





Annex 2 – Technical Guidelines and Lease Parameters

1. Introduction

1.1. The objective of this Annex – Technical Guidelines and Lease Parameters – is to address the following aspects of the Lease: (i) Area, Equipment and Edifications; (ii) Access to the Area; (iii) Activities; (iv) Performance Parameters; (v) Dimensioning and Operating Parameters; (vi) Technical Parameters; (vii) Deadline for Initiating Activities; and (viii) Minimum Requirements of the Basic Implementation Plan.

2. Definitions

2.1. The definitions applicable to this Annex are stated in the General Contract Conditions.

3. Area, equipment and edifications

- 3.1. The total area of the Lease identification code STS04 encompasses approximately 46,800 m² (forty six thousand and eight hundred square meters), composed of Area 1, with approximately 30,700 m² (thirty thousand and seven hundred square meters) and Area 2, with approximately 16,100 m² (sixteen thousand and one hundred square meters). The equipment and edifications to be utilized in unloading (unloading, internal movement, storage and dispatch) and loading operations (reception, storage, internal movement and loading) of dry bulk grain in this Lease site have already been or will be implemented according to the rules set down in the Contract and its Annexes. Appendix B indicates the boundaries of the Lease areas.
- 3.2. All of the areas are located within the area of the Organized Port.
- 3.3. Following the rules determined by Port Administration, within 24 (twenty four months) from the Provisional Acceptance Declaration and Area 2 Asset Use License have been formalized, vessels with cargoes targeted to or originating in the Lease area will have docking priority when utilizing Berth 38.
- 3.4. All other access conditions and rules applicable to the public berths are defined by the port administration.
- 3.5. Until such time referred in 3.3, the activities to be developed by the Lessee must not hinder the operations of the current Warehouse 38 lessee.
- 3.6. The activities to be developed by the Lessee in the Lease area must not interrupt or hinder the access of trucks and railway compositions to the terminals that utilize these accesses.
- 3.7. If authorized by the Port Authority, the rail line existent in Area 1 may be deactivated and/or removed, in which case the infrastructure of that line and the segment that it now occupies may be used by the Lessee for purposes of developing the Activities.







- 3.8. The Lessee will be responsible for preventive and corrective maintenance of Berth 38, as well as for all investments, additional improvements and unspecified services that may become necessary in order to achieve the Performance, Dimensioning and Operating Parameters. Projects and constructions must obey the Technical Parameters.
 - 3.8.1. By preventive and corrective maintenance of Berth 38, one understands preservation of the operational conditions of Berth 38 existent on the Assumption Date.

4. Access to the area

- 4.1. <u>Highway access:</u> through Avenida Mário Covas.
- 4.2. <u>Rail access:</u> through the rail line available at the Lease site.
- 4.3. <u>Maritime access:</u> through the public berths of the Santos Port.

5. Activities

- 5.1. The Lease site will be utilized exclusively for movement and storage of dry bulk grain as permitted by the Organized Port PDZ.
- 5.2. The quantitative volumes of annual cargo movement indicated in the chart below are the minimum amounts guaranteed by the Lessee and must be achieved during the entire life of the Lease:

| Lease Contract Year | Minimum Required Movement (thousand tons) |
|----------------------|--|
| Year 1 through 2 | 0 |
| Year 3 | 3,900 |
| Year 4 | 4,000 |
| Year 5 and following | 4,100 |

5.2.1.For purposes of verification of Minimum Required Movement, only those cargoes unloaded from vessels docked at the Organized Port or cargoes loaded on such vessels in operations utilizing the Lease site will be calculated.

6. <u>Performance Parameters</u>

6.1. The Lessee must ensure that the facilities of the Lease site provide the following Levels of Service to Users:

<u>Efficiency in the loading of vessels</u>: minimum of 1,200 tons per hour on average, during berth occupation time.

6.2. This calculation will be made by dividing total tonnage moved in the Berth by the total number of hours in which ships remain docked at the Berth.







6.3. Verification of Performance Parameters will be done on a quarterly basis within 30 (thirty) days of the end of each quarter, and will encompass the previous 12 (twelve) months including the most recent quarter.

7. Dimensioning and Operating Parameters

- 7.1. The Lessee must make investments and perform Activities in such a way as to comply with the Dimensioning and Operating Parameters indicated below:
 - 7.1.1.System of loading and unloading:
 - 7.1.1.1 The Lessee will replace the current bulk grain loading system at Berth 38, composed of two ship loaders on tracks and conveyors with a new system with nominal capacity of at least 3,000 (three thousand) tons per hour.

7.1.2. Storage System

7.1.2.1. The Lessee must maintain a storage system with total aggregate static capacity of at least 285,000 (two hundred and eighty five thousand) tons, as well as recovery and stacking equipment with a nominal capacity compatible with the loading and railway reception systems.

7.1.3.Land-based Reception System

7.1.3.1. The Lessee must implement new railway reception stations, while also maintaining and expanding railway branch lines to be used in unloading operations, as required.

8. Technical Parameters

8.1. Project Parameters

- 8.1.1.The Lessee will be exclusively responsible for all technical studies including, but not restricted to, field investigations, feasibility studies, conceptual and final projects, planning documents and documents involving improvements and additions required to achieve performance of the Activities at the Lease site.
- 8.1.2.Projects involving implantation of all improvements and construction works at the Lease site will comply with all applicable municipal, state and federal codes and regulations, as well as the project standards indicated by the organizations listed below (should conflicts between the standards indicated below exist, the most restrictive code will be applied):
 - ABNT
 - ISO
 - IMO
 - MARPOL







- 8.1.3. Investments in construction works to be carried out by the Lessee for purposes of performing the Activities foreseen for the Lease site should consider a useful life of 50 (fifty) years.
- 8.1.4. The Lessee should carry out preventive maintenance routines on the equipment as recommended in the technical documentation provided by the respective manufacturers or, should such documentation not exist, based on the best international practices.
- 8.2. Construction Parameters
 - 8.2.1. Any facilities to be constructed will comply with the standards and codes below:
 - The standards produced by the ABNT, or when such are not available, appropriate and internationally recognized standards, including those listed in subitem 8.1.2 of this Annex;
 - National, state and municipal building and construction codes.

9. Environmental Parameters

- 9.1. From the very start of Activities, the Lessee must guarantee the air quality standard for Total Solid Particles as determined in CONAMA Resolution no. 003/90, or in any norm that may come to replace it.
- 9.2. Samplings for this parameter should be taken through utilization of duly calibrated large-volume samplers (Hi-Vol), following the method specified in ABNR NBR 9547, or in any norm that may come to replace it.
- 9.3. The samplers must be installed prior to the start of Activities. Location and specification of the equipment will be subject to ANTAQ approval.
- 9.4. The Lessee will obey the "Sustainability Commitments" and the "Technical Requirements for Port Terminals Movement of Dry Bulk Grain" (Appendices B and C, respectively, of this Annex).
 - 9.4.1. If, in collaboration with CETESB, the Lessee intends to redefine the requirements cited in subitem 9.4 above, any alterations must be resubmitted to the Grantor Authority.
- 9.5. The Lessee will be charged with instituting and maintaining an Environmental Management Sector within its own organizational structure, composed of qualified environmental professionals and technicians. The sector in question will be responsible (i) for the system of environmental management and control of the Lease site, (ii) for maintenance of the environmental plans and programs defined in Appendix B of this Annex, as well as (iii) for full-time monitoring of operations, all with the objective of ensuring adequate implementation of such procedures in the entire process of cargo movement.







9.6. The Lessee assumes the commitment to act in a participatory manner in environmental activities and all other initiatives fostered by the Port Authority and those institutions and authorities involved in improving the environmental performance of the Lease site, including environmental agendas and integrated environmental contingency plans.

10. Deadline for Initiating Activities

- 10.1. The Lessee will have a maximum of 4 (four) years as of the Assumption Date to make the area, infrastructure, port facilities and Activities available according to the terms of the Performance, Dimensioning, Operations and Technical Parameters, as required in the Contract and its Annexes.
- 10.2. The quantitative volumes of annual cargo movement indicated in subitem 5.2 of this Annex should be guaranteed by the Lessee within the deadlines indicated therein, considering that the maximum period foreseen for that purpose in this subitem does not apply.

11. Minimum Requirements of the Basic Implementation Plan ("PBI")

11.1. Without prejudice to compliance with applicable legal and regulatory provisions, as well as other provisions of the Contract and its Annexes related to the theme, the Basic Implementation Plan to be submitted by the Lessee according to the terms of the Contract should contain the requirements of Appendix A.







Appendix A Requirements of the Basic Implementation Plan

With an adequate level of precision, the Basic Implementation Plan ("PBI") should include those necessary and sufficient elements required to inform the Grantor Authority of the stages and strategies to be followed in implementation of the Activities by the Lessee. The PBI should also ensure that the Lessee possesses the conditions and plans required to implement the structures necessary for performing all of the Activities that are the object of the Contract, without generating unnecessary interference in the port system and the surrounding area of the Organized Port. More specifically, the PBI should clearly and precisely demonstrate that the Lessee possesses all of the conditions required to comply with all of the Technical Guidelines and Lease Parameters indicated in the Contract and its Annexes.

The PBI should also characterize the port facilities to be used by the Lessee, including those located both in and outside the Lease site, that already exist or that will be implemented, as well as their adequacy for the requirements specified in this Annex and their consistency with the services to be rendered.

The following items determine the content to be submitted in the PBI.

A.1. Introductory Documentation:

- A.1.1. Description of the Lease site and the localities in which the Activities will be performed, including a georeferenced survey of the area, with identification of physical and/or operational interferences with surrounding lease sites and public areas and proposals for mitigating such, when required;
- A.1.2. Preliminary listing of leased assets and evaluation of the physical state and use conditions of such;
- A.1.3. Description of the operational flow and material flow chart of the Activities to be performed, indicating the equipment, major infrastructural elements and their main technical characteristics, including static storage capacity and nominal movement capacity.
 - a) In the case of multiple stages of development of the Lease site, the description above should be submitted for each stage.

A.2. <u>Commercial Plan of the Lease Site</u>:

- A.2.1. Description of the services to be rendered at the Lease site;
- A.2.2. Projections of cargo movement over the entire period of the Lease and underlying premises utilized.

A.3. <u>Technical and Operational Feasibility of the Lease:</u>

- A.3.1. Utilization of technical drawings in blueprints and cross-sections on an adequate scale, with captions and quotas, duly undersigned by a qualified professional, for purposes of presenting the overall arrangement of the proposed facility, encompassing:
 - a) Map of the location within the Organized Port;
 - b) Elements of infrastructure, superstructure and major equipment, including that already existent and to be installed;







- c) Highway, railway, waterway and pipeline access already existent and to be installed, utilizing a unifilar diagram, as required;
- d) Proposed environmental prevention systems (gases, dust removal, trash removal, noise, among others) that already exist and/or are to be implemented, with the respective descriptions;
- e) Items "b" to "d" above should be presented for each stage, in cases involving multiple stages of development of the Lease site.
- A.3.2. General description of the leased equipment or that to be acquired by the Lessee, including, in the case of equipment to be acquired, type, model, main dimensions, nominal capacity, expected efficiency, range;
- A.3.3. Based on the calculation log, corroboration that the port facilities and already existent equipment and/or that to be implemented at the Lease site are sufficient to meet projected demand, as determined in the accompanying material flow chart. With this in mind, an evaluation of the dynamic capacity of the following systems should be submitted for the entire period of the Lease, including expansions planned by the Lessee:
 - a) Loading and unloading systems;
 - b) Storage system;
 - c) Land-based reception and dispatch systems.
- A.3.4. Based on utilization of the calculation log, corroboration that the port facilities and equipment already existent and/or to be installed in the Lease site are sufficient to meet the Performance Parameters.
 - a) Corroboration of compliance with efficiency parameters during loading and unloading should consider estimates of the availability of berths and equipment, nominal capacities and the efficiency of the equipment, preand post operational time lapses and stoppages during operations, caused by a variety of reasons;
 - b) The values adopted for the items above should be compatible with those normally observed in analogous terminals and situations or good international practices. Should the contrary occur, the differences should be justified and explained in the calculation log;
 - c) The corroboration referred to in this item should be presented for each stage in those cases in which there are multiple stages of development of the Lease site.
- A.3.5. Based on the detailed description log, corroboration that port facilities and equipment already existent and/or to be installed by the Lessee are sufficient to meet the Dimensioning and Operating Parameters.
 - a) The corroboration referred to in this item should be presented for each stage in those cases in which there are multiple stages of development of the Lease site.
- A.3.6. In the case of expansion of the maritime infrastructure (piers, berths, dolphins, etc.), preliminary evaluation that the works in question are feasible from the







viewpoint of maneuverability and that they do not interfere with waterway access to the other port facilities in the region;

- A.3.7. Presentation of the physical and financial schedule of the undertaking, duly respecting the maximum deadlines indicated in the Contract and its Annexes, particularly the Technical Guidelines and Lease Parameters Annex;
- A.3.8. Description of the facilities utilized by the Federal Revenue Service and other inspection entities at the Organized Port, as required.
- A.4. Environmental Feasibility of the Lease Site:
 - A.4.1. Utilizing the detailed descriptive log, evaluation of the impacts of the Lease on land traffic of trucks and railway compositions in the surrounding area, including:
 - a) Estimate of the highway and/or railway vehicle flow involving the terminal as required to achieve forecast movement;
 - b) Description of the actions to be implemented by the Lessee with the objective of avoiding formation of waiting lines of vehicles, including constitution or utilization of regulating patios aimed at minimizing these impacts;
- A.4.2. Utilization of the detailed descriptive log for purposes of evaluation of the environmental impacts of performance of the Activities, together with mitigating measures to be adopted, such as engineering solutions and management measures aimed at controlling emissions of particulates, treatment of effluents and solid waste, among others. Furthermore, the PBI should foresee a high technology system (state-of-the-art) capable of ensuring confinement, filtering, separation and exhaustion of particulate material, including:
 - (i) Transfer points between shipping companies, equipped with aspiration systems;
 - Dust aspiration of the area utilized for operation of trucks and/or railcars and utilization of baghouse filters, centrifugal exhaust systems, discharge valves, pipeline network with captors and flaps for adjusting discharge and chimney for discharging clean air;
 - (iii) Installation of platforms around the manifolds for purposes of maintenance in the solenoids, as well as compact filters with internal filtering hoses.
 - A.4.3. Attestation of the efficacy of the measures to be implemented based on a comparison with analogous terminals and situations, as well as adoption of best international practices.







Appendix B Sustainability Commitments

- 1.1 Following the guidelines that orient monitoring of atmospheric pollution set down in Law no. 12,187/2009, Decree no. 7,390/2010, CONAMA Resolution no. 005/1989, CONAMA Resolution no. 003/1990, CONAMA Resolution no. 008/1990, MMA Resolution no. 424/2011, State Decree no. 8,468/1976 with its alterations and State Decree no. 59,113/2013, the equipment acquired should be designed to meet the basic premise of minimum emissions of particulates.
- **1.2** The Lessee should guarantee continuous improvement both in terms of updating the technologies acquired to control particulates and in internal operational procedures.
- 1.3 The ship loader to be acquired by the Lessee should be equipped with a particulate control system capable of minimizing emissions of particulates during loading of ships, duly observing the minimum technical specifications described below:
 - 1.3.1 Telescopic tube: guarantied range of 100% of the operation;
 - 1.3.2 Particulate control system: cascade-type cones that result in gradual dropping of the product with diminishing speed and without air currents, making it possible to avoid propagation of the particulates, maintaining the particulates confined in the telescopic tube itself.
- 1.4 The Lessee assumes the commitment of guaranteeing that the outflow of the telescopic tube of the ship loader is maintained always close to the product, eliminating the passage of air currents and, consequently, reducing emissions of particulates during loading.
- 1.5 The Lessee further assumes the commitment of expanding installation of the oil aspersion system to the maximum number of transfer points of the products as possible within the complex, in order to guarantee minimum emissions of particulates during grain reception operations.
- 1.6 The Lessee assumes the commitment of making the investments required to adjust the flooring of the areas reserved for circulation of trucks, guaranteeing maximum efficiency in superficial drainage and in cleaning operations, thus avoiding accumulation of grain in the leased area.
- 1.7 The Lessee should prioritize the railway modal for reception of merchandise.
- 1.8 The Lessee should present the urban project of the region in which it is situated in order to foster reduction of the visual impact of its facilities on local society.
- 1.9 The Lessee assumes the commitment of elaborating a written document on the following programs: Risk Management Program PGR, Solid Waste Management Program PGRS, Environmental Education Program, Traffic Control Program, Liquid Effluent Control and Monitoring Program, Atmospheric Pollution Control and







Monitoring Program, Sound Pollution Control and Monitoring Program and the Synanthropic Fauna Control and Monitoring Program.

- 1.10 As regards the PGRS, the Lessee should also construct an area for the Organic Waste Center;
- 1.11 The Lessee assumes the commitment of implementing and certifying the Environmental Management and Control System within 2 (two) years as of the **Assumption Date**.
- 1.12 The Lessee assumes the commitment of performing environmental audits every two years in order to comply with the terms of CONAMA Resolution no. 306/2002 or possible updatings.







APÊNDICE C

Technical Requirements for Port Terminals – Movement of Dry Bulk Grains

- 1. Reception of dry bulk grains:
 - 1.1. Dry bulk grains transported in metallic truck bodies or railcars should be transported by vehicles equipped with hopper-type discharge equipment.
- 2. Grain discharge in hoppers:
 - 2.1. Highway or railway hoppers must be constructed inside the enclosed sheds and be equipped with exhaust ventilation systems and pollutant control equipment (PCE).
 - 2.2. The PCE should be installed by sector, one unit for each hopper (1 hopper = 1 PCE) and should be projected and constructed in such a way as not to permit emissions of particulate material into the atmosphere during discharge of dry bulk grain.
 - 2.3. The grain discharge sheds should be equipped with automatic doors to close after entry and departure of the trucks or railcars.
 - 2.4. Dry bulk grain discharge operations may only be carried out with the shed gates in the closed position, equipped with interlocking devices.
- 3. Conveyors, elevators and transfer points:
 - 3.1. Conveyors should be totally enclosed upper, lower and lateral parts.
 - 3.2. Grain conveyors must be equipped with cargo limiters, utilizing the project parameters as the limits; these limiters must automatically shut down the conveyor whenever the transportation limit is surpassed.
 - 3.3. Transfer points must be equipped with local exhaust systems and individualized pollutant control equipment (particulate material).
 - 3.4. Metallic plates, utilized to close conveyor and elevator transfer points subject to the impacts of dry bulk grain, must be coated in material resistant to abrasion.
- 4. Movements of railcars in the interior of the port terminal should only be carried out with rail-based vehicles (locomotives or locotractors).
- 5. Warehouses for grain storage:
 - 5.1. Grain storage should be in silos or warehouses that are adequately sealed and equipped with efficient air pollution control systems in order to avoid emissions







of particulate material into the atmosphere through doors, roof openings, ventilation shafts, etc.

- 5.2. Reception or movement of dry bulk grain in the interior of warehouses should be done in such a way as to avoid emissions of pollutants (particulate matter) into the atmosphere through doors, roof openings, ventilation shafts, etc. In this sense, efficient air pollution control systems should be installed whenever necessary to avoid such atmospheric emissions.
- 6. Loading ship holds:
 - 6.1. Whenever dry bulk grain is loaded on ships, the holds in operation must be maintained totally enclosed in such a way as not to cause emissions of particulate material into the atmosphere, particularly in the initial and final procedures of the loading operations. Alternatively, one can utilize any other appropriate air pollution control system with an efficiency level equal to or greater than the enclosure method.
- 7. Highway vehicles:
 - 7.1. Prior to their departure from port areas with movement of dry bulk grains and sugars, passenger vehicles, diverse forms of transportation, service vehicles and, above all, trucks and their respective trailers should be subjected to efficient cleaning in such a way as to eliminate any and all aggregate residues that could be released on highways.