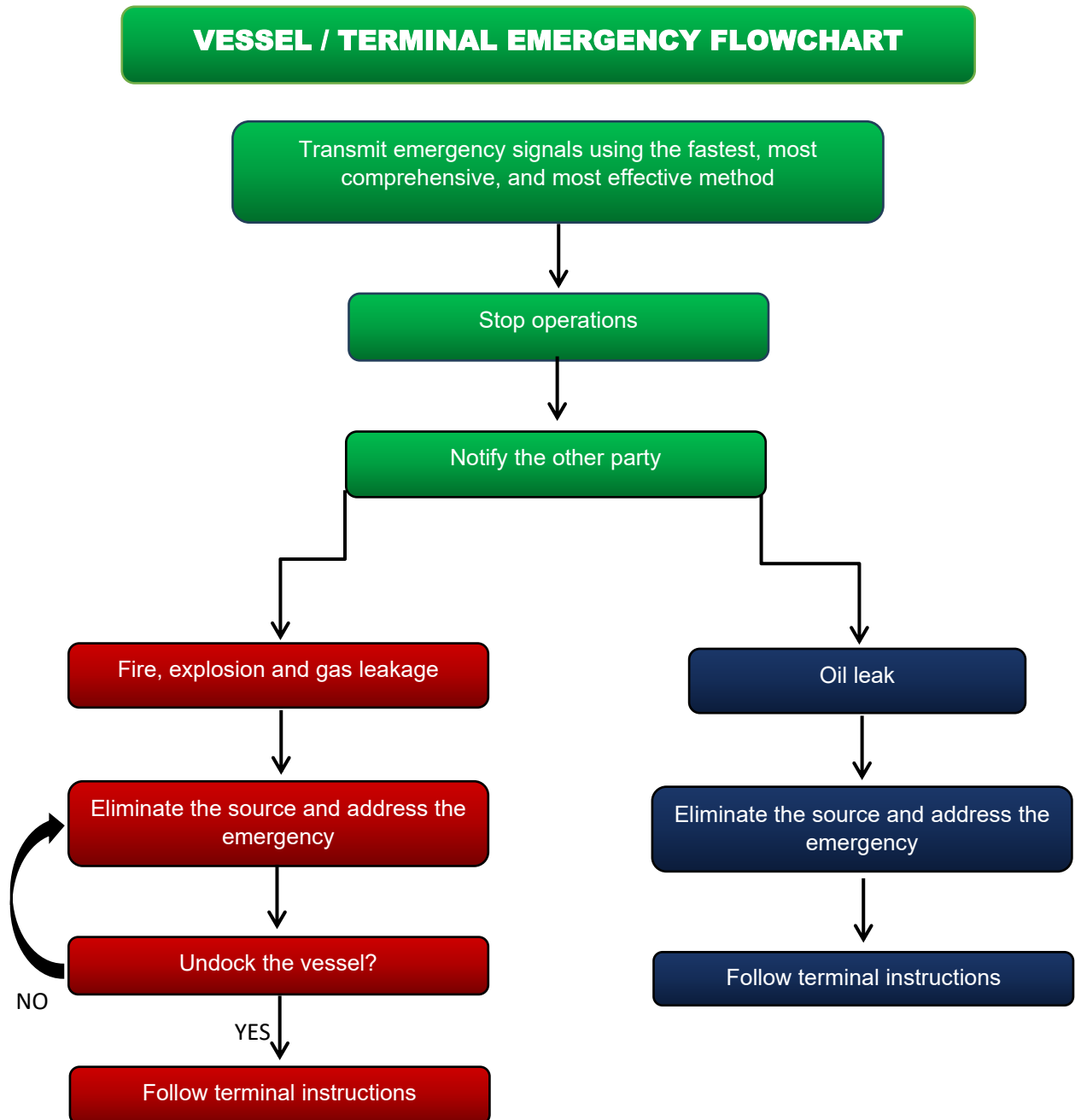


Figure 1

### **1.3. LOCAL EMERGENCY SERVICES**

For other emergencies, public organizations offer the resources for which they are intended.

### **1.4. STATE AND NATIONAL EMERGENCY ORGANIZATIONS.**

For other emergencies, public organizations offer the resources for which they are intended.

### **1.5. MUTUAL AID PLANS**

Under the TEVIT/TGL Mutual Aid Plans, the Local Area Plan, a group of companies that have joined together to address contingencies and emergencies and possess resources that can be used to mitigate marine pollution incidents, may be activated.

### **1.6. OIL AND CHEMICAL SPILL**

#### **1.6.1.TERMINAL RESPONSE CAPABILITY.**

The resources available to combat oil spill situations are listed in the PEI (Individual Emergency Plan), which is available in the operating room and through computerized systems.

#### **1.6.2.RESPONSE CAPACITY OF THE ENVIRONMENTAL AGENCY**

The Environment Agency of Espírito Santo (IEMA) does not have resources to combat oil spills.

#### **1.6.3.RESOURCES AVAILABLE FROM MUTUAL AID PLANS OF OTHER TERMINALS**

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

#### **1.6.4.POLLUTION RESPONSE**

The sub-items below describe the resources available to combat pollution emergencies in the Terminal region and adjacent areas.

#### **1.6.5.COMBATING MEDIUM-SIZED SPILLAGE**

In these events, national resources from Transpetro/Petrobras are requested. These resources, their availability, and how they are accessed are described in the computerized system, the PRE and the PEI.

#### **1.6.6.FIGHTING A MAJOR ACCIDENT**

In these events, regional and national resources from Transpetro/Petrobras are requested. These resources, their availability, and how they are accessed are described in the PRE and the PEI.

#### 1.6.7. COMBATING OTHER MAJOR EMERGENCIES

The TEVIT/TGL's PRE and PEI outline the actions to be taken and the personnel responsible for each type of event in the event of a major accident (catastrophic in scale) that may occur in the vicinity of facilities or vessels and involve third parties.

For events that are not provided for in this document, TRANSPETRO/PETROBRAS will make available all national or international resources that are within its reach.

#### 1.7. FIRE AND EXPLOSION

Procedures to be adopted are found in the Terminal's Emergency Response Plan – PRE.

#### 1.8. BERTH COLLISION / DAMAGE

In case of collision or damage to the berths, the masters must inform the Safety Inspector, the Brazilian Navy and the Protective Agency.

#### 1.9. MEDICAL EMERGENCY

The Terminal does not have its own medical care.

#### 1.10. SECURITY BREACH

Captains must instruct their crews on the need for **strict** compliance with the ISPs CODE.

#### 1.11. MAN OVERBOARD

Masters must IMMEDIATELY raise the Man Overboard emergency on VHF channel 16, inform the Brazilian Navy, the Terminal Safety Inspector and the vessel's Protecting Agent.

#### 1.12. REMOVAL OF BERTHED VESSEL

The shipboard personnel shall alert the TEVIT safety inspector as soon as possible. The Terminal has tugboats to assist in mitigating and correcting the clearance.

#### 1.13. EMERGENCY SHUTDOWN (ESD)

The emergency shutdown will be negotiated with the vessel at the time of initial release.

Transpetro encourages crews to **"When in doubt, STOP"**.

#### 1.14. INCIDENT NOTIFICATION POLICY

The instructions for notification of incidents must be followed by the Captains according to:

➤ **Pollution Incident**

It should be recorded in a specific document, to be sent to the Terminal shift coordinator, as soon as possible. This document may be prepared in phases (initial alert, update of incident alert and final incident report).

➤ **Security Incident**

Similar action as for pollution incident.

➤ **Protection Incident**

Generate a report as recommended in the ISPs Code.

## 2. Health, Safety and Environment Policies

#### 2.1. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Crew members in areas outside the superstructures must remain wearing their PPE. Crew members in transit "going to" or "coming from" the Terminal gatehouse, will be exempt from the use of PPE.

#### 2.2. ACCESS TO TERMINAL (CREW ASHORE AND VISITORS TO VESSEL)

For more information contact the Terminal port security supervisor, who is trained in accordance with the requirements required by the IMO.

Phone: +55 27 3333-6645 (PFSO VALE)

### 2.3. DECLARATION OF SECURITY (ISPS CODE)

At TEVIT /TGL, the actions related to the ISPS CODE controls are the responsibility of VALE, which is the owner of the port operated by TRANSPETRO.

TEVIT/TGL is not ISPS certified due to its unenforceability and, therefore, is prevented from issuing the Declaration of Security (DOS).

However, TEVIT/TGL has implemented business security measures applicable to vessels and port facilities.

If necessary, these security measures can be triggered by the Vessel through the Port Facility Security Officer (PFSO), or through the VHF radio (channels 15/16).

For more details, the Port Facility Security Officer (PFSO) - trained in accordance with the requirements required by the IMO - can be contacted through the phone below:

- Phone: +55 27 3333-6645 (PFSO VALE)

### 2.4. ALCOHOL AND OTHER DRUGS

According to ISGOTT, item 13.4, for the sake of employee health and safety, the use of alcohol or other drugs has a detrimental effect on performance, behavior, and safety practices in the workplace; therefore, such use is prohibited at TEVIT..

**Transpetro**, with a view to supporting national and international authorities in combating drug trafficking and alcohol use in prohibited locations, complies with relevant preventive measures regarding the use, possession or criminal distribution of these substances.

### 2.5. SMOKING

TEVIT does not have safe and demarcated areas for smoking, so no one is allowed to smoke within the limits of the terminal facilities.

### 2.6. PORTABLE ELECTRONIC EQUIPMENT AND NAKED LIGHTS

All portable electrical equipment used in areas where the ambient air may be contaminated by flammable or explosive gases must be of the intrinsically safe and explosion-proof type.

On the deck and in adjacent compartments, only intrinsically safe and explosion-proof electric lighting may be used, and it must strictly comply with the safety recommendations set forth in ISGOTT (latest edition) while the ship is at the pier.

**It is forbidden to take photos of any area, equipment or people within the Terminal facilities without prior authorization from the Terminal management.**

## 2.7. MAINTENANCE ON BOARD WHILE BERTHED

No repairs or maintenance work of any nature may be carried out that involves or may involve the risk of sparks or other means of ignition while the vessel is docked without the prior authorization of the Terminal management. Cold repairs that imply some restriction of the vessel during the stay must be previously authorized by the shore crew and the request for such repairs must be requested at least 24 hours in advance. Any repair must be carried out in accordance with the recommendations of ISGOTT, most recent edition.

## 2.8. MATERIAL HANDLING

The movement of materials must be agreed upon at the terminal. **(contact the nautical inspector, via VHF channel 16)**

## 2.9. SAFETY DATA SHEET (SDS)

For the storage, transport or use of chemicals classified as hazardous or whose intended or recommended uses give rise to risks to the safety and health of workers, the SDS is mandatory (NBR 14725/2023) and must be available at the storage and/or use location.

## 2.10. BENZENE AND H<sub>2</sub>S

The risks associated with benzene, H<sub>2</sub>S, and any other toxic substances present in the cargo being handled must be properly identified and understood.

Transpetro encourages shipmasters to require crew members to use Benzene and H<sub>2</sub>S detectors when outside the vessel's superstructure.

Operations involving benzene at the facilities operated by Transpetro comply with the provisions of Annex 13A of NR15, and the facility implements the PPEOB (Benzene Occupational Exposure Prevention Program).

Operations involving H<sub>2</sub>S-containing products follow Petrobras corporate procedure PP-2TP-00114-0 (Handling of H<sub>2</sub>S-Containing Products).

## 2.11. STATIC ELECTRICITY

**Attention** must be paid to precautions for preventing ignition risks from static electricity sparks during measurements, sampling, connections and cargo/discharge operations.

## 3. General Information

### 3.1. REFERENCE LETTERS AND DOCUMENTS

Information regarding the Terminal can be obtained from the following publications listed below.

#### Nautical Charts

| Area                               | Chart Number |                        |                   |
|------------------------------------|--------------|------------------------|-------------------|
|                                    | Brazil (DHN) | US Hydrographic Office | British Admiralty |
| <b>Anchorage and Port Approach</b> | 1.401        |                        | 521               |
| <b>Port Entrance and Channels</b>  | 1.410        |                        | 521               |
| <b>Terminal and approach area</b>  | 1.410        |                        | 521               |

Table 4

#### Other Publications

In addition to the information contained in the aforementioned Letter, other information and data about the Terminal can be obtained from the documents below:

| Type / Subject                                                             | Editor or Source                               |
|----------------------------------------------------------------------------|------------------------------------------------|
| <b>Tubarão and Praia Mole Port Complex Regulation</b>                      | Port Authority – VALE                          |
| <b>NPCP-ES - Port Authority of Espírito Santo Standards and Procedures</b> | Maritime Authority – Port Authority of ES CPES |
| <b>NORMAM – Maritime Authority Standards</b>                               | Maritime Authority – Port Authority of ES CPES |
| <b>Route – East Coast</b>                                                  | Directorate of Hydrography and Navigation DHN  |
| <b>Lighthouse List</b>                                                     | Directorate of Hydrography and Navigation DHN  |
| <b>Tide Table</b>                                                          | Hydrography Center of the Brazilian Navy       |

Table 5

### 3.2. VESSE/TERMINAL COMMUNICATION POLICY

See items below.

### 3.3. DOCUMENTS AND EXCHANGES OF INFORMATION

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

| Information                                               | Prepared by: |         |      | Delivered to: |         |      | Remarks                                                           |
|-----------------------------------------------------------|--------------|---------|------|---------------|---------|------|-------------------------------------------------------------------|
|                                                           | Terminal     | Vessels | Both | Terminal      | Vessels | Both |                                                                   |
| Before Arrival                                            |              |         |      |               |         |      |                                                                   |
| Estimated arrival (ETA) and vessel information            |              | X       |      | X             |         |      | According to Appendix B                                           |
| Basic information about the Terminal and the operation    | X            |         |      |               | X       |      | According to Appendix C                                           |
| Before Cargo or Bunker Transfer                           |              |         |      |               |         |      |                                                                   |
| Details of cargo / slop / ballast on board                |              | X       |      | X             |         |      | According to Appendix B                                           |
| Essential information to the operation (complete on site) | X            |         |      |               | X       |      | According to Appendix C                                           |
| Ship/Shore Safety Checklist                               |              |         | X    |               |         | X    | According to Appendix C                                           |
| During Cargo or Bunker Transfer                           |              |         |      |               |         |      |                                                                   |
| Repeat Ship/Shore Safety Checklist                        |              |         | X    |               |         | X    | According to Appendix C                                           |
| After Cargo or Bunker Transfer, before departure          |              |         |      |               |         |      |                                                                   |
| Information required for unberthing the Vessel            |              |         | X    |               |         | X    | Inform the quantities of fuels and water on board.                |
| After unberthing, at the exit of the Port                 |              |         |      |               |         |      |                                                                   |
| Information relating to port departure data               |              | X       |      |               | X       |      | Official Port departure time and disembarkation time of the Pilot |

### 3.4. OPERATING HOURS

No time restriction.

### 3.5. LOCAL TIME

Brasília Time in UTC-03:00

### 3.6. COMMUNICATION LANGUAGES

The communication of the Vessel/Terminal must be made in Portuguese or English.

### 3.7. USEFUL PHONE NUMBERS

See item **Contacts**

### 3.8. ENVIRONMENTAL MONITORING PROCEDURES

Crew members on deck duty shall be instructed to maintain uninterrupted surveillance of the marine areas adjacent to the vessels. If you notice any pollutants in the water or spot any marine or terrestrial wildlife, please alert the safety inspectors or operations technicians.

## 4. Description of the Port and Anchorages

### 4.1. GENERAL DESCRIPTION

The Vitória Waterway Terminal (TEVIT) operates from a pier dedicated to the domestic transport of petroleum products, known as the Liquid Bulk Terminal (TGL).

It is operated by Petrobras Transporte S.A. – Transpetro, and its primary function is to transport petroleum products via coastal shipping (light petroleum products) to the distribution companies operating within the BAVIT area, to supply Espírito Santo, southern Bahia, northern Rio de Janeiro, and eastern Minas Gerais. In addition, it handles the transportation of “dark” derivatives, primarily the distribution of surplus fuel oils received by VIBRA ENERGIA in its tanks, which originate from the Gabriel Passos Refinery (REGAP), located in the city of BETIM - MG.

It consists of a T-JETTY pier with 01(one) berth.

### 4.2. LOCATION OF ANCHORAGES

See appendix A.

#### 4.2.1.COORDINATES

TEVIT/TGL is installed at the following coordinates:

| Pier 5: Liquid Bulk Terminal (TGL) | LATITUDE      | LONGITUDE      |
|------------------------------------|---------------|----------------|
|                                    | 20° 17' 16" S | 040° 14' 40" W |

Table 6

#### 4.2.2. AREA WHERE ANCHORING OR STAYING BY VESSELS IS PROHIBITED

It is expressly prohibited for any vessel to anchor in the access channels and maneuvering areas of the ports.

It is expressly prohibited to anchor vessels at a distance of less than 1NM from the submarine cables shown on nautical charts.

#### 4.2.3. EXTERNAL ANCHORAGE

According to the Regulations for the Tubarão and Praia Mole Port Complex and the East Coast Route (DHN), the following applies:

**Anchorage No. 4** - Intended for vessels or ships to be inspected by the Naval Inspection, the Federal Police Inspection (NEPOM), the Health Inspection (ANVISA), the Customs Inspection, and/or other authorized agencies. It is bounded by the following geographic coordinates:

- Lat. 20° 18' 48" S // Long. 040° 13' 42" W;
- Lat. 20° 18' 12" S // Long. 040° 13' 42" W;
- Lat. 20° 17' 54" S // Long. 040° 13' 12" W;
- Lat. 20° 19' 18" S // Long. 040° 13' 12" W;

**Anchorage No. 5** - Preferably intended for vessels or ships with a normal waiting period, scheduled for the Liquid Bulk Terminal, Pier 5 (TGL/TEVIT), of Tubarão Port. It is bounded by the following geographic coordinates:

- Lat. 20° 23' 30" S // Long. 040° 09' 36" W;
- Lat. 20° 21' 42" S // Long. 040° 09' 36" W;
- Lat. 20° 21' 42" S // Long. 040° 08' 30" W;
- Lat. 20° 23' 24" S // Long. 040° 08' 54" W;

#### 4.2.4. INTERNAL ANCHORAGE

The Evolution Basin may be used as an inland anchorage in emergency situations or to safeguard human life at sea, subject to authorization by the Port Complex Administration and the Maritime Authority.

#### NAVIGATION AIDS

Access to Tubarão Port and the Praia Mole Terminal is via a 300-meter-wide channel, dredged to a depth of 25.3 meters (2012), and marked by 10 numbered lighted buoys on the starboard and port sides, 1 lighted preferred channel buoy on the port side, and 1 special buoy. The axis of this channel is defined by a line of light at 344.5°.

For sailors heading to Tubarão Port or the Praia Mole terminal, the following points will assist with docking and disembarking:

### Tubarão Rear Leading Line

- Order No.: 1940;
- Position: Lat.: 20° 15,88'S // Long.: 040° 15,58'W;

### Tubarão Front Leading Line

- Order No.: 1942;
- Position: Lat.: 20° 16,51'S // Long.: 040° 15,40'W;

### Tubarão South

- Order No.: 1952;
- Position: Lat.: 20° 17,59'S // Long.: 040° 14,84'W;

### Steelworks Wharf

- Order No.: 1956;
- Position: Lat.: 20° 17,70'S // Long.: 040° 14,25'W;

### Mole Pier Beach

- Order No.: 1960;
- Position: Lat.: 20° 17,87'S // Long.: 040° 14,20'W;

### Mole Head

- Order No.: 1964;
- Position: Lat.: 20° 18,07'S // Long.: 040° 14,45'W;

**NOTE:** For more detailed information on lighthouses and other markings, please refer to the current edition of the List of Lighthouses published by the Directorate of Hydrography and Navigation (DHN) of the Brazilian Navy.

### PORT LIMITS

The Port Complex is located north of Espírito Santo Bay, in the Municipality of Vitória-ES, capital of the State of Espírito Santo, to which it is connected by highways and railways.

It is located at the geographical coordinates:

#### **Tubarão Point**

Pier 2: Latitude: 20° 17'35" S and Longitude: 040° 14' 51" 'W;

Pier 1: North/South: Latitude: 20° 17' 23" S and Longitude: 040° 14' 42" W;

#### **Miscellaneous Products Terminal – Grain Terminal**

Pier 3: Grain Terminal Latitude: 20° 17' 32" S and Longitude: 040° 14' 46" W;

Pier 4: Container and Miscellaneous Products Terminal: Latitude: 20° 17' 27" S and Longitude: 040° 14' 37" W;

#### **Liquid Bulk Terminal**

Pier 5: Latitude: 20° 17' 16" S and Longitude: 040° 14' 40" W

#### **Praia Mole Port (Coal Terminal)**

Latitude: 20° 17'52" S and Longitude: 040° 14'12" W

### **4.3. APPROACH TO TERMINAL**

#### **4.3.1. GENERAL DESCRIPTION**

A sailor approaching from the north should recognize the hills located north of Espírito Santo Bay, visible from a great distance, among which Mestre Alvares stands out. Closer to the bay are the hills of Frade Leopardo, Moreno, and Penha; the latter features the Convent of Nossa Senhora da Penha on its summit. Finally, Ponta do Tubarão comes into view, with the facilities of Tubarão Port and the Praia Mole terminal, where there is a notable water tower and a chimney; Ponta de Santa Luzia, with its lighthouse; and further south, Ilha dos Pacotes, with its small lighthouse. When approaching the bar, you must navigate outside the 20-meter isobath and watch out for the Carapebus shoal, the only hazard until you reach the pilot boarding point.

A sailor coming from the south should spot Escalvada Island, with its lighthouse, and to the northwest, the city of Guarapari, with its many buildings; the coves of Guarapari and Perocão; and further north, inland, countless hills. As you approach Espírito Santo Bay, the same hills and landmarks seen by those coming from the north come into view. Between Escalvada Island and Pacotes Island, you should also navigate outside the 20-meter isobath, paying attention to the hazards around the Rasas Islands and south of Pacotes Island.

Coming from the open sea, the Vitória (VTR) aeronautical radio beacon can assist with landing, subject to the limitations this aid imposes on maritime navigation.

The configuration of the coastline and the nearby elevations and islands near the mouth of Espírito Santo Bay facilitate navigation using radar.

Access to Tubarão Port and the Praia Mole Terminal is via a 300-meter-wide channel, dredged to a depth of 25.3 meters (2012), and marked by 10 numbered lighted buoys on the starboard and port sides, 1 lighted preferred channel buoy on the port side, and 1 special buoy. The axis of this channel is defined by a line of light at 344.5°.

#### 4.4. MANEUVERING AREA

The evolution basin of Tubarão Port has the following characteristics and restrictions:

##### South Evolution Basin

###### Operational Characteristics:

- |                |                                   |
|----------------|-----------------------------------|
| ➤ Center       | 20° 17' 40" S and 040° 15' 07" W; |
| ➤ Diameter     | 730 meters;                       |
| ➤ Radius       | 365 meters;                       |
| ➤ Design depth | 13.0 meters;                      |

###### Restrictions regarding vessels:

- |                        |                      |
|------------------------|----------------------|
| ➤ Maximum deadweight   | 405,000 metric tons; |
| ➤ Maximum total length | 365 meters;          |
| ➤ Maximum beam         | 66 meters;           |
| ➤ Maximum draft        | 11.20 meters;        |

##### North Evolution Basin

###### Operational Characteristics:

- |                |                                   |
|----------------|-----------------------------------|
| ➤ Center       | 20° 17' 34" S and 040° 15' 08" W; |
| ➤ Diameter     | 730 meters;                       |
| ➤ Radius       | 365 meters;                       |
| ➤ Design depth | 18.0 meters;                      |

###### Restrictions regarding vessels:

- |                        |                      |
|------------------------|----------------------|
| ➤ Maximum deadweight   | 405,000 metric tons; |
| ➤ Maximum total length | 365 meters;          |

- Maximum beam 66 meters;
- Maximum draft 15.50 meters more than the tide;

#### 4.5. ENVIRONMENTAL FACTORS

The region's climate is classified as humid and saline tropical, with relative humidity remaining consistent throughout the year, ranging between 80 and 90 percent.

Rainy seasons from October to April, with an index above 100 mm per day. Dry seasons from May to September, with an index of 30 to 100 mm per day.

The average annual rainfall is 1,238.5 mm. Maximum daily rainfall is 47.7 mm.

The seawater density of Tubarão Port is 1.025 Kg/l.

The predominant wind in the area is NE with an annual average speed of 8 knots.

In the winter months, it is common for cold fronts to arrive, which sometimes prevent or interrupt operations at the TGL. On such occasions, the wind shifts from NE to N/NW as the front approaches, and to S/SW as it passes, requiring extra caution when average wind speeds exceed 25 knots.

Table 7 (below) shows the wind records, measured in knots, at Vitória Airport, presented in the TGL mooring plan.

| QUADRANT    | TOTALS | OCCURRENCES   |               |               |            |        |
|-------------|--------|---------------|---------------|---------------|------------|--------|
|             |        | 01 - 08 knots | 08 - 12 knots | 12 - 16 knots | > 16 knots | TOTALS |
| N (NE - NW) | 36     | 32            | 18            | 7             | 2          | 59     |
| E (NE - SE) | 9      | 9             | 5             | 2             | 1          | 17     |
| S (SE - SW) | 20     | 11            | 6             | 3             | 1          | 21     |
| W (SW - NW) | 10     | 2             | 1             | 0             | 0          | 3      |
| CALM        | 25     | 0             | 0             | 0             | 0          | 0      |
| TOTALS      | 100%   | 54%           | 30%           | 12%           | 4%         | 100%   |

Table 7 - Note: A knot is a unit of speed equivalent to one nautical mile per hour, or 1.852 m/h, 1.852 km/h, or 0.514 m/s.

As described earlier, during the winter months, when cold fronts move in, swells originating from the S-SW can form, which may make it impossible for vessels to operate in the TGL. Special attention should be paid when swells reach a height of more than 0.5 meters.

The predominant feature is scattered, brief showers; severe, prolonged downpours are rare. Storms are not common, but they can occur with the passage of cold fronts.

Fog is a relatively rare phenomenon in the region. When it occurs on land (on the coastline) it can hide nautical signs used as a reference for landing

### Predominant Winds

The predominant direction of the winds is NE with an annual average of 08 knots of speed.

### Waves and swells

As explained above, during the winter months, when cold fronts move in, swells originating from the S-SW can form, which may make it impossible for vessels to operate in the TGL. Special attention should be paid when waves at TEVIT/TGL reach a height of more than 0.5 meters.

Rough seas are usually caused by southerly winds. When there are no strong winds from the south, the sea is calm, with waves no more than 0.5 meters high.

Occasionally, during the winter months, swell-like waves from the S/SE may occur, which can cause the ship to rock, requiring special care during mooring, even if the pier is sheltered.

### Rainfall

The region's climate is classified as humid and saline tropical, with relative humidity remaining consistent throughout the year, ranging between 80 and 90 percent.

Rainy seasons from October to April, with an index above 100 mm per day.

Dry seasons from May to September, with an index of 30 to 100 mm per day.

Average annual rainfall: 1,238.5 mm. Maximum daily rainfall: 147.7 mm.

### Lightning Storms

Lightning storms are not common, but they can occur with the passage of cold fronts.

### Visibility

Visibility limitation is rare and can occur during heavy rains or on unusual occasions of fog.

### Tidal Currents and Other Currents

The currents inside the area sheltered by the Tubarão mole are caused by the recirculation of water during the tides.

Current velocities vary by 0.5 m/s in the regions running lengthwise and crosswise to the vessels at Piers 1 and 2.

In the access channel, the current velocity perpendicular to the channel's axis is up to 0.5 knots.

The swells in the region are caused by local winds. In the evolution and extension basin, waves of 1.20 (Hs) meters and peak periods (Tp) of 10 seconds may occur.

However, due to the position of the TGL, current is not a relevant factor when the vessel is docked.

### Variation of Tide levels

The approximate average normal tidal amplitude at the Terminal is 0.90 m.

During a syzygy tide, there are greater variations, ranging from 1.80 m (high tide) to -0.10 m (low tide). The maximum draft and minimum freeboard for berthing at TGL were calculated based on the worst-case tidal conditions.

Exact values of tidal current amplitude and intensity can be obtained in DHN publications (Tide Table and Tidal Current Chart for the Port of Vitória).

### Measurements

The Liquid Bulk Terminal (TGL) has an anemometer and an ondograph installed on the pier to monitor environmental conditions during operations. This data is used to compare information from the sensors installed on Buoy 10, whose data is considered official by the Brazilian Navy and the pilot service for the purpose of monitoring the port's operational limits.

In addition to the information provided above, meteo-oceanographic data is obtained from weather bulletins published on the website of the Brazilian Navy Hydrographic Center—Delta Area, as well as from daily bulletins and alerts received from TetraTech.

## 5. Terminal Description

### 5.1. GENERAL DESCRIPTION

Opened in August 1996, the Liquid Bulk Terminal (TGL) began operations, replacing the former BAVIT Terminal. Owned by VALE, it is located within the Tubarão and Praia Mole Port Complex, Pier 5: Liquid Bulk Terminal.

It is operated by Petrobras Transporte S.A. - Transpetro.

It was built on piles, using an offshore-style design, and is located between Piers 1 and 2 of the Tubarão and Praia Mole Port Complex.

It consists of a T-JETTY pier with 01(one) berth.

Its primary function is to transport petroleum products via coastal shipping (light petroleum products) to the distribution companies operating within the BAVIT area, to supply Espírito Santo, southern Bahia, northern Rio de Janeiro, and eastern Minas Gerais. In addition, it handles the transportation of "dark" derivatives, primarily the distribution of surplus fuel oils received by VIBRA ENERGIA in its tanks, which originate from the Gabriel Passos Refinery (REGAP), located in the city of BETIM - MG.

### 5.2. TERMINAL LOCATION

Owned by VALE, it is located within the Tubarão and Praia Mole Port Complex, Pier 5: Liquid Bulk Terminal, in the northern part of the bay of Vitória, Ponta de Tubarão, on the northeast bank of the bay of Espírito Santo, and 12km from the port of Vitória, by road.

Its facilities are located at the following address:

**PETROBRAS TRANSPORTE S.A. - TRANSPETRO**

**VITÓRIA WATERWAY TERMINAL**

Avenida Dante Michelini, Parque Industrial, Terminal Portuário de Tubarão, s/n

Vitória - ES, CEP 29.090-900

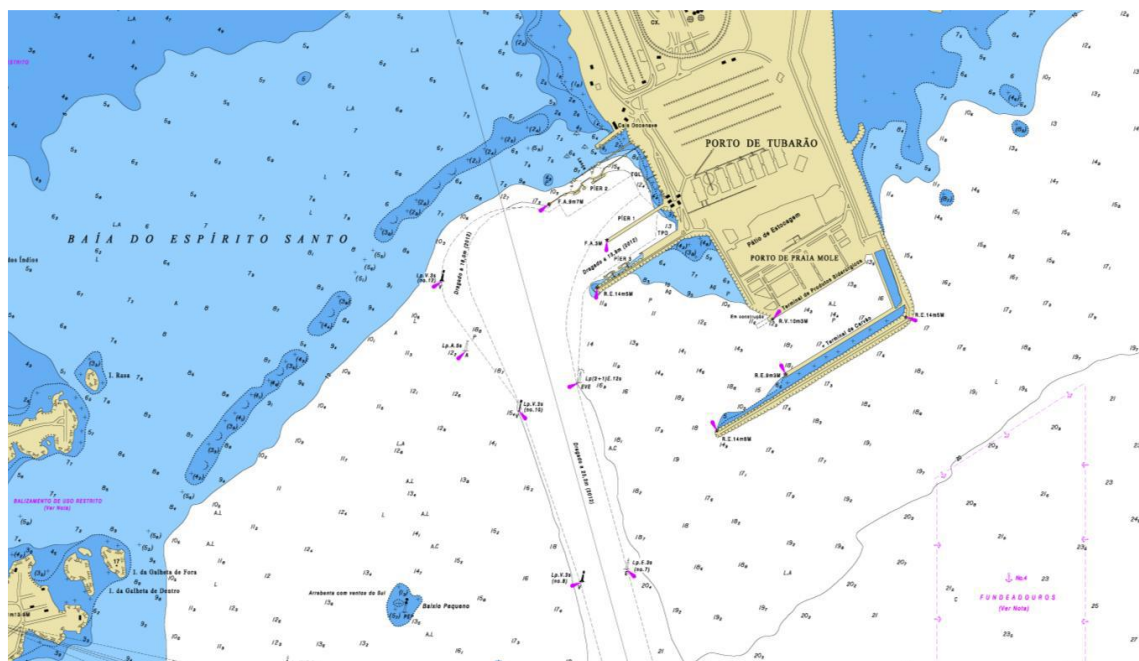


Figure 2 Illustrative image of DHN Chart 1401 – Terminal Proximities

### 5.3. TERMINAL LAYOUT



*Figure 3 Liquid Bulk Terminals*

#### **5.4. VESSEL ACCEPTANCE CONDITIONS**

While the vessel is in port, various risk management measures are implemented to minimize risks and ensure safe operations.

Vessels with a history of unresolved problems will not be accepted and will be denied permission to operate at the oil terminal. Petrobras/Transpetro will not be held responsible for actions that fail to comply with the standard deadlines for this purpose.

At every stage, as described in the following sub-items, measures are taken to facilitate operations and plan them appropriately.

#### **5.5. MANAGEMENT AND CONTROL**

The Operations Control Center (CCO) is located in the administrative building. This location serves as the central hub for operations control and the exchange of information with the vessel.

Communications are conducted via VHF radios on a prearranged maritime frequency registered on VHF channels 15 and 16.

Operations are managed in accordance with local and corporate procedures, as well as internal and external standards applicable to the PETROBRAS system.

The Operations Control Center is located near the tanking area, about 3 km from the TGL. The shift supervisor is stationed at this control center along with the operators responsible for monitoring all terminal operations through the supervisory system.

A backup system, using cell phones, is in place in case the primary system fails.

CCO: TEVIT/TGL: +55 27 3194.4268

## 5.6. MAIN RISKS

Excessive speed when approaching the pier should be avoided since there is a risk of structural damage to the pier. The speed of approach of the vessel perpendicular to the fender line ( $V_p$ ) should be, according to the calculation of the berthing energy, equal to or less than 0.15 m/sec.

The Terminal does not have a weather forecast service on its premises.

While in the Terminal's coverage area, vessels must monitor the weather forecasts for the DELTA region issued by the Brazilian Navy's Hydrographic and Navigation Center.

Fluctuations in tension and mooring caused by wave conditions when waves or swells from the south or southeast are present.

Operations must be suspended whenever sea and weather conditions exceed safe operating limits (average swell height above 70 cm and average wind speed above 25 knots). Under these conditions, at the Terminal's discretion and with the consent of the vessel's master, the need to unmoor the ship must be assessed to prevent damage to the ship, the Terminal, and third parties due to excessive impacts caused by the waves.

Thunderstorms are rare, but at the discretion of the terminal and/or vessel, operations must be suspended when they occur.

Regarding the impracticality for maneuvering, see item **9.4 IMPRACTICALITY**

## 5.7. NAVIGATION HAZARDS

The following hazards must be avoided:

Near the access channel to Tubarão Port, vessel operators heading to Tubarão Port should be aware of depths less than 25.3 m in the channel dredged to 25.3 m (2012) and depths less than 13.9 m in the channel dredged to 13.9 m (2012), paying special attention to the shallower depths shown on nautical charts.

Provided that the lateral boundaries of the marked channel are observed, no navigation risks were identified from the anchorage area to the TEVIT/TGL facilities.

Special attention must be paid to the possibility of sudden changes in wind direction, as winds typically blow strongly from the south when cold fronts pass through, and to the presence of swells coming from the S-SW with an average height exceeding 60 cm as the vessel approaches the pier.

## 5.8. ACCESS CHANNEL

The maneuvering area, Tubarão Port, is bounded by a circle with a radius of 300 meters and a center at 20° 17.5' S and 040° 15.0' W.

Access to Tubarão Port is via a marked channel with five pairs of buoys and a maneuvering area consisting of two turning basins, with a total length of 5,522 meters.

#### Operational Characteristics

|              |                                                      |
|--------------|------------------------------------------------------|
| Length       | 4,422.00 meters;                                     |
| Design width | 285 meters (350 meters between buoys TU and No. 10); |
| Design depth | 25.30 meters                                         |

#### Restrictions regarding vessels

|                      |                      |
|----------------------|----------------------|
| Maximum deadweight   | 405,000 metric tons; |
| Maximum total length | 365 meters;          |
| Maximum beam         | 66 meters;           |

#### Maximum draft

22.30 plus tide limited to 23 meters.

22.30 meters + tide, with a significant swell height of up to 1.00 meters;

22.20 meters + tide, with a significant swell height of up to 1.10 meters;

22.10 meters + tide, with a significant swell height of up to 1.20 meters;

22.00 meters + tide, with a significant swell height of up to 1.30 meters;

21.90 meters + tide, with a significant swell height of up to 1.40 meters;

21.80 meters + tide, with a significant swell height of up to 1.50 meters;

## 6. Description of Berths

### 6.1. PHYSICAL DETAILS OF THE BERTHS

#### GENERAL RESTRICTIONS

- During nighttime berthing maneuvers, the restriction regarding the availability of Pier 1 (North Side) or Pier 2 must be observed for vessels with a length overall (LOA) exceeding 170.00 meters;
- For entry/berthing maneuvers, the restriction regarding the presence of a vessel berthed at Pier 2 that has a maximum length equal to or less than 333 meters or a maximum breadth equal to or less than 60.00 meters must be observed;

- For entry and berthing maneuvers, the stern of the ship berthed at Pier 2 must be aligned with mooring dolphin No. 2.

| OPERATIONAL CHARACTERISTICS    |                    |
|--------------------------------|--------------------|
| Operating Length               | 226.25 meters      |
| Berthing Wharf                 | 124.50 meters      |
| Design Depth                   | 12.50 meters       |
| RESTRICTIONS REGARDING VESSELS |                    |
| Maximum Deadweight             | 40,000 metric tons |
| Maximum Length Overall (LOA)   | 184.00 meters      |
| Maximum Beam                   | 30.00 meters       |
| Maximum Draft                  | 11.35 meters       |
| Maximum Manifold Height        | 12.00 meters       |

Table 8

The maximum height of the manifold was calculated based on the hose extension limits and operating environmental conditions.

Small vessels, or those with a shallow draft, must be aware of the possibility of passing under the TGL's fenders, which could result in damage to them. Accordingly, for berthing at TGL, a Minimum Freeboard of 2.10 meters was specified, calculated based on the height of the lower edge of the fender from the low-tide waterline at syzygy, with a safety margin added to accommodate waves with an average amplitude of 60 cm.

When conditions for approaching or remaining at the pier warrant caution, GIAONT must be contacted so that it can assess safety conditions and advise the Master on whether to proceed with the berthing maneuver or remain at the pier.

This decision to maintain the approach, abort the maneuver or remain berthed, even in apparently adverse conditions, is the sole responsibility of the vessel's Master, and GIAONT is responsible for assessing the risks of damage to the Terminal structure and the vessel. In this case, GIAONT must communicate its recommendation to the terminal supervisor and the vessel's Master, who will decide whether the vessel should remain at the pier or depart.

Caution is advised when weather conditions reach the following measures:

- Southerly wind with an average speed of more than 25 knots;
- Offshore swell with an average height greater than 60 cm;
- Surface waves from the south with a height greater than 1 m.

| BERTH      | BERTH TYPE | BERTHING WHARF (m) | DEPTH (m) | MAXIMUM DEADWEIGHT (TPB) | DISTANCE BETWEEN FENDERS (m)  |
|------------|------------|--------------------|-----------|--------------------------|-------------------------------|
| <b>TGL</b> | T- Jetty   | 124.5              | 12.5      | 40,000                   | See pier 5's plan in item 6.2 |

Table 9

| BERTH      | PRODUCTS HANDLED                     | VESSEL'S MAXIMUM LENGTH OVERALL - LOA (m) | MAXIMUM BEAM (m) | MAXIMUM DRAFT (m) | FREEBOARD   |             | MINIMUM PARALLEL BODY (m) |
|------------|--------------------------------------|-------------------------------------------|------------------|-------------------|-------------|-------------|---------------------------|
|            |                                      |                                           |                  |                   | MAXIMUM (m) | MINIMUM (m) |                           |
| <b>TGL</b> | LIGHT AND DARK PETROLEUM DERIVATIVES | 184                                       | 35               | 11.35             | 10          | 2.1         | 52.15                     |

Table 10

### DEPTH CONTROL

The port authority is responsible for monitoring local water depths and will work in conjunction with port operators and the pilotage service to ensure that the maximum permitted draft is kept up to date.

### MAXIMUM DIMENSIONS OF THE LIQUID BULK TERMINAL (TGL)

#### Operational Characteristics:

- Operating Length 226.25 metric tons;
- Berthing Wharf 24.50 meters;
- Design depth 12.50 meters;

#### Restrictions regarding vessels:

- Maximum deadweight 40,000 metric tons;
- Maximum total length 184.00 meters;
- Maximum beam 30.00 meters;
- Maximum draft 11.35 meters;
- Maximum Manifold Height 12.00 meters;

The maximum height of the manifold was calculated based on the hose extension limits and operating environmental conditions.

### NAVIGATION AND BERTHING AIDS

There is no equipment at the piers to assist with or monitor approach and berthing maneuvers.

## 6.2. BERTHING AND MOORING ARRANGEMENT

The TEVIT/TGL pier has 6 berthing fenders and 11 mooring bollards for passing the mooring lines, as shown below, which represents the TGL plan (See APPENDIX D).

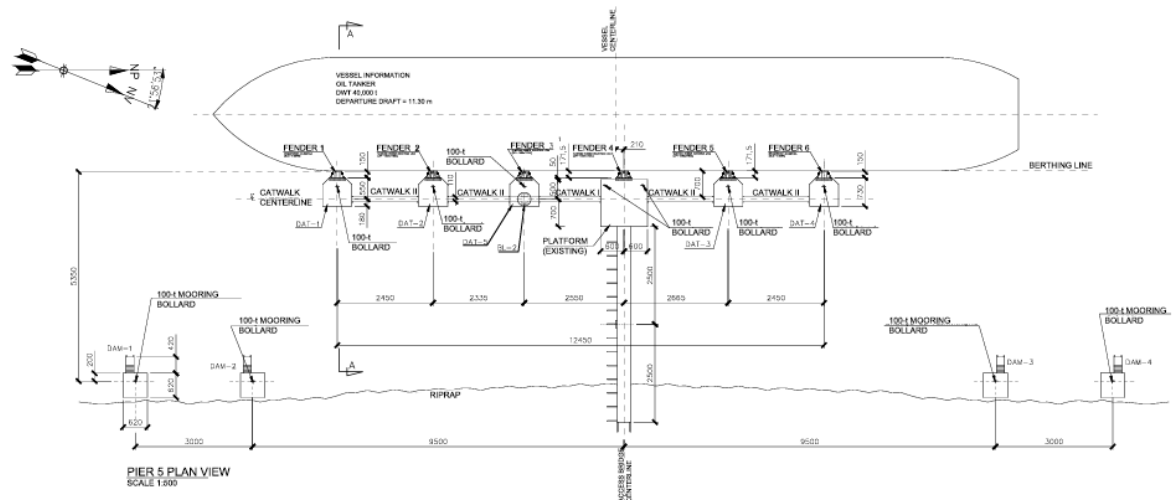


Figure 4

In addition to the vessel's lines, the use of shore lines (8-inch nylon) is mandatory. These are short lines (one per dolphin), which provide greater safety to the operation, as they are resistant lines and work by preventing the movement of the vessel away from the pier. Traditionally, these lines are nicknamed “jibóia” because of the way they used to be coiled (resembling the way a boa constrictor coils itself) and because of their size and the difficulty in handling them. For vessels of approximately 40,000 DWT, four additional long head and stern lines (8-inch nylon) are fed from shore, two forward and two aft, which reinforce the mooring and reduce the likelihood of the vessel's head and stern lines parting.

| Approach |                       |                   | Mooring points |          | Mooring Lines (Bow x Stern) |             |              |
|----------|-----------------------|-------------------|----------------|----------|-----------------------------|-------------|--------------|
| Berth    | Maximum Speed (Knots) | Maximum Angle (°) | Bollards       | SWL      | Head and Stern Lines        | Breast line | Spring Lines |
| TGL      | 0.5                   | 5                 | 11             | 100 tons | 3 x 3                       | 3 x 3       | 2 x 2        |

Table 11

## 6.3. CHARACTERISTICS OF THE LOADING AND DISCHARGING BERTH

| PRODUCTS HANDLED | HOSES   | LENGTH                                             | RECEIVING OR SENDING | TEMPERATURE (°C) |         | MAXIMUM FLOW (m <sup>3</sup> / h) | MAXIMUM PRESSURE (bar) |
|------------------|---------|----------------------------------------------------|----------------------|------------------|---------|-----------------------------------|------------------------|
|                  |         |                                                    |                      | MINIMUM          | MAXIMUM |                                   |                        |
| <b>LIGHTS</b>    | 1 X 08" | 22 METERS<br>(1 hose of 10m + 1 of 12m, connected) | both                 | 15               | 40      | 1,200                             | 10                     |
| <b>DARKS</b>     | 1X 08"  | 22 METERS<br>(1 hose of 10m + 1 of 12m, connected) | both                 | 30               | 70      | 1,200                             | 10                     |

Table 12

## 7. Communication Before Arrival

Any vessel intending to operate in the TEVIT/TGL must submit, in advance and fully completed, the information listed in Appendix B, as this information is essential for preparing the operation.

Prior to the vessel's arrival, the Terminal will send a list of information based on ISGOTT (Pre-Arrival Exchange of Information) – Appendix C. It will also send the Terminal's Port Information Booklet through the Agency after the terminal operation has been confirmed. The list of documents required for clearance with local authorities will also be sent.

The start of operations will be authorized only when all possible pending issues of the Safety Checklist – LVSO (ISGOTT) are resolved by the vessel.

Onboard repairs that involve hot work or that prevent the use of the MCP and the washing of the vessel's cargo tanks may not be performed while the vessel is berthed. Repairs should preferably be carried out in the anchoring area. To perform these services with the vessel berthed, prior authorization from the Terminal will be required.

Vessels destined for TEVIT/TGL facilities must indicate the estimated arrival time (ETA) 48 and 24 hours in advance. The change or confirmation of the arrival of the vessel must be communicated at least 24 hours in advance. In the ETA information, it must be specified by the vessel whether the time mentioned is local or GMT.

The time of arrival is considered to be the moment the vessel reaches the anchorage area or, in the event of inclement weather that prevents anchoring, the End of Sea Passage—EOSP plan.

Notice of readiness to operate will only be accepted if the vessel is actually, in all respects, ready to commence operation.

The order in which vessels berth at TEVIT/TGL is determined by Transpetro's schedule.

## 7.1. TERMINAL INFORMATION FOR VESSEL

At every stage, as described in the sub-items below, measures are taken to facilitate operations and plan them appropriately.

### 7.1.1 ON ARRIVAL

Port authorities are notified by vessel agents regarding the vessel's arrival and expected time of berthing. As a general rule, the inspection and clearance are handled by the shipping agency after the vessel has berthed.

#### Vessel / Terminal Information Exchange

Information between the terminal and the vessel is exchanged prior to arrival and during the initial clearance after berthing, as well as relevant safety information, such as escape routes, emergency flowcharts, emergency contacts, and a list of port telephone numbers in accordance with Item 1 **Emergency Procedures**, and details of the exit routes in the event of an emergency evacuation of the ship's crew.

## 7.2. VESSEL INFORMATION FOR TERMINAL

The information to be exchanged between the Terminal and the Vessel, prior to arrival, is described in Appendices "B" and "C", according to ISGOTT recommendations.

# 8. Operational Information

## 8.1. BERTHING

### VESSEL MOORING SYSTEM

Moorings lines deserve permanent care in order to keep the berthed vessel within safe limits of clearance from the pier. All lines must be maintained at the proper tension during operation, bearing in mind that the crossbeams are short and, consequently, have less elasticity, resulting in a higher probability of parting when subjected to excessive stress.

All mooring lines must be of the same type, gauge and material (fiber or steel), and the use of mixed moorings is not allowed.

The mooring lines must be arranged as symmetrically as possible in relation to the midship of the vessel.

The breast lines should be oriented as perpendicularly as possible to the longitudinal axis of the vessel.

The spring lines should be oriented as parallel as possible to the longitudinal axis of the vessel.

## 8.2. VESSEL / PORT ACCESS

The TGL does not have telescopic ladders for access to berthed vessels nor a parallel area close enough to use the vessels' gangway. Therefore, vessels must fix their access boards to the dolphin and, they must be correctly supported on the vessel's balcony and with a safety net installed.

Crew members who use the terminal facilities upon disembarking should not walk through the industrial area. Transportation may only be provided using vehicles contracted by the vessel's security agency, which will take the vessel's crew to the main entrance and back. **The movement of crew members on foot is not allowed.**

## 8.3. INITIAL CLEARANCE

Operations will only commence after the initial letter has been completed by the onshore and on-board representatives. The Load Plan and operation sequence must be presented to the Terminal Operator and discussed prior to commencement.

## 8.4. OPERATIONAL SAFETY CHECKLIST (OSC)

Immediately after berthing and before the start of operations, in order to verify operational safety conditions, equipment, and procedures, GIAONT conducts a safety inspection in accordance with the Operational Safety Checklist, which is based on the latest edition of ISGOTT and tailored to the type of vessel.

In the end, it must reflect the exact condition of the vessel, at the time when the Giaont Inspector must present the result to the vessel's Master or their legal representative. If any non-compliant item is observed that may affect the safety of the operation, it will only commence after the pending issue is remedied and the vessel is considered safe to operate.

## 8.5. TANK MEASUREMENT

They must be carried out at the time of initial and final release, and all safety precautions must be followed correctly. Attention must be paid to precautions for preventing ignition risks from static electricity sparks during measurements, sampling, connections and cargo/discharge operations.

Equipment used for this purpose must be, in addition to being certified, explosion-proof and properly grounded before use (ISGOTT Procedures).

Measurements/inspections of the onboard tanks are carried out by the vessel's personnel, upon monitoring by the Terminal Operator, observing all safety measures applicable to the case.

## 8.6. BALLASTING, DEBALLASTING AND SLOP POLICY

Ballast loading and discharging is permitted inside the port.

The vessels' ballasting and deballasting nets and tanks must be intended only for this purpose, being isolated from the other on-board nets.

The act of deballasting the vessel, during the operation, presupposes that the Master is fully aware of the satisfactory and compatible quality of the water discharged into the sea. This water must be free of oils and/or oily residues, as well as pathogenic organisms that may alter the microbiological balance of the region, causing damage to marine fauna and flora, causing a negative impact on the local community and area of marine influence of the port, and must do so in accordance with the International Convention for the Control and Management of Ballast Water and Sediments of Vessels - BWB.

The Terminal may, at any time, when the apparent condition of the ballast suggests possible water contamination, request a copy of the Ballast Water Report, in accordance with Normam-20, to protect its interests against potential challenges.

### SLOP

At TEVIT/TGL, there is no facility to receive oily waste (SLOP).

## 8.7. PROCEDURES FOR CONNECTING/DISCONNECTING HOSES

### BEFORE CARGO TRANSFER

See item 8.4 Operational Safety Checklist (LVSO).

### THERMAL INSULATION

Electrical isolation between vessel and Terminal is achieved by means of insulating flanges installed on the loading hoses, in order to ensure connection safety in accordance with ISGOTT recommendations.

### CONNECTION OF HOSES

The Terminal Operator will direct the connection and disconnection of the loading hoses.

During berthing, the terminal operator will remain at the manifold station of the terminal to be used in order to guide the pilot in correctly positioning the vessels.

The vessel must install reducers to ensure that the diameter of the cargo inlets is suitable for connecting the loading hoses.

The connection is made by ground personnel; however, the onboard crew will provide the necessary assistance. The hose shall be supported by the onboard crane throughout the operation.

After connecting the loading hoses, they must be tested for tightness. Therefore, pumping should begin at the lowest possible flow rate and pressure.

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

## **8.8. CARGO TRANSFER PROCEDURES.**

The start of operations is contingent upon the holding of a preliminary meeting (Safety Key Meeting) at which the LVSO (ISGOTT—Vessel/Shore Safety Checklist) and the Initial Letter will be agreed upon and signed.

To begin the transfer, the “Ready to Operate” form must be signed by all parties (Vessel/Terminal).

Monitoring of pressures in the vessel's manifold is done during cargo transfer, hourly and recorded by shipboard and shore representatives.

The Terminal controls the internal pressure variables through the centralized supervisory control system. Flow rates and accumulated volumes are recorded hourly and compared between the parties, subject to the limit specified in the Operational Monitoring Letter, which is provided to and discussed with the vessel's representative at the time of initial clearance.

Any change in operating conditions must be communicated and documented between the parties. During operation, it is expressly forbidden to close valves that cause back pressure in the system.

The interruption of the cargo transfer must occur in any situation that may pose a danger, either to the vessel or to the Terminal. The shore crew is authorized to interrupt or suspend the cargo transfer operation in the event of non-compliance with any of the universally accepted safety rules and standards adopted in the maritime transport of oil. The vessel's master has the right to suspend cargo transfer operations if he has reason to believe that operations on shore are unsafe, provided he gives advance notice to the shore crew.

The vessel's master has the right to suspend cargo transfer operations if there are reasons to believe that operations on shore are unsafe, provided that the shore crew is notified in advance. The procedures and contacts for each type of emergency are described in the terminal's Emergency Response Plan (PRE) and the Individual Emergency Plan (PEI), and the main phone numbers are provided in item 1.

If the vessel has any outstanding issues related to the LVSO (ISGOTT—Vessel/Shore Safety Checklist) and the Initial Letter that are not resolved by the crew in a timely manner, the Terminal will not authorize the vessel to begin operations.

## **RESTRICTIONS ON EXCESSIVE SMOKE AND SOOT BLOWING**

Throughout the entire period that the vessel is berthed at TEVIT/TGL, it is prohibited to discharge dense smoke from the stack or to perform soot blowing or cleaning of boiler pipes of any kind (MARPOL). In addition, precautions must be taken to ensure that no sparks escape through the chimney. Failure to comply with these regulations will result in one or more of the following sanctions:

- Immediate suspension of operations;
- Fine from the competent authorities;
- Compulsory unberthing of the vessel from the Pier;
- Communication of the infraction to the shipowners;
- Fines, loss of time and all other related expenses will be charged to the vessel.
- Miscellaneous expenses that may cause damage to Transpetro's interests.

### **RESTRICTION / CONDITION FOR VESSELS ALONGSIDE**

The prohibition against small vessels remaining alongside or in the vicinity of other vessels while they are berthed must be strictly observed. Only service vessels, or those authorized by the Maritime/Port Authorities, or authorized by the Terminal, may be in the vicinity or alongside the vessel, provided that they meet the safety conditions. Violation of this standard will be immediately reported to the competent Maritime/Port Authorities.

All vessels in operation at TEVIT/TGL must keep their machines ready for departure at all times.

### **PROPELLER MOVEMENT RESTRICTION**

Berthed vessels will not be able to move their propeller(s) without express authorization from the Terminal Management after formal request made by the Shipowner to Transpetro.

### **INTERMEDIATE INSPECTIONS**

In accordance with Appendix A of "ISGOTT," these inspections are conducted by GIAONT during the vessel's operation at intervals agreed upon at the time of initial clearance, which may not exceed 6 hours, in accordance with operational safety criteria, and are recorded in the LVSO. In STS operations, the inspection may not exceed 4 hours.

### **PRESSURE AND FLOW MONITORING**

The Terminal will maintain control of the internal pressure variables of its pipelines through a supervisory control system.

The monitoring of manifold pressures, flow, as well as total cargo volume, must be recorded and measured by the onboard and onshore representatives, every hour. Any significant difference shall be investigated and the transfer operation stopped if necessary.

Any change in operating conditions must be communicated in advance and documented.

During operation, it is expressly forbidden to close valves that may cause back pressure in the system (Vessel x Terminal).

### **INTERRUPTIONS OF OPERATIONS**

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

- Temporarily during storms, with the incidence of lightning, winds or intense currents (According to parameters listed in the ISGOTT LVSO);
  - In the event of non-compliance with any of the rules and standards concerning safety, universally accepted and adopted in the maritime transport of oil;
  - If the vessel's Master has reason to believe that operations on shore are unsafe, provided they give advance notice to the pier operators;
  - Product leakage on the vessel or at the Terminal;
  - A significant difference between the amount unloaded and the amount received on shore or on board the vessel;
  - Non-compliance with any item of the LVSO re-check.
- See item [5.6 Main Risks](#)

**In the event of any emergency, the Terminal may suspend operations so that all resources can be directed toward mitigating any incident.**

### **SPECIAL LPG REQUIREMENTS**

Not applicable

## **8.9. DRAINAGE, LOAD MEASUREMENT, SAMPLING AND DOCUMENTATION**

After the end of the operation, the Terminal must make sure about the authorization to close the cargo outlets - Vessel x Terminal – (Manifold).

The Terminal will authorize the start of drainage from the used loading hoses. The vessel's representative will be responsible for arranging for the drainage of the onboard section and making the disconnection ready.

### **FINAL MEASUREMENTS**

The final measurements of the onboard tanks are carried out by the vessel's personnel and accompanied by the Terminal representatives. They must be carried out at the time of final release and all safety precautions must be followed correctly. Equipment used for this purpose must be, in addition to being certified, explosion-proof and properly grounded before use (ISGOTT Procedures).

The final release of the operation must occur after comparing the quantities handled (Vessel x Terminal), as well as the entire complement of the stay documentation.

At the end, all documentation of the operation must be exchanged between the parties (Vessel x Terminal), and duly signed, as well as the entire complement of the stay documentation.

## **8.10. TANK WASHING**

Washing the cargo tank of a ship berthed at TEVIT/TGL is not considered a standard operation and is not permitted under routine conditions. However, the COW operation may be allowed as long as it is authorized by the Transpetro schedule and authorized by the Terminal Supervision, after consulting the Management.

Vessels authorized to carry out COW operation must meet the main requirements as per ISGOTT Section 12.5.

#### 8.11. REPAIRS IN THE PORT

While the vessel is berthed, no repairs or maintenance work may be carried out that involves or may involve the risk of sparks or other means of ignition.

In extreme cases – where maintenance is imperative - all safety standards must be observed and met and must have the consent of the vessel and the terminal, after approval of a Risk Analysis.

Any type of repair that implies some restriction of the vessel during the stay must be previously authorized by the Terminal.

It should be noted that, in all cases, it is expressly forbidden to carry out any type of maintenance that results in restriction of the machine, which prevents or hinders the movement of the vessel by its own means

#### 8.12. INERT GAS

In the event of difficulties or problems with the vessel's inert gas system, operations will be suspended until the system complies with the minimum acceptable standard.

Vessels must have atmospheres that are inert with respect to flammability and explosion in the tanks to be loaded.

#### 8.13. BUNKER SUPPLY

There is no bunker supply at Vitória Waterway Terminal (TEVIT/TGL).

#### 8.14. POLLUTION PREVENTION

The vessel will send, in advance, a summary of its emergency plans (SOPEP).

#### 8.15. DRINKING WATER

The terminal provides potable water through piping at the pier. The supply request must be made by the vessel directly to Vale via VHF channel 06 radio.

#### 8.16. UNBERTHING AND LEAVING THE PORT

During the unberthing maneuver and exit from the port, the limits of the channel and the hazards reported in the item 5 and its subitems must be observed.

Provided that the aforementioned departure condition is met, the Pilot normally begins the unberthing maneuver immediately after the final clearance is granted, that is, once the documents have been completed and signed.

Safe conditions must be ensured for the Pilot to disembark. The pilot usually disembarks at the same embarkation point.

#### 8.17. COMPLIANCE WITH THE ISPS CODE

If necessary (in the event of a security incident), security measures may be initiated by the vessel through the Terminal's Port Facility Security Officer (PFSO) or via VHF radio. The terminal operates normally at security level 1.

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

## 9. PORT OR ANCHORAGE ORGANIZATION

### 9.1. PORT CONTROL OR VTS

The Vessel Traffic Service (VTS) is an electronic navigation aid capable of actively monitoring waterway traffic, with the purpose of enhancing the safety of human life at sea, navigation safety, and environmental protection in areas with heavy vessel traffic or a risk of major accidents.

According to the Maritime Authority's Standard for Vessel Traffic Services (NORMAM-602/DHN), the Vitória VTS Operational Control Center serves as an Information Service (INS), providing essential and timely information to support decision-making processes on board. General information and Notices to Mariners are broadcast at regular intervals, every six hours, beginning at 00:00, or upon request by the mariner. Ad hoc information concerning navigation safety is transmitted at the initiative of Vitória VTS.

The Information Service (INS), upon request, may provide: reports on the positions, identification, and intentions of other vessels; conditions of waterways, anchorages, piers, and terminals; hazards; meteorological and hydrological conditions; or any other factor that may assist the vessel's master or the onboard pilot in decision-making or that may otherwise affect a vessel's transit.

The system provides coverage of the entire Vitória VTS area, which includes the Organized Port area, the Tubarão Port Complex (Port of Tubarão—Ore Terminal; Port of Praia Mole—Coal Terminal and Steel Products Terminal, General Cargo Terminal, and Liquid Bulk Terminal), the waiting and anchorage areas, the access channels, and the maneuvering basins.

The coverage area of Vitória VTS is defined by the following coordinates:

| Point | Latitude              | Longitude              |
|-------|-----------------------|------------------------|
| 1     | <i>20° 19' 30'' S</i> | <i>040° 16' 36'' W</i> |
| 2     | <i>20° 19' 36'' S</i> | <i>040° 21' 07'' W</i> |
| 3     | <i>20° 19' 26'' S</i> | <i>040° 21' 00'' W</i> |
| 4     | <i>20° 18' 40'' S</i> | <i>040° 16' 56'' W</i> |
| 5     | <i>20° 16' 25'' S</i> | <i>040° 14' 00'' W</i> |
| 6     | <i>20° 16' 25'' S</i> | <i>040° 08' 00'' W</i> |
| 7     | <i>20° 24' 00'' S</i> | <i>040° 08' 00'' W</i> |
| 8     | <i>20° 24' 00'' S</i> | <i>040° 17' 00'' W</i> |

Table 13

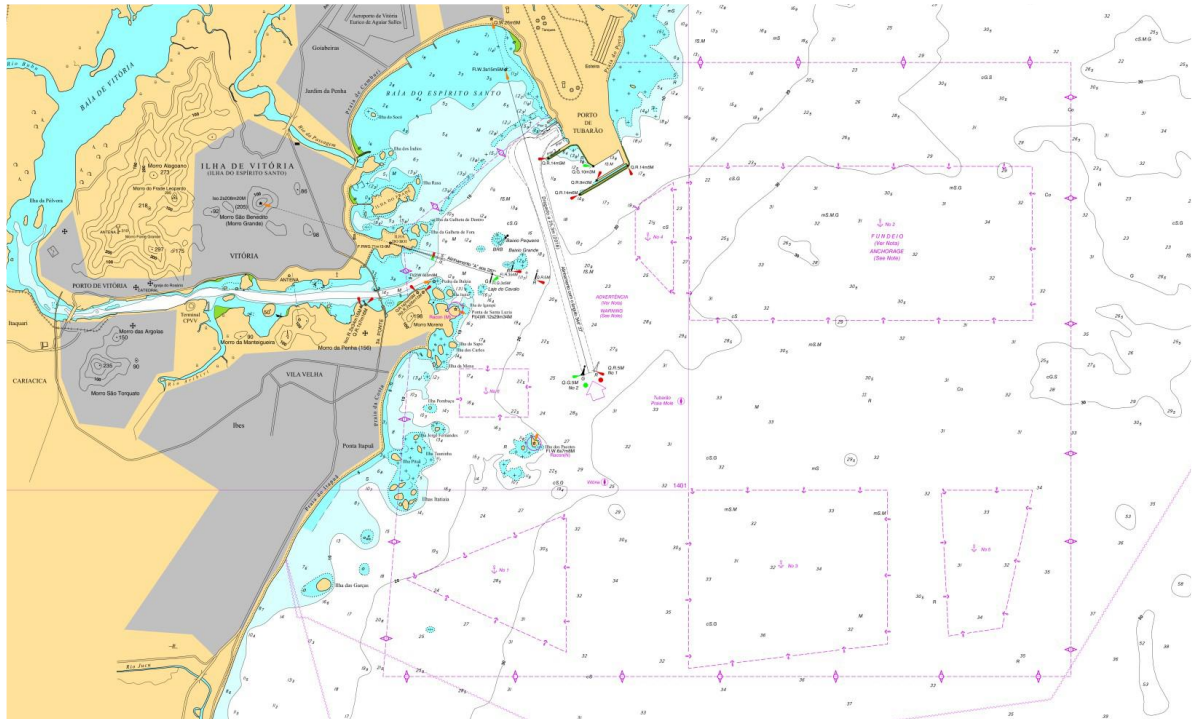


Figure 5

The Vitória VTS Operational Control Center (OCC) is located on Estrada de Capuaba, 1500 – Bairro Ilha das Flores – Vila Velha – ES, CEP: 29.115-900.

Telephones: +55 (27) 2104-3482 (VTS Supervisor – 24hrs), +55 (27) 2104- 3480 (VTS Controller – business hours).

Emails: [vitoriavts@vports.gov.br](mailto:vitoriavts@vports.gov.br) (VTS Supervisor – 24hrs); and [vitoriavts.manager@codesa.gov.br](mailto:vitoriavts.manager@codesa.gov.br); (VTS Manager – business hours).

Opening hours: 24/7.

In accordance with the guidelines set forth in the Maritime Authority's Regulations for the Traffic and Stay of Vessels in Brazilian Jurisdictional Waters (NORMAM-08/DPC), the control of entry into and departure from the ports of Espírito Santo is carried out through the Center for Coordination and Control of Maritime Activities (CCCAM), whose radio call sign is PWG77. It operates within the Department of Waterway Traffic Safety of the Espírito Santo Port Authority (CPES) and is permanently on Channel 16 on the VHF band, as well as via telephone at (27) 2124-6526/6523 and email at [cpes.merep@marinha.mil.br](mailto:cpes.merep@marinha.mil.br).

All vessels, both foreign and domestic, must maintain contact with the CCCAM while operating and staying in port areas under CPES jurisdiction, through shipping agencies or their legal representatives, via the Paperless Port System (PSP), by email at [cpes.merep@marinha.mil.br](mailto:cpes.merep@marinha.mil.br), via the contact phone numbers, on VHF channel 16, or in person.

All VHF radio communications within the coverage area must be to the point, concise, and in accordance with the standard radio communication procedures set forth in the IMO Standard Marine Communication Phrases (SMCP).

All merchant vessels in the anchorage area or entering or leaving the ports of Espírito Santo must keep their AIS turned on.

### COMMUNICATION PROCEDURES IN THE VTS COVERAGE AREA:

Vessel masters must be aware of the Procedures for Vitória VTS Mariners, available on the Vports website at: <http://www.vports.gov.br>.

All VHF radio communications within the Vitória VTS coverage area must be to the point, concise, and in accordance with the standard radio communication procedures set forth in the IMO Standard Marine Communication Phrases (SMCP).

Portuguese or English must be used for VHF communications.

The Vitória VTS Operational Control Center, call sign Vitória VTS, maintains a constant listen on VHF channels 16 and 73 for traffic information and meteo-oceanographic conditions.

Mariners must preferably place their calls over the VHF on channel 73.

The information provided by Vitória VTS is intended to assist the vessel's master in order to contribute to the increase of navigation safety. Such information does not replace the regulations in force and cannot be used as a reason to disregard them or refrain from any measures that are consistent with the rules of navigation. The responsibility for navigation safety rests with the waterway user.

All vessels, both foreign and domestic, must maintain contact with the CCCAM while operating and staying in port areas under jurisdiction of this Port Authority, through shipping agencies or their legal representatives, via the Paperless Port System (PSP), by email at [cpes.merep@marinha.mil.br](mailto:cpes.merep@marinha.mil.br), via the contact phone numbers, on VHF channel 16, or in person.

All merchant vessels in the anchorage area or entering or leaving the ports of Espírito Santo must keep their AIS turned on.

## 9.2. MARITIME AUTHORITY

CPES – Port Authority of Espírito Santo – Brazilian Navy.

Rua Belmiro Rodrigues da Silva, 145, Enseada do Suá, Vitória – ES. CEP: 29.050-435.

Telephone: +55 27 2124-6555.

The process for CPES to clear the vessel will comply with the regulatory requirements set forth in Normam 08, Chapter 02.

The access channel and the internal waters of TEVIT/TGL are defined by the geographical coordinates described in item 5.8 ACCESS CHANNEL of this document.

The Maritime Authority, represented by the Port Authority of Espírito Santo (CPES), aims to contribute to the guidance, coordination, and control of activities related to the Merchant Marine, related organizations, and sports and recreational activities, with regard to national defense, the safety of life at sea, navigational safety, and the prevention of water pollution, as they pertain to vessels, platforms, or their support facilities.

### 9.3. PILOTAGE

Pilotage services are mandatory at the Port of Tubarão and are provided by the Espírito Santo State Pilots' Union, in accordance with the guidelines and instructions set forth in the Maritime Authority Regulations (NORMAN) and the Port Authority of Espírito Santo Standards and Procedures (NPCP-ES).

The boundaries of the mandatory pilotage zones are the pilot embarkation and disembarkation points, as marked on the chart, and the berthing and unberthing points.

It complies with the concepts and instructions defined in the Maritime Authority Standards (NORMAM) and the Port Authority of Espírito Santo Standards and Procedures (NPCP-ES). Pilotage services are mandatory from the entrance to the access channel, except as provided for in Normam-12, item 0404.

The request for a pilot must be submitted to "Praticagem do Espírito Santo" (Espírito Santo Pilotage) through the vessel's shipping agency or its representatives in Vitória. Its headquarters are at Rua Abail do Amaral Carneiro, 41, 9º andar, Enseada do Suá; telephone (27) 3200-3898; fax (27) 3325-4586; email [praticagem@praticagem.com.br](mailto:praticagem@praticagem.com.br). The Pilotage maintains a constant watch on VHF radio channels 16 and 74, in English and Portuguese.

The minimum time to request a pilot is 02 (two) hours in advance.

It should be noted that each Master is solely responsible for the maneuvers, and is responsible for providing the Maritime Pilot with all necessary information regarding any peculiarities, specific conditions, or existing difficulties, such as engine or boiler malfunctions, problems or failures with navigation aids, mooring lines, or any other element that could pose a danger with regard to berthing/unberthing, operations, or the safety of the vessel and the Terminal facilities.

If the Master fails to comply with the pilot's instructions, in order to ensure the safe maneuvering of the vessel, the Port Master must be notified in writing through the vessel's agency. This fact shall be reported to the terminal supervisor by the vessel's agency or its representatives.

The Pilotage Organization that operates in TEVIT/TGL is the Espírito Santo State Pilots' Union.

The request for a pilot must be submitted to "Praticagem do Espírito Santo" (Espírito Santo Pilotage) through the vessel's shipping agency or its representatives in Vitória. Its headquarters are at Rua Abail do Amaral Carneiro, 41, 9º andar, Enseada do Suá, Vitória - ES; telephone (27) 3200-3898; fax (27) 3325-4586; email [praticagem@praticagem.com.br](mailto:praticagem@praticagem.com.br). The Pilotage maintains a constant watch on VHF radio channels 16 and 74, in English and Portuguese.

#### 9.4. SUSPENSION OF PILOTAGE OPERATIONS

According to the Port Authority of Espírito Santo Standards and Procedures (NPCP/ES), it is the responsibility of the Port Master to declare the suspension of pilotage operations of the bar. Suspension of pilotage operations is a situation that arises when weather conditions, sea conditions, accidents, navigational incidents, or technical deficiencies pose an unacceptable risk to navigational safety, making it inadvisable to conduct pilotage operations, allow vessel traffic, and/or facilitate the Pilot's embarkation or disembarkation. The declaration of suspension of pilotage operations in this ZP, in whole or in part, is the legal competence of the Port Master.

The declaration of suspension of pilotage operations will follow basic parameters, such as the wind intensity condition above Force 7 on the Beaufort Scale and/or the presence of swells in the evolution basin corresponding to sea state 4 on the Douglas Scale. In such cases, at the discretion of the Port Master, the suspension of pilotage operations may apply to the entire ZP or be partial, when the restrictions on the execution of pilotage tasks apply only to certain locations, vessels, maneuvers and/or pilotage navigation.

If it is determined that sea, wind, and visibility conditions are unfavorable, the Pilotage Service, through its legal representative, must request a declaration of suspension of pilotage operations from the Port Authority, specifying the prevailing conditions in the region that were preliminarily deemed to pose a risk to waterway traffic safety, the safety of human life, the preservation of the environment, or pilotage operations in the ZP, such as:

- a) Adverse weather conditions and sea state on the bar, pilot waiting point, access channel, evolution basin and maneuvering area;
- b) Specific conditions of the vessel, the berth, and on board;
- c) Wind direction and intensity, including gusts;
- d) Restricted visibility;
- e) Sailing area of the vessel to be maneuvered;
- f) Relationship between draft and freeboard of the vessel to be maneuvered;
- g) Period, height and direction of swells;
- h) Occurrence of swell and wind in different directions (bi-modality);
- i) Occurrence of transverse currents;
- j) Type, power and number of tugboats to be used;
- k) Limitation of tugboat performance due to vessel rolling;
- l) Deficiency in nautical signaling;
- m) Parameters established in maneuver simulators;
- n) Accidents or navigation facts; and
- o) Other technical deficiencies of the vessel or crew.

CPES will inform, by email, the total or partial suspension of pilotage operations of the ZP to Pilotage, Port and Terminal Administrations, which must be relayed to vessels, shipowners and other members of the Maritime Community and interested parties.

## 9.5. TUGS AND OTHER MARINE SERVICES

It is mandatory to use a tugboat in the maneuvers of vessels and ships in the Waterway Port of Vitória, in accordance with the concepts and instructions defined in the Maritime Authority Standards (NORMAM) and Port Authority of Espírito Santo Standards and Procedures (NPCP-ES).

All vessels operating in TEVIT/TGL, which are classified in terms of service and activity as tugboats, must comply with the provisions of the Standards of the Directorate of Ports and Coasts (DPC) relevant to the subject.

It will be up to the Shipowner/Shipping Company or its Shipping Agency (legal representative, agent and/or authorized representative at the port) to request the tugboats necessary for the maneuvers to be carried out. During the maneuver, the vessel's Master will determine the towing configuration, that is, the number of tugboats and their positions, to generate the necessary torque; it is recommended to take the pilot's suggestion into account. The towing lines and other materials to be used in maneuvers with the tugboats must be adequate to the safety requirements for the maneuver. The provision of these services must be the result of an agreement between the contracting party the shipowner or agent and the contractor the tugboat company.

The vessel's Master shall make the final decision on the use of materials suitable for the maneuver and devices.

During tugboat maneuvers near the bow of ships, it is prohibited to pass the towline by lowering it over the bow so that the tugboat's crew can pick it up with a hook. The towline should be routed through a line thrown from the forecastle toward the tugboat's deck, in order to prevent the tugboat and the ship from coming too close to each other, thereby reducing the effects of hydrodynamic interaction between the vessels.

The use of motorboats for loading provisions and supplies, collecting trash, and delivering lubricants, while berthed, will be permitted only with authorization from the Terminal. This service must be contracted via an agency, and it is up to the Terminal, through GIAONT, together with the vessel's Service Officer, to evaluate the safety conditions of the operation.

TEVIT/TGL is serviced by duly registered port tugboat companies. All harbor tugboats involved in maneuvering operations at TEVIT/TGL are inspected at least every 6 months and/or at any time, as necessary.

Due to the high turnover of vessels over time, we ask that, if necessary, you contact the TEVIT/TGL Operational Control Center (CCO) via VHF channels 15/16 to obtain an updated list of tugboats.

## 9.6. OTHER MARITIME SERVICES

Other maritime services relevant to the port, such as divers, vessel repairs, support boats, etc., are not available at TEVIT/TGL.

### 9.7. OTHER OIL / GAS TERMINALS

There are no other oil and oil product terminals in the anchorage area or in the vicinity of the berth.

### 9.8. OTHER KEY USERS

The Vitória Waterway Terminal (TEVIT/TGL) is where VALE S.A.'s private terminal is located.

## 10. Contacts

The following tables indicate the organization, position, telephones, electronic address, channel and radio frequencies of the main contacts of the Terminal and the companies that operate in it.

### Emergency Response Organizations

See table contacts **1.1 GENERAL**

### Port Services

| Location    | Contact              | Telephone              | Email                          | VHF/UHF Channels |         |
|-------------|----------------------|------------------------|--------------------------------|------------------|---------|
|             |                      |                        |                                | Calling          | Working |
| Terminal    | Operations Manager   | (55 27)<br>9.9718.1831 | marco.vieira@transpetro.com.br | 16               | 15      |
| Port Master | Port Authority of ES | (55 27)<br>9.2124.6500 | -                              | 16               | 11      |

Table 14

### Shipping Agents and Suppliers

| Company                       | Business            | Telephone                                                 | Email                    | VHF/UHF Channels |              |
|-------------------------------|---------------------|-----------------------------------------------------------|--------------------------|------------------|--------------|
|                               |                     |                                                           |                          | Calling          | Working      |
| GAC Maritime Agency of Brazil | Shipping Agent      | +55 27 3024-3826 // +55 27 99255 9802// +55 27 99286.7542 | shipping.vitoria@gac.com | 16               | To be agreed |
| Not available                 | Small Naval Repairs | -                                                         | -                        | -                | -            |
| Not available                 | Large Naval Repairs | -                                                         | -                        | -                | -            |
| Not available                 | Garbage Disposal    | -                                                         | -                        | -                | -            |
| Not available                 | Divers              | -                                                         | -                        | -                | -            |
| Not available                 | Line handlers       | -                                                         | -                        | -                | -            |

Table 15

### Local Authorities, State and National Agencies

See item **9.2 MARITIME AUTHORITY**

## 11. DEFINITIONS

**NAVIGATION AID** – Set of all visual, sound and radio resources, for the use of the navigator, in order to enable the recognition of their position;

**BAVIT** – Fuel base of Vitória/ES, from VIBRA ENERGIA S.A;

**BP** (Bollard Pull) – Longitudinal static traction;

**BUNKER** – Marine fuel for vessels;

**CALM** (Catenary Anchor Leg Mooring) - Anchoring system and installation of the single-buoy assembly / subsea hoses;

**COW** (Crude Oil Washing) - cleaning the ship's cargo tanks with the product it is carrying;

**CRE** – Emergency Response Center;

**DWT** – Deadweight;

**SQUAT EFFECT** - Increase in the draft of a vessel as a result of the increase in displacement speed;

**BEAUFORT SCALE** – Scale that measures wind intensity based on sea state;

**ETA** – Estimated Time of Arrival

**GIAONT** – Vessel / Terminal Inspection and Operational Monitoring Group;

**IMO** – International Maritime Organization;

**ISGOTT** – International Safety Guide for Oil Tankers and Terminals;

**ISPS CODE** – International Ship and Port Facility Security Code;

**LOA** – Length Overall

**LVSO** – Operational Safety Checklist (ISGOTT);

**MANIFOLD** – Set of loading ports and valves, located amidships, where the arms and hoses are connected for loading or unloading operations;

**Low tide** – Condition in which the tide reaches the minimum amplitude at certain times of the year;

**Spring tides** – Condition in which the tide reaches the maximum amplitude at certain times of the year;

**NE** – Northeast;

**NT** – Tanker;

**OCIMF** (Oil Companies International Marine Forum);

**PEI** – Individual Emergency Plan;

**Deadweight:** Difference between the weight of the vessel with the maximum authorized cargo and the weight of the light vessel. This difference, which can be expressed in metric tons, therefore corresponds to the weight of the cargo, passengers and their luggage, fuel and lubricants, water and food;

**PRE** – Emergency Response Plan;

**PLEM (Pipe Line End Manifold)** – Set of valves and pipes at the end of the subsea pipeline;

**S** – South;

**SE** – Southeast;

**SLOP** – Waste tank;

**SOLAS** – Safety of Life at Sea – International Convention for the Safety of Life at Sea;

**SW** – Southwest;

**DWT** – Deadweight Tonnage

**VHF** (Very High Frequency) – Radio frequency used in maritime operations;

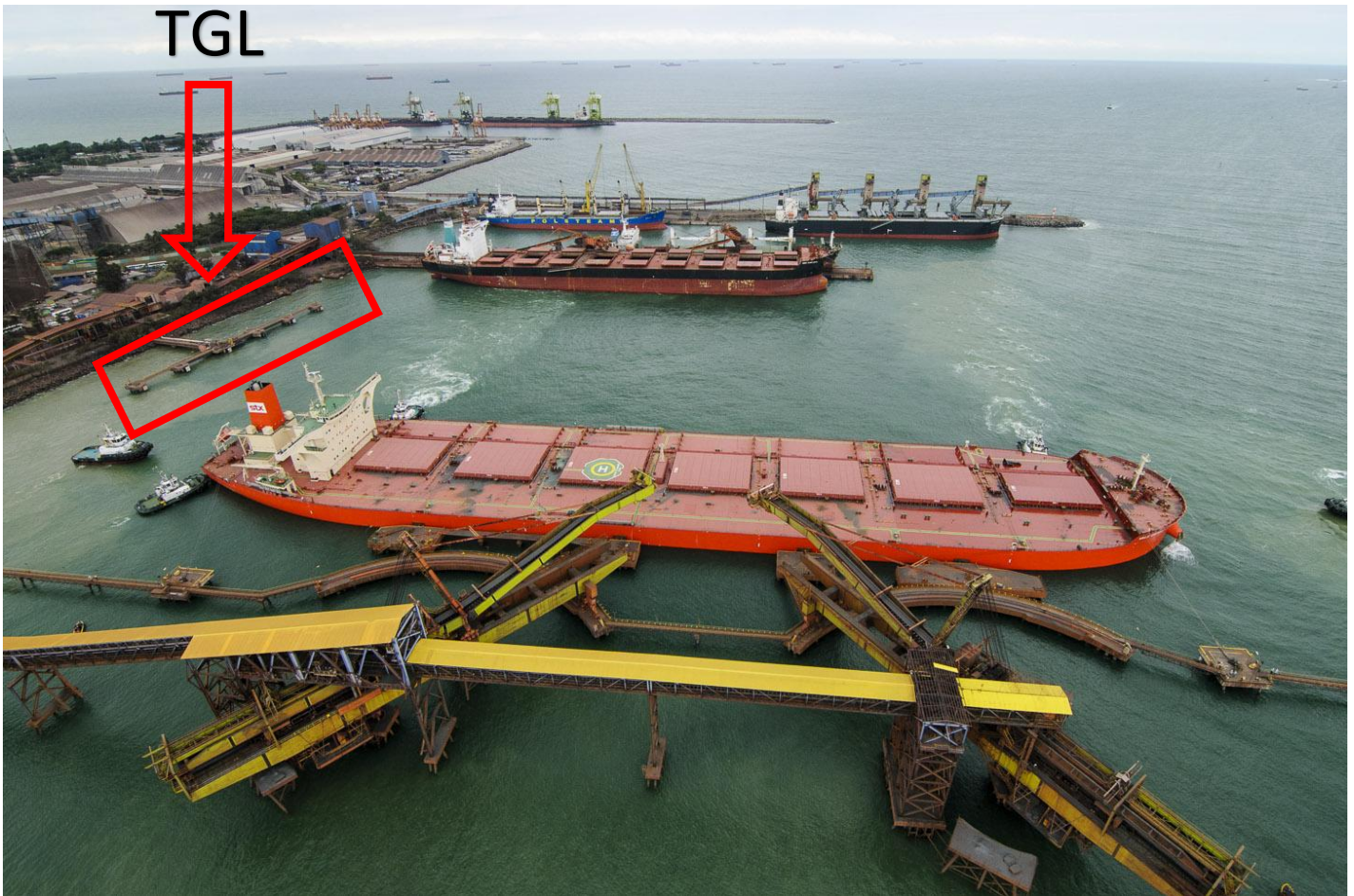
**VTs** (Vessel Traffic Service) – Traffic service for the vessel;

**W** – West;

**ZP** – Pilotage Zone;

## 12.APPENDICES

### APPENDIX A – Terminal Location



## APPENDIX – B Information Prior to the Ship's Arrival at the Terminal

| TRANSPETRO/DDT/ TP/DOP/DTNNESE/UO-BAES/OPBR/TEVIT<br>VITÓRIA WATERWAY TERMINAL - TEVIT/TGL        |                                                      |                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Request for Vessel Information</b>                                                             |                                                      |                                                                                                                                                   |
| Vessel Name:                                                                                      | Estimated time of arrival:                           |                                                                                                                                                   |
| Flag:                                                                                             | Last Port:                                           |                                                                                                                                                   |
| Master's Name:                                                                                    | Next Port:                                           |                                                                                                                                                   |
| Shipowner:                                                                                        | Agents:                                              |                                                                                                                                                   |
| Does the Vessel have an inert gas system?                                                         | Oxygen content in cargo tanks:                       |                                                                                                                                                   |
| Does the vessel intend to conduct crude oil washing?                                              | Does the vessel plan to wash its tanks while moored? |                                                                                                                                                   |
| Total length (LOA):                                                                               | Draft on arrival:                                    |                                                                                                                                                   |
| Length between perpendiculars:                                                                    | Maximum draft during transfer:                       |                                                                                                                                                   |
| Beam:                                                                                             | Draft on departure:                                  |                                                                                                                                                   |
| <b>Propulsion</b>                                                                                 | <b>Transverse propulsion</b>                         | <b>Required tugboats</b>                                                                                                                          |
| Number of motors:                                                                                 | Bow (no. and power):                                 | Minimum:                                                                                                                                          |
| Number of propellers:                                                                             | Bow (no. and power):                                 |                                                                                                                                                   |
| <b>Number and size of flanges</b>                                                                 |                                                      | <b>Distances</b>                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Cargo:</li> <li>• Ballast:</li> <li>• Bunker:</li> </ul> |                                                      | <ul style="list-style-type: none"> <li>• Bow to manifold:</li> <li>• Ship's side to manifold:</li> <li>• Manifold height to main deck:</li> </ul> |
| <b>Loading schedule</b>                                                                           |                                                      |                                                                                                                                                   |
| Cargo Appointment                                                                                 | Ballast discharge to sea                             | Slop / ballast discharge to shore                                                                                                                 |
| Type and quantity (m <sup>3</sup> ):                                                              | Quantity (m <sup>3</sup> ):                          | Quantity (m3): Not applicable                                                                                                                     |
| Type and quantity (m <sup>3</sup> ):                                                              | Estimated time:                                      | Estimated time: Not applicable                                                                                                                    |
| <b>Discharge schedule</b>                                                                         |                                                      |                                                                                                                                                   |
| Discharge Appointment                                                                             | Ballast discharge to sea                             | Slop / ballast discharge to shore                                                                                                                 |
| Type and quantity (m <sup>3</sup> ):                                                              | Quantity (m <sup>3</sup> ):                          | Quantity (m3): Not applicable                                                                                                                     |
| Type and quantity (m <sup>3</sup> ):                                                              | Estimated time:                                      | Estimated time: Not applicable                                                                                                                    |
| <b>Requested supply</b>                                                                           |                                                      |                                                                                                                                                   |
| Type and quantity (HFO): Not applicable                                                           | Type and quantity (MDO): Not applicable              |                                                                                                                                                   |
| Additional information (if any):                                                                  |                                                      |                                                                                                                                                   |

## APPENDIX – C

|                                                                                                                           |                                                                                             |                       |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br>SHIP/ShORE SAFETY CHECK LIST | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                           | <b>Página 1 / 22</b>  |

**INSTRUÇÕES DE PREENCHIMENTO DO SSSCL**  
INSTRUCTIONS FOR COMPLETING THE SHIP/ShORE SAFETY CHECKLIST

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| <p>Antes de preencher o SSSCL, os representantes do navio e do terminal devem ler e compreender as instruções a seguir para garantir uma conclusão satisfatória.</p> <p>Uma aplicação eficaz do SSSCL fornecerá uma base para operações seguras enquanto o navio permanecer no terminal. É importante que cada parte aplicável seja preenchida como requerida para garantir esta operação segura.</p> <p><b>ANTES DA CHEGADA</b><br/>O navio deve preencher a parte 1A (e 1B se tiver SGI instalado) e, em seguida, encaminhar uma cópia ao terminal para análise antes da chegada. O terminal deve preencher a parte 2 e, em seguida, encaminhar da mesma forma, uma cópia ao navio para análise antes da chegada.</p> <p>Após a conclusão dos procedimentos de antes da chegada, se não for possível enviar uma cópia dos procedimentos concluídos ao navio e/ou terminal, então uma mensagem deve ser enviada confirmando a hora e a data do cumprimento desses procedimentos. Se houver qualquer problema pendente não marcado como "Sim" na caixa de status, isso deve ser explicado nas mensagens trocadas antes da chegada.</p> <p><b>VERIFICAÇÕES APÓS A ATRACAÇÃO</b><br/>O navio deve preencher a parte 3 e entregar uma cópia ao Representante do Terminal assim que possível, mas o mais tardar na Reunião de Liberação Inicial.</p> <p>O terminal deve preencher a parte 4 e entregar uma cópia ao navio o mais rápido possível, mas o mais tardar na Reunião de Liberação Inicial.</p> <p><b>VERIFICAÇÕES ANTES DA OPERAÇÃO - A REUNIÃO DE LIBERAÇÃO INICIAL</b><br/>O navio e o terminal devem cumprir a parte 5A durante a Reunião de Liberação Inicial. Cada parte deve reter uma cópia. Esse requisito é obrigatório a TODOS os petroleiros e gaseiros.</p> <p>Em operações com navios gaseiros, o navio e o terminal devem preencher a parte 5C adicional durante a Reunião de Liberação Inicial, e cada parte deve reter uma cópia (para mais informações, o ICS' Tanker Safety Guide: Liquefied Gas deve ser consultado).</p> <p>O navio e o terminal devem discutir e concordar com o conteúdo da parte 6 (Acordos), o qual resume os fatores operacionais detalhados acordados na Reunião de Liberação Inicial. Uma cópia deve ser postada no C.C.C., em local visível aos componentes da operação.</p> <p>O navio também deve completar as verificações adicionais antes da operação, aplicável a petroleiros e gaseiros, na parte 7A, imediatamente antes de iniciar as operações de transferência.</p> <p>Se operação COW estiver planejada, deve ser cumprido também a parte 7B.</p> <p>Se o navio planeja lavar e degaseificar tanques durante a operação, deve discutir essa intenção durante a Reunião de Liberação Inicial e, uma vez que o acordo for alcançado, fornecer uma cópia da parte 7C ao terminal antes de iniciar as operações.</p> <p><b>A DECLARAÇÃO</b><br/>O cumprimento dos checklists pelo navio, pelo terminal, ou por ambos, deve ser comprovado/rubricado no formulário da declaração.</p> <p>Após o cumprimento de todos os checklists, os representantes</p> | <p>Before completing the SSSCL, tanker and terminal representatives should read and understand the following instructions to ensure satisfactory completion.</p> <p>An effective application of the SSSCL will provide a basis for safe operations while the tanker is at the terminal. It is important that each applicable part is completed as required to ensure this.</p> <p><b>PRE-ARRIVAL</b><br/>The tanker should complete part 1A (and 1B if using an IG system) and then forward a copy to the terminal for review before arrival. The terminal should complete part 2 and then similarly forward a copy to the tanker for review before arrival.</p> <p>On completion of the pre-arrival parts, if it is not possible to send a copy of the completed part to the tanker and/or terminal, then a message should be sent confirming the time and date of completion to the relevant party before arrival. If there are any outstanding issues not marked "Yes" in the status box, this should be explained in this communication.</p> <p><b>CHECKS AFTER MOORING</b><br/>The tanker should complete part 3 and give a copy to the Terminal Representative as soon as possible, but no later than at the pre-transfer conference.</p> <p>The terminal should complete part 4 and give a copy to the tanker as soon as possible, but no later than at the pre-transfer conference.</p> <p><b>CHECKS BEFORE TRANSFER - THE PRE-TRANSFER CONFERENCE</b><br/>Tanker and terminal personnel should both complete part 5A as part of the pre-transfer conference. Each party should retain a copy. This requires completion by ALL tankers.</p> <p>If bulk gases are to be transferred, the tanker and terminal personnel should also complete the additional part 5C as part of the pre-transfer conference, and each party should retain a copy (for further information, see ICS' Tanker Safety Guide: Liquefied Gas).</p> <p>The tanker and terminal personnel should discuss and agree the content of part 6 (Agreements), which summarises the detailed operational factors agreed at the pre-transfer conference. A reference copy for personnel on the tanker and in the terminal should be displayed at the relevant control stations.</p> <p>Tanker personnel should also complete the additional pre-transfer checks for all tankers in part 7A immediately before beginning transfer operations.</p> <p>If COW is planned, they should also complete part 7B.</p> <p>All tankers planning on tank cleaning and/or gas freeing alongside should discuss the intention during the pre-transfer conference and, once agreement is reached, provide a copy of part 7C to the terminal before beginning operations.</p> <p><b>THE DECLARATION</b><br/>When completed, each separate checklist part should be checked off and initialled by tanker personnel, terminal personnel, or both, in the relevant boxes on the declaration form.</p> <p>When all parts are addressed, tanker and terminal representatives should agree the intervals at which they undertake repetitive checks of items applicable to their responsibility from the SSSCL, and that could impact on the safety of the operation if not monitored. This interval should be noted in the declaration, after which the two representatives may agree to start operations and</p> |
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Revisão: S – 03/02/2021

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|  | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br>SHIP/ShORE SAFETY CHECK LIST | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                    | <b>Formulário</b>                                                                           | <b>Página 2 / 22</b>  |

do navio e do terminal devem acordar os intervalos para realização das verificações repetitivas (*re-checks*) dos itens aplicáveis do SSSCL ao navio e ao terminal, e que podem impactar a segurança da operação se não forem monitorados. Este intervalo acordado é parte da declaração.

O navio e o terminal devem reter uma cópia de todos os *checklists* da lista de verificação e da declaração.

#### RESUMO DAS VERIFICAÇÕES REPETITIVAS DURANTE E APÓS A OPERAÇÃO DE TRANSFERÊNCIA

As verificações repetitivas a serem realizadas em intervalos acordados na Reunião de Liberação Inicial pelo navio e pelo terminal existem para:

- Atuar como um auxiliar de memória para o navio e terminal, monitorando itens operacionais importantes durante as operações.
- Fornecer uma base para verificações durante os serviços de quarto e passagens de serviço.
- Permitir a tomada de decisões caso as condições mudem durante o curso das operações.

Quando um item analisado durante o *re-check* não estiver mais em conformidade com as condições originais acordadas durante a Reunião de Liberação Inicial, o navio ou representante do terminal deve tomar medidas imediatas para sanar o problema ou paralisar as operações até que as condições acordadas na Reunião de Liberação Inicial sejam restabelecidas.

Se a paralisação for necessária, o navio e representantes do terminal devem se reunir para acordar as ações para resolver o problema e retomar a operação de forma aceitável.

O navio deve completar as verificações repetitivas na parte 8 nos intervalos acordados. O registro deve estar disponível para análise do terminal.

O terminal deve completar as verificações repetitivas na parte 9 nos intervalos acordados. O registro deve estar disponível para análise do navio.

O navio e o terminal devem fornecer uma cópia final das partes 8 e 9 ao outro, quando as operações forem concluídas. Isso fornecerá uma base para a análise da operação e verificação dos *re-checks* realizados.

*add their details.*

*The tanker and terminal should retain a copy of all checklist parts and the declarations for their files in accordance with the operator's document retention period.*

#### SUMMARY OF REPETITIVE CHECKS DURING AND AFTER TRANSFER

*Repetitive checks to be undertaken at intervals agreed in the pre-transfer conference by the tanker and terminal representatives are provided to:*

- *Act as an aide memoire for tanker and terminal personnel to monitor key operational items during the period of operations.*
- *Provide a basis for status checks at watch or shift handovers.*
- *Enable decision making in the event that conditions change during the course of operations.*

*Where an item reviewed during the repetitive checks is no longer in compliance with the original status agreed during the pre-transfer conference, the tanker or terminal representative should take immediate steps to remedy the issue or cease operations until the status agreed at the pre-transfer conference can be reinstated.*

*If cessation is necessary, the tanker and terminal representatives should meet to agree the course of action taken to resolve the issue and agree that resumption is acceptable.*

*The tanker personnel should complete the repetitive checks in part 8 at the agreed intervals. The record should be available for terminal personnel to review.*

*The terminal personnel should complete the repetitive checks noted in part 9 at the agreed intervals. The record should be available for tanker personnel to review.*

*The tanker and terminal personnel should provide a final copy of their parts 8 and 9 to the other when operations are completed. This will provide a basis for review of the operation and verification of checks undertaken.*

|                                                                                                                           |                                                                                                    |                       |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 3 / 22</b>  |

**VERIFICAÇÕES ANTES DA CHEGADA**  
*INSTRUCTIONS FOR COMPLETING THE SHIP/ShORE SAFETY CHECKLIST*

**Data e Hora:** \_\_\_\_\_  
*Date and Time*

**Porto e Berço:** \_\_\_\_\_  
*Port and Berth*

**Nome do Navio:** \_\_\_\_\_  
*Ship's Name*

**Terminal:** \_\_\_\_\_  
*Terminal*

**Produto a ser transferido:** \_\_\_\_\_  
*Product to be transferred*

| <b>PARTE 1A – NAVIO – VERIFICAÇÕES ANTES DA CHEGADA</b><br><i>PART 1A – TANKER – CHECKS PRE-ARRIVAL</i> |                                                                                                                                                                             |                                            |                                      |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                              | <b>Verificação</b><br><i>Check</i>                                                                                                                                          | <b>Condição</b><br><i>Status</i>           | <b>Observações</b><br><i>Remarks</i> |
| <b>1</b>                                                                                                | <b>As informações de antes da chegada são trocadas.</b><br><i>Pre-arrival information is exchanged (6.5, 21.2).</i>                                                         | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>2</b>                                                                                                | <b>Conexão internacional está disponível.</b><br><i>International shore fire connection is available (5.5, 19.4, 3.1).</i>                                                  | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>3</b>                                                                                                | <b>Mangotes de transferência são de construção adequada.</b><br><i>Transfer hoses are of suitable construction (18.2).</i>                                                  | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>4</b>                                                                                                | <b>Port Information do terminal analisado.</b><br><i>Terminal information booklet reviewed (15.2.2).</i>                                                                    | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>5</b>                                                                                                | <b>Informações de antes da atracação são trocadas.</b><br><i>Pre-berthing information is exchanged (21.3, 22.3).</i>                                                        | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>6</b>                                                                                                | <b>Válvulas de vácuo/pressão e/ou suspiros de alta velocidade estão operacionais.</b><br><i>Pressure/vacuum valves and/or high velocity vents are operational (11.1.8).</i> | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>7</b>                                                                                                | <b>Analisadores de oxigênio fixos e portáteis estão operacionais.</b><br><i>Fixed and portable oxygen analysers are operational (2.4).</i>                                  | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |

|                                                                                                                           |                                                                                             |                       |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br>SHIP/ShORE SAFETY CHECK LIST | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                           | <b>Página 4 / 22</b>  |

| <b>PARTE 1B – NAVIO – VERIFICAÇÕES ANTES DA CHEGADA SE EQUIPADO COM SGI</b><br>PART 1B – TANKER – CHECKS PRE-ARRIVAL IF USING NA INERT GAS SYSTEM |                                                                                                                                                                                          |                                            |                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                                                                        | <b>Verificação</b><br><i>Check</i>                                                                                                                                                       | <b>Condição</b><br><i>Status</i>           | <b>Observações</b><br><i>Remarks</i> |
| <b>8</b>                                                                                                                                          | <b>Os registradores de pressão e oxigênio do sistema de gás inerte estão operacionais.</b><br><i>Inert gas system pressure and oxygen recorders are operational (11.1.5.2, 11.1.11).</i> | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>9</b>                                                                                                                                          | <b>O sistema de gás inerte e equipamentos associados estão operacionais.</b><br><i>Inert gas system and associated equipment are operational (11.1.5.2, 11.1.11).</i>                    | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>10</b>                                                                                                                                         | <b>O teor de oxigênio dos tanques de carga está abaixo de 8%.</b><br><i>Cargo tank atmospheres' oxygen content is less than 8% (11.1.3).</i>                                             | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>11</b>                                                                                                                                         | <b>Os tanques de carga estão com pressão positiva.</b><br><i>Cargo tank atmospheres are at positive pressure (11.1.3).</i>                                                               | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/SHORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 5 / 22</b>  |

| <b>PARTE 2 – TERMINAL – VERIFICAÇÕES ANTES DA CHEGADA</b><br><i>PART 2 – TERMINAL – CHECKS PRE-ARRIVAL</i> |                                                                                                                                        |                                            |                                      |
|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                                 | <b>Verificação</b><br><i>Check</i>                                                                                                     | <b>Condição</b><br><i>Status</i>           | <b>Observações</b><br><i>Remarks</i> |
| <b>12</b>                                                                                                  | <b>As informações de antes da chegada são trocadas.</b><br><i>Pre-arrival information is exchanged (6.5, 21.2).</i>                    | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>13</b>                                                                                                  | <b>Conexão internacional está disponível.</b><br><i>International shore fire connection is available (5.5, 19.4, 3.1, 19.4, 3.5).</i>  | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>14</b>                                                                                                  | <b>O equipamento de transferência é de construção adequada.</b><br><i>Transfer equipment is of suitable construction (18.1, 18.2).</i> | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>15</b>                                                                                                  | <b>O Port Information do terminal foi enviado ao navio.</b><br><i>Terminal information booklet transmitted to tanker (15.2.2).</i>     | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>16</b>                                                                                                  | <b>Informações de antes da atracação são trocadas.</b><br><i>Pre-berthing information is exchanged (21.3, 22.3).</i>                   | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/SHORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 6 / 22</b>  |

**VERIFICAÇÕES APÓS ATRACAÇÃO**  
*CHECKS AFTER MOORING*

| <b>PARTE 3 – NAVIO – VERIFICAÇÕES APÓS A ATRACAÇÃO</b><br><i>PART 3 – TANKER – CHECKS AFTER MOORING</i> |                                                                                                                                                                                              |                                            |                                      |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                              | <b>Verificação</b><br><i>Check</i>                                                                                                                                                           | <b>Condição</b><br><i>Status</i>           | <b>Observações</b><br><i>Remarks</i> |
| <b>17</b>                                                                                               | <b>As defensas são eficazes.</b><br><i>Fendering is effective (22.4.1).</i>                                                                                                                  | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>18</b>                                                                                               | <b>O navio está amarrado com segurança.</b><br><i>Moorings arrangement is effective (22.2, 22.4.3).</i>                                                                                      | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>19</b>                                                                                               | <b>O acesso entre o navio e o terminal é seguro.</b><br><i>Access to and from the tanker is safe (16.4).</i>                                                                                 | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>20</b>                                                                                               | <b>Embornais e bandejas de contenção estão efetivamente bujonados.</b><br><i>Scuppers and save-alls are plugged (23.7.45, 23.7.5).</i>                                                       | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>21</b>                                                                                               | <b>As válvulas de costado e de fundo estão fechadas e lacradas.</b><br><i>Cargo system sea connections and overboard discharges are secured (23.7.3).</i>                                    | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>22</b>                                                                                               | <b>Os equipamentos de VHF e UHF estão no modo de baixa potência.</b><br><i>Very high frequency and ultra high frequency transceivers are set to low power mode (4.11.6, 4.13.2.2).</i>       | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>23</b>                                                                                               | <b>Todas as portas externas e demais portas e vigias nas acomodações, paióis e espaços de máquinas estão fechadas.</b><br><i>External openings in superstructures are controlled (23.1).</i> | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>24</b>                                                                                               | <b>A ventilação da casa de bombas é eficaz.</b><br><i>Pumproom ventilation is effective (10.12.2).</i>                                                                                       | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>25</b>                                                                                               | <b>As antenas dos transmissores de alta e média frequências estão aterradas.</b><br><i>Medium frequency/high frequency radio antennae are isolated (4.11.4, 4.13.2.1).</i>                   | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>26</b>                                                                                               | <b>Uma pressão positiva é mantida dentro das acomodações.</b><br><i>Accommodation spaces are at positive pressure (23.2).</i>                                                                | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>27</b>                                                                                               | <b>Os planos de emergência contra incêndio estão prontamente disponíveis.</b><br><i>Fire control plans are readily available (9.11.2.5).</i>                                                 | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/SHORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 7 / 22</b>  |

| <b>PARTE 4 – TERMINAL – VERIFICAÇÕES APÓS A ATRACAÇÃO</b><br><i>PART 4 – TERMINAL – CHECKS AFTER MOORING</i> |                                                                                                                                                                |                                            |                                      |
|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                                   | <b>Verificação</b><br><i>Check</i>                                                                                                                             | <b>Condição</b><br><i>Status</i>           | <b>Observações</b><br><i>Remarks</i> |
| <b>28</b>                                                                                                    | <b>As defensas são eficazes.</b><br><i>Fendering is effective (22.4.1).</i>                                                                                    | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>29</b>                                                                                                    | <b>O navio está amarrado de acordo com o plano de amarração do terminal.</b><br><i>Tanker is moored according to the terminal mooring plan (22.2, 22.4.3).</i> | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>30</b>                                                                                                    | <b>O acesso entre o navio e o terminal é seguro.</b><br><i>Access to and from the terminal is safe (16.4).</i>                                                 | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>31</b>                                                                                                    | <b>Áreas de contenção de derramamentos e sump tanks estão fechados.</b><br><i>Spill containment and sumps are secure (18.4.2, 18.4.3, 23.7.4, 23.7.5).</i>     | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/SHORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 8 / 22</b>  |

**VERIFICAÇÕES ANTES DA OPERAÇÃO DE TRANSFERÊNCIA**  
*CHECKS PRE-TRANSFER*

**Data e Hora:** \_\_\_\_\_  
*Date and Time*

**Porto e Berço:** \_\_\_\_\_  
*Port and Berth*

**Nome do Navio:** \_\_\_\_\_  
*Ship's Name*

**Terminal:** \_\_\_\_\_  
*Terminal*

**Produto a ser transferido:** \_\_\_\_\_  
*Product to be transferred*

| <b>PARTE 5A – NAVIO E TERMINAL – REUNIÃO DE LIBERAÇÃO INICIAL</b><br><i>PART 5A – TANKER AND TERMINAL – PRE-TRANSFER CONFERENCE</i> |                                                                                                                                                                                                 |                                               |                                                    |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------|--------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                                                          | <b>Verificação</b><br><i>Check</i>                                                                                                                                                              | <b>Condição Navio</b><br><i>Tanker Status</i> | <b>Condição Terminal</b><br><i>Terminal Status</i> | <b>Observações</b><br><i>Remarks</i> |
| <b>32</b>                                                                                                                           | <b>O navio está pronto para se movimentar no período de notificação acordado.</b><br><i>Tanker is ready to move at agreed notice period (9.11, 21.7.1.1, 22.5.4).</i>                           | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| <b>33</b>                                                                                                                           | <b>Comunicação eficaz estabelecida entre o navio e o terminal.</b><br><i>Effective tanker and terminal communications are established (21.1.1, 21.1.2).</i>                                     | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| <b>34</b>                                                                                                                           | <b>Equipamento de transferência em condição segura (isolado, drenado e despressurizado).</b><br><i>Transfer equipment is in safe condition (isolated, drained and de-pressurised) (18.4.1).</i> | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| <b>35</b>                                                                                                                           | <b>A supervisão, acompanhamento e vigilância da operação é adequado.</b><br><i>Operation supervision and watchkeeping is adequate (7.9, 23.11).</i>                                             | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| <b>36</b>                                                                                                                           | <b>Existe pessoal suficiente para enfrentar uma emergência.</b><br><i>There are sufficient personnel to deal with an emergency (9.11.2.2, 23.11).</i>                                           | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| <b>37</b>                                                                                                                           | <b>Locais para fumar e as restrições ao fumo estão estabelecidos.</b><br><i>Smoking restrictions and designated smoking areas are established (4.10, 23.10).</i>                                | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| <b>38</b>                                                                                                                           | <b>As exigências quanto a luzes desprotegidas estão estabelecidas.</b><br><i>Naked light restrictions are established (4.10.1).</i>                                                             | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| <b>39</b>                                                                                                                           | <b>Acordado o controle de dispositivos elétricos e eletrônicos.</b><br><i>Control of electrical and electronic devices is agreed (4.11, 4.12).</i>                                              | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |

Revisão: S – 03/02/2021

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|  <b>PETROBRAS TRANSPORTE S.A.</b><br><b>TRANSPETRO</b> | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA</b><br><b>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                                          | <b>Formulário</b>                                                                                        | <b>Página 9 / 22</b>  |

| <b>PARTE 5A – NAVIO E TERMINAL – REUNIÃO DE LIBERAÇÃO INICIAL</b><br><i>PART 5A – TANKER AND TERMINAL – PRE-TRANSFER CONFERENCE</i> |                                                                                                                                                                                                    |                                               |                                                    |                                                                            |
|-------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                                                          | <b>Verificação</b><br><i>Check</i>                                                                                                                                                                 | <b>Condição Navio</b><br><i>Tanker Status</i> | <b>Condição Terminal</b><br><i>Terminal Status</i> | <b>Observações</b><br><i>Remarks</i>                                       |
| <b>40</b>                                                                                                                           | <b>Meios de saída de emergência estão estabelecidos no navio e no terminal.</b><br><i>Means of emergency escape from both tanker and terminal are established (20.5).</i>                          | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>41</b>                                                                                                                           | <b>Equipamento de combate a incêndio pronto para uso.</b><br><i>Firefighting equipment is ready for use (5, 19.4, 23.8).</i>                                                                       | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>42</b>                                                                                                                           | <b>Material para combate a derrames está disponível.</b><br><i>Oil spill clean-up material is available (20.4).</i>                                                                                | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>43</b>                                                                                                                           | <b>As conexões no manifold estão apropriadas.</b><br><i>Manifolds are properly connected (23.6.1).</i>                                                                                             | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>44</b>                                                                                                                           | <b>Os protocolos para medição e amostragem estão acordados.</b><br><i>Sampling and gauging protocols are agreed (23.5.3.2, 23.7.7.5).</i>                                                          | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>45</b>                                                                                                                           | <b>Os procedimentos para as operações de carga, abastecimento e lastro estão acordados.</b><br><i>Procedures for cargo, bunkers and ballast handling operations are agreed (21.4, 21.5, 21.6).</i> | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>46</b>                                                                                                                           | <b>O controle da supervisão da operação de transferência de carga está acordado.</b><br><i>Cargo transfer management controls are agreed (12.1).</i>                                               | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>47</b>                                                                                                                           | <b>Os requisitos para limpeza de tanques, incluindo operação COW estão acordados.</b><br><i>Cargo tank cleaning requirements, including crude oil washing are agreed (12.3, 12.5, 21.4.1).</i>     | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         | Ver também partes 7B/7C, se aplicável (See also parts 7B/7C as applicable) |
| <b>48</b>                                                                                                                           | <b>Arranjos para desgaseificação de tanques estão acordados.</b><br><i>Cargo tank gas freeing arrangements agreed (12.4).</i>                                                                      | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         | Ver também parte 7C (See also part 7C)                                     |
| <b>49</b>                                                                                                                           | <b>Requisitos de movimentação de resíduos de carga e combustível acordados.</b><br><i>Cargo and bunker slop handling requirements agreed (12.1, 21.2, 21.4).</i>                                   | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         | Ver também parte 7C (See also part 7C)                                     |
| <b>50</b>                                                                                                                           | <b>Rotina para verificações regulares da quantidade de carga movimentada é acordada.</b><br><i>Routine for regular checks on cargo transferred are agreed (23.7.2).</i>                            | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>51</b>                                                                                                                           | <b>Sinais de emergência e procedimentos de parada de emergência são acordados.</b><br><i>Emergency signals and shutdown procedures are agreed (12.1.6.3, 18.5, 21.1.2).</i>                        | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |
| <b>52</b>                                                                                                                           | <b>FISPQs estão disponíveis.</b><br><i>Safety data sheets are available (1.4.4, 20.1, 21.4).</i>                                                                                                   | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                                                            |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/SHORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 10 / 22</b> |

| <b>PARTE 5A – NAVIO E TERMINAL – REUNIÃO DE LIBERAÇÃO INICIAL</b><br><i>PART 5A – TANKER AND TERMINAL – PRE-TRANSFER CONFERENCE</i> |                                                                                                                                                                                                     |                                               |                                                    |                                      |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------|--------------------------------------|
| <b>Item</b><br><i>Item</i>                                                                                                          | <b>Verificação</b><br><i>Check</i>                                                                                                                                                                  | <b>Condição Navio</b><br><i>Tanker Status</i> | <b>Condição Terminal</b><br><i>Terminal Status</i> | <b>Observações</b><br><i>Remarks</i> |
| 53                                                                                                                                  | <b>Os riscos associados aos produtos sendo manuseados são discutidos.</b><br><i>Hazardous properties of the products to be transferred are discussed (1.2, 1.4).</i>                                | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| 54                                                                                                                                  | <b>O isolamento elétrico na interface navio/terminal é eficaz.</b><br><i>Electrical insulation of the tanker/terminal interface is effective (12.9.5, 17.4, 18.2.14).</i>                           | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| 55                                                                                                                                  | <b>Sistema de alívio dos tanques e procedimentos para operação fechada são acordados.</b><br><i>Tank venting system and closed operation procedures are agreed (11.3.3.1, 21.4, 21.5, 23.3.3).</i>  | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| 56                                                                                                                                  | <b>Os parâmetros operacionais da rede de retorno de vapores são acordados.</b><br><i>Vapour return line operational parameters are agreed (11.5, 18.3, 23.7.7).</i>                                 | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| 57                                                                                                                                  | <b>Medidas para evitar retorno de produto são acordadas.</b><br><i>Measures to avoid back-filling are agreed (12.1.13.7).</i>                                                                       | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| 58                                                                                                                                  | <b>A condição das conexões de carga e combustível que não estão em uso é satisfatória.</b><br><i>Status of unused cargo and bunker connections is satisfactory (23.7.1, 23.7.6).</i>                | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| 59                                                                                                                                  | <b>Os transceptores portáteis de VHF e UHF são intrinsecamente seguros.</b><br><i>Portable very high frequency and ultra high frequency radios are intrinsically safe (4.12.4, 21.1.1).</i>         | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |
| 60                                                                                                                                  | <b>Procedimentos para recebimento de nitrogênio do terminal nos tanques de carga são acordados.</b><br><i>Procedures for receiving nitrogen from terminal to cargo tank are agreed (12.1.14.8).</i> | <input type="checkbox"/><br><b>Sim/Yes</b>    | <input type="checkbox"/><br><b>Sim/Yes</b>         |                                      |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/SHORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 11 / 22</b> |

| <b>PARTE 6 – NAVIO E TERMINAL – ACORDADO ANTES DO INÍCIO DA OPERAÇÃO</b><br><i>PART 6 – TANKER AND TERMINAL – AGREEMENTS PRE-TRANSFER</i> |                                                                                                                                                                                          |                                                                                                                                                                                                                                                            |                                                  |                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------|
| <b>Parte 5<br/>Item<br/>Part 5<br/>Item</b>                                                                                               | <b>Acordado<br/>Agreement</b>                                                                                                                                                            | <b>Detalhes<br/>Details</b>                                                                                                                                                                                                                                | <b>Rubrica<br/>Navio<br/>Tanker<br/>initials</b> | <b>Rubrica<br/>Terminal<br/>Terminal<br/>initials</b> |
| <b>32</b>                                                                                                                                 | <b>Prontificação do navio para manobra.</b><br><i>Tanker manoeuvring readiness.</i>                                                                                                      | <b>Período de notificação prévia (máximo) para total prontidão para manobra:</b><br><i>Notice period (maximum) for full readiness to manoeuvre:</i><br><br><b>Período fora de operação (se permitido):</b><br><i>Period of disablement (if permitted):</i> |                                                  |                                                       |
| <b>33</b>                                                                                                                                 | <b>Protocolos de proteção.</b><br><i>Security protocols.</i>                                                                                                                             | <b>Nível de proteção:</b><br><i>Security level:</i><br><br><b>Requisitos do porto:</b><br><i>Local requirements:</i>                                                                                                                                       |                                                  |                                                       |
| <b>33</b>                                                                                                                                 | <b>Comunicação eficaz navio/terminal</b><br><i>Effective tanker/terminal communications</i>                                                                                              | <b>Sistema principal:</b><br><i>Primary system:</i><br><br><b>Sistema de reserva:</b><br><i>Backup system:</i>                                                                                                                                             |                                                  |                                                       |
| <b>35</b>                                                                                                                                 | <b>Supervisão da operação e sistema de vigilância.</b><br><i>Operational supervision and watckkeeping</i>                                                                                | <b>Navio:</b><br><i>Tanker:</i><br><br><b>Terminal:</b><br><i>Terminal:</i>                                                                                                                                                                                |                                                  |                                                       |
| <b>37<br/>38</b>                                                                                                                          | <b>Salão de fumantes e restrições a luzes desprotegidas.</b><br><i>Dedicated smoking areas and naked lights restrictions.</i>                                                            | <b>Navio:</b><br><i>Tanker:</i><br><br><b>Terminal:</b><br><i>Terminal:</i>                                                                                                                                                                                |                                                  |                                                       |
| <b>45</b>                                                                                                                                 | <b>Critérios máximos de vento corrente e condições de mar/swell ou outros fatores ambientais.</b><br><i>Maximum wind, current and sea/swell criteria or other environmental factors.</i> | <b>Paralisação da operação:</b><br><i>Stop cargo transfer:</i><br><br><b>Desconexão:</b><br><i>Disconnect:</i><br><br><b>Desatracação:</b><br><i>Unberth:</i>                                                                                              |                                                  |                                                       |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA</b><br><b>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                        | <b>Página 12 / 22</b> |

| <b>PARTE 6 – NAVIO E TERMINAL – ACORDADO ANTES DO INÍCIO DA OPERAÇÃO</b><br><i>PART 6 – TANKER AND TERMINAL – AGREEMENTS PRE-TRANSFER</i> |                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                    |                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------|
| <b>Parte 5</b><br><b>Item</b><br><i>Part 5</i><br><i>Item</i>                                                                             | <b>Acordado</b><br><i>Agreement</i>                                                                                                                            | <b>Detalhes</b><br><i>Details</i>                                                                                                                                                                                                                                                                                                                                                                          | <b>Rubrica</b><br><b>Navio</b><br><i>Tanker</i><br><i>initials</i> | <b>Rubrica</b><br><b>Terminal</b><br><i>Terminal</i><br><i>initials</i> |
| <b>45</b><br><b>46</b>                                                                                                                    | <b>Limites para as operações de carga, abastecimento e lastro.</b><br><i>Limits for cargo, bunkers and ballast handling.</i>                                   | <b>Vazões máximas de transferência:</b><br><i>Maximum transfer rates:</i><br><br><b>Vazões de top:</b><br><i>Topping-off rates:</i><br><br><b>Pressão máxima no manifold:</b><br><i>Maximum manifold pressure:</i><br><br><b>Temperatura da carga:</b><br><i>Cargo temperature:</i><br><br><b>Outras limitações:</b><br><i>Other limitations:</i>                                                          |                                                                    |                                                                         |
| <b>45</b><br><b>46</b>                                                                                                                    | <b>Controle de surto de pressão.</b><br><i>Pressure surge control.</i>                                                                                         | <b>Número mínimo de tanques de carga alinhados:</b><br><i>Minimum number of cargo tanks open:</i><br><br><b>Protocolos de mudança de tanques:</b><br><i>Tank switching protocols:</i><br><br><b>Vazão máxima:</b><br><i>Full load rate:</i><br><br><b>Vazão de top:</b><br><i>Topping-off rate:</i><br><br><b>Tempo de fechamento de válvulas automáticas:</b><br><i>Closing time of automatic valves:</i> |                                                                    |                                                                         |
| <b>46</b>                                                                                                                                 | <b>Procedimentos de supervisão da operação de transferência.</b><br><i>Cargo transfer management procedures.</i>                                               | <b>Períodos de notificação para ações:</b><br><i>Action notice periods:</i><br><br><b>Protocolos de parada de transferência:</b><br><i>Transfer stop protocols:</i>                                                                                                                                                                                                                                        |                                                                    |                                                                         |
| <b>50</b>                                                                                                                                 | <b>Rotina para verificações regulares da quantidade de carga movimentada é acordada.</b><br><i>Routine for regular checks on cargo transferred are agreed.</i> | <b>Verificações de rotina da quantidade transferida:</b><br><i>Routine transferred quantity checks:</i>                                                                                                                                                                                                                                                                                                    |                                                                    |                                                                         |
| <b>51</b>                                                                                                                                 | <b>Sinais de emergência.</b><br><i>Emergency signals.</i>                                                                                                      | <b>Navio:</b><br><i>Tanker:</i><br><br><b>Terminal:</b><br><i>Tanker:</i>                                                                                                                                                                                                                                                                                                                                  |                                                                    |                                                                         |

Revisão: S – 03/02/2021

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|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 13 / 22</b> |

| <b>PARTE 6 – NAVIO E TERMINAL – ACORDADO ANTES DO INÍCIO DA OPERAÇÃO</b><br><i>PART 6 – TANKER AND TERMINAL – AGREEMENTS PRE-TRANSFER</i> |                                                                                     |                                                                                                                                                                           |                                                  |                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------|
| <b>Parte 5<br/>Item<br/>Part 5<br/>Item</b>                                                                                               | <b>Acordado<br/>Agreement</b>                                                       | <b>Detalhes<br/>Details</b>                                                                                                                                               | <b>Rubrica<br/>Navio<br/>Tanker<br/>initials</b> | <b>Rubrica<br/>Terminal<br/>Terminal<br/>initials</b> |
| <b>55</b>                                                                                                                                 | <b>Sistema de alívio dos tanques.</b><br><i>Tank venting system.</i>                | <b>Procedimento:</b><br><i>Procedure:</i>                                                                                                                                 |                                                  |                                                       |
| <b>55</b>                                                                                                                                 | <b>Operações fechadas.</b><br><i>Closed operations.</i>                             | <b>Requisitos:</b><br><i>Requirements:</i>                                                                                                                                |                                                  |                                                       |
| <b>56</b>                                                                                                                                 | <b>Rede de retorno de vapor.</b><br><i>Vapour return line.</i>                      | <b>Parâmetros operacionais:</b><br><i>Operational parameters:</i><br><br><b>Vazão máxima:</b><br><i>Maximum flow rate:</i>                                                |                                                  |                                                       |
| <b>60</b>                                                                                                                                 | <b>Nitrogênio fornecido pelo terminal.</b><br><i>Nitrogen supply from terminal.</i> | <b>Procedimentos de recebimento:</b><br><i>Procedures to receive:</i><br><br><b>Pressão máxima:</b><br><i>Maximum pressure:</i><br><br><b>Vazão:</b><br><i>Flow rate:</i> |                                                  |                                                       |
| <b>XX</b>                                                                                                                                 | <b>Exceções e acréscimos.</b><br><i>Exceptions and additions.</i>                   | <b>Questões especiais que ambas as partes devem estar cientes:</b><br><i>Special issues that both parties should be aware:</i>                                            |                                                  |                                                       |

Revisão: S – 03/02/2021

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|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br>SHIP/ShORE SAFETY CHECK LIST | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                           | <b>Página 14 / 22</b> |

**Data e Hora:** \_\_\_\_\_  
Date and Time

**Porto e Berço:** \_\_\_\_\_  
Port and Berth

**Nome do Navio:** \_\_\_\_\_  
Ship's Name

**Terminal:** \_\_\_\_\_  
Terminal

**Produto a ser transferido:** \_\_\_\_\_  
Product to be transferred

| <b>PARTE 7A – NAVIO TANQUE GERAL – VERIFICAÇÕES ANTES DA OPERAÇÃO</b><br>PART 7A – GENERAL TANKER – CHECKS PRE-TRANSFER |                                                                                                                                                                                                   |                                     |                               |
|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------|
| <b>Item</b><br>Item                                                                                                     | <b>Verificação</b><br>Check                                                                                                                                                                       | <b>Condição</b><br>Status           | <b>Observações</b><br>Remarks |
| <b>84</b>                                                                                                               | <b>Bandejas portáteis estão corretamente posicionadas e vazias.</b><br>Portable drip trays are correctly positioned and empty (23.7.5).                                                           | <input type="checkbox"/><br>Sim/Yes |                               |
| <b>85</b>                                                                                                               | <b>As válvulas de gás inerte de cada tanque estão alinhadas e travadas de acordo com plano de carga.</b><br>Individual cargo tank inert gas supply valves are secured for cargo plan (12.1.13.4). | <input type="checkbox"/><br>Sim/Yes |                               |
| <b>86</b>                                                                                                               | <b>O SGI está entregando gás inerte com teor de oxigênio de no máximo de 5%.</b><br>Inert gas system delivering inert gas with oxygen content not more than 5% (11.1.3).                          | <input type="checkbox"/><br>Sim/Yes |                               |
| <b>87</b>                                                                                                               | <b>Os alarmes de nível alto dos tanques estão operacionais.</b><br>Cargo tank high level alarms are operational (12.1.6.6.1).                                                                     | <input type="checkbox"/><br>Sim/Yes |                               |
| <b>88</b>                                                                                                               | <b>Todas as aberturas dos tanques de carga, lastro e combustível estão fechadas.</b><br>All cargo, ballast and bunker tanks openings are secured (23.3).                                          | <input type="checkbox"/><br>Sim/Yes |                               |

| <b>PARTE 7B – NAVIO – VERIFICAÇÕES ANTES DA OPERAÇÃO, SE COW É PLANEJADA</b><br>PART 7B – TANKER – CHECKS PRE-TRANSFER IF COW IS PLANNED |                                                                                                                                                                                                                                                                                                                 |                                     |                               |
|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------|
| <b>Item</b><br>Item                                                                                                                      | <b>Verificação</b><br>Check                                                                                                                                                                                                                                                                                     | <b>Condição</b><br>Status           | <b>Observações</b><br>Remarks |
| <b>89</b>                                                                                                                                | <b>O checklist completo de COW antes da chegada, conforme contido no manual de COW aprovado, é copiado ao terminal.</b><br>The complete pre-arrival COW checklist, as contained in the approved COW manual, is copied to terminal (12.5.2, 21.2.3).                                                             | <input type="checkbox"/><br>Sim/Yes |                               |
| <b>90</b>                                                                                                                                | <b>Os checklists de COW para uso antes, durante e após a operação estão disponíveis e prontos para serem utilizados, como contido no manual de COW aprovado.</b><br>COW checklists for use before, during and after COW are in place ready to complete, as contained in the approved COW manual (12.5.2, 21.6). | <input type="checkbox"/><br>Sim/Yes |                               |

Revisão: S – 03/02/2021

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|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/SHORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 15 / 22</b> |

**VERIFICAÇÕES APÓS A REUNIÃO DE LIBERAÇÃO INICIAL**  
*CHECKS AFTER PRE-TRANSFER CONFERENCE*

**PARTE 7C – NAVIO – VERIFICAÇÕES ANTES DE OPERAÇÕES DE LIMPEZA E  
DESGASEIFICAÇÃO DE TANQUES ATRACADO**  
*PART 7C – TANKER – CHECKS PRIOR TO TANK CLEANING AND/OR GAS FREEING ALONGSIDE*

| <b>Item</b><br><i>Item</i> | <b>Verificação</b><br><i>Check</i>                                                                                                                                                                                                                         | <b>Condição</b><br><i>Status</i>           | <b>Observações</b><br><i>Remarks</i> |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|--------------------------------------|
| <b>91</b>                  | <b>Autorização para operação de limpeza de tanques confirmada.</b><br><i>Permission for tank cleaning operation is confirmed (21.2.3, 21.4, 25.4.3).</i>                                                                                                   | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>92</b>                  | <b>Autorização para operação de degaseificação de tanques confirmada.</b><br><i>Permission for gas freeing operation is confirmed (12.4.3).</i>                                                                                                            | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>93</b>                  | <b>Os procedimentos para limpeza de tanques estão acordados.</b><br><i>Tank cleaning procedures are agreed (12.3.2, 21.4, 21.6).</i>                                                                                                                       | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>94</b>                  | <b>Se for necessário a entrada em tanques de carga, os procedimentos para entrada em espaços confinados devem ser acordados com o terminal.</b><br><i>If cargo tank entry is required, procedures for entry have been agreed with the terminal (10.5).</i> | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |
| <b>95</b>                  | <b>Requisitos e tancagem para recebimento de slops estão confirmados.</b><br><i>Slop reception facilities and requirements are confirmed (12.1, 21.2, 21.4).</i>                                                                                           | <input type="checkbox"/><br><b>Sim/Yes</b> |                                      |

Revisão: S – 03/02/2021

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|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br>SHIP/ShORE SAFETY CHECK LIST | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                           | <b>Página 16 / 22</b> |

## DECLARAÇÃO

### Declaration

**Nós, abaixo assinados, verificamos os itens nas partes aplicáveis de 1 a 7, conforme assinalados e assinados abaixo:**

*We the undersigned have checked the items in the applicable parts 1 to 7 as marked and signed below:*

|                                                                                                                                                                        | <b>Navio</b><br><i>Tanker</i> | <b>Terminal</b><br><i>Terminal</i> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------|
| Parte 1A – Navio: Verificações antes da chegada<br><i>Part 1A – Tanker: Checks pre-arrival</i>                                                                         | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 1B – Navio: Verificações antes da chegada, se equipado com SGI<br><i>Part 1B – Tanker: Checks pre-arrival if using an inert gas system</i>                       | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 2 – Terminal: Verificações antes da chegada<br><i>Part 2 – Terminal: Checks pre-arrival</i>                                                                      | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 3 – Navio: Verificações após a atracação<br><i>Part 3 – Tanker: Checks after mooring</i>                                                                         | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 4 – Terminal: Verificações após a atracação<br><i>Part 4 – Terminal: Checks after mooring</i>                                                                    | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 5A – Navio e Terminal: Reunião de Liberação Inicial<br><i>Part 5A – Tanker and Terminal: Pre-transfer conference</i>                                             | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 6 – Navio e Terminal: Acordado antes do início da operação<br><i>Part 6 – Tanker and Terminal: Agreements pre-transfer</i>                                       | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 7A – Navio Tanque Geral: Verificações antes da operação<br><i>Part 7A – General tanker: Checks pre-transfer</i>                                                  | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 7B – Navio: Verificações antes da operação, se COW é planejada<br><i>Part 7B – Tanker: Checks pre-transfer if COW is planned</i>                                 | <input type="checkbox"/>      | <input type="checkbox"/>           |
| Parte 7C – Navio: Verificações antes das operações de limpeza e degaseificação de tanques<br><i>Part 7C – Tanker: Checks prior to tank cleaning and/or gas freeing</i> | <input type="checkbox"/>      | <input type="checkbox"/>           |

Revisão: S – 03/02/2021

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|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br>SHIP/ShORE SAFETY CHECK LIST | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                           | <b>Página 17 / 22</b> |

De acordo com as orientações do capítulo 25 do ISGOTT, declaramos de que as verificações que efetuamos estão de acordo, tanto quanto é do nosso conhecimento, e que o navio e o terminal estão de acordo para a realização da operação de transferência.

*In accordance with the guidance in chapter 25 of ISGOTT, we have satisfied ourselves that the entries we have made are correct to the best of our knowledge and that the tanker and terminal are in agreement to undertake the transfer operation.*

Também concordamos em realizar as verificações repetitivas observadas nas partes 9 e 10 do ISGOTT SSSCL, que devem ocorrer em intervalos de não mais que \_\_\_\_\_ horas para o navio e não mais de \_\_\_\_\_ horas para o terminal.

*We have also agreed to carry out the repetitive checks noted in parts 9 and 10 of the ISGOTT SSSCL, which should occur at intervals of not more than \_\_\_\_ hours for the tanker and not more than \_\_\_\_ hours for the terminal.*

Se, pelo nosso conhecimento, a condição de qualquer item mudar, informaremos imediatamente a outra parte.

*If, to our knowledge, the status of any item changes, we will immediately inform the other party.*

|                                 |                                    |
|---------------------------------|------------------------------------|
| <b>Navio</b><br><i>Tanker</i>   | <b>Terminal</b><br><i>Terminal</i> |
| Nome:<br><i>Name</i>            | Nome:<br><i>Name</i>               |
| Função:<br><i>Rank</i>          | Função:<br><i>Position</i>         |
| Assinatura:<br><i>Signature</i> | Assinatura:<br><i>Signature</i>    |
| Data:<br><i>Date</i>            | Data:<br><i>Date</i>               |
| Hora:<br><i>Time</i>            | Hora:<br><i>Time</i>               |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 18 / 22</b> |

**VERIFICAÇÕES DURANTE A OPERAÇÃO – VERIFICAÇÕES REPETITIVAS**  
*CHECKS DURING TRANSFER – REPETITIVE CHECKS*

**PARTE 8 – NAVIO – VERIFICAÇÕES REPETITIVAS DURANTE E APÓS A OPERAÇÃO**  
*PART 8 – TANKER – CHECKS DURING AND AFTER TRANSFER*

| Item<br>Item                                                                        | Verificação<br>Check                                                                                                                                                                  | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Observações<br>Remarks |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|------------------------|
| <b>Tempo de intervalo:</b><br>hrs<br><i>Interval time:                      hrs</i> |                                                                                                                                                                                       |                                         |                                         |                                         |                                         |                                         |                                         |                        |
| 8                                                                                   | <b>Registrador de pressão e O<sub>2</sub> do SGI está operacional.</b><br><i>Inert gas system pressure and oxygen recording operational.</i>                                          | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 9                                                                                   | <b>SGI e todos os equipamentos associados estão operacionais.</b><br><i>Inert gas system and all associated equipment are operational.</i>                                            | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 11                                                                                  | <b>Os tanques de carga estão com pressão positiva.</b><br><i>Cargo tank atmospheres are at positive pressure.</i>                                                                     | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 18                                                                                  | <b>O arranjo de amarração é eficaz.</b><br><i>Mooring arrangement is effective.</i>                                                                                                   | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 19                                                                                  | <b>O acesso entre o navio e o terminal é seguro.</b><br><i>Access to and from the tanker is safe.</i>                                                                                 | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 20                                                                                  | <b>Emboraís e bandejas de contenção estão efetivamente bujonados.</b><br><i>Scuppers and save-alls are plugged.</i>                                                                   | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 23                                                                                  | <b>Todas as portas externas e demais portas e vigias nas acomodações, paióis e espaços de máquinas estão fechadas.</b><br><i>External openings in superstructures are controlled.</i> | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 24                                                                                  | <b>A ventilação da casa de bombas é eficaz.</b><br><i>Pumproom ventilation is effective.</i>                                                                                          | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |

Revisão: S – 03/02/2021

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|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA</b><br><b>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                        | <b>Página 19 / 22</b> |

| PARTE 8 – NAVIO – VERIFICAÇÕES REPETITIVAS DURANTE E APÓS A OPERAÇÃO<br>PART 8 – TANKER – CHECKS DURING AND AFTER TRANSFER |                                                                                                                                                              |                                         |                                         |                                         |                                         |                                         |                                         |                        |
|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|------------------------|
| Item<br>Item                                                                                                               | Verificação<br>Check                                                                                                                                         | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Observações<br>Remarks |
| Tempo de intervalo:<br>hrs<br>Interval time: hrs                                                                           |                                                                                                                                                              |                                         |                                         |                                         |                                         |                                         |                                         |                        |
| 28                                                                                                                         | As defensas são eficazes.<br>Fendering is effective.                                                                                                         | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 32                                                                                                                         | O navio está pronto para se movimentar no período de notificação acordado.<br>Tanker is ready to move at agreed notice period.                               | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 33                                                                                                                         | Comunicação é eficaz.<br>Communications are effective.                                                                                                       | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 35                                                                                                                         | A supervisão, acompanhamento e vigilância da operação é adequado.<br>Operation supervision and watchkeeping is adequate.                                     | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 36                                                                                                                         | Existe pessoal suficiente para enfrentar uma emergência.<br>There are sufficient personnel to deal with an emergency.                                        | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 37                                                                                                                         | Locais para fumar e as restrições ao fumo estão sendo cumpridas.<br>Smoking restrictions and designated smoking areas are complied with.                     | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 38                                                                                                                         | As exigências quanto a luzes desprotegidas estão sendo cumpridas.<br>Naked light restrictions are complied with.                                             | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 39                                                                                                                         | O controle de dispositivos elétricos e eletrônicos está sendo cumprido.<br>Control of electrical and electronic devices in hazardous zones is complied with. | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 40<br>41<br>42<br>51                                                                                                       | Preparação para resposta a emergências é satisfatório.<br>Emergency response preparedness is satisfactory.                                                   | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA</b><br><b>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                        | <b>Página 20 / 22</b> |

| PARTE 8 – NAVIO – VERIFICAÇÕES REPETITIVAS DURANTE E APÓS A OPERAÇÃO |                                                                                                                                                                              |                                         |                                         |                                         |                                         |                                         |                                         |                        |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|------------------------|
| PART 8 – TANKER – CHECKS DURING AND AFTER TRANSFER                   |                                                                                                                                                                              |                                         |                                         |                                         |                                         |                                         |                                         |                        |
| Item<br>Item                                                         | Verificação<br>Check                                                                                                                                                         | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Observações<br>Remarks |
| Tempo de intervalo:<br>hrs<br>Interval time: hrs                     |                                                                                                                                                                              |                                         |                                         |                                         |                                         |                                         |                                         |                        |
| 54                                                                   | O isolamento elétrico na interface navio/terminal é eficaz.<br>Electrical insulation of the tanker/terminal interface is effective.                                          | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 55                                                                   | Sistema de alívio dos tanques e procedimentos para operação fechada estão transcorrendo como acordado.<br>Tank venting system and closed operation procedures are as agreed. | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 85                                                                   | As válvulas de gás inerte de cada tanque estão alinhadas e travadas como acordado.<br>Individual cargo tank inert gas valves settings are as agreed.                         | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 86                                                                   | O SGI está entregando gás inerte com teor de oxigênio de no máximo de 5%.<br>Inert gas system delivering inert gas with oxygen content not more than 5%.                     | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 87                                                                   | Os alarmes de nível alto dos tanques estão operacionais.<br>Cargo tank high level alarms are operational.                                                                    | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| Rubricas<br>Initials                                                 |                                                                                                                                                                              |                                         |                                         |                                         |                                         |                                         |                                         |                        |

Revisão: S – 03/02/2021

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|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------|
|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br>SHIP/ShORE SAFETY CHECK LIST | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                           | <b>Página 21 / 22</b> |

| PARTE 9 – TERMINAL – VERIFICAÇÕES REPETITIVAS DURANTE E APÓS A OPERAÇÃO<br>PART 9 – TERMINAL – CHECKS DURING AND AFTER TRANSFER |                                                                                                                                                                     |                                         |                                         |                                         |                                         |                                         |                                         |                        |
|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------|------------------------|
| Item<br>Item                                                                                                                    | Verificação<br>Check                                                                                                                                                | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Hora<br>Time                            | Observações<br>Remarks |
| <b>Tempo de intervalo:</b><br>hrs<br>Interval time: hrs                                                                         |                                                                                                                                                                     |                                         |                                         |                                         |                                         |                                         |                                         |                        |
| 18                                                                                                                              | <b>O arranjo de amarração é eficaz.</b><br>Mooring arrangement is effective.                                                                                        | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 19                                                                                                                              | <b>O acesso entre o terminal e o navio é seguro.</b><br>Access to and from the terminal is safe.                                                                    | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 28                                                                                                                              | <b>As defensas são eficazes.</b><br>Fendering is effective.                                                                                                         | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 31                                                                                                                              | <b>Áreas de contenção de derramamentos e sump tanks estão fechados.</b><br>Spill containment and sumps are secure.                                                  | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 33                                                                                                                              | <b>Comunicação é eficaz.</b><br>Communications are effective.                                                                                                       | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 35                                                                                                                              | <b>A supervisão, acompanhamento e vigilância da operação é adequado.</b><br>Operation supervision and watchkeeping is adequate.                                     | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 36                                                                                                                              | <b>Existe pessoal suficiente para enfrentar uma emergência.</b><br>There are sufficient personnel to deal with an emergency.                                        | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 37                                                                                                                              | <b>Locais para fumar e as restrições ao fumo estão sendo cumpridas.</b><br>Smoking restrictions and designated smoking areas are complied with.                     | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 38                                                                                                                              | <b>As exigências quanto a luzes desprotegidas estão sendo cumpridas.</b><br>Naked light restrictions are complied with.                                             | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |
| 39                                                                                                                              | <b>O controle de dispositivos elétricos e eletrônicos está sendo cumprido.</b><br>Control of electrical and electronic devices in hazardous zones is complied with. | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes | <input type="checkbox"/><br>Sim/<br>Yes |                        |

Revisão: S – 03/02/2021

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|  PETROBRAS TRANSPORTE S.A.<br>TRANSPETRO | <b>LISTA DE VERIFICAÇÃO DE SEGURANÇA<br/>NAVIO/TERMINAL</b><br><i>SHIP/ShORE SAFETY CHECK LIST</i> | <b>SGF-PET-FM-010</b> |
| <b>FRONAPE</b>                                                                                                            | <b>Formulário</b>                                                                                  | <b>Página 22 / 22</b> |

| <b>PARTE 9 – TERMINAL – VERIFICAÇÕES REPETITIVAS DURANTE E APÓS A OPERAÇÃO</b><br><i>PART 9 – TERMINAL – CHECKS DURING AND AFTER TRANSFER</i> |                                                                                                                                                                                            |                                                       |                                                       |                                                       |                                                       |                                                       |                                                       |                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------|-------------------------------|
| Item<br><i>Item</i>                                                                                                                           | Verificação<br><i>Check</i>                                                                                                                                                                | Hora<br><i>Time</i>                                   | Hora<br><i>Time</i>                                   | Hora<br><i>Time</i>                                   | Hora<br><i>Time</i>                                   | Hora<br><i>Time</i>                                   | Hora<br><i>Time</i>                                   | Observações<br><i>Remarks</i> |
| <b>Tempo de intervalo:</b><br><i>hrs</i><br><i>Interval time:                      hrs</i>                                                    |                                                                                                                                                                                            |                                                       |                                                       |                                                       |                                                       |                                                       |                                                       |                               |
| <b>40</b><br><b>41</b><br><b>42</b><br><b>51</b>                                                                                              | <b>Preparação para resposta a emergências é satisfatório.</b><br><i>Emergency response preparedness is satisfactory.</i>                                                                   | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> |                               |
| <b>54</b>                                                                                                                                     | <b>O isolamento elétrico na interface navio/terminal é eficaz.</b><br><i>Electrical insulation of the tanker/terminal interface is effective.</i>                                          | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> |                               |
| <b>55</b>                                                                                                                                     | <b>Sistema de alívio dos tanques e procedimentos para operação fechada estão transcorrendo como acordado.</b><br><i>Tank venting system and closed operation procedures are as agreed.</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> | <input type="checkbox"/><br><b>Sim/</b><br><i>Yes</i> |                               |
| <b>Rubricas</b><br><i>Initials</i>                                                                                                            |                                                                                                                                                                                            |                                                       |                                                       |                                                       |                                                       |                                                       |                                                       |                               |

Revisão: S – 03/02/2021

## APPENDIX – D – Pier Plans – TGL

