

REGULATION OF THE TERMINAL OF PONTA DA MADEIRA

VALE		CLASSIFICATION EXTERNAL USE	TERMINAL OF PO MADEIRA (PI	
TERMINAL OF PONTA	DA MADEIRA (PDM)		No. (VALE)	PÁGE 1/19
PORT REGULATION			No. (CONTRACTOR)	REV. 01 12/03/21

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1.0 GENERAL RULES

- **Art. 1** The Regulation of the Terminal of Ponta da Madeira ("PDM") intends to regulate, discipline and organize operations, activities and services performed at the Port, under the terms of the Law No.12,815/13, the ANTAQ authorization for the Port operation and the respective Adhesion Agreement with the State for exploitation of the Private Use Terminals.
- **Art. 2** For the purposes of this Regulation, the following definitions are applied:
 - I Port Administration: Vale S/A, as duly authorized operator of the Terminal of Ponta da Madeira ("PDM"), acting within its authorization limits;
 - II Maritime Authority: Brazilian Navy;
 - III ANTAQ National Waterway Transportation Agency
 - IV Port Area comprises the land and waterway port infrastructure under management, control, or property of the Port Administration, including yards, inner roadway, conveyors, railways, warehouses, piers, mooring areas, loading and unloading equipment, access channel, anchorage area(s), evolution basin, beaconing, Operational Control Center CCO, among other goods or services necessary for the operation of the Port.
 - V Adhesion Agreement: the instrument which formalizes the authorization for Port Installation as Private Use Terminals, by Vale S.A., for the Terminal of Ponta da Madeira ("PDM");
 - VI SDR: Abbreviation of Special Drawing Rights, the monetary unit of the International Monetary Fund;
 - VII ETA: Estimated Time of Arrival;
 - VIII Port is the Terminal of Ponta da Madeira ("PDM"), a Private Use Terminals granted to Vale; and
 - IX Regulation This Regulation of the Terminal of Ponta da Madeira ("PDM") and their annexes
- **Art. 3** The Port Administration must, without prejudice to other competences defined in the legislation and in this Regulation:
 - I comply with and enforce the laws, regulations and the Adhesion Agreement:
 - II authorize, hire, allow or pre-qualify service providers in the area of the Port;
 - III establish prices and collect values related to its activities;
 - IV perform surveillance of the port operation, ensuring compliance with legal principles and guided by operational safety, of people, community and respect to the environment;

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V – authorize or determine the entrance and exit, including mooring and unmooring, anchoring and traffic of vessels at the Port area, consulting, if applicable, other competent authorities;

VI – authorize or determine the movement and storage of the cargo, establishing the schedule for loading and unloading;

VII – act or allow action in situations of assistance to and salvage of vessels and wreck removal in accordance with the competence of the Maritime Authority, consulting, if applicable, other competent authorities;

VIII – under coordination of the Maritime Authority, maintain and operate the beaconing of the access canal and the evolution basin, as well as the dredging of the mooring areas at the Port;

IX – under coordination of the Maritime Authority, establish and disclose the maximum draft of operation of the vessels;

X – under coordination of the Maritime Authority, establish and disclose the maximum deadweight and the maximum size of the vessels that will be in traffic, due to limitations and particularities of the access to the Port and its docking facilities;

XI – suspend the port operations that may hinder the operation of the Port, except for the aspects of interest of the Maritime Authority;

XII – establish the working hours of the Port, under legal and regulatory provisions;

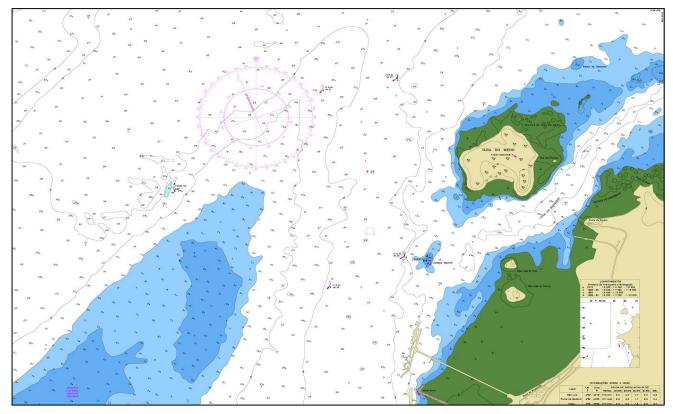
XIII- apply the penalties provided in this Regulation; and

XIV – organize the safety of the Port facilities, including the entry, exit and transit of people, vehicles and equipment.

Art. 4 – The Port Administration, in light of its duties and legal assignments for provision of port services, is the port authority in exercise at the geographic area of the Port, being vessels, clients, users, service providers and their representatives, and also anyone who is, even temporarily, in the Port Area, subject to its resolutions, as well as the full compliance with this Regulation.

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Figure 1 – The Vicinity of the Port



Note. This figure does not replace the original Nautical Chart. Illustrative image only.

Art. 5 – The use of the Port facilities and its services inside the limits of the Port Area shall be authorized by the Port Administration upon request of shipowners, operators, charterers or shipping agents of the vessels and will be made upon payment of the amounts established by the Port.

2.0 INFORMATION ABOUT THE PORT

2.1 INTRODUCTION

Art. 6 – Information contained in this Regulation has the purpose of providing guidance to the owners, shipowners, operators, charterers, masters, clients, users and shipping agents of the vessels regarding facilities and general conditions of the Port, and do not replace or change any of the provisions defined in Brazilian or international official publications destined to the seafarers. Other information regarding conditions of the Port may be obtained upon consultation with the Port Administration.

Art. 7 – The Port Administration is not responsible for delays, expenses, costs, prejudices, losses, direct or indirect damages, accidents or damages arising from errors in using this information or from omission in consulting other publications of the Port Administration or of public or private entities, which may be necessary or required, national or international.

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2.2 PANORAMIC VIEW OF THE PORT

Figure 2 – Panoramic View of the Port



Note. Illustrative image only.

2.3 LOCATION

Art. 8 – The Terminal of Ponta da Madeira is located on the east margin of São Marcos Bay, in the Island of São Luís, 8 kilometers south of the center of the City of São Luís, Capital of the State of Maranhão, to which is linked by motorway system to the address Avenida dos Portugueses s/n CEP 65085-580.

It is located in the geographic coordinates:

a. Pier 1: Latitude: 02° 34′ 00″ South
 b. Pier 3: Latitude: 02° 33′ 42″ South
 c. Pier 4: Latitude: 02° 33′ 07″ South
 Longitude: 044° 22′ 45″ West
 Longitude: 044° 22′ 45″ West

2.4 VESSEL NOMINATION AND ACCEPTANCE

Art. 9 – The main port requirements of the Port Administration for vessel nomination and acceptance are found in the document entitled **Summary of Vale Port Requirements for Vessel Nomination and Acceptance** ("Summary"), set out in Annex A.

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Art. 10 – The Port Administration will have the right, at its sole discretion, to reject the nomination or to stop the loading or discharge of any ship that:

Lis not, in all respects, ready to receive cargo shipment at the Port.

- II.has not been approved in the shipper's verification system (vetting) contained in the Summary of Vale Port Requirements for Vessel Nomination and Acceptance ("Summary") of the Port, set out in Annex A:
- III.has not complied with the provisions of this Regulation on the installation of the geotextile on board, or has previously refused permission for its installation or reinstallation;
- IV.does not meet operational requirements of suitability for de-ballasting time compatible with loading rates;
- V.does not meet the specifications of the mooring cables recommended in relation to the Deadweight (DWT) of the vessel and the programmed Pier.

2.5 NAUTICAL CHARTS

- **Art. 11** The access channel, evolution basin, anchoring areas and berths are represented in the following Nautical Charts, which must be consulted, being the master of the ship responsible for knowing them in advance:
 - Charts no. 400, 410, 411, 412, 413 and 414 issued by the Brazilian Directorate of Hydrography and Navigation (DHN);
 - Charts no. 24.270, 24.271 and 24.274 issued by United States Hydrographic Office (HO);
 - Charts no. 3.958, 541, 543 and 565 of the British Admiralty.

2.6 METEOROLOGICAL CONDITIONS

Art. 12 – About meteorological conditions:

- The weather in the region is of tropical type with high total rainfall levels and moderate rainfall levels during the dry period, with only one rain season (December to June), in normal conditions;
- The temperature ranges throughout the year from 23°C to 31°C, usually staying around 27°C. The relative humidity of the air is uniformly high during the entire year, with monthly average ranging from 75% to 85%
- The average rainfall in 2019 was 187.00 mm, and in the rainy season, between January to July, the average in 2019 was 261.00 mm per month, with approximately 21 rainy days per month. In the dry season, between August and December, the monthly average in 2019 was 82.00 mm, with approximately 3 rainy days per month;

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• the predominant direction of the winds is northeast.

2.7 CURRENTS, TIDES AND WAVES

Art. 13 – On currents, tides and waves:

- The circulation of waters in the São Marcos bay is governed by tide variations.
 Predominant winds, with medium intensity, only contribute to cause minor deviations in the circulation produced by the tides;
- The minimum values of the currents occur next to the padding tidal and the maximum levels occur 3 to 4 hours after the high tide, in ebb tides, and 2 to 3 hours after the low tide, in floods:
- The currents are reverse, present north and northeast direction in ebb tides and after the padding tidal they invert the direction to the south and southeast during the floods;
- In the access canal, the currents present in the direction of 40°-220° to 60°-240° and may reach speed of up to 2.5 knots. Currents are amplified at the height of the evolution basin of the Terminal;
- The tide in São Marcos Bay is semidiurnal. The tide at the entrance of the canal buoys no. 1 and no. 2 occurs 75 minutes before and with amplitude of about 60% of the amplitude observed in the Pier 1 of the Terminal.
- The waves in the region are produced by local winds. At the evolution basin and its extension, waves of up to 1.10 meters.

Sole Paragraph: The information on currents, tides and waves contained above is for information purposes only and should not support or justify the taking of any decision regarding safety and navigability conditions at the Port, which is the sole responsibility of the vessel's master.

2.8 COMMUNICATIONS

Art. 14 – Vessels must adjust their receivers to receive and comply with communications on the following VHF channels:

- General call, CHANNEL 16
- Pilots Station, CHANNELS 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 67, 68, 69, 77, 78 and 79
- Terminal of Ponta da Madeira ("PDM"), CHANNEL 15.

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2.9 PILOTAGE AND TUGBOATS

Art. 15 – The use of pilots and tugboats in the maneuvers of ships in the Port is mandatory under the Brazilian Maritime Authority Rules (NORMAM 12) and under the Rules and Procedures of the Port Captaincy of Maranhão (NPCP-MA) and the clients, users, shipowners, operators, agents and/or masters are responsible for hiring such services and for the respective payment.

Sole Paragraph: In the event of adverse weather or sea conditions, including, but not limited to, rain, waves, tide or waves and winds during mooring, returning from the anchorage, loading or unloading and the vessel cannot remain safely moored by its own means, the ship's master must request pilotage and towing services in order to immediately remove the vessel from the quay. If the master does not proceed accordingly, the Port Administration will request pilotage and towing services, in order to avoid any risk to the Port, vessel and/or vessel's crew, in which case all costs related to pilotage and towing services will be on account of and paid directly by the ship/owner.

2.10 ANCHORAGES

2.10.1 External Anchorage Area

Art. 16 – The following areas are delimited:

I - **Area 1**: located between the slant of buoys no. 6 and no. 10. It is reserved to the vessels destined to the Terminal, with partial load, with draft higher than eleven (11) meters. It is also reserved to vessels under litigation and those undergoing major repairs. To anchor in this area, an authorization from the Captaincy of Ports is required. This area is limited by the rectangle of the following coordinates:

a. Latitude: 01° 58' 30" South
 b. Latitude: 01° 55' 30" South
 c. Latitude: 01° 49' 12" South
 d. Latitude: 01° 51' 48" South

Longitude: 044° 07' 00" West

 Longitude: 044° 09' 00" West
 Longitude: 043° 58' 24" West
 Longitude: 043° 56' 30" West

II - Area 2 (tide waiting area): located at east margin of the canal, between the buoys no. 16 and no. 18, is destined to large loaded vessels, with draft higher than twenty (20) meters, which will need to wait the correct tide for the passing through the buoys no. 14 and no. 10 and buoys no. 4 and no. 2. In this area the master must pay attention, due the existence of submarine cables in the West sector. It is delimited by the polygon with the following coordinates:

a. Latitude: 02° 05' 24" South
 b. Latitude: 02° 06' 00" South
 c. Latitude: 02° 04' 24" South
 d. Longitude: 044° 03' 24" West
 Longitude: 044° 07' 12" West
 Longitude: 044° 06' 01" West

III - Area 3: it is also located at the east margin of the canal, between the buoys no. 18 and no. 15, destined to the anchoring of large loaded vessels, with draft higher than twenty (20) meters, equally awaiting for the correct tide for passing through boys no. 10 and no. 14 and no. 2 and no. 4 when the area is occupied. It also useful for vessels in quarantine. In this area the master must pay attention, due the existence of submarine cables. It is delimited by the following coordinates:

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a.	Latitude: 02º 08' 18" South	Longitude: 044° 08' 42" West
b.	Latitude: 02° 10' 54" South	Longitude: 044° 09' 00" West
C.	Latitude: 02° 12' 01" South	Longitude: 044° 10' 00" West
d.	Latitude: 02° 12' 01" South	Longitude: 044° 11' 00" West

2.10.2 Pilot Waiting Area

Art. 17 – For ships waiting for Pilot and in accordance with Annex 4-B of NORMAM-12/DPC:

- I The boarding point for vessels with draft less than 11 meters is nearby buoy nº19: Latitude: 02° 28 '54' 'South and Longitude: 044° 22' 12" West.
- II The boarding point for vessels with a DWT greater than 100,000 or with a draft equal to or greater than 11 meters ("ALFA" point): Latitude: 02° 26 '00" South and Longitude: 044° 20' 36" West.

2.10.3 Internal Anchorage Area

Art. 18 – The following areas are delimited:

I - Area 4: destined to the anchoring of vessels waiting for mooring and with maximum draft of eleven (11) meters. At north, this area is away from the east margin of the canal in the slant of buoys no. 20 and 22. At south, this area is located between buoy no. 22 and lighthouses of São Marcos and Araçagi, delimited by the following coordinates:

a.	Latitude: 02° 19' 12" South	Longitude: 044° 12' 12" West
b.	Latitude: 02° 21' 24" South	Longitude: 044° 09' 30" West
C.	Latitude: 02° 24' 24" South	Longitude: 044° 12' 48" West
d.	Latitude: 02° 27' 24" South	Longitude: 044° 17' 18" West
e.	Latitude: 02° 26' 36" South	Longitude: 044° 19' 24" West

Note:

At north, the seafloor of this area is made of mood and fine sand, with depth of eleven meters and thirty centimeters (11.30m) to sixteen (16) meters.

At south, the seafloor of this area is made of fine sand with depths from fifteen (15) to twenty-seven (27) meters.

II – **Area 5:** destined to the anchoring of vessels waiting for mooring and with maximum draft of eleven (11) meters. Located at west of the canal, at the height of the pair of buoys no. 17 and no. 22, and delimited by the following coordinates:

a.	Latitude: 02° 22' 12" South	Longitude: 044° 20' 18" West
b.	Latitude: 02° 25' 00" South	Longitude: 044° 21' 13" West
C.	Latitude: 02° 24' 24" South	Longitude: 044° 22' 12" West
d.	Latitude: 02° 20' 01" South	Longitude: 044° 20' 24" West

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Note: The seafloor is made of stones and thick sand, with depth of fourteen meters and fifty centimeters (14.50m) and thirty-four meters (34m).

III – **Area 6**: Destined for quarantined vessels with drafts less than 11 meters. The anchoring in this area requires an express authorization from the Port Captaincy and additional precautions that will be determined upon request. Due to the strong currents noticed in this area, the anchoring in area 6 is not advised. This area is delimited by the following coordinates:

a. Latitude: 02° 26' 36" South
 b. Latitude: 02° 29' 12" South
 c. Latitude: 02° 30' 36" South
 d. Latitude: 02° 29' 48" South

Longitude: 044° 24' 30" West
Longitude: 044° 24' 00" West
Longitude: 044° 25' 24" West
Longitude: 044° 26' 00" West

IV – **Area 7:** For vessels with a maximum draft of 11 meters. The anchoring in this area is intended for vessels with maneuver restrictions and / or short-term operational needs and requires an express authorization from the Port Captaincy and additional precautions that will be determined upon request. As a safety measure, the Northeast quadrant of area 7 should be avoided for anchoring, considering that it is used as an evolution basin for vessels maneuvers. This area is delimited by the following coordinates:

a. Latitude: 02° 33' 36" South
 b. Latitude: 02° 34' 00" South
 c. Latitude: 02° 35' 30" South
 d. Latitude: 02° 34' 48" South

Longitude: 044° 25' 00" West

 Longitude: 044° 23' 36" West
 Longitude: 044° 24' 18" West
 Longitude: 044° 25' 42" West

V - Area 8: The anchorage in this area is intended for vessels with a draft less than 11 meters in case of loading and unloading of fuels and explosives. The anchoring in this area requires an express authorization from the Port Captaincy and additional precautions that will be determined upon request. This area is delimited by the following coordinates:

a. Latitude: 02° 35' 24" South
 b. Latitude: 02° 34' 48" South
 c. Latitude: 02° 35' 30" South
 d. Latitude: 02° 36' 48" South
 l. Latitude: 040° 26' 00" West
 l. Longitude: 044° 25' 42" West
 l. Latitude: 040° 24' 18" West
 l. Latitude: 040° 24' 48" West

2.11 ACCESS CHANNEL

Art. 19 – The access canal to the Terminal of Ponta da Madeira starts at about 12 nautical miles south from the safe waters buoy – São Marcos de Fora, with 55 nautical miles of length in the south – southeast direction.

Art. 20 – The width of the canal, in nearly its entire length, is of one thousand (1,000) meters, except in the following areas in which the minimum width is of five hundred (500) meters:

- between the pairs of light buoys no. 1 and no. 2, and no. 3 and no.4;
- between the pairs of light buoys no. 5 and no. 10, no. 7 and no. 12, and no. 9 and no. 14

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between the pairs of light buoys no. 17 and no. 22.

Art. 21 – The depth of this natural canal is twenty-three (23) meters.

2.12 EVOLUTION BASIN

Art. 22 – Pier 1: the evolution basin of Pier 1 is limited at east by the mooring line; at south by the parallel of 02° 34'. 5' South and at West by light buoy no. 33 with width of 0.8 nautical miles and length of approximately 3 nautical miles. Depths found range from 23.00 meters at the mooring line,

Art. 23 – Pier 3: the evolution basin of Pier 3 includes the basin of Pier 01, is limited at east by the mooring line; at south by the parallel of 02° 34'. 5' South and at West by light buoy no. 23 with width of 0.8 nautical miles and length of approximately 6 nautical miles. Depths found range from twenty-one (21) meters at the mooring line.

Art. 24 – Pier 4 - the evolution basin of Pier 4 includes the basin of Piers 1 and 3. It is limited at east by the mooring line; at south by the parallel of 02° 34′. 5′ South and at West by light buoy no. 23 with width of 0.8 nautical miles and length of approximately 3 nautical miles. The depths found range from 25.00 meters at the mooring line.

2.13 MOORING AREAS

Art. 25 – Particulars of Pier 1:

operational length of the pier: 490.00 meters

maximum mooring dock: 342.00 meters

total length of the vessels: 365.00 meters

maximum breadth of the vessels: 66.00 meters

minimum depth of the berth: 23.00m + height of the tide

deadweight (DWT) maximum of 420,000 mt

Art. 26 – Particulars of Pier 3:

operational length of the pier: 640.00 meters

maximum mooring dock: 600.00 meters

total length of the vessels: 365.00 meters

maximum breadth of the vessels: 66.00 meters

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- minimum depth of the berth: 21.00m + height of the tide
- deadweight (DWT) maximum of 200,000 mt on pier 3S and 150,000 mt on pier 3N.

Art. 27 – Particulars of Pier 4 South:

- operational length of the pier: 508.00 meters
- maximum mooring dock: 165 meters
- preferential deadweight for vessel mooring: equal to or higher than 320,000 DWT
- total length of the vessels: 365.00 meters
- maximum breadth of the vessels: 66.00 meters
- Minimum depth of the berth: 23.00m + height of the tide

Art. 28 – Particulars of Pier 4 North:

- operational length of the pier: 508.00 meters
- maximum mooring dock: 165 meters
- preferential deadweight for vessel mooring: equal to or higher than 320,000 DWT
- total length of the vessels: 365.00 meters
- maximum breadth of the vessels: 66.00 meters
- Minimum depth of the berth: 23.00m + height of the tide

3.0 WORKING HOURS OF THE PORT

Art. 29 – The working hours in the Port facilities is currently 24 hours and may change without prior notification by the Port Administration, under the legislation in force.

4.0 USE OF THE ANCHORING AREAS AND BERTHING FACILITIES

- **Art. 30** Authorization for berthing in the Port facilities, as well as definition of priorities, shall be granted by the Port Administration.
- **Art. 31** Clients and users of the Port shall promptly comply with the determinations of the Port Administration and competent authorities regarding the priority of service to vessels.

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- **Art. 32** Clients and users of the Port shall provide all documentation and information required by legal rules and by the Port Administration, subject to the penalty of not being authorized to enter or exit, including mooring or unmooring and moving/shifting of vessels in the Port area.
- **Art. 33** The Port Administration may interrupt, paralyze, suspend or cancel, temporarily or permanently, any activity or operation, whether started or not, which is not in accordance with the current legislation and with this Regulation or which may otherwise hinder the operation of the Port, thus causing failure to comply with its obligations as authorized by Public Administration.
- **Sole Paragraph –** The determination of the Port Administration for exit or unmooring of the vessel must be complied with at shipowner's and his crew's own risk, observing the special navigation situations and restrictions, such as the tide condition.
- **Art. 34** Vessels anchored or moored shall not perform repairs in its main engine and/or equipment that prevent them from moving, except in special situations previously authorized by the Port Administration and, if applicable, as instructed by the Maritime Authority.
- **Sole Paragraph -** Subject to the situations above, the Port Administration will authorize repair of moored vessels and such repair must be completed within the estimated time of the ship's loading and unloading operation. If repair exceed this time, the ship/owner will be responsible for paying the fine established in article 46, para 1, without prejudice to the Port Administration determining the immediate vacancy of the berth at your discretion. If the master does not proceed accordingly, the Port Administration will request pilotage and towing services, in which case all costs related to pilotage and towing services shall be on account of and paid directly by the ship/owner.
- **Art. 35** In case of vessels transporting hazardous cargo, the owner, the shipowner, operator, charterer, shipping agent or master must provide the following data at least 48 hours in advance:
 - I. the technical name of the cargo, in Portuguese, according to the classification code of the International Maritime Organization (IMO), the flash point, when applicable, and its UN number (identification number established by the United Nations Committee);
 - II. the quantity of hazardous cargo on board, indicating the amount that must be unloaded at the port and the amount that will remain on board the vessel, located on deck or inside the holds;
 - III. the type of package;
 - IV. the status of the hazardous cargo and the likelihood of a potential incident to occur;
 - V. information of whether the vessel has or not any insurance certificates for carriage of hazardous cargo;
 - VI. other relevant information regarding precautions while handling the cargo and concerning appropriate PPEs.

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Sole paragraph – The vessel guarantees that the transport of dangerous cargo is in full compliance with the applicable international and national regulations, including, but not limited to, as provided by the IMDG Code (International Maritime Dangerous Code) and Normam 29 (Normas da Autoridade Marítima).

- **Art. 36** Vessels and their crew members are subject to the present Regulation during the time in which they remain in the Port area.
- **Art. 37** Vessels while moored at berth must readily fulfill the orders given by the Port Administration, including immediate unmooring and to vacate the berth and exit the Port Area, especially in case of abnormal situations which may compromise the safety of the personnel, environment, port facilities and the vessels themselves or that which may hinder the good operation of the Port. Any non-compliance will subject the owner, shipowner, operator or charterer to a non-compensatory daily fine or equivalent fraction, based on the order/notification given by the Port Administration, in the amount of 58,000 (fifty-eight thousand) SDR, without prejudice to the others. administrative, civil, criminal responsibilities, among others that your non-compliance causes.
- **Art.38** The master must perform loading and/or unloading operations as programmed and immediately unmooring the vessel after the completion of the operations.
- **Art. 39** The master must follow the best marine and shipping practices during the period of maneuver and commercial operation of the ship, including, but not limited to:
 - I. perform the proper mooring arrangements for his vessel, depending on the influence of meteorological and hydrographic conditions, or in the cases indicated by the Port Administration;
 - II. installation of geotextile in the bilge wells, as provided in article 41 of this Regulation.
- **Art. 40** In case of rainfalls, at any intensity, during loading or unloading operations, the master of the ship must keep closed all hatches which are not being operated by the Port.

Sole paragraph – In case of hard rainfalls, the Port Administration may determine that all hatches, without exception, must be closed.

Art. 41 – The vessels' wells must be completely drained before mooring for loading, in order not to add humidity to the cargo that will be loaded and to enable the drainage as from the loading operation.

Sole Paragraph – The drainage of wells is not allowed in the mooring areas.

5.0 GEOTEXTILE INSTALLATION

- **Art. 42** For loading of ore fines in the Port, the installation of geotextiles on the vessels is mandatory, for navigation safety reasons.
- § 1 The vessel must carry out, by its crew and under its responsibility, the previous installation of geotextile that it has on board, in order to allow the ship to berth with holds ready to start loading operations.

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- § 2 The Port Administration can arrange for the supply of geotextiles if the vessel does not have them on board, for installation after the ship's mooring and before loading begins.
- **Art. 43** Masters of the vessels programmed to operate in the Port must provide to the Port Administration, within a minimum of seven (7) days prior to the ETA:
 - I. his acceptance with the installation on board of geotextile according to Annex B of this Regulation; or
 - II. his confirmation that the geotextile device is already available on board.
- **Art. 44** Removal of the geotextile device and the resulting costs after the completion of ore fines transportation is responsibility of the ship's master.
- **Art. 45** The Port Administration will not be responsible for any direct or indirect damage, loss or expense resulting from the inefficient operation of the geotextile.
- **Art. 46** If the master refuses to proceed with or complete the loading operation as scheduled, the Port Administration, at its own discretion and on account of the vessel, under the provisions of article 33, may order the immediate unmooring of the vessel and its shifting to one of the anchoring areas of the Port or any other designated area, until the impasse which caused the refusal is solved, with a view to preventing prejudice to the regularity, effectiveness, and safety of port operations and to the environment.
- § 1 A refusal by the master in promptly complying with the order for shifting/moving the ship to the anchoring area or to any other designated area shall subject the shipowner, operator or charterer to a daily non-compensatory fine or equivalent fraction, applicable as from the unmooring order, in the amount equivalent to 58,000 (fifty-eight thousand) DES, without prejudice to criminal and civil liabilities for damages arising from the master's refusal.
- § 2 If the master does not proceed accordingly, the Port Administration will request pilotage and towing services, in order to avoid any risk to the Port, vessel and/or vessel's crew, in which case all costs related to pilotage and towing services will be on account of and paid directly by the ship/owner.
- § 3 In case of refusal to comply with the shifting/moving order to anchoring area or any other designated area, the Port Administration may seek the fulfillment of its order before the Courts, the resulting losses, damages and costs incurred by the Port, inclusive of administrative, legal and judicial expenses, shall be borne by the shipowner.

6.0 PRICES OF PORT SERVICES

Art. 47 – The prices for the port services shall be informed by the Port Administration upon consultation, except when they are already included in the official Internet website of Vale S.A.

Sole paragraph: The prices in the table published on Vale's website are merely references, and may vary more or less, depending on the peculiarities of vessel, cargo, services, quantities, terms and other commercial adjustments, case by case.

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- **Art. 48** Services with specific characteristics, adjusted to attend the particular need of the clients and users of the Port are to be agreed between them and the Port Administration.
- **Art. 49** The Port Administration is not responsible for services hired by clients and users of the Port with third parties. Prices shall be negotiated by clients and users of the Port directly with such third parties, without any liability, participation or legal relationship involving Vale.

7.0 PORT SECURITY

Art. 50 – The Port operates according to international safety standards and rules of ISPS - International Ship and Port Facilities Security Code – level 1. The master must be aware of and adapt to any level of security protocol under which the Port is operating

8.0 ENVIRONMENT PROTECTION

- **Art. 51** Ships, their masters and crew must observe, during their stay in the Port, the rules of harmonious relationship and preservation of the sea environment contemplated in this Regulation and the applicable legislation.
- **Art. 52** Vessels are prohibited to release oil, residues, garbage or any other material that may harm or contaminate the waters in the Port area.
- § 1 The discharge of ballast water will be allowed inside the Port Area, as long as the requirements of the competent authorities and applicable regulations are respected, in order to avoid environmental pollution or changes in the balance of marine fauna and flora
- § 2 The vessels performing cabotage voyages shall comply with ballasting/deballasting procedures pursuant to the applicable rules by public authorities and avoid, inside the Port Area, discharge of waters whose color and/or composition (muddy waters, waters with corrosion residues in suspension etc) may cause visual environmental impact, hence giving rise to notices of infraction against the Terminal by competent authorities, in which case the respective shipowner, owner or operator shall take all measures necessary to defend the Terminal and set aside any aggression, danger or risk to the environment, being further responsible for the reparation of damages, losses and/or penalties imposed.
- **Art. 53** Services to clean vessels' hulls or propellers are not allowed in the Port Area.
- **Art. 54** The Port Administration authorizes, through registered companies, that the waste collection service (for garbage, sediments and oily residues), happens 7 (seven) days a week during the daytime, and the Port Administration may authorize the said service at night time in exceptional situations.
- § 1 The companies providing the waste collection service can be obtained upon consultation to the official website of Vale S.A. and the International Maritime Organization IMO.
- § 2 Vale annually publicize to the local maritime agencies' unions the registered companies.

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9.0 CONTROL OF EFFLUENTS FROM EXHAUST GAS CLEANING SYSTEMS (EGCS)

- **Art. 55** It is mandatory, during navigation in the maritime area adjacent to the Port and operation in the waters of the Port Area, especially in the access channel, anchoring areas, berths and docking area, that vessels use fuel with a sulfur content lower than or equal to 0.5% and/or exhaust gas cleaning systems (EGCS), or scrubbers, which do not cause any discharge of effluents at sea.
- § 1 If a breach of these terms and/or any and all applicable implementation measures is identified, the Port Administration will have the right to reject the docking or interrupt the ship's operation already started, being the shipowners responsible for any incidents and to indemnify the Port Administration for losses and damages.
- § 2 The ships must have a sufficient amount of fuel with a sulfur content less than or equal to 0.5% to be used during the period of operation and stay in the Port Area. The lack of this fuel or the use of exhaust gas cleaning systems (EGCS), or scrubbers, which causes the discharge of any effluent from its washing at sea, will result in the attribution of responsibility to the vessel, leaving the Port Administration, the right to order the ship to vacate the Port Area, with the shipowner being responsible for expenses, including losses and damages.

10.0 BALLAST WATER MANAGEMENT AND CONTROL

- **Art. 56** In the event of ships need to discharge ballast water, pursuant to article 52, para 1 of this Regulation, this must be made in accordance with the International Convention for the Control and Management of Ships' Ballast Water and Sediments ("BWM Convention") and any and all applicable implementation measures.
- § 1 If it is found that the ship does not comply with the terms of the applicable BWM Convention, the Port Administration will have the right to reject the mooring or interrupt the operation if it has already started, being the shipowners responsible for any delays in the operation, indemnifying the Port Administration for the losses and damages caused.
- § 2 In case of a written request from the Port Administration, at any time, the master or shipowner must immediately provide an electronic copy of the valid International Ballast Water Management Certificate for the ship.
- **Art. 57** The ships must always have sufficient ballasting or deballasting capacity in relation to the loading or unloading capacity, and the master is responsible for ensuring that the loading or unloading and the respective ballasting or deballasting are properly synchronized at all times, to maintain the ship within limits of stress and stability.
- § 1 In the event of the loading/unloading has to be interrupted or delayed continuously for more than six (6) consecutive hours due to insufficient ballasting/deballasting capacity in relation to cargo loading capacity, non-compliance with the BWM Convention or to any other reason attributable to the ship, the Port Administration shall have the right to order the ship to vacate the pier determining the time of exit and eventual return to the berth, being the master and/or the shipowner responsible by the cost of this

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movement, including related expenses, payment of fine pursuant to Article 46 and its paragraphs, as well as indemnification to the Port for losses and damages.

11.0 FINAL PROVISIONS

- **Art. 58** All clients, users, service providers and their representatives and agents must comply with the rules of:
 - I this Regulation;
 - II the Summary of Vale Port Requirements for Vessel Nomination and Acceptance ("Summary"), set out in Annex A;
 - III the guidelines on the installation of geotextile, according to the instructions in Annex B;
 - IV the safety and environment standards and guidelines established by competent bodies and the Port Administration, the operational procedures of the Port and other information provided in the Operational Port Guidelines, sent to the shipping agent before the mooring of the ship, according to model Annex C;
 - V other procedures for the exit of the ship set out in the Checklist for Sailing, according to Annex D;
 - VI other documents and operational procedures presented, at any time, by the Port to the shipping agents or to the crew of the ships;
 - VII rules and definitions of regulatory bodies, of the Maritime Authority, environmental, customs, sanitary, health, maritime police bodies and others established by the legislation in force.
- **Art. 59** Conditions for cargoes to enter, be moved, stay or be stored shall be established by the Port Administration, according to the particulars of each cargo.
- **Art. 60** Entrance and flow of vehicles, equipment, cargo or personnel in the Port are subject to previous authorization by the Port Administration. Clients, users, service providers and their representatives and agents must check with the Port Administration regarding applicable rules, reasonably in advance before performing any operation.
- **Sole paragraph –** Vehicles and their drivers must be in conformity with the traffic and transportation current legislation, as well as the provisions of the Port Administration and other applicable laws and regulations.
- **Art. 61** Clients and users of the Port are aware that the Port Administration may inform the competent governmental authorities about the conditions of services provided and operational data, notably regarding the removal of wastes and omissions of the vessels.

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- **Art. 62** In the event of an incident involving the foreign vessel and causing damage to the land or waterway port infrastructure at the Port Area or prejudicing its activities, the Port Administration may require from the respective shipowner, owner or operator, without assets in the country, the provision of security, in the form of an idoneous guarantee that ensures eventually the reparation of damages, loss of earnings and applicable fines.
- § 1 The security must be presented within forty-eight (48) hours after its request by the Port Administration, however always before the departure of the vessel from the Port.
- § 2 In case of refusal or failure to provide the security, the Port Administration may judicially apply for the seizure/arrest of the vessel until the security is provided, without prejudice to the duties imposed in this Regulation on owners, shipowners, operators, charterers and masters, especially to vacate the loading berth.
- **Art. 63** The Port Administration shall not be responsible for any delays, expenses, costs and damages to shipowners, operators, charterers, ship masters due to their failure to comply with the provisions of this Regulation.
- **Art. 64** Shipowners, operators, charterers, ship masters are responsible before the Port Administration and shippers for the failure to comply with the provisions of this Regulation.
- **Art. 65** Should the vessel fail to comply with any obligation provided for in this Regulation for which there is no specific fine, such non-compliance will subject the vessel, its master, shipowner, owner, operator and/or charterer to the payment of a non-compensatory daily fine up to 58,000 SDRs at sole discretion of the Port Administration, from the date of the noncompliance to the effective fulfillment of the obligation, without prejudice to other administrative, civil and criminal responsibilities/consequences, among others caused by the vessel.
- **Art. 66** Cases not included herein and/or its annexes shall be definitively resolved by the Port Administration.
- **Art. 67** This Regulation is issued in two versions, one in Portuguese and another in English. In case of any inconsistency between them, the Portuguese version shall prevail.
- **Art. 68** Updated versions, in Portuguese and English, of the Regulation and its annexes are available on the official website of Vale S.A.
- **Art. 69** In case of conflict between the provisions of the Regulation and its annexes, the provisions of the Regulation shall prevail, except in the event of conflict with the provisions of Annex A Summary.
- **Art. 70** The Port Administration reserves the right to change, unilaterally and at any time, the provisions of the present Regulation and its annexes, without the need to communicate to clients, users and service providers and their representatives.