

**Summary of Project Contained in the Private Initiative
“Ship-Loading Terminal for Mineral Concentrates in the Callao Port Terminal”**

Objective

The objective of the “Ship-Loading Terminal for Mineral Concentrates in the Callao Port Terminal” project is the construction and operation of Mineral concentrates ship-loading Terminal in the Callao Port Terminal.

The Terminal shall be designed to service the ship-loading of mineral concentrates with service and productivity efficiency levels, and in compliance with the technical standards and environmental regulations required.

Scope

The Project comprises the design, financing, construction, operation and conservation of a mineral concentrates ship-loading terminal. The Terminal will be located between Dock 7 and dry dock El Ancla, running parallel to the northern breakwater according to the reference plan, which like Annex 4 is part of this present document.

The port infrastructure to be built is:

- publicly-owned,
- of public use,
- specialized (mining-industrial),
- maritime, due to its geographical location within the port facilities of Callao Port Terminal; and
- of national scope

The Project entails the following important components:

- a) Construction of a dock to run parallel to the north breakwater, between dock N° 7 and dry dock El Ancla of the Callao Port Terminal.
- b) A transfer tower located on the open access site which will receive the mineral concentrates from different storage deposits.
- c) Installation of an airtight conveyor belt and its respective structural support in sea and land to move the mineral concentrates between the open access point and the proposed dock.
- d) A ship-loader
- e) Dredging of the maneuvering area and the berth location of the dock.

Project Benefits:

- Contamination reduction due to elimination of prior stockpiling on the dock floor of Pier 5.
- Reduction of mineral cargo truck traffic from the storage deposits to the Callao Port Terminal.
- Increase of current shiploading capacity system.
- Decrease of ship time in Callao Port Terminal
- Specialization in cargo and ship service in the Callao Port Terminal.

Contractual mode and term of the contract

- Proposed private investment participation mode: Concession, as established in sub-paragraph a) of article 14 of Supreme Decree 059-96-PCM and the provisions of articles 10 and 11 of the National Port System Law (Law 27943).

- Concession Contract term: 20 years.

Estimated Investment Amount

The estimated total cost of the project, with all concepts included, among them design, construction works and start-up is US\$ 120'330,000.00 (One hundred and twenty million three hundred and thirty thousand U.S. dollars), Value Added Tax included.

The estimated total cost does not include cost of design, supervision, including Value Added Tax.

Proposed Return on Investment:

- Ship charges: Consideration for use of berth. Charges are to be applied by length of ship measured in meters and by time (hour or hour fraction) the ship remains moored to the dock, calculated as of the moment it passes the first warp in the mooring operation until the time it unmoors and passes the last warp in the unmooring operation. Charges include mooring and unmooring service for the ship

- Loading tariff: Consideration for ship-loading the mineral which includes use of mineral transport infrastructure from open access point to the ship. It will be calculated in metric tons.

Quality Indicators of Services to be Rendered

Dock

Marginal type, located on zone adjacent to the north breakwater, between Dock 7 and El Ancla dry dock; 200 meters in length, approximately and with a capacity for

servicing ships 226 meters long, with a breadth of 34 meters and a reference draught of 13.10 meters.

It has a capacity to support a mineral shiploader as per required characteristics.

Dredging

Estimated dredging of the areas committed to the arrival and departure maneuvers of ships with mineral cargoes up to a depth of 14 meters (approximate dredging volume is 2 million cubic meters).

The reference area of dredging is indicated on the plan, which like Annex 4 is part of this present document

Conveyor Belt

The system must have an airtight tubular conveyor belt, specially designed to avoid contamination in the loading of minerals; it should be 3000 meter in length, approximately, with a nominal capacity of 2000 tons/hour and a design capacity of 2300 tons/hour, and with a speed of 4.0-4.5 m/s-, approximately.

Referential design dimension show a belt width of approximately 1600 mm and 400 mm of tube diameter. The belt shall run 20 meters high from the transfer tower, located on the open access point, to the shiploader.

The route of the conveyor belt will run northbound through Petroperu property land (Vopak) and will enter the Callao Navy Base until reaching the southern shore of the Rimac River. Then it will go west, parallel to the river and adjacent to the Naval Base. The conveyor belt will then follow the beach to the south up to the inside side of the north breakwater and will reach the dock to be built.

Shiploader

The proposed shiploader is an in-line travel system moving on rails along the dock to be built, with an estimated 2000 ton/hour nominal performance.

This device is to service ships of up to 60,000 DWT, with a breadth between rails pursuant to the shiploader specifications and a distance run according to the length of the ship to be serviced.

Transfer Tower

This is the constitutive element of ship-loading minerals whose loading speed must be designed according to the performance of the conveyor belt and the shiploader.

Its design shall enable connection of the airtight conveyor belts coming from diverse mineral deposit storehouses.

Equipment

The following will be considered complementary equipment that helps port operation and safety of port mineral concentrates shiploading:

- Silo
- Power system

- Fire suppression systems and safety
- Lighting system
- Basic services
- Other

The project may be implemented through the use of diverse technologies provided that these technologies allow compliance to the levels of service aforementioned. The proposed technologies must have been internationally tested and applied for at least ten years in conditions similar to those of the project.

Concession Area

The Concession area comprises:

(i) Land Area: The area where the open access will be located; it has a surface extension of approximately 63 m².

**Preliminary Area of Concession
OPEN ACCESS
Datum Coordinates WGS84
UTM Zone 18 South**

Vértice	East (X)	North (Y)
A	267803.570	8667635.070
B	267810.390	8667636.620
C	267812.400	8667627.850
D	267805.570	8667626.290
Area	63.00 m ²	
Perimeter	32.00 M	

(ii) Water area: with an approximate extension of 53,000 m².

**Preliminary Area of Concession
Mineral Dock North Breakwater
Datum Coordinates WGS84
UTM Zone 18 South**

Vortex	East (X)	North (Y)
1	265954.510	8667792.570
2	265858.310	8667880.660
3	266103.720	8668175.220
4	266136.200	8668131.060
5	266166.030	8668166.860
6	266187.510	8668197.020
7	266209.550	8668244.210
8	266218.400	8668277.490

9	266222.770	8668312.160
10	266231.650	8668299.480
11	266228.860	8668275.660
12	266220.590	8668242.920
13	266207.290	8668211.200
14	266196.590	8668191.000
15	266174.950	8668161.250
16	266142.310	8668122.770
17	266193.420	8668053.470
Area	53406.98	m2
Perimeter	1431.36	M

Environmental Impact Assessment

The concessionaire will have to prepare the EIA that comprises the construction and operation activities of the Port Terminal, and which will have to be approved by the corresponding authorities.