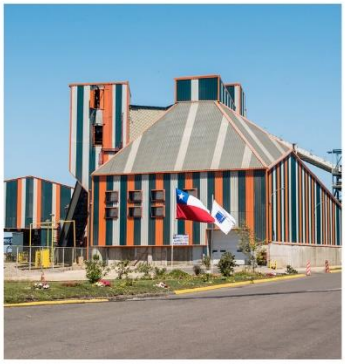
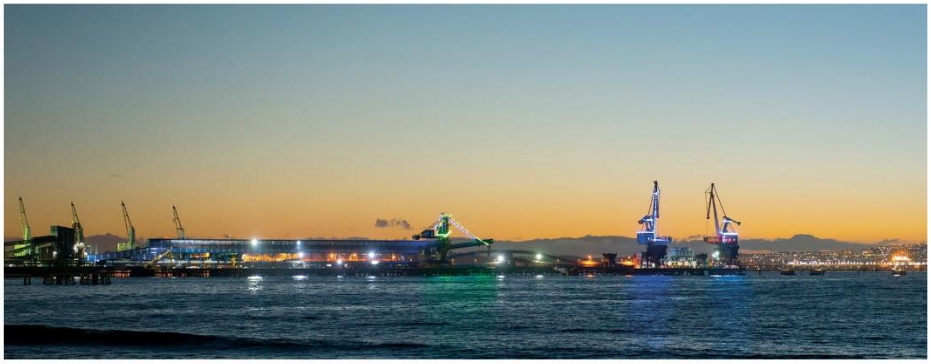
PVSA
PUERTO VENTANAS S.A.

Port Environmental Review System (PERS) Application

June 2018





PUERTO VENTANAS S.A. CHILE

ECOPORTS PERS CERTIFIED

PRIMER PUERTO VERDE DE CHILE

ECO SLC

Sustainable Logistic Chain

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1. INTRODUCTION: PUERTO VENTANAS S.A.

1.1. BACKGROUND

With more than 26 years of experience and an excellent service, Puerto Ventanas S.A., located in Quintero Bay in the Puchuncaví commune, has been consolidated within the port industry as one of the most important bulk ports in the country.

Specialist in the handling of solid and liquid bulk, the Port has an integral wharfage service and last generation mechanized systems for the storage and transfer of cargo, which place it at the forefront of the bulk ports of the world.

It has a team of professionals, technicians and workers who provide complete assistance for cargo handling, with appropriate facilities for every need, with high standards of safety, quality, and respect for the environment.

Provides services of integral loading and unloading of liquid and solid bulks with high efficiency, reliability and mechanized systems that are complemented with an enclosure enabled for bulk storage with environmental and safety control, warehouses for general cargo, for bulk solid, in addition to ample storage spaces.

1.2. STRATEGIC VISION OF OUR BUSINESS

PRINCIPLES AND VALUES

VIEW:

To work every day to be recognized as the best port company in quality and sustainable services for mining, energy, and industry in Chile.

MISSION:

To contribute to the sustainable progress of Chile and Latin America, providing our clients with quality, safe and sustainable port services, generating value and development opportunities for the community, shareholders, suppliers and collaborators and caring for the environment

VALUES:

We take care of Life

In each of our decisions and actions we put respect for life in the first place. We privilege safe work, ensuring respect for the environment, the communities and residents of the Port.

We reach the goals Working in Team

We are a link in a great chain, we practice fair play and care for the partner. Working together we are able to exceed our goals and achieve high performance.

We seek Excellence and Innovation

We care to do well the first time, be innovative and exceed our standards

We Feel Passion for Service

We are inspired to serve the development of the country, our customers and the community.

We act with Commitment

We act with respect, we put all our capacity, energy and will to fulfill and honor the word committed.

The business strategy of Puerto Ventanas S.A. it is mainly based on consolidating and strengthening its specialization in the port operation of liquid and solid bulks.

Its development model is based on a philosophy of sustainable operation, which simultaneously integrates all relevant business variables: excellent port services, care for the environment, employee safety, operational continuity, relationship with neighboring communities, compliance of regulations and regulations, corporate reputation and continuous improvement of its infrastructure and facilities. For this, Puerto Ventanas S.A. Its management is guided by six strategic pillars that guide its actions to achieve growth objectives.

STRATEGIC PILLARS

SUSTAINABILITY: Central axis of our operation

Puerto Ventanas S.A is convinced that sustainable management and operation is key to the present and future development of Puerto, considering the safety and health of workers, care for the environment, operational excellence, and the construction of long-term relationships with neighboring communities.

In this sense, in this period we have made considerable progress in the Infrastructure and Innovation Improvement Plan, which has meant significant improvements, not only in productivity, but also in environmental aspects of the operation. Likewise, significant progress was made in the consolidation of the People's Area and we have continued to deepen our bond with the community of Puchuncaví.

COLLABORATORS: Our strategic resource

Puerto Ventanas S.A We work constantly to generate meeting points and spaces for dialogue and development for people. From the Personnel Sub-Directorate, systems, policies, and tools were continued to be developed, which allowed the area to be strengthened, as well as training plans for the employees, which meant a total of 2.147 training hours during 2017.

Likewise, during this period, relations with our union organizations continued to be strengthened in a climate of joint work and collaboration that resulted in the signing of a labor policy that reflects the principles and pillars that govern individual and collective labor relations. inside of our company. This establishes a guiding framework of rights, guarantees and obligations in order to ensure consistency between their behavior and the principles and values that our labor community considers important.

CLIENTS: Greater proactivity

Satisfying customers and being their strategic ally is the focus of the management of Puerto Ventanas S.A., where their needs and expectations are priorities for the development of the company. It is a permanent challenge to provide efficient, timely and quality services that stand out in the port industry, delivering value proposals tailored to each client.

In 2017, the Commercial Management achieved important achievements by providing new services to current customers and in the diversification of its operations, which meant an increase in the transfer of cargo made and the incorporation of new customers.

INFRASTRUCTURE: Modernization of our facilities

Within the investment plan for the modernization of its facilities, Puerto Ventanas S.A. has developed important infrastructure projects for the storage and dispatch of copper concentrate, consolidating its leadership in the handling of solid bulk in the central zone of the country.

In this way, to the new warehouse opened in 2016, the execution of the project "Improvement and Modernization of the Copper Concentrate Shipment System" was added, which consists of the assembly of traveling ship-loader equipment in the port industry and the most modern of its kind, with a nominal capacity of 1,500 Tons / Hour (TPH) for the transfer of copper concentrate, thus increasing the efficiency of the loading process of the ships in the Port. The project has more than 1,100 meters. of encapsulated conveyor belts, totally sealed, which interconnect all the current storage areas with the different docking sites for the shipment of copper concentrate in the Port.

GROWTH: Identify new opportunities

We permanently analyze the market in order to detect business opportunities with current and potential customers, and thus create value for shareholders, employees, customers and all stakeholders.

In November 2017, within the framework of the diversification plan, the first unloading of soybean meal of Bolivian origin was completed, thus adding agribusiness burdens to the supply of services that we delivered.

PRODUCTIVITY: Efficiency and effectiveness in the operation and use of resources

Being more efficient and effective is a permanent management challenge in order to offer an increasingly competent, safe and reliable service. The investment plan for the improvement and modernization of the Port's infrastructure has allowed us to advance in the efficiency of our processes. This is how the entry into operation of the new ship-loader, triples the speed of load transfer, allowing to provide a service with an increasing level of efficiency and safety. In the same way, the flexibility of our cargo reception system, whether by train or truck, provides important comparative advantages for our customers.

1.3. PUERTO VENTANAS S.A. FACILITIES AND EQUIPMENT

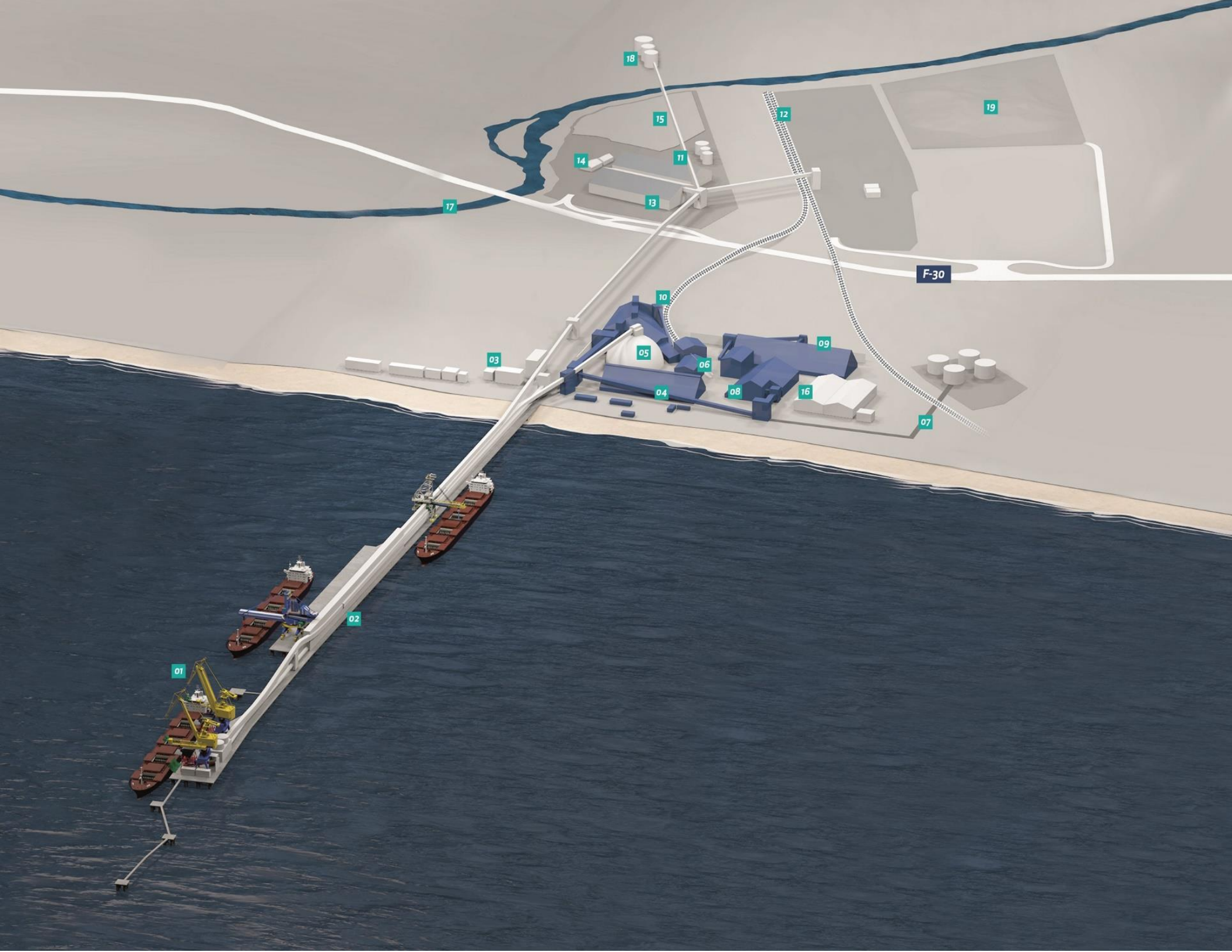
Our docking sites available to receive ships of up to 70,000 tons and 14.3 meters draft in loading and unloading of liquid bulk, solids and general cargo.

Complete logistics equipment, warehouses and transport capacity and cargo handling in transit. 218.1 hectares of land surface, with more than 80% available.

The description of facilities and main equipment is shown in the following table:

Table: Puerto Ventanas facilities and main equipment

1. Two cranes to unload solid bulk connected to conveyor system.	10. Warehouse La Greda for storage of solid bulk: 46,000 tons.
2. Encapsulated and sealed conveyor system, connected to a state-of-the-art traveler Charger for the transfer of copper concentrate.	11. Warehouse of grains and general loads: 10,000 tons.
3. Offices.	12. Court yard railway maneuvers.
4. Warehouse for copper concentrate: 55,000 tons.	13. Clean grain warehouse: 45,000 tons.
5. Dome for clinker and cement: 45,000 tons. All facilities for the download are owned by Melón S.A.	14. Customs and SAG offices.
6. Warehouse for storage of various concentrates: 6,000 tons.	15. Open patio for general cargo: 30,000 m2.
7. Aciduct: shipment of sulfuric acid (H2SO4).	16. Oil Coal Field (ENAP): 80,000 tons.
8. Warehouse for copper concentrate: 30,000 tons.	17. Melon Plant S.A.
9. Anglo American warehouse for copper concentrate: 60,000 tons.	18. Covered patio: 6,640 m2.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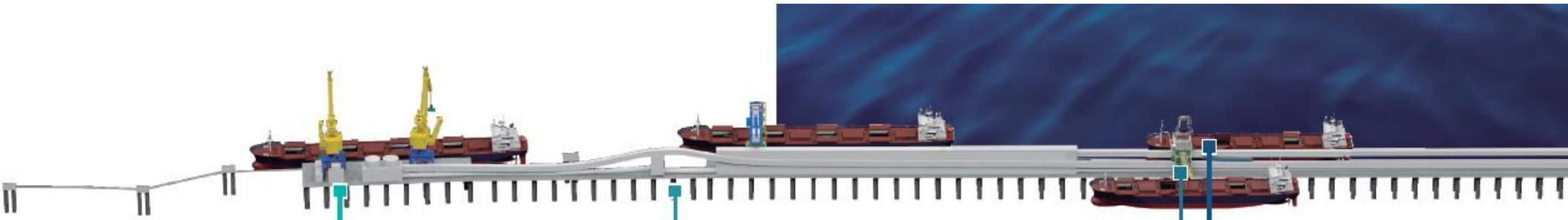


SITE Nº 5

MAXIMUM BERTH:	14,30 METERS
MAXIMUM LENGTH:	245 METERS
EQUIPMENT:	

Two pantographic cranes with a capacity of 30 tons at 40 meters and discharge capacities of 750 tons / hour each. A box of valves for the shipment or ranch of fuel required by the ships. A valve box for the discharge of combustible inputs.

SITE Nº 3

MAXIMUM BERTH:	11,70 METERS
MAXIMUM LENGTH:	200 METERS
EQUIPMENT:	

Ship-loader. New copper concentrate transfer system composed of encapsulated conveyor belts, sealed transfer towers and the incorporation of ship-loader that allows the loading of the ship without the need for it to change position.

Manifold connection for the shipment of sulfuric acid. In addition, it has a valve box for the shipment or ranch of fuel required by the ships and a valve box for the unloading of fuel supplies for the asphalt and fuel terminal.

SITE Nº 2

MAXIMUM BERTH:	9,57 METERS
MAXIMUM LENGTH:	200 METERS
EQUIPMENT:	

Manifold connection for the shipment of sulfuric acid and loading tower of mineral concentrates. A box of valves for the shipment or ranch of fuel, required by the ships.

SITE Nº 1

MAXIMUM BERTH:	8,00 METERS
MAXIMUM LENGTH:	125 METERS
EQUIPMENT:	

Two boxes of valves for the shipment of marine fuels to the minitanqueros.

2. DEVELOPMENT OF THE INFORMATION REQUIRED BY THE ECOPORTS GUIDE

2.1. ENVIRONMENTAL POLICY STATEMENT:

Puerto Ventanas S.A. has implemented an integrated management system through which it manages the aspects associated with the Environment, Quality, Energy Efficiency and Occupational Health and Safety. Puerto Ventanas Integrated Management System has been structured on the basis of the requirements contained in the ISO 14.001, ISO 9.001, ISO 50.001 and OHSAS 18.001 international standards.
Since 2013, Puerto Ventanas S.A. has environmental management certification under standard ISO 14.001, which is periodically verified, and It was recertified under the new upgrade standard ISO14.001: 2015 by the certifying company LRQA Business Assurance; the certification of this standard is valid until December 2019. Environmental and Quality Management System, was recertified under the new versions of the ISO 9001 and ISO 14.001 standards, deepening in key aspects of the company's management, such as:

Main changes:

- Risk Management is strengthened with a business focus, in process planning. Risk identification and evaluation methodology is implemented, Opportunities of the interested parties for the internal and external context. For this, an analysis of

strengths, opportunities, weaknesses, and threats is made, in order to plan the System according to that context.

- In this context, the requirements of each one of them are included in the stakeholder matrix, and the corporate confirmation of voluntary compliance with the defined requirements.

- Process Management is strengthened, and the way business processes add value, identifying the expected results of each one of them.

- The Management System approach is also maintained with the guideline of Customer Satisfaction, Legal Compliance, and the prevention of environmental contamination.

- The Policy of the Integrated Management System is maintained, since it incorporates the protection of the environment.

- Environmental aspects and impacts are evaluated under a service lifecycle approach.

- The Integrated Management System Manual is modified according to the new normative points.

The Integrated Management System Policy incorporates our commitment to:

- Compliance with legislation and regulations that apply to the Port, which include the environmental regulations and agreements signed voluntarily, with a system to update and verify compliance.

- Implementing an environmental management system to prevent events that impact the environment and ensure that we are prepared to address any event with the potential to impact the environment in a timely manner, in order to reduce its consequences as much as possible.

- Utilizing resources in an efficient manner, especially energy, such as to reduce our carbon footprint.

- Maintaining a collaborative relationship with our customers, suppliers and the community in general to make them part of our challenges and environmental targets.

- Recycling and reusing materials in our processes

- Training our collaborators in subjects associated with the care of the environment in each stage of our processes.

- Continuously reviewing the Integrated Management System Policy and verifying its implementation and compliance through periodic revisions

- Providing the resources necessary to implement the Integrated Management Policy and its action plans.

PUERTO VENTANAS S.A.
INTEGRATED MANAGEMENT SYSTEM POLICY

Puerto Ventanas S.A. is the primary private port in the central region of the country, offering comprehensive and specialized services for the transfer, storage and dispatch of solid and liquid bulk products and non-container cargo.

We are committed to satisfying the needs of our customers through continuous improvement processes, with the primary protection being for the health and safety of our employees, the environment, and saving energy, generating a sustainable development of our activity and driving the economic development of the region.

For this, Puerto Ventanas S.A. agrees to:

1. *Provide and maintain suitable and safe working environments for its employees and other people who are at its facilities.*

2. *Ensure compliance with the domestic and international regulations applicable to its business activities and the corporate standards associated with occupational health and safety, the environment, energy and quality.*

3. *Implement all necessary and feasible resources to ensure compliance with the objectives and targets established according to the following principles: quality of services, customer satisfaction, management of energy, prevention of pollution, work-related accidents and illnesses, as well as the design and purchase of efficient products and services, for the improvement of energy performance.*

4. *Make available the Integrated Management System information to all Puerto Ventanas S.A. employees to ensure compliance with the objectives and targets, in the framework of continuous improvement when carrying out the processes.*

PUERTO VENTANAS S.A.

PUERTO VENTANAS S.A. VENTANAS

Jorge Oyarce Santibáñez.
General Manager

Política del Sistema Integrado de Gestión Puerto Ventanas S.A.

Puerto Ventanas S.A, es el principal puerto privado de la región central del país, ofreciendo servicios integrales y especializados en la transferencia, almacenamiento, despacho de graneles sólidos, líquidos y cargas fraccionadas.

Estamos comprometidos con la satisfacción de las necesidades de nuestros clientes, a través de procesos de mejora continua, teniendo como principal recaudo la salud, seguridad del personal, el medio ambiente y el ahorro de la energía, generando un desarrollo sustentable de nuestra actividad e impulsando el desarrollo económico de la región.

Para ello ***Puerto Ventanas S.A.*** se compromete a:

1. Proveer y mantener ambientes de trabajo adecuados y seguros para su personal, y otras personas que se encuentren en sus instalaciones.

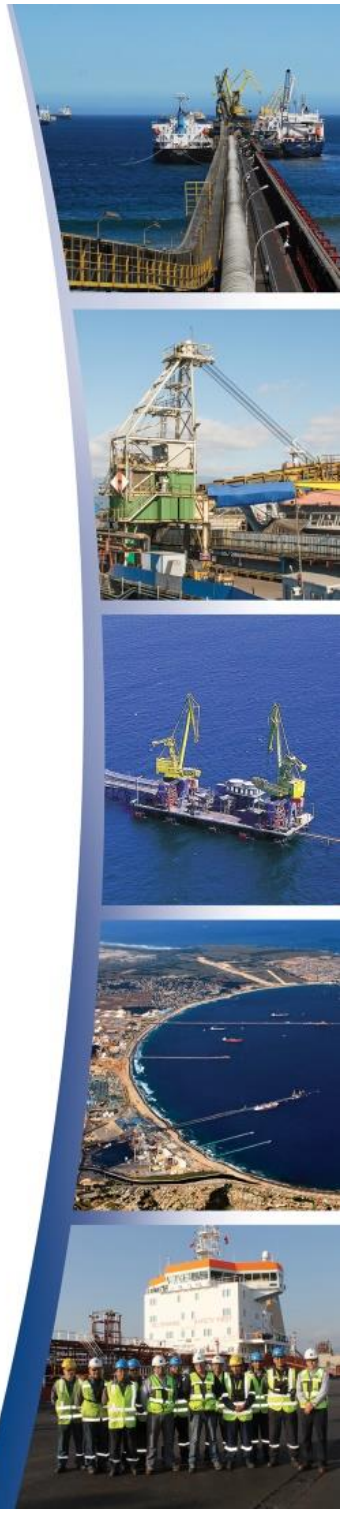
2. Velar por el cumplimiento de la normativa nacional e internacional aplicable a las actividades de su negocio y los estándares corporativos, relacionados con seguridad, salud ocupacional, medio ambiente, energía y calidad.

3. Implementar todos los recursos necesarios y factibles para asegurar el cumplimiento de los objetivos y metas establecidos según los siguientes principios: la calidad en los servicios, satisfacción de los clientes, gestión de la energía, prevención de la contaminación, accidentes y enfermedades profesionales, así como también, el diseño y compra de productos y servicios eficientes, para la mejora del desempeño energético.

4. Mantener disponible la información del Sistema Integrado de Gestión, a todo el personal de ***Puerto Ventanas S.A,*** para asegurar el cumplimiento de los objetivos y metas, en el marco de un mejoramiento continuo en el desempeño de sus procesos.

Jorge Oyarce Santibañez
Gerente General
Puerto Ventanas S.A.

Vigencia desde: Octubre 2014



Integrated Management Policy and Environmental Report can be downloaded from Puerto Ventanas website:

http://www.puertoventanas.cl/

Or directly at the following link:

https://puertoventanas.cl/inversionistas/memorias-puerto-ventana-s/memorias-puerto-ventana-s-2017/

2.2. LOG OF ENVIRONMENTAL ASPECTS, LEGAL REQUIREMENTS AND PERFORMANCE INDICATORS

2.2.1. Identification of aspects and assessment of environmental impacts

The internal procedure P-002-SGI “Identification of Environmental Aspects and Evaluation of Environmental Impacts”, aims to define the methodology to be used for the identification and evaluation of the environmental aspects of Puerto Ventanas, whether in normal or extraordinary operation. This procedure is applicable to all activities and services currently performed in Puerto Ventanas.

RESPONSIBILITIES TABLE

Stages	**Responsible**		
	Coordinator of Environment and Communities	Supervisor of the Environment	All the staff
Evaluate environmental impacts		X	
Develop management plans for the management of significant environmental impacts	X		
Control aspect - environmental impact			X
Communicate the procedure	X		
Comply with the procedure			X

IDENTIFICATION OF ENVIRONMENTAL IMPACTS

1. Identify all the activities (normal, abnormal, and emergency) that are carried out in Puerto Ventanas, whether they are developed by the staff, contractors or visits.
2. Identify the environmental aspects in each of the activities identified in the previous point. The way to carry out the identification of environmental aspects can be carried out by: interviews with personnel, review of incident records, inspections of operations, measurements, or previous data.
3. Determine the environmental impacts for each environmental aspect (an environmental aspect can give rise to one or more environmental impacts).
4. Identification of the control and / or mitigation measures that currently exist in Puerto Ventanas.

EVALUATION OF ENVIRONMENTAL IMPACTS

For the evaluation of environmental impacts, the Frequency, Severity and Legislation criteria are used, which determine the magnitude of the these.

- Frequency: Periodicity with which each incident occurs

NUMBER	FREQUENCY
1	It happens, or it would happen in more than 5 years
2	It happens, or it would happen between 1 to 5 years
3	It happens, or it would happen in less than 1 year
4	It happens, or it would happen in less than 1 month
5	It happens, or would happen continuously or daily

- Severity: The level of damage caused by the environmental aspect or impact.

NUMBER	SCALE AND SEVERITY
1	**Despicable**: It is confined to interior of buildings, to a team or activity, duration of a week.
2	**Low**: It is confined to the interior of property, in one or more areas, its effects can be extended to 1 month.
3	**Medium**: It can cause deterioration in the environment; its effects will last for a period of 1 year.
4	**High**: It can cause damage to the environment or deterioration to health, its

	effects can last for more than a year.
5	**Very High**: It can cause damage to the health of the community and / or the environment, its effects being irreversible over time.

- Legislation:

VALUE	LEGISLATION OR COMMITMENT
1	There is no legislation
3	There is legislation and / or voluntary commitments

Significance of the environmental impact (S):

$$S = F \times Se \times L$$

- Frequency = F
- Severity = Se
- Legislation = L

If the value of the significance of the impact is equal to or greater than 45, the environmental impact is significant and therefore the environmental aspect that originates it is also significant.

MANAGEMENT OF SIGNIFICANT ENVIRONMENTAL ASPECTS

In order to monitor and control the significant environmental aspects in Puerto Ventanas, the following tools can be used:

- Environmental management programs.
- Procedures and / or operational instructions.
- Monitoring

2.2.2. Identification of legal requirements and other requirements:

ENVIRONMENTAL REGULATION PORT COMPLEX.

Puerto Ventanas has a review of legal and regulatory requirements within the framework of its management system that contains the requirements identified in environmental areas. Which is disseminated through R2-P004-SGI "Identification and monitoring of environmental legal requirements"

OPERATING PROCEDURE OF MANAGEMENT PLATFORM OF ENVIRONMENTAL QUALIFICATION RESOLUTION (EQR)

OBJECTIVE AND SCOPE

From the need to have a system that manages and monitors all environmental requirements linked to an Environmental Qualification Resolution (EQR) of Puerto Ventanas S.A. The environmental qualification resolution is the authorization that the Environmental Assessment Service of Chile delivers. It is an administrative document that is obtained once the evaluation process of the Environmental Impact Study or the Environmental Impact Declaration of a project has been completed. The EQR establishes whether the submitted project has been approved or rejected. In a favorable case, the conditions that are imposed will be mandatory: development of the monitoring and audit function.

The procedure applies to all areas with responsibility for compliance with the environmental requirements established in the EQR, which are indicated in the environmental monitoring platform Management of resolution of environmental qualification. The EQR involved are the following:

• EQR No. 263/2000 "Copper Concentrated Warehouse Project in Puerto Ventanas."

• EQR No. 229/2004 "Site 6 Project."

• EQR No. 009/2010 "Expansion of Copper Concentrates Storage Capacity in Puerto Ventanas."

• EQR No. 249/2014 "Expansion, Improvement and Modernization of the Shipment System for Copper Concentrates in Puerto Ventanas."

• EQR No. 066/2015 "Improvement of Storage Conditions for Copper Concentrate, 46,000 tons."

RESPONSIBILITIES TABLE

Stages	Responsible				
	Managements associated	Head of Area	Coordinator of Environment and Communities	Supervisor of the Environment	All the staff
Maintain and upload systematized information in platform “Mis Compromisos”			X	X	
Comply with the established requirements and upload information indicated in these		X			
Train personnel regarding the operation of the platform			X	X	
Verifiers of fulfillment of demands in the platform			X		
Support in the fulfillment of all the environmental demands of the X system					X
Support heads of areas or respective managers of platform use with respect to its operation			X	X	
Monitor indicators of compliance with the requirements of the respective heads of area			X		

GENERAL DESCRIPTION OF THE EQR PLATFORM.

The EQR management platform is created for the generation of an Environmental Monitoring Plan of PVSA which tracks compliance with the environmental requirements established in the Environmental Qualification Resolutions

ACCESS TO THE SITE

In order to access the EQR management platform, each person in charge of the area assigned to responsibilities must enter with credentials, with this username and password in the following link:

http://sga.integrasoluciones.cl/login.html

MAIN SCREEN OF EQR MANAGEMENT PLATFORM.

The main screen of the platform presents a summary on the management and states of compliance of responsibilities assigned to each EQR, which are visible in the presentation of graphical and statistical data that presents the progress of the fulfillment of responsibilities assigned to each area.

This platform contemplates a procedure P-004-MA "Operating procedure of platform **"MIS COMPROMISOS"**

EQR COMPLIANCE REPORTS THROUGH THE ELECTRONIC PLATFORM OF THE ENVIRONMENT SUPERINTENDENCE

The Environment Superintendence (ES), through resolution Exempt No. 223/2015, indicates the generation of environmental monitoring plans through the reporting of environmental monitoring reports and information generated during the execution of projects to activities in the Evaluation System of Environmental Impact (ESEI)

Therefore, Puerto Ventanas to comply with the new reporting system generates reports under the structure indicated in the Resolution. Which are reported on the electronic platform of the ES, in which the list of the five EQR of Puerto Ventanas S.A is registered, generating reports according to the commitment and frequency indicated by the EQR of each project and in the stage that it finds.

That is why, using the Excel spreadsheet, a report of the reportable compliance of the 5 PVSA EQRs is made according to the stage in which each project is located, in order to maintain an order of what information to report to the ES

MANAGEMENT WITH THE AUTHORITY

Puerto Ventanas S.A in its search for the best available technologies for sustainable operation makes constant coordination with the environmental authority to jointly define the definition of tools that allow Puerto Ventanas to be the best sustainable port.

Likewise, continuous contact is made with authority for the management of sectoral authorizations to prove that it complies with current legislation.

The environmental aspects and the legal requirements applicable to Puerto Ventanas S.A. operations are kept in a log, and each area has a matrix of environmental aspects with their respective controls and the legal requirements applicable to their processes. The following tables shows a summary of the environmental aspects, controls and legal requirements applicable to the Puerto Ventanas S.A. operations.

Table 1: Maintenance Matrix

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Maintenance workshops and works outside them	Used solvents, contaminated cloths, used oils, fluorescent tubes, lightbulbs, metal halide lightbulbs	Pollution of ground and water	Head of Maintenance	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83)	Maintaining health and environmental conditions in the workplace Compliance with the hazardous waste management plan, authorized by the sanitary authority	1. P-001-MA Procedure for comprehensive management of solid waste 2. P-011-PEM Hazardous waste management plan. 3. Annual training plan.
	Metals, used parts, packaging, plastic containers, wood, belt bands	Ground pollution	Head of Maintenance	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987.	Maintaining health and environmental conditions in the workplace	
	Electricity	Depletion of natural resources	Energy Management Engineer	N/A	N/A	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification
	Spills of chemical products, contaminated solvents, used oils	Pollution of ground and water	Head of Maintenance	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83)	Compliance with the hazardous waste management plan authorized by the health authority Storage of hazardous substances according to applicable legislation	1. P-010-PEM Procedure for management of hazardous substances. 2. I-005-PEM Instructions on control of minor spills to the ground.

Table 2: Terminal Petcoke Matrix (1-2)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Unloading, storing, loading and transit of trucks	Particulate matter	Alteration in air quality	Head of Terminal Petcoke	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Decree No. 12/2011, Decree 10/2015.	Perimeter mesh to contain dust	1. PO-001-TP Operating procedure Petcoke Terminal 2. Wetting of piles and transit areas. 3. Washing truck wheels. 4. Covering trucks and hoppers 5. Perimeter mesh to contain dust.
		Effects on interested parties	Environment Coordinator	N/A	N/A	
Wetting stockpiles and washing streets, wheels and mesh	Water	Depletion of natural resources	Environment Coordinator	N/A	N/A	1. Storage system with geomembrane. 2. Closed circuit with water recirculation.
	Water contaminated with Petcoke	Pollution of surface water	Head of Terminal Petcoke	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992.	Liquid waste management Water use awareness	
		Pollution of groundwater	Head of Terminal Petcoke	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992.		
		Ground pollution	Head of Terminal Petcoke	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987.		
Front loader, bulldozer, pickup truck	Combustion gases	Change in air quality	Head of Terminal Petcoke	Supreme Decree No. 148/2003 (Art. 6), Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/2005 (Art. 3), Decree 112/2002, Decree 113/2002, Decree 114/2002.	Request for machinery documentation	1. Own vehicle maintenance schedule. 2. Roadworthiness checks up-to-date. 3. Requirements 1 and 2 from suppliers. 4. I-005-PEM Instructions on control of minor spills to the ground
	Spill of oils and fuels from own equipment and equipment of critical suppliers	Ground pollution	Head of Terminal Petcoke	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 S (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987.	Spill control sector Management of hazardous waste according to the Management Plan	

Lighting, offices, services and workshop	Electricity	Depletion of natural resources	Head of Terminal Petcoke	N/A	N/A	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification.

Table 3: Terminal Petcoke Matrix (2-2)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Power generators	Fuel	Depletion of natural resources	Head of Terminal Petcoke	N/A	N/A	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification.
	Combustion gases	Alteration in air quality	Energy Management Engineer	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/2005 (Art. 3), Decree 112/2002, Decree 113/2002, Decree 114/2002, Decree 115/2002, Decree No. 12/2011, Decree 10/2015.	Declaration of SIDREP emissions Declaration of generators emissions, resolution 15027/94	
Maintenance workshop	Cleaning solvents, contaminated cloths, filters, batteries	Ground pollution	Head of Terminal Petcoke	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987.	Maintaining health and environmental conditions in the workplace Compliance with the hazardous waste management plan, authorized by the sanitary authority	1. P-010-PEM Procedure for management of hazardous substances. 2. I-005-PEM Instructions for control of minor spills to the ground. 3. P-001-MA Comprehensive management of solid waste. 4. P-011-PEM Hazardous waste management plan. 5. Annual training plan.
		Pollution of groundwater	Head of Terminal Petcoke	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83).		

	Spill of chemical products, contaminated solvents, used oils	Pollution of ground and water	Head of Terminal Petcoke	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83). Supreme Decree No43/2016	Spill control sector Management of hazardous waste according to the Management Plan Storage of hazardous substances according to applicable legislation	

Table 4: Terminal Granos Matrix (1-2)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Offices and services for staff	Waste water	Pollution of surface water and groundwater	Head of Terminal Granos	Supreme Decree No. 1/1992.	Awareness of the use of water Management and disposal of liquid waste	1. Receiving chambers with drain systems. 2. Periodic cleaning of chambers by authorized service providers.
	Rest of paper, food scraps, toner inks and batteries	Soil and water pollution	Head of Terminal Granos	Supreme Decree N. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83),	Facilities for waste segregation Compliance with the waste management plan	1.-Procedure P-001-MA integral management of solid waste 2.-Procedure P-011-PEM, hazardous waste management plan
Loading silos for trucks and trains, storage warehouses for grain and cement, loading and unloading trucks, transit of trucks, belt conveyors	Particulate Matter	Alteration in air quality	Head of Terminal Granos	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013, Decree No. 12/2011, Decree 10/2015.	Belts encapsulated with covers Organizational standard: prohibition to store non-wettable fine granulometry products in the open air. Cleaning of trucks prior to their leaving the warehouses (instructions included in I-001-TG unloading trucks in grains	1. Belts encapsulated with covers. 2. Inspection during works and immediate corrective actions (instructions in PO-003-TG receipt and packing grain on belt conveyors). 3. Organizational standard: prohibition to store non-wettable fine granulometry products in the open air. 4. Covering of

					warehouse). Light gates always closed	trucks. 5. Cleaning of trucks prior to their leaving the warehouses (instructions included in I-001-TG unloading trucks in grains warehouse). 6. Light gates always closed. 7. Cleaning of warehouses and post-unloading transport system (instructions in PO-003-TG receipt and packing of grain on belt conveyors).
	Presence of vectors (Pigeons)	Damage to flora and fauna	Environment Coordinator	Supreme Decree N. 594/1999	Periodic fumigation service and authorized documentation	1. Plan for cleaning and vacuuming the terminal. 2. Implementation of light gates always closed.
Front loaders, transporters' trucks	Fuel	Depletion of natural resources	Head of Terminal Granos	N/A	N/A	1. Own vehicles maintenance schedule 2. Roadworthiness checks up-to-date 3. Requirement 1 and 2 from suppliers.
	Combustion gases	Alteration in air quality	Head of Terminal Granos	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/ 2005 (Art. 3) Decree 112/2002, Decree 113/2002, Decree 114/2002, Decree 115/2002, Decree N. 12/2011, Decree 10/2015.	Request for documentation of machinery	
	Spills of oils and fuels and own equipment and supplier equipment	Ground pollution	Head of Terminal Granos	Supreme Decree No. 594/1999 , Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987.	Spill control sector Management of hazardous waste according to the Management Plan	1. I-005-PEM Instructions for control of minor spills to the ground

Table 5: Terminal Granos Matrix (1-2)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures

Lighting and belt conveyors	Electricity	Depletion of natural resources	Energy Management Engineer	N/A	Awareness use electric power	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification.
Fire buildings and equipment	Combustion gases	Alteration in air quality	Head of Terminal Granos	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/ 2005 (Art. 3) Decree 112/2002, Decree 113/2002, Decree 114/2002, Decree 115/2002, Decree No. 12/2011, Decree 10/2015.	Training in the use of fire extinguishers and simulacrum	1. Prohibition to smoke in offices and the workplace. 2. Fire extinguishers and emergency equipment. 3. D-009-PEM Emergency manual.
	Water contaminated by fire	Pollution of ground and water	Head of Prevention, Safety and Emergencies	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992.	Liquid waste management	
	Solid waste	Ground pollution	Head of Terminal Granos	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Decree 75/1987.	Waste management	
Maintenance workshop	Cleaning solvents, contaminated cloths, filters, batteries	Ground pollution	Head of Terminal Granos	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013. Decree 75/1987.	Maintaining health and environmental conditions in the workplace Compliance with the hazardous waste management plan, authorized by the sanitary authority	1. P-001-MA Comprehensive management of solid waste 2. P-011-PEM Hazardous waste management plan. 3. Annual training plan.
		Pollution of groundwater	Head of Terminal Granos	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83).		
	Spills of chemical products, contaminated solvents, used oils	Pollution of ground and water	Head of Terminal Granos	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83).	Spill control sector Management of hazardous waste according to the Management Plan Storage of hazardous substances according to applicable legislation	1. P-010-PEM Procedure to manage hazardous substances 2. I-005-PEM Instructions for control of minor spills to the ground

Table 6: Dock Matrix (1-2)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Transfer of solid products from vessels to belts, trucks and viceversa	Particulate matter	Alteration in air quality	Head of Operations	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Decree No. 12/2011, Decree 10/2015. EQR No.249/2014	Conveyor belts and transfer towers confined Mesh use Dust collection systems	1. Sealed ecological shovels. 2. Stop works with winds greater than 19 knots (APL customer protocols). 3. Encapsulated receiving belts and hoppers. 4. Water aspersion in carbon hoppers. 5. Compliance with Maritime Authority requirements per Ord. No. 12.000/228/11 included in operating procedures. 6. Installation of containment mesh vessel hold hatches. 7. Installation of covers from vessel to dock (dock operating procedures). 8. Environmental watch program (EQR 01/99). 9. Carbon stranding watch and monitoring plan.
		Pollution of surface water	Head of Operations	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992.		
	Spills into the sea (failure of equipment, mishandling in operation)	Pollution of surface water	Head of Operations	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992. EQR No.249/2014	Copper concentrate Spill Plan Emergency Plan	1. Equipment maintenance program 2. Qualified crane operators 3. Installation of containment barriers in the perimeter of the vessel during carbon works 4. Contingency and emergency plan for spills into the sea of hydrocarbons and other substances.
		Effects on interested parties	Environment Coordinator	N/A	N/A	
		Damage to marine flora and fauna	Environment Coordinator	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992.	Monitoring of water in case of spill	

Front loaders, pickup trucks, sweepers	Combustion gases	Alteration in air quality	Head of Operations	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/ 2005 (Art. 3), Decree 112/2002, Decree 113/2002, Decree 114/2002, Decree 115/2002, Decree No. 12/2011, Decree 10/2015.	Request for documentation of machinery	1. Maintenance schedule. 2. Roadworthiness test up-to-date 3. Requirement 1 and 2 from suppliers
Lighting, belt conveyors, operation of towers and services	Electricity	Depletion of natural resources	Energy Management Engineer	N/A	Awareness of the use of electrical energy	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification.
Power generators	Combustion gases	Alteration in air quality	Energy Management Engineer	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/2005 (Art. 3), Decree 112/2002, Decree 113/2002, Decree 114/2002, Decree 115/2002, Decree No. 12/2011, Decree 10/2015.	Declaration of SIDREP emissions Declaration of generator emissions, resolution 15027/94	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification.

Table 7: Dock Matrix (2-2)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Transfers of liquids: Hydrocarbons and sulfuric acid	Remanents of products due to drainage of hoses and lines	Pollution of ground and water	Head of Operations	Supreme Decree No. 594/1999. Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83). Maritime Circular O-31/2004	Management, storage and final disposal of waste	1. PO-001-OM Loading sulfuric acid. 2. PO-009-OM Unloading and loading fuels. 3. PO-008-MA Comprehensive management of hazardous waste. 4. P-011-PEM Hazardous waste management plan.
	Product spills due to operational failure, failure of equipment, etc.	Pollution of surface water	Head of Operations	Supreme Decree No. 594/1999, Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992 Maritime Circular O-31/2004	Spill contingency Plan	1. PO-001-OM Loading of sulfuric acid. 2. PO-009-OM Unloading and loading fuels. 3. PO-008-OM Unloading asphalt. 4. I-005-PEM Instructions for
		Effects on interested parties	Environment Coordinator	N/A	N/A	

		Damage to marine flora and fauna	Environment Coordinator	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992. Maritime Circular O-31/2004	Spill contingency Plan Water monitoring in case of spills	control of minor spills to the ground (only hydrocarbons). 5. Certified hoses. 6. Compliance with ISGOTT regulations. 7. PVSA equipment maintenance schedule. 8. Check and maintenance of acid piping.. 9. Check and maintenance of fuel piping.. 10. Contingency plan for spills into the sea of hydrocarbons and others substances. 11. PMC Contingency plan for fuel spills.
Maintenance	Used solvents, contaminated cloths, used oils, fluorescent tubes, metal halide lightbulbs	Ground pollution	Head of Maintenance	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987. Supreme Decree No.43/2016	Spill control sector Management of hazardous waste according to the Management Plan Storage of hazardous substances according to applicable legislation	1. Environmental awareness signs: use chemical substances responsibly 2. P-011-PEM Hazardous waste management plan. 3. P-001-MA Comprehensive management of solid waste
	Spills of chemical products: Contaminated solvents, used oils	Pollution of ground and water	Head of Maintenance	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83).		1. I-005-PEM Instructions for control of minor spills to the ground. 2. P-010-PEM Hazardous substances management procedure. 3. P-001-MA Comprehensive management of solid waste. 4. P-011-PEM Hazardous waste management plan.

Table 8: Terminal Costa Matrix (1-4)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Areas for unloading trucks and trains, concentrate storage warehouses, loading and transit of trucks with concentrate, belt conveyors	Particulate matter	Alteration of air quality	Head of Terminal Costa	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013), Decree No. 12/2011, Decree 10/2015 EQR No. 263/2000 EQR No. 09/2010 EQR No.66/2015	Dust collection system in warehouses Dust extractors Keep gates closed in warehouses Towers and conveyor belts confined Keep sweeper circulating through the Terminal	1. Anglo-American Warehouses with negative pressure. 2. Operation of warehouses with closed doors. 3. Encapsulated receiving belts and hoppers. 4. Tailings dams at “Pavo Anglo I”. 5. Periodic inspections during the works and immediate corrective actions. 6. Organizational standard: Prohibition to store non-wettable fine granulometry products in the open air. 7. Covering of truck cargo. 8. Cleaning of trucks prior to leaving warehouses. 9. Vacuuming of trucks and sweeping the terminal’s streets.
	Spill of copper concentrate	Ground pollution	Head of Terminal Costa	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003, Statutory Decree 1/2013, Decree 75/1987. EQR No. 263/2000 EQR No. 09/2010 EQR No.66/2015	Copper Concentrate Spill contingency Plan Avoid the fall of copper concentrate from conveyor systems and storage warehouses	
	Dragging of PM deposited on the ground by rain	Pollution of surface water	Environment Coordinator	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art.73), Supreme Decree 90/2000, Supreme Decree No. 1/1992 EQR No. 263/2000 EQR No. 09/2010 EQR No.66/2015	Rainwater treatment plant (EQR requirement 09/2010). Treatment plant duly authorized by the Health Authority.	1. Terminal Costa rainwater collection system 2. Rainwater treatment plant
Front loaders, transporters' trucks, pickup trucks, mobile truck	Fuel	Depletion of natural resources	Head of Terminal Costa	N/A	N/A	1. Own vehicle maintenance program. 2. Roadworthiness checks up-to-date 3. Requirement 1 and 2 from suppliers. 4. Requirement that transporters’ trucks be a maximum of 5 years old (EQR). 5. I-005-PEM Instructions for Control of Minor Spills on the Ground.
	Spills of own and critical suppliers' oils and fuels and equipment	Ground pollution	Head of Terminal Costa	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003, Statutory Decree 1/2013, Decree 75/1987. EQR No. 263/2000 EQR No. 09/2010 EQR No.66/2015	Spill control sector Management of hazardous waste according to the Management Plan	

Table 9: Terminal Costa Matrix (2-4)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Lighting, operation of belt conveyors, operation of wheel washing, rainwater treatment plant and offices	Electricity	Depletion of natural resources	Energy Management Engineer	N/A	Awareness in the use of electric energy	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification.
Rainwater treatment plant	Treatment sludge	Ground pollution	Head of Terminal Costa	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987 EQR No. 09/2010	Waste management	1. P-001-MA Management of Solid Waste. 2. Chemical products spill containment parapet.
	Spills of chemical products and liquid industrial waste in treatment	Pollution of surface water	Head of Terminal Costa	Supreme Decree No. 594/1999, Statutory Decree No. 725 Sanitary Code (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Art. 6,8,25,27,29,31,33,34,80,83) EQR No. 09/2010	Liquid waste management Avoid contamination of water resources Maintenance for the correct operation of the Plant	1. Treatment plant incorporated into the maintenance program. 2. Operator training: Operations manual and plant maintenance. 3. Chemical products spill containment parapet. 4. I-005-PEM Instructions for control of minor spills on the ground.
		Pollution of beach land	Head of Terminal Costa	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987. EQR No. 09/2010	Beach cleanup contingency Plan	

Power generators	Combustion gases	Alteration in air quality	Energy Management Engineer	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/2005 (Art. 3), Decree 112/2002, Decree 113/2002, Decree 114/2002, Decree 115/2002, Decree No. 12/2011, Decree 10/2015. EQR No. 263/2000 EQR No. 09/2010 EQR No.66/2015	Declaration of SIDREP emissions Declaration of generator emissions, Resolution 15027/94	1. D-001-EE Energy Management Program PVSA V03. 2. ISO 50.001 Certification.

Table 10: Terminal Costa Matrix (3-4)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Wheel washer	Sludge	Ground pollution	Environment Coordinator	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987. EQR No. 09/2010	Waste management and disposal	1. P-001-MA-Comprehensive Management of Solid Waste.
	Contaminated water	Pollution of land and groundwater	Head of Terminal Costa	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree 90/2000 (Art. 4.1.2), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83) EQR No. 09/2010	Awareness of the use of water Liquid waste management	1. Closed Water reutilization circuit

Santa Fe fuel loading area (critical service provider)	Spills of fuels	Pollution of surface water	Head of Terminal Costa	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992, Law Decree 2222/1978 (Arts. 8,13,16,44,118, 146)	Legal compliance for fuel loading zone Spill control area Waste management Application of contingency or emergency plans	1. Requirement of environmental controls from contractor company. 2. Contractor faculties included in the environmental inspections program. 3. Requirement to record disposal of hazardous waste from contractors.
		Ground pollution	Head of Terminal Costa	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987, Decree No. 160/2008 (Arts. 8,13,16,44,118, 146)		

Table 11: Terminal Costa Matrix (4-4)

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Maintenance	Used solvents, contaminated cloths, used oils, fluorescent tubes, metal halide lightbulbs.	Ground pollution	Head of Terminal Costa	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987.	Spill control sector Management of hazardous waste according to the Management Plan Storage of hazardous substances according to applicable legislation	1. P-001-MA Comprehensive management of hazardous waste. 2. P-011-PEM Hazardous waste management plan. 3. Annual training plan.

	Metals, used parts and materials in disuse (pallets, rubber bands, metals, etc.).		Head of Terminal Costa	Supreme Decree No. 594/1999. Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987.	Waste management and disposal	
	Spills of chemical products: contaminated solvents, used oils.	Pollution of land and water	Head of Terminal Costa	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83)		1. P-010-PEM Management of hazardous substances. 2. P-011-PEM Hazardous waste management plan. 3. I-005-PEM Instructions for control of minor spills on the ground.

Table 12: Administration Matrix

Activity	Environmental Aspect	Environmental Impact	Responsible person / organization	Applicable legislation	Legal requirements	Control measures
Offices and services for staff	Rest of paper, food scraps, toner inks and batteries	Soil and water pollution	Head of Administration	Supreme Decree N. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83),	Facilities for waste segregation Compliance with the waste management Plan	1.-Procedure P-001-MA integral management of solid waste 2.-Procedure P-011-PEM, hazardous waste management plan
	Waste water	Pollution of surface water and groundwater	Head of Administration	Supreme Decree No. 1/1992.	Awareness of the use of water Management and disposal of liquid waste	1. Receiving chambers with drain systems. 2. Periodic cleaning of chambers by authorized service providers.
	Electricity	Depletion of natural resources	Energy Management Engineer	N/A	Awareness of the use of electrical energy	1. D-001-EE Energy management program PVSA V03. 2. ISO 50.001 Certification

Storeroom	Cardboard, plastics from packaging, plastic containers	Ground pollution	Head of Administration	Supreme Decree No. 594/1999.	Recycling awareness	1. P-001-MA Management of solid waste
	Spill of chemical substances	Ground pollution	Head of Administration	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Statutory Decree 1/2013, Decree 75/1987. Supreme Decree No.43/2016	Handling of dangerous substances (toiletries)	1. Maintenance of minimum stock per utilization. 2. Warehouse with spill containment system. 3. I-005-PEM Instructions for control of minor spills to the ground. 4. P-010-PEM Procedure for the management of hazardous substances.
Fire buildings and equipment	Combustion gases	Alteration in air quality	Head of Administration	Decree No. 144/1961 (Art. 1), Supreme Decree No. 346/1993 (Art. 1), Decree 20/2013 (Arts. 1, 6, 12), Supreme Decree 138/ 2005 (Art. 3) Decree 112/2002, Decree 113/2002, Decree 114/2002, Decree 115/2002, Decree No. 12/2011, Decree 10/2015.	Trainings use of fire extinguishers and drills	1. Prohibition to smoke in offices and workplaces. 2. Fire extinguishers and emergency equipment. 3. D-009-PEM Emergencies manual.
	Water contaminated by fire	Pollution of surface water	Head of Prevention, Safety and Emergencies	Supreme Decree No. 594/1999, Statutory Decree No. 725 (Art. 73), Supreme Decree No. 1/1992.	Liquid waste management	
	Solid waste	Ground pollution	Head of Administration	Supreme Decree No. 594/1999, Supreme Decree No. 148/2003 (Arts. 4,6,8,25,27,29,31,33,34,80,83), Decree 75/1987.	Waste management	

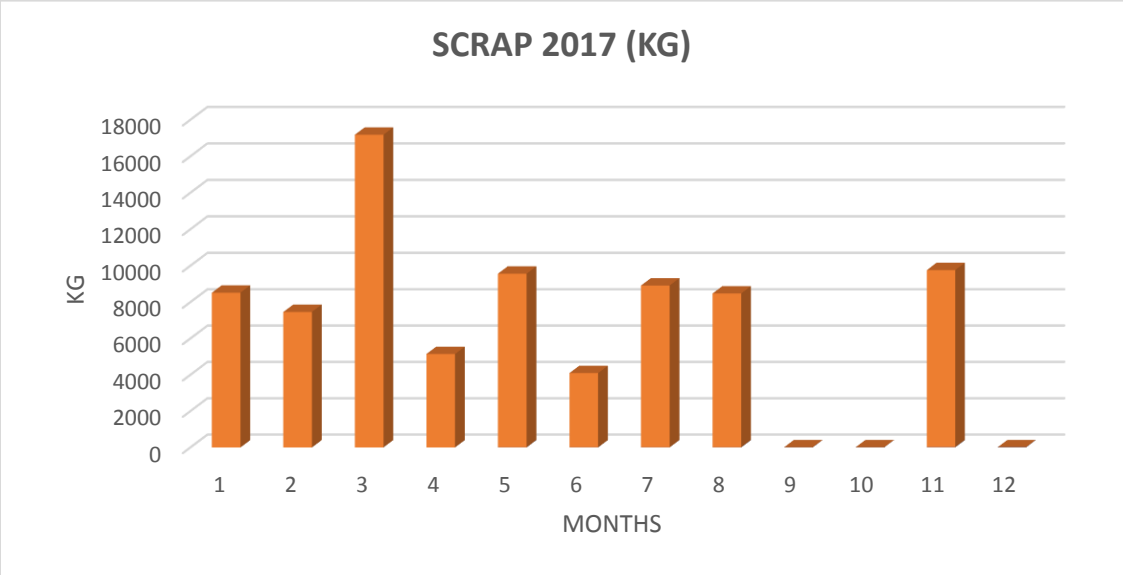
2.2.3. Puerto Ventanas S.A. Environmental Performance Indicators:

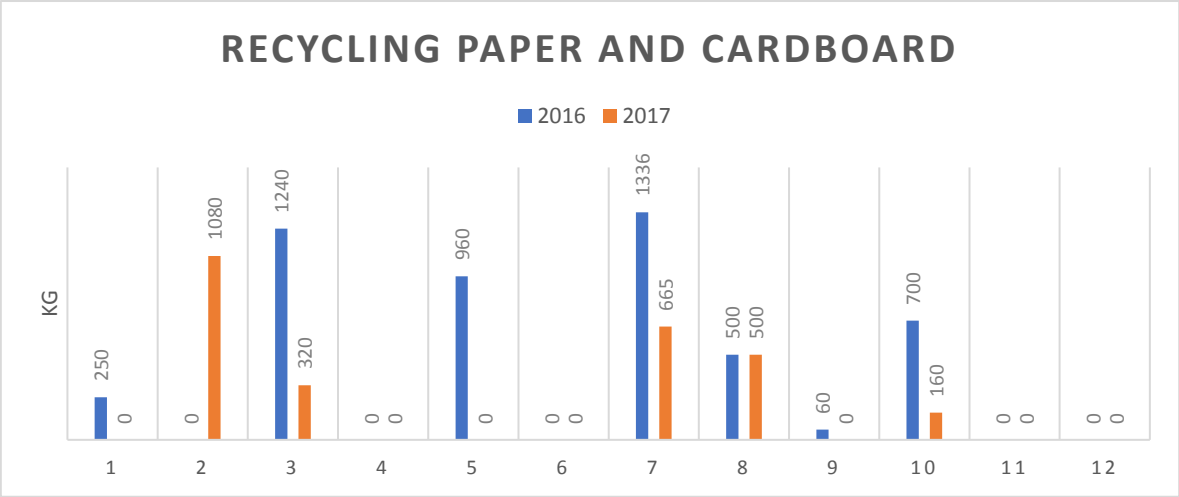
Puerto Ventanas S.A. has a series of indicators, through which it monitors compliance with its legal and regulatory obligations and measures the improvement of its environmental performance and the continuous improvement of its environmental management system.

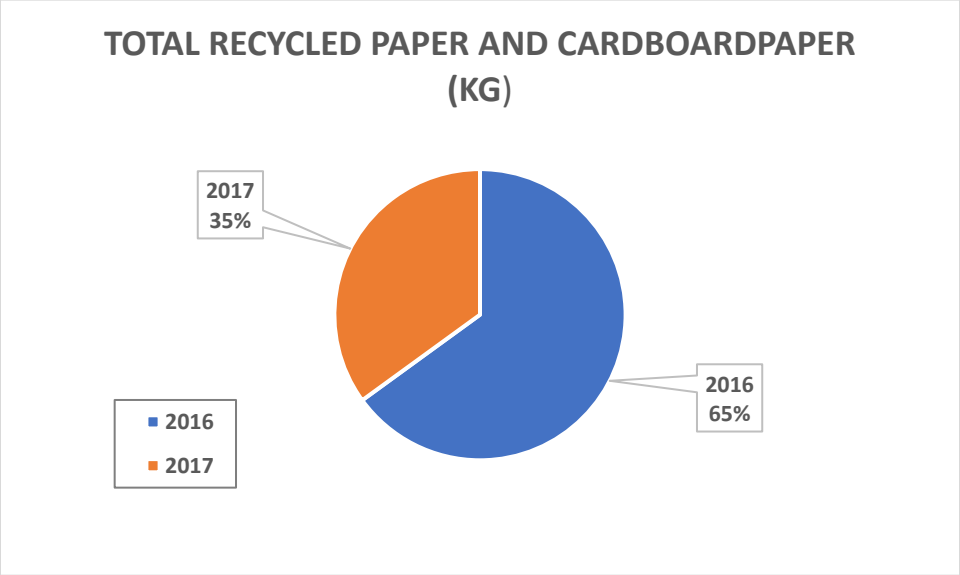
The main Puerto Ventanas S.A. environmental performance indicators are:

- Compliance EQR: **Compliance 100% stage of construction and operation**
- Recycling
- Environmental incidents: **0 in the year 2017**
- Environmental training
- Consumption of energy
- Greenhouse effect gases
- Environmental improvement projects

RECYCLING







The decrease in recycling was because in 2017 the use of paper and cardboard decreased compared to 2016

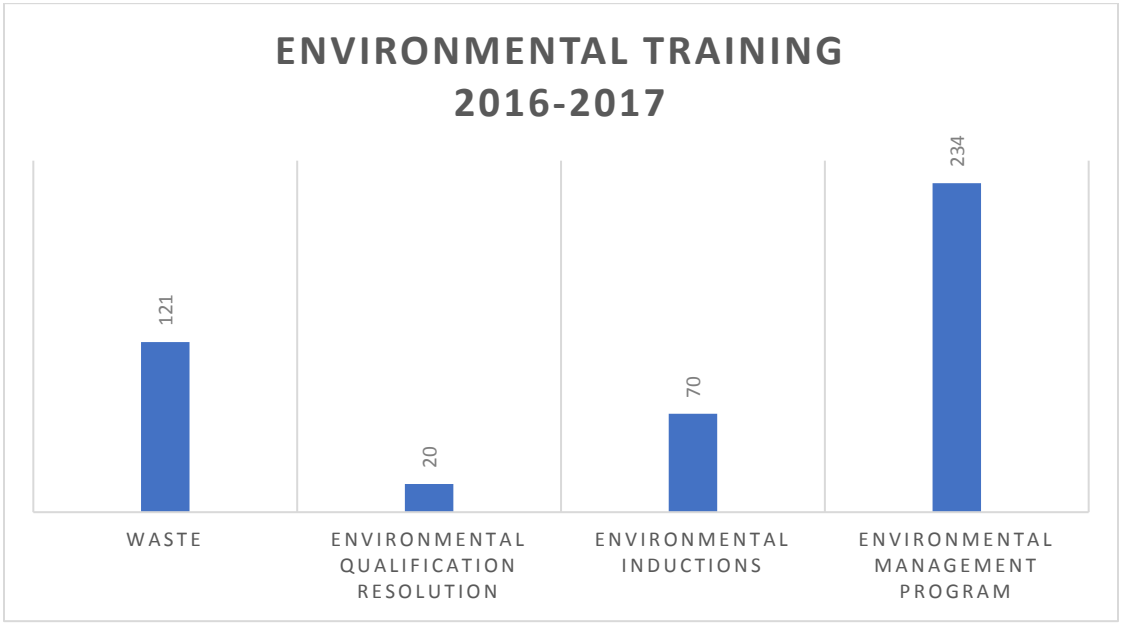
ENVIRONMENTAL TRAINING.

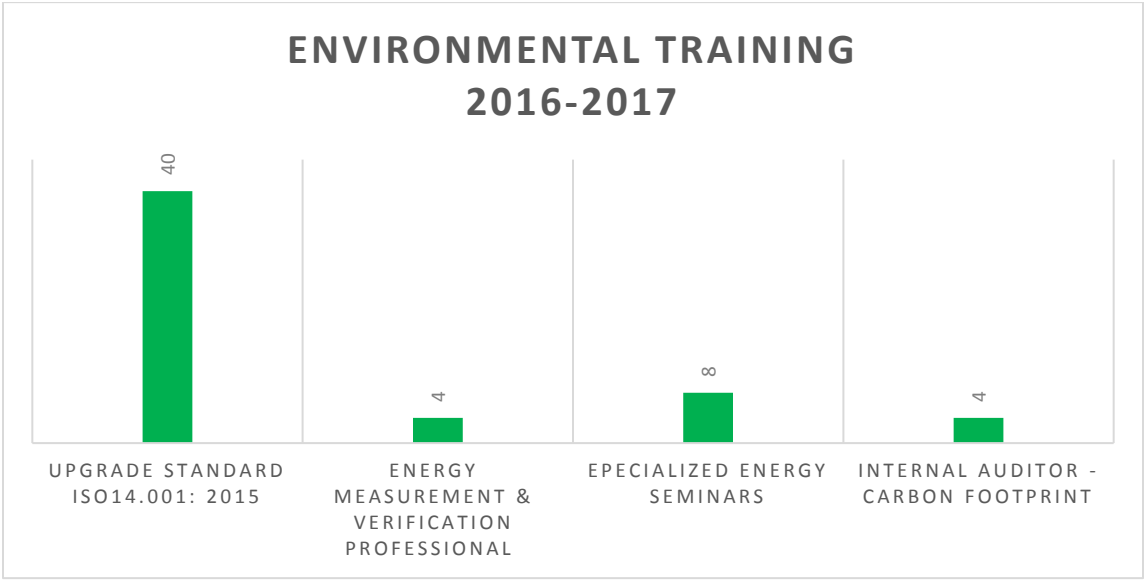
Personnel will be trained according to a Training Program in the Environment area. This training will be conducted with the following topics:

- Matrix of environmental aspects and impacts of each PVSA area. Indicating the associated control and mitigation measures.

- Integral management of waste generated by the activities and operations developed in PVSA.
- Environmental regulations applicable to the port complex.
- Compliance with port EQR commitments.

As for new workers, a talk will be given indicating the main environmental activities developed and the presentation of the company's integrated management system (IMS).





ENERGY MANAGEMENT PROGRAM

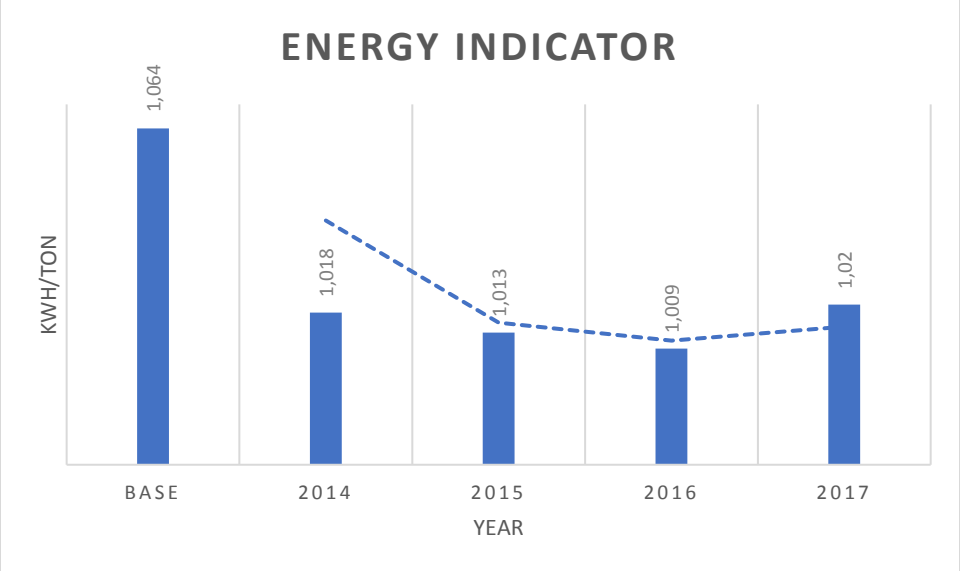
The Energy Management Program (EMP) established at the Port due to the implementation of ISO standard 50.001 has made it possible to identify guidelines with respect to the energy practices and policies that must be complied with and reinforced yearly, in order to comply with the objectives and targets proposed therein. This includes: Maintaining an energy efficiency management system that enables the continuous detection of savings opportunities. Objectively quantifying the energy performance through meters installed in the Pier unloading system. Keeping the Energy Efficiency Seal valid, obtained in September 2014 and November 2017.Ensuring that the acquisition of energy efficient technologies is preferred in projects of implementation, modification or renewal of equipment.

Case Study Snapshot	
Industry	Ports
Product/Service	Management Services in Loading, Discharging, Portage, Storage and Dispatch of Bulk, Liquid and Breakbulk Cargo.
Location	Bahía de Quintero, región de Valparaíso
Energy Management System	ISO 50001
Energy Performance Improvement Period	4
Energy Performance Improvement (%) over improvement period	5%
Total energy cost savings over improvement period	US $136,084
Cost to implement EnMS	US $21,000
Payback period (years) on EnMS implementation	< 1 year
Total Energy Savings over improvement period	1,336.3 MW/Hr
Total CO_2-e emission reduction over improvement period	511 metric tons

In the period 2013-2017, Puerto Ventanas mobilized a total of 33 million tons using electric power. The energy performance to date has allowed to generate energy savings of 1,336.3 MW/Hr and the consequent energy cost savings US $136,084.

The reduction of 0.044-kilowatt hour per ton mobilized, [kWh/Ton], in the period 2014 - 2017 results in the reduction of greenhouse gases (GHG), representing an accumulated reduction of 511 Tons of equivalent CO2, associated with electrical consumption in port operations. The Master Plan for modernization, improvement of infrastructure and energy efficiency of the Port is a benchmark in the solid bulk port industry in Chile and has allowed the creation of alliances with public bodies such as the Ministry of the Environment, an entity with which we jointly develop the first Guide of Good Practices in the Storage, Transport and Handling of Solid Bulks in Industrial Installations. In the same way, it has allowed to generate alliances with the Ministry of Energy of Chile, through the implementation of the Energy Efficiency Plan, achieving that Puerto Ventanas S.A obtained during 2014 and 2017 the Gold Seal of Energy Efficiency granted by this Ministry.

There is a specific plan "P-004-EE Annex Energy Efficiency Plan" with strategic activities to ensure effective control of the progress during the period. Each month, follow-up meetings are held, coordinated by the head of the Energy Management System, and are aimed at evaluating the status of implementation and evaluation of the following aspects: A.- Modification of facilities that affect the Energy Management System. B.- Follow-up to improvement projects and savings in development. C.- Monitoring of energy efficiency indicators. D.- Determination and projection of energy consumption and performance. E.- Monitoring of non-conformities and open improvement opportunities detected in internal and external processes.



The 2017 energy indicator decreased mainly due to the entry into service of new electric loads and equipment enhancement. The new system of storage and transfer of concentrate of load contributed with an installed capacity of 1MVA during that year, installation that did not exist previously.

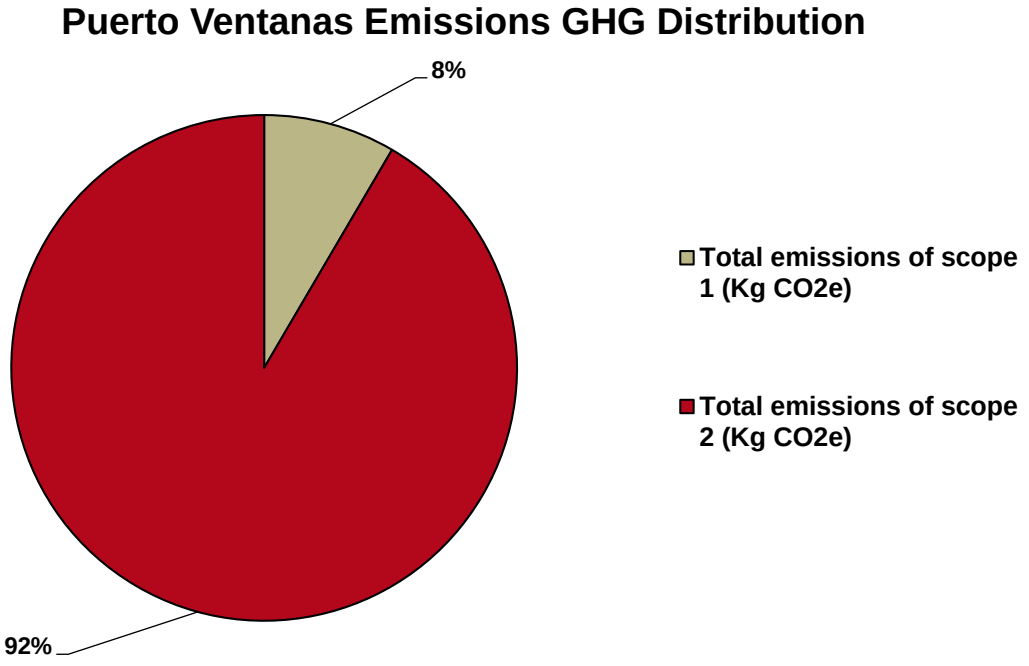
PUERTO VENTANAS CORPORATE CARBON FOOTPRINT

For the calculation of the carbon footprint of the activities of the port, the methodology described in the international standard of ISO 14064, developed by the International Organization for Standardization, has been used. The ISO 14064 standard establishes the requirements for the quantification, monitoring, reporting and verification of emissions and / or removals of greenhouse gases (GHG) on a voluntary basis in order to improve the management of GHGs.

It should be mentioned that the requirements established in ISO 14064 are similar to GHG protocol, since the elaboration of ISO 14064 was based on this protocol.

In addition, the process of verification of the inventory of greenhouse gas emissions was carried out by AENOR, in accordance with the requirements established in ISO 14064-3: 2006 "Greenhouse Gases. Part 3: Specification with guidance for validation and verification of greenhouse gases.

Most of the emissions generated in the Port are due to scope 2, that is, indirect emissions due to the consumption of electricity in the Port. These represent 91% of the total of the calculated emissions. These electricity consumptions are used for the operation of all reception and boarding machines from and to the ships, and transportation to the port sectors.



Direct emissions, due to mobile vehicles and diesel equipment that are owned by the port, represent only 9% of total emissions. This distribution is explained by the fact that a large part of the trucks and vans used in the port belong to external companies.

With respect to all scopes 1 and 2, the total GHG emissions of the port are 0.387 kg CO2e per ton mobilized. Although the differences in activities carried out and types of merchandise used in each port should be considered, these emissions can be compared with those of other ports in Chile that have also made the calculation, for example, the Port of Mejillones reported 0.7 kg CO2e per ton mobilized and the Port of Arica (TPA) reported 2 kg CO2e per ton mobilized for these same scopes.

In 2013, direct GHG emissions were 0.04 kg CO2e / Tons and indirect GHG emissions per energy of 0.460 kg CO2e / Tons, representing a 24% decrease in total emissions from 1 + 2 ranges. This decrease is mainly due to the decrease in the indirect emissions factor of the Central Interconnected System (SIC-Chile electricity network).

The following table shows the indicators of GHG emissions verified in the last 3 audits:

Classification	BASE (kg CO_2e/tons)	2016 AUDIT (kg CO_2e/tons)	2017 AUDIT (kg CO_2e/tons)
1. DIRECT EMISSIONS OF GEG	0.04	0,033	0,033
2. INDIRECT EMISSIONS OF GEG BY ENERGY	0.46	0,370	0,354
TOTAL 1 + 2	**0.51**	**0,402**	**0,387**

In order to demonstrate the seriousness of its actions and decrease the emissions of gases, Puerto Ventanas participates voluntarily with the HuellaChile emissions reporting program, of the Ministry of the Environment

The GHG emissions report have been made this year to Huella Chile through the Registry of Emissions and Transfer of Pollutants (RETC) of the Ministry of the Environment of Chile.

2.3. DOCUMENTED RESPONSIBILITIES AND RESOURCES ASSOCIATED WITH ENVIRONMENTAL ASPECTS

2.3.1. Responsibility of key employees at Puerto Ventanas S.A.:

The executive team of Puerto Ventanas S.A is led by the General Manager, who has direct control over the management and responsibility of directing the company's business, as well as being responsible for the judicial representation of the company. From his role he leads and delivers the necessary guidelines to manage and control adequately and the operation of the company, directly involved in the achievement of the objectives.

The functions of the main executives of the company is to ensure compliance with the strategy, with the business challenges established by the Board of Directors and the management of the company.

The executive team of Puerto Ventanas S.A. includes:

- General Manager
- Sustainability Manager
- Operations and Maintenance Manager
- Commercial Manager
- Infrastructure Assistant Manager
- Administration and Finance Manager
- Human Resources Assistant Manager

PRIMARY FUNCTIONS AND RESPONSIBILITY OF THE PUERTO VENTANAS S.A. EXECUTIVE TEAM

General Manager: Jorge Oyarce S., Transportation Engineer. The General Manager is appointed by the Board and is responsible for the company in general. He also has the direct control of the various Puerto Ventanas departments. The General Manager is the company's legal representative and has the right to be heard in the Board meetings. The General Manager is responsible for the company's processes being carried out in compliance with the regulatory framework that is applicable to the port's operations. The General Management Department approves the objectives of the Integrated Management System and authorizes the resources necessary for its due implementation along with the

Puerto Ventanas S.A. Integrated Management System Policy. The General Manager establishes, implement, and maintain an integrated policy within the scope defined by the Management System related to Safety, Environment, Quality and Energy Efficiency, appropriate to the purpose and context of the organization including the nature, magnitude and impacts, provide a framework of reference and include a commitment to comply with legal requirements and continuous improvement of the same system.

Sustainability Manager: Luis Fuentes M.- Mining Engineer - Master's in Environmental Management. The Sustainability Department must promote and ensure knowledge, internalization and implementation of company policies related to issues of Safety, Environment, Quality and Energy Efficiency. Is responsible for maintain the port in compliance with environmental regulations, safety, energy efficiency and community relation, safeguarding its reputation in relation to local and national communities and authorities, guaranteeing its growth against the demands of society, regulations and its reputation, through: build and consolidate the reputation of PVSA, as a "Green Port", Install a PVSA culture where one of its pillars is Sustainability and HSEC (Health / Safety / Environment / Community), ensure compliance with all the HSEC regulation for Port operations, maintain fluid and close relationships with political, governmental and professional authorities, install a collaborative, respectful and close model of relationship with the community, ensure the efficiency and quality of the company's processes, propose, plan and direct the implementation of the port sustainability strategy, participate in the Executive Team to ensure the progress of the PVSA objectives and design and implement the corporate and internal communications plan of PVSA.

Operations and Maintenance Manager: Rodrigo Pulgar – Mechanical Engineer. The Operations and Maintenance Department gives strategic direction to operations management, ensuring an efficient, competitive, modern, and safe operation that is an example in its sector. Must promote and ensure knowledge, internalization and implementation of company policies related to issues of Safety, Environment, Quality and Energy Efficiency. Guarantee the execution of the service stipulated in the commercial plan according to the contracts agreed with each client and respecting the policies, norms and rules that govern the port operations, relationship with Stakeholder: Authorities (mainly maritime); Clients, Trade union leaders, participate in commercial development and infrastructure projects, evaluating the feasibility and analysis of the operational process of the services and tasks considered in these projects, manage the performance of teams and direct and indirect collaborators, to promote the development of the port, participate in the executive committee, providing technical and operational criteria for decision making, promote and direct the development of innovation projects and continuous improvement to maximize the productivity and efficiency of port operations and ensure the alignment and coordination of the ground operations, maritime operations and maintenance teams to guarantee operational continuity and compliance with management goals.

Administration and Finance Manager: Jorge Concha M. – Civil Industrial Engineer. The Administration and Finance Department is responsible for manage the company's

resources, safeguarding the efficient and timely use of them, considering coordination and supervision of the work teams of all PVSA areas, allowing an adequate decision making for profitability and business growth. Must promote and ensure knowledge, internalization and implementation of company policies related to issues of Safety, Environment, Quality and Energy Efficiency. Manage the financial and accounting statements of Puerto Ventanas, generate the processes of protection of the company's information and the continuity of the computer systems that support the company's operation in all areas of work, advise in making decisions regarding major investments of the company, analyzing feasibility, return, adaptation to the operation, financial status of the port and viability of the same, analyze, manage, negotiate and resolve the financing of operations according to needs, definitions of the company's board of directors and policies, control the management and budget of PVSA, monitoring the accounting management and the performance of the indicators defined for the areas for adequate decision making, control and manage the use of resources, guaranteeing operational continuity and adequate financial management in compliance with regulations

Infrastructure Assistant Manager: Eduardo Monsalve S. – Ocean Civil Engineer. The infrastructure department leads the development of the projects that are carried out inside and outside the port, complying with the regulations and supervising the specific areas that apply within the development of the Project. Must promote and ensure knowledge, internalization and implementation of company policies related to issues of Safety, Environment, Quality and Energy Efficiency. Develop the necessary documentation to understand the project in progress, make purchase orders and follow up on all the inputs required to execute the project, with an opportunity and according to the defined budget, ensure that the construction and commissioning of equipment and supplies are properly executed under PVSA quality and safety standards.

Commercial Manager: Pablo Hojman A. – Civil Industrial Engineer. The Commercial Department is responsible for ensure the capture of new business and maintenance of the current business, loyalty to customers, seeking to grow services (inside and outside the port), in line with strategic planning, the operational feasibility of the Port and the profitability of the business. Must promote and ensure knowledge, internalization and implementation of company policies related to issues of Safety, Environment, Quality and Energy Efficiency. To ensure the capture of new businesses according to the strategic planning and operational feasibility of the Port, loyalty to current customers, making permanent monitoring of their needs, satisfaction of the services provided and generating improvements to existing services, evaluate the feasibility of potential businesses in other markets, different from the current ones, projecting future profits and operational and financial implications.

Human Resources Assistant Manager: Paula García V. – Psychologist. Directs and supervises the processes and tools that favor the development and growth of people, the attraction and retention through the systems of people management (recruitment, selection, training, performance evaluation and others) according to requirements,

strategic objectives of the company and labor standards. Also responsible for labor relations, administration of collective agreements and benefits to staff. Must promote and ensure knowledge, internalization and implementation of company policies related to issues of Safety, Environment, Quality and Energy Efficiency. To Lead the alignment, design, implementation and monitoring of the development model of people, from the point of view of Organizational development, it safeguards the rational and efficient use of the resources assigned to the area contributing to the achievement of the company's results, it controls the resources and coherence of the organizational structures in relation to the business objectives, verifying internal and external equity of the remunerations by position, design and implement, disseminate and control the policies and procedures relating to the company's people, manage compliance with the current collective agreement, maintaining labor relations according to company guidelines, generates guidelines for the unit of quality of life in terms of benefits, conventions and events and celebrations of the port.

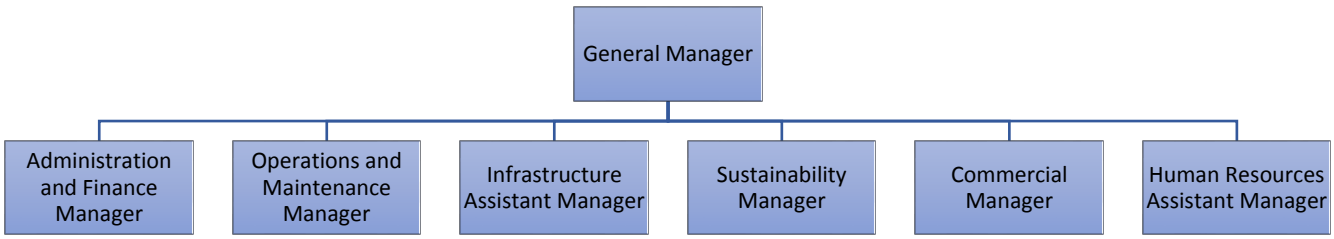


Figure 1: Puerto Ventanas S.A. Executive Structure

STRUCTURE TO SUPPORT THE ENVIRONMENTAL MANAGEMENT AT PUERTO VENTANAS S.A.

The Sustainability Department is responsible for the Port's environmental management, for which it has a team of university-educated professionals with extensive experience to provide support to the areas regarding the environmental management of Puerto Ventanas.

The Environment Coordinator at Puerto Ventanas S.A. is the Environmental Engineer Mariette Aros E., a professional with over 10 years of experience in public and private entities. She leads the environment area, with the primary responsibility of supporting the preparation of procedures and instructions required by each stage of the process, coordinating the required environmental monitoring of the company, updating the matrix of environmental aspects and impacts and regulatory obligations of the Port's operations,

verifying the timely and effective implementation of the requirements established in the company's operating licenses (Environmental Classification Resolutions), as well as defining, supporting and supervising the effective implementation of the environmental requirements in the Port's operations. For this she works directly with those responsible from the various areas, through the application of an Environmental Plan. She works with a team comprised of a junior Environmental Engineer. A staff of external environmental advisors and consultants support specific requirements as required by Puerto Ventanas S.A.

The Sustainability Department also has an Integrated Management System Coordinating Engineer (SGI), who has the primary function of ensuring that the requirements of the standards in which the Puerto Ventanas S.A. operations are certified are duly and satisfactorily implemented. In particular for ISO standard 14.001 on Environmental Management, he ensures that its procedures, instructions and records are duly implemented and protected. The Integrated Management System Coordinator ensures that the procedures and instructions are updated, are suited to the level of risk of the operations and that the employees involved in these processes are trained. The Integrated Management System Coordinator verifies the due implementation of these procedures through an internal audit process that is carried out twice per year, supported by a team of the Port's internal auditors.

Additionally, the Sustainability Department has an Energy Management Engineer who has the primary objective of ensuring the development of an energy efficiency plan and ensuring the due implementation of the Puerto Ventanas energy management system, pursuant to the requirements contained in ISO standard 50.001. In addition, the Energy Management Engineer leads the implementation of projects that are necessary to improve the efficiency of the consumption of energy at Puerto Ventanas, such as: Studies of the uses and consumption of energy at the port and participation in contractual reviews of electrical supply; management of technical information (plant equipment and systems, automatic control and power system), development of works at site and supervision (Technical Works Inspector), monitoring and following-up on energy efficiency indicators, providing feedback to the various port areas regarding the results of the consumption of energy and options for minimizing and using energy efficiently. His management will be mainly focused on identifying opportunities for improvement and the optimization of the use of energy in the Port's operations.

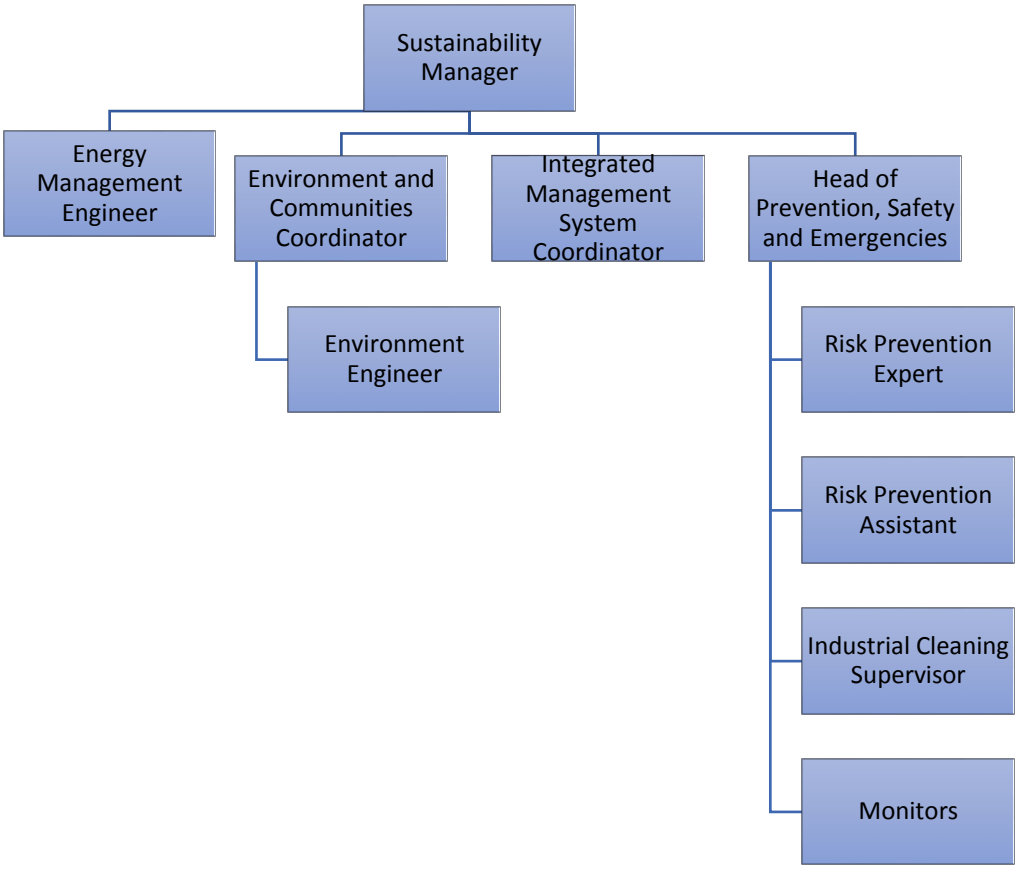


Figure 2: Sustainability Management Structure – Puerto Ventanas S.A

MANAGEMENT REPRESENTATIVE REGARDING THE INTEGRATED MANAGEMENT SYSTEM OF PUERTO VENTANAS

The responsibility for compliance with the requirements of the Integrated Management System rests with the General Manager, who has appointed a Management Representative for the system, which has the powers to modify and implement the initiatives, controls and monitoring necessary to ensure the compliance with the provisions of the Integrated Management System and the relevant legislation in matters of Quality, Environment, Energy, Safety and Occupational Health. In the same way, it informs the General Manager about the performance of the System.

Senior Management has decided to maintain the position of Management Representative and has appointed the Sustainability Manager of Puerto Ventanas S.A., in this role for the Integrated Management System. It has the authority to ensure that the system has been established, implemented, and maintained.

2.3.2. Environmental Responsibilities of Key Personnel:

The functions, responsibilities, and authority of all the personnel that participate or manage the Puerto Ventanas S.A. processes are duly documented and are communicated to the pertinent employees in the various Port areas. The documentation of the responsibilities is formalized through the position descriptions of each function and are defined in the operational procedures and instructions, which in their structure establish the responsibilities for compliance and supervision of the Environmental, Safety, Quality and Energy Efficiency requirements that apply to each process.

Table 13: Environmental Responsibilities of Key Personnel

For those areas for which the Port authority has responsibility, what personnel are responsible for the following functions?		
	Job Title or Name**	Department
Port Operations (Navigation)	Head of Operations	Operations
Port Operations (Shipping)	Ship Operator	Operations
Port Operations (Terminals)	Head of Operations	Operations
Cargo Handling Operations	Dock Administrator	Operations
Jetty/Wharf Management	Operations Manager	Operations
Site Management	Head of Operations	Operations
Strategic Planning	Head of Operations	Operations
Supplies acquisition	Head of Supply	Administration
Licensing/Permits	Sustainability Manager	Sustainability
Quality Management	Sustainability Manager	Sustainability
On site Contractor Management	Contract Administrator	Maintenance
Emergency Planning	Head of Prevention, Safety	Sustainability
Waste Management	Environmental Coordinator	Sustainability
Environmental Document Management	Environmental Coordinator	Sustainability
Environmental Data Management	Environmental Coordinator	Sustainability
Soil pollution assessment	Environmental Coordinator	Sustainability
Air Quality monitoring	Environmental Coordinator	Sustainability
Energy and Carbon Footprint monitoring	Energy M. Engineer	Sustainability Sustainability
Water Quality monitoring	Environmental Coordinator	Sustainability
Noise management	Head of Prevention, Safety	Sustainability
Vehicular Management of Terminal traffic	Head of Prevention, Safety	Sustainability
Energy efficiency	Energy M. Engineer	Sustainability
Integrated Management System Coordinator	SGI Coordinator	Sustainability
Occupational health	Head of Prevention, Safety	Sustainability

The environmental management budget is approved by the General Administration Department. Below is a detail of the articles that make up this budget for the year 2017.

Table 14: Environmental Management Budget 2017

BUDGET	TOTAL
• Final disposal of Hazardous Waste	
• Final disposal of Non-Hazardous Industrial Waste	
• Removal of Household Waste	
• Cleaning septic tanks	
• Chemical baths	
• Pest control	
• Removal of plastic bottles	
• Maintenance of bottle cages	
• Sleeves installation	
• Operational Cleaning Service	
• Beach Cleaning Service	
• Dust equipment calibration (dust emissions)	
• Cleaning of Campiche stream	
• Green Areas (plants, square, garden, trees)	
• Chemical reagents	
• Reagents system wheel washing	
• Supreme Decree No. 90 Rainwater Treatment Plant	
• Environment Day	
• Beach Cleaning Day	
• Environment Event Fair	
• Campaigns Environment	
• Transfer and authorization of paleontological remains Puchuncaví Museum	
• Paleontologist Report and Restoration	
• Isokinetic Measurements Dust Collector	
• Noise Measurement	
• Sanitary Report Update Site 3	
• Risk Management Plan EQR 66 La Greda Warehouse	
• Integrated Management System (Includes Ecoport-PERS recertification)	
• Advice on Carbon Footprint and Energy Management	
• Water Footprint Calculation and Verification	
TOTAL	**869,981 [$USD]**

2.4. REVIEW OF COMPLIANCE BY THE ENVIRONMENTAL POLICY AND LEGAL REQUIREMENTS

Analysis of the main focuses of development in the implementation of the Environmental Policy and legal aspects of Puerto Ventanas S.A.

As previously mentioned, Puerto Ventanas S.A. was recertified under the new upgrade standard ISO14.001: 2015 by the certifying company LRQA Business Assurance; the certification of this standard is valid until December 2019.

The audit corresponding to 2017 was performed in December and the main LRQA conclusions were:

- **Result of the audit:**

Based on the result of the audit, the Audit Team recommends the ISO 14001: 2015 certification of Puerto Ventanas SA for the agreed scope.

- **Objective:**

The objective of this audit is to verify that the company has implemented all the changes in its Integrated Management System corresponding to ISO 14001: 2015.

- **Evaluation:**

The evidence of implementation corresponding to the requirements of ISO 14001: 2015 has been evaluated, found that they comply adequately with the requirements of ISO 14001: 2015. No nonconformities were detected in this audit.

- **Result:**

Based on the foregoing, the audit team recommends the certification of the Puerto Ventanas Integrated Management System, in accordance with the requirements of ISO 14001: 2015, for the defined scope. The Auditor Team Leader confirms that the contractual requirements for ISO 14001: 2015 are correct.

I. Audit routes and sources of evidence:

Context

Analysis of external-internal aspects

- PVSA strategic planning (5 years)
- Guidelines how to achieve the objectives

Stakeholder requirements

- List of interested parties - PVSA version 01 September 2017- Quality requirements - Environment
- Rating of Risks and Opportunities of the context
- Natural risks by climate - environment

- Register Strategic risk approach - version 01 - nov2017 - Risk assessment matrix -
- Quality-Environmental- Occupational safety and health
- Procedure identification and evaluation of risks and opportunities and determination of interested parties for internal and external context- strengths, opportunities weakness, threats by area and management.
- External consultant evaluations Deloitte - Company risks - Analysis of opportunities - Escalation of risks and opportunities

Scope - revised, unchanged

Management Manual - objectives - expected result "effective application of management systems"

System Processes

Risk-based processes - Audit – Integrated Management Systems

Process map - May 2017 - at different levels - Examples: copper concentrate - process schemes

Evaluation and conclusions:

Based on the reviewed evidence, background, and evidence of the management system, it is concluded that the evaluation of the new ISO 14001 requirements does not identify potential NC findings in the Context requirement.

II. Audit routes and sources of evidence:

Leadership

Leadership and Commitment

- Activities of personalized programs: compliance (basic) - Reportability - Heads of area
- Responsibility for EQR compliance in area heads - Evidence in environmental platform
- Strategic planning (5 years) - guidelines how to reach the objectives - duplicate the EBITDA
- Leadership skills - development plans - Sigdo Koppers Group (SK Group) - Accountability and effective communication.
- Time management - feedback skills (awareness)
- Sustainability Indicator with several areas of evaluation - SK Group
- Setting objectives - Heads of area to their teams - Objectives retain talents - Training of new hires of experienced staff seniority.

Focus on client

- Evaluation process customer satisfaction
- Claims management

Roles and responsibilities authority

- Personnel selection process - job descriptors - responsibilities by levels and positions -
- Process of induction to the workplace
- Internal communication by mail and internal bulletin.
- Policy - July 2017 - review carried out - no changes / Review by Management: Nov.2017 presentation of heads of areas - days of closure of findings - indicators aligned with performance evaluation (coherence with strategy) - Focus on risks - by management-area-environmental. Internal audit focuses on reviewing risk management and contractors - Strategic objectives - priority - zero harm to the environment - continuous improvement of facilities - operations without adverse effects.

Evaluation and conclusions:

Based on the reviewed evidence, background, and evidence from the management system, it is concluded that the evaluation of the new ISO 14001 requirements does not identify potential NC findings in the Leadership requirement.

III. Audit routes and sources of evidence:

Operation

Planning and operational control

- Operations processes with incorporation of Environmental controls - Operations in Dock - Copper Concentrate Terminal -Grain Terminal - Petcoke Terminal
- Example: Operating procedures: Discharge of copper concentrate charges through hoppers - PO-021-OM
- Contractors Control - monthly meetings with contractors

Operational controls

- Rainwater treatment plant - performance
- Dangerous residues temporary patio - Resolution of operation
- Procedures for segregation of waste and disposal in an appropriate manner according to legislation.

Emergency response

- Emergency plan D-007-PEM

Simulation

- September 2017
- Planning on-site tests - testing of PVSA teams with participation Port Captaincy
- Equipment inspection maintenance tests – Nov. 2017 - Preparation of simulations - Maritime authority

Evaluation and conclusions:

Based on the reviewed evidence, background, and evidence from the management system, it is concluded that the evaluation of the new ISO 14001 requirements does not identify potential NC findings in the Operation requirement.

IV. Audit routes and sources of evidence:

Environmental Management System Performance Evaluation

Monitoring, measurement, analysis, and evaluation of results

- Waste management - Waste statistics - Data analysis and deviations.
- Indicators: totals - distribution according to origin - Monthly statistics from January to September - types of dangerous residues
- quantities - liquids - sweeps (89% of the total)
- Non-hazardous residues - quantities and types: scrap - paper - cardboard
- Indicator: Closing time of findings
- EQR web platform

Performance in schemes and standards

- ACHEE 2017 Gold Seal - Ecoport - Carbon Footprint

Internal audit

- Audit according to program carried out in Oct 2017
- Operations area - chief operations - terminal heads coast - dock -
- Legal compliance assessment - compliance and records information platform.

Management Revision:

- Review by management carried out in Nov2017 presentation of heads of areas - days of closure of findings -indicators aligned with performance evaluation (coherence with strategy) - Focus on risks - by management-area-environmental. Internal audit focuses on reviewing risk management and contractors

- Strategic objectives - priority - zero harm to the environment - continuous improvement of facilities -
- operations without adverse effects

Evaluation and conclusions:

Based on the reviewed evidence, background, and evidence from the management system, it is concluded that the evaluation of the new ISO 14001 requirements does not identify potential NC findings in the Performance Evaluation requirement.

Lloyd's Register

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LRQA
LRQA Chile – BC South America
Lloyd's Register Quality Assurance Limited
Blanco 625, Of. 112, Valparaíso
V Región - Chile

Sirs
Puerto Ventanas S.A.
Camino Costero s/n
Ventanas
Puchuncaví

May 04, 2018
LRQA N° 0119

Dear Sirs:

Through this communication, we confirm that Lloyd's Register Central and South America Ltd. – Agencia en Chile, have valid agreements to provide certification services to Puerto Ventanas S.A. under the requirements of the following Standards;

1. SAC0703207 – ISO 9001:2015 – Original Approval date: 10 December 2008
2. SAC6018361 – ISO 14001:2015 and OHSAS 18001:2007 – Original Approval date: 23 December 2013
3. SAC6021363 – ISO 50001:2011 – Original Approval date : 09 January 2015

Lloyd's Register Central and South America Ltd. – Agencia en Chile issues this certificate letter to Puerto Ventanas S.A. to be presented to Ecoports.

Best Regards,

Michael Ramdohr
Director of Business Development / Operations Coordinator
South America Management Systems
Lloyd's Register Central & South America Limited

Figure 3: LRQA communication about valid certifications in Puerto Ventanas

Compliance and Monitoring of Clean Production Agreement (Quintero Bay-Puchuncaví APL).

As a signatory to the Quintero Bay-Puchuncaví Clean Production Agreement, at Puerto Ventanas S.A. have complied 100% with the APL (Clean Production Agreement) commitments, which was audited by the Clean Production Council (CPL) and we have a plan with permanent environmental protection measures, committed to in the agreement signed with the Clean Production Council.

These include:

1. **Improve environmental management, incorporating the best available techniques:**
    - Cover cargo entering the port.
    - Close the transfer towers, avoiding dust in suspension.
    - Identify potential sources responsible for coal washing up on the coast of the Ventanas industrial complex and prepare an action plan for its control.
    - Avoid trucks transporting material that may pollute, washing the wheels of trucks that leave the port.
    - Develop an integrated management system.
    - Cover all stockpiles of copper concentrate, avoiding dust in suspension.

2. **Generate an energy efficiency plan, defining a baseline for consumption and then develop alternatives to reduce it.**

3. **Strengthen occupational health and safety.**

4. **Promote social responsibility actions for the community:**
    - Visual protection to care for the landscape.
    - Employment insertion programs.
    - Training directed towards those living in the area of influence.
    - Implement a Supplier Development Plan.
    - Develop a work plan with the community.

5. **Promote actions to protect the biodiversity present along the coast, developing a marine medium monitoring plan, which will be reported to the pertinent authorities.**

ECO Sustainable Logistic Chain Foundation (ECOSLC)

Dear Sirs:

We declare that Puerto Ventanas S.A. registration of legal or environmental requirements included in the application for Port Environmental Review System (PERS) dated May 14th,2018 is appropriate and complies with the environmental management standard ISO 140001:2004 and with Chilean Standards NCh2796.0f2009, NCh2797.0f2009, NCh2807.0f2009 and NCh2825.0f2009

Santiago of Chile, May 14th, 2018

Rodríguez Rosende y Cia Ltda Law Fim

RODRIGUEZ ROSENDE
ABOGADOS

Hugo Rosende Hernández
Abogado

Av Alonso de Córdova 3788 Of. 73-B
Vitacura, Santiago-Chile
Tel : +562 32630100

Figure 4: Letter of compliance issued by external Lawyer

MODEL OF CONTINUOUS IMPROVEMENT ENVIRONMENTAL MANAGEMENT

Puerto Ventanas S.A. has defined an Environmental Management model through the implementation of the requirements established in the standard in ISO 14.001: 2015, under the Integrated Management system, with a central approach established from the improvement cycle. Continuous: Plan - Verify - Check - Act.

Definition of Objectives of the Integrated Management System Puerto Ventanas S.A

The Port has defined objectives within the framework of its Environmental Management System, considering the strategic objectives and the context in which the organization operates. The strategic planning process considers the business challenges in a medium-term horizon, establishing objectives and action plans with a Management focus for each of the aspects included in the Port Integrated Management System.

Objective 2018 is shown in the ***Appendix 1***: “D-005-SIG_Objectives of the Integrated Manage System (2017)”, which includes the Port's environmental objectives.

Monitoring and verification of compliance with the objectives

Based on the definition of Objectives of the Integrated Management System, different monitoring and control instances are defined to verify compliance or deviations. Compliance is verified systematically through:

I. **Internal Audits**:

The verification of performance and compliance with the objectives and action plans is carried out through internal audits in order to verify whether the activities of the Integrated Management System (quality, environment, safety, energy and occupational health) meet with the planned provisions and thus, determine the effectiveness of the System. An annual program of internal audits (***Appendix 2***, page 1: “Internal Audit Program and Plan (2_2017)”) is established annually with at least two audits in the year. In said planning, the areas of the organization and the periods programmed for the respective audits are indicated. The Audit Plan (R2-P-007-SGI) is formulated considering the results of the evaluations of external and internal audits, weaknesses observed in the areas, among others, with the purpose of ensuring that after one year the status of the main regulatory requirements of the ISO 14.001: 2015 and all the critical processes of the company. The results of the audits are recorded in the internal audit reports and treated in the program of corrective and / or preventive actions.

The Internal Audits of the Integrated Management System are carried out by a team of duly qualified internal auditors, who belong to different areas of the Company. The areas and positions of the current internal auditors of Puerto Ventanas SA are the following:

	Position	Area
1	Supervisor Maintenance	Maintenance
2	Terminal Manager Petcoke	Operations
3	Management control	Administration
4	Risk Prevention Engineer	Prevention, Security and Emergencies
5	Head of administration	Administration
6	Development Engineer	Administration
7	IT	Computing
8	Integrated Management System Coordinator	Sustainability
9	Executive People	People
10	Technical supervisor	Terminal Costa
11	Chief of Information Technology	Administration
12	Electrical supervisor	Maintenance
13	Reliability Engineer	Maintenance
14	Energy Engineer	Sustainability
15	Spring Manager	Operations
16	Planning Engineer	Maintenance
17	Electromechanical	Operations

The target and scope of the internal audit is described below according to the ***Appendix 2***, page 2: “Internal Audit Program and Plan (2_2017)”.

Target: Verification of the degree of implementation of the Integrated Management System, in accordance with ISO 9001, ISO 50.001, ISO 14.001, OHSAS 18.001. (Up Grade 2015) and Verification of Carbon Footprint, Labor Legislation (Contractors Companies)

Scope: According to the scope of the certifications that PVSA maintains, the areas and processes will be audited according to the criteria ISO 9001, ISO 50 .001, ISO 14.001 and OHSAS 18.001 / Up Grade 2015 and Carbon Footprint, Administration: Customer Loans. Human Resources: Process of Induction, follow-up, and compliance to the training plan (Environment, Prevention, Energy, Carbon Footprint), Management Indicators of the area. Acquisitions: Accounting Suppliers invoices, Energy purchases. IT: Dissemination of Information Technology, Licenses, Contingency Plans, Energy. PVSA, PUERTO and FAENA Parity Committee: Maintenance Follow-up: EQR 66 Applicable Considerations / Costa Terminal: EQR 66 Applicable Considerations - Review of Procedures vs. Land, Laboratory Permits, Dock Energy: Review of Procedures, Petcoke Energy Management: Energy, Customized Program (Evidence), Procedure, Grain Terminal: Energy,

Personalized Program (Evidence), Procedure. Carbon Footprint: Verification of Calculation. Contractors: Labor-Prevention. (Sample of 3 Contractors). Commercial Management: Methodology Client Perception. Operations Management: Leadership in Terms of Compliance of Management of Findings and Personalized Program of Heads of Areas. Infrastructure: EQR 66.

The results and reports with the conclusions of the internal audit are recorded in the ***Appendix 3***: "Internal Audit Reports"

- Page 1, Audit Report_Sustainability (2_2017)
- Page 2-6, Audit Report_Operations (2_2017)
- Page 7-10, Audit Report_ Administration and Finance (2_2017)
- Page 11-12, Audit Report_Human Resources (2_2017)
- Page 13-15, Audit Report_ Business Development (2_2017)

The meeting record is in accordance with the ***Appendix 4***, page 1: Meeting Registration:

- Internal Audit Registration

II. <u>Review by the Management</u>:

The results of the Audit, as well as the results of the performance of the processes and the Integrated Management System, the effectiveness of the actions taken, are reviewed twice during the year in Management meetings. The presentation is made by the area heads and Respective Managers, who, together with the General Manager, review the results of the period. The structure of the Review includes in its content, the following aspects of the Environment:

- Performance in Energy: Indicators of Energy Consumption, Results and Main Changes.

- Environmental Performance, Compliance with Indicators of Environmental Rating Resolutions, Indicators of Hazardous and Non-Hazardous Waste Management, Scrap Indicators, Results with Rainwater Treatment Plant.

Based on the presentation of results directly carried out by the functional areas, it allows the leadership in relation to environmental issues to be directly managed with a responsibility on the part of the functional areas, which are advised and supported by the Environment area.

The meeting record is in accordance with the ***Appendix 4***, page 2,3: Meeting Registration

- Review by Management Meeting No.1 Registration
- Review by Management Meeting No.2 Registration

III. External audits:

Semi-annually additional to the internal audits, Puerto Ventanas S.A. voluntarily decides to submit to third-party audits conducted by Lloyd Register, in order to ensure that the Integrated Management System implemented is effectively maintained.

The results of the audit are referred in the page 52-56 and 71 of this report.

IV. Learning due to unplanned events:

Additionally, Puerto Ventanas has a tracking system to enter the corrective actions that are defined based on the incidents analysis and the findings identified as Non-Conformance or Improvement Action that are the result of an audit internal or a review of some process. These actions are carried out through a platform (software), after the entry of the respective cause analysis developed by a multidisciplinary team. To this end, a procedure of corrective actions is maintained where the methodology is defined so that the actions are effective and can be followed through indicators in the aforementioned platform, in order to ensure that learning from unplanned events is available to the Company. The coordinator of the Integrated Management System of Puerto Ventanas S.A, periodically monitors the improvement actions that are defined within this process, having as a responsibility to verify the effective closing of the actions that are defined for each incident. The results of this process are presented by the heads of each area, through meetings with the different heads and managements, at least once a month, determining additional actions for continuous improvement, if necessary.

The Tendency of findings (unplanned events) is described below according to the ***Appendix 5***: “Tendency report of findings (November 2017)”

The trend of the performance in the closing of findings until the month of November, with a global result of 89% in the management of findings (Findings closed / Total of Findings), increasing the tendency that we had during the year, even when During that month, the internal audit findings were entered. Although the percentage management increases that we have had during the year, have a close relationship with some milestones of revision, such as Internal and External Audits and Management Meetings, it should be noted the effort and good work that the areas have done in these instances

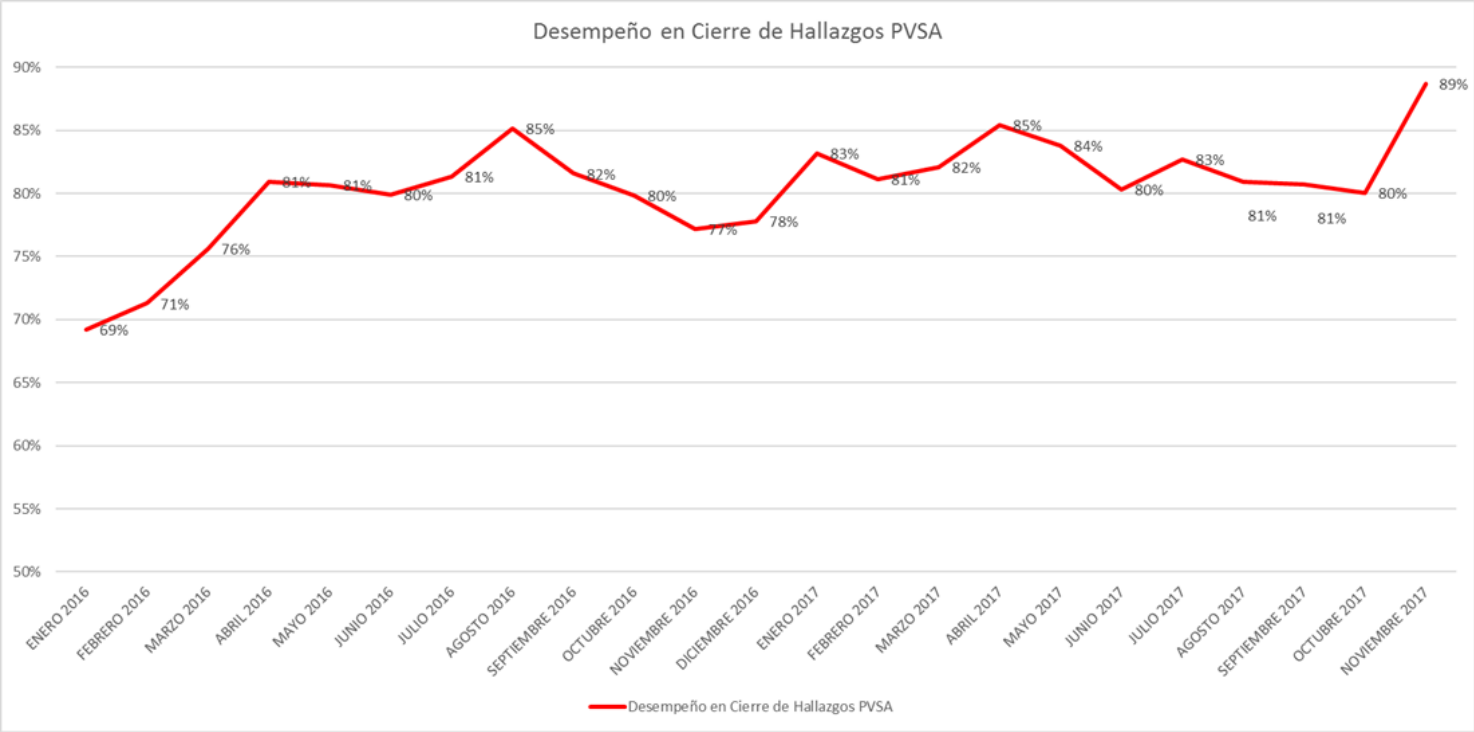


Figure 5: Performance in closing findings

V. Monitoring of EQR and Legal compliance:

To monitor compliance with Legal and Environmental Qualification Resolutions, the Environment area through a tracking software, performs automatic reports of warnings and alarms, to ensure compliance with reports, records, and deadlines in the EQR. Refer to point 2.2.2, page 56 of this report.

VI. Monitoring through Management Control:

In addition to the controls mentioned above, the management control area consolidated monthly performance in terms of energy and environment to all managements, in order to develop specific actions associated with maintaining performance according to plan.

The check-up through these instances of improvement, the expected results are evaluated, and new challenges or actions are proposed to achieve compliance with the strategic planning.

2.5. ENVIRONMENTAL REPORT

Environmental Management System, which is in line with the requirements of the standard ISO 14,001/2,005. During the year 2017, Puerto Ventanas S.A. it was recertified under the latest version of this standard, incorporating strategic aspects for our business, as the focus of environmental management based on the risks of our operations, an exhaustive analysis of the processes and the strengthening of leadership at all levels of the organization, as a basis for management success environmental. This has allowed us to integrate environmental management into processes of business, strategy, and decision-making at all levels.

In the same way, the Environmental Management System of Puerto Ventanas S.A, allows to establish in a verifiable way a systematic and proactive management of the whole organization for the protection of the environment.

In addition, this system identifies and monitors compliance with the legal requirements and others, applicable to the system of integral management of the organization related to safety, environment, quality, energy efficiency, occupational or environmental aspects and administration and finance. To do this, it has software that supports the monitoring of commitments legal-environmental and management of Puerto Ventanas S.A. where all the obligations are identified and segmented by area and scope of specific responsibility, allowing them to be managed more efficiently.

On the other hand, Puerto Ventanas S.A, determines the external and internal factors that are relevant to its purpose and strategic direction and that affect its ability to achieve the expected results of its integrated management system. To define the context analysis, the SWOT (Strengths, Opportunities, Weaknesses and Threats) tool is used, determining the risks as negative factors and the opportunities as positive factors, considering internal aspects such as the organizational culture, the knowledge, the performance of the processes, among others, and for the external context, the legal, technological, competitive, cultural, market and social environment, among others, is considered. To obtain a representative sample, the SWOT is obtained from the following groups of interest: Managers, area heads and union representatives. Who consolidates this information is the coordinator of the Management System and is presented to the General Management in the review by the Management, for its Validation. The risks and opportunities are evaluated, according to document D-008-SGI Identification and Evaluation of Risks, Opportunities and Interested Parties of Internal and External Context, and managed through one or more treatments as defined by requirement 6.1 of ISO 9001: 2015 and ISO 14001: 2015. It has been established that the SWOT analysis will be updated when the organization deems appropriate and will be retained as documented information.

Actions to address Risks and Opportunities

PVSA determines the risks and opportunities from the internal and external context of the Organization, through an evaluation methodology, action plans are generated in accordance with document D-008-SGI: Identification and Evaluation of Risks,

Opportunities and Stakeholders Internal and External Context, which is maintained and preserved as documented information.

Procedure description: Understanding of the Organization and its context

In order to identify the context, the Management System Coordinator identifies the internal and external questions that are relevant for its purpose and strategic direction, through interviews, with the main PVSA stakeholders. The interviews are made to Managers, Area Managers, the Joint Committee and the Trade Unions, from which a consolidated SWOT analysis is obtained, including all the aspects declared in the interview. Through this, the risks related to the business are identified, which are complemented with the strategic Risks updated by the Company year after year.

To evaluate opportunities, the following aspects should be considered, when appropriate:

- In the case of business, establish a potential market, be aligned, there are competitors in the market that you want to address. The business is part of the Vision and Mission of PVSA,
- The Opportunity is compatible with the values of the company,
- A present and / or future need is met,
- What scope or number of workers involves the opportunity,
- Viability plan need of resources, experience,
- Identify the risks of taking the opportunity, if applicable.

Once the necessary considerations have been evaluated, it is necessary to define which opportunities will be addressed so that the organization can define the resources and be responsible for their implementation.

Negative risks and Opportunities are validated as context in review by Management, prioritizing those that affect the corporate objectives, defining the risk scenario of PVSA.

Business Risks

After analyzing the context, Strategic, operational, and tactical risks are aligned through a disaggregation of the risks of the Business, defining that the superior controls are the objectives for the subordinate control. Based on this, a Matrix of Strategic, Operational and Tactical Risks is defined.

The following table shows the Stakeholders List, identifying each of them and the quality and environmental requirements.

Table 15: Stakeholders List

No.	Stakeholders	Quality Requirements	Environment Requirements
1	Community people	Hiring local people	Hiring local people
		Various requirements (support for events and others)	Various requirements (support for events and others)
2	Fishing guilds and others.	Economical support	Economical support
3	University community	Know the port sector	Know the port sector
4	Basic and average educational community	Improve your experiences in visits: example: ex. Getting on a ship	
5	Customers	Contract compliance	
6	Suppliers	Timely payments	
7	Certifiers	Comply with the rules implemented	Comply with the rules implemented
8	Workers / Trade Unions	• Labor union: quick coupling • Definition of clear attributions and responsibilities	
9	Joint Committee		That the rules and requirements indicated in minutes of meetings are met.
10	PVSA Owners	Fulfill customer contracts	Regulatory compliance and EQR and not appear in the media.
11	PVSA Directory	Fulfill customer contracts	Regulatory compliance and EQR and not appear in the media.
12	PVSA Management	Fulfill customer contracts	Regulatory compliance and EQR and not appear in the media.
13	PVSA Headquarters		Regulatory compliance and EQR
14	Local authorities		Regulatory compliance and EQR
15	Regional authorities		Regulatory compliance and EQR
16	National authorities		Regulatory compliance and EQR
17	Media		
18	Environmental organizations		• Regulatory compliance and EQR and beyond basic compliance. • They give permanent follow-up to the behavior of the companies to point out the breaches.

2.5.1. Main actions of Environmental Management

WASTE MANAGEMENT

We have a waste management system, according to the regulations that minimize and reduce the environmental impact of these for its final disposition. It also promotes the reuse, recycling, treatment, and final disposal, with a focus on the reduction in waste origin, and the environmental education in the workers.

RECYCLING PROGRAM: "PUERTO RECICLA"

This program began in the first semester of 2017 and its main objective is to promote a culture of recycling and strengthen the waste management of the Port, segregating them according to their characteristics.

The purpose of this initiative is to create, educate and promote a recycling culture within the company and strengthen the port's waste management program.

The objectives and scope of this initiative are:

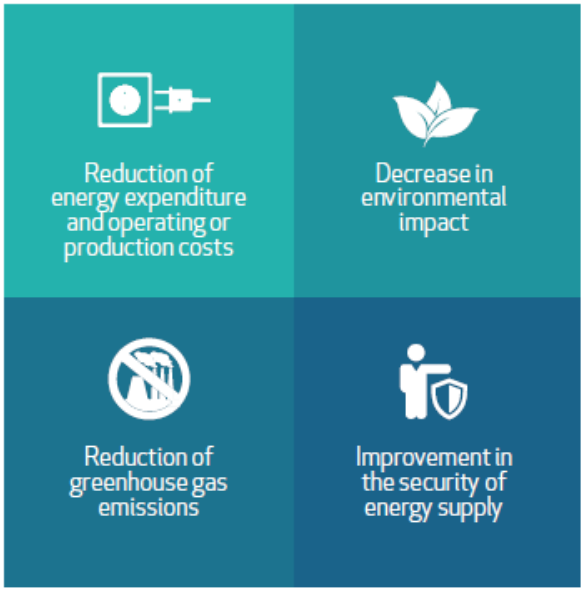
- Generate effective control of non-hazardous solid waste, hazardous and similar to household waste in generation, temporary storage and final disposal.
- Identify waste streams to be able to establish indicators and objectives associated with improving environmental performance.
- Perform inventory or monitor the non-hazardous, hazardous, and similar assimilable solid waste to households generated in the different areas of the Port.
- Segregate, in origin, non-hazardous solid waste, hazardous and assimilable to domiciliary originated.
- Reduce the generation of waste.

Recycling stations have been implemented at various points of the Port facilities that allow the waste to be properly collected and segregated, which are finally delivered to specialized companies. The materials that are considered in the program are residues similar to domiciliary, as they are; plastics, paper, cardboard, plastic bottles, hazardous waste, batteries, irons and scrap.

MANAGEMENT SYSTEM FOR THE EFFICIENT USE OF ENERGY

Puerto Ventanas S.A. maintains a Management System for the Efficient Use of Energy (EnMS) formulated under ISO 50.001, which has made it possible to define guidelines with respect to energy practices and policies in port operations.

The implementation of energy efficiency initiatives has generated multiple benefits in areas such as:



Electric power is one of the most relevant inputs in the operations of the Port, representing 2017, 89% of the total energy used.

To achieve these objectives, the program considers:

1. Constantly detect savings opportunities.
2. Quantify the energy performance with meters installed in the dock unloading system.
3. Generate activities that allow improving the energy performance with respect to the baseline 2013. During 2017, savings of 4.1% were achieved, compared to the base year.
4. Privilege energy efficient technologies in projects of implementation, modification, or renewal of equipment.
5. Identify the controls of applicable operations for the saving of electrical consumption.

Through our energy efficiency plan we have achieved a reduction of 5% of the energy per ton transferred, corresponding to 1,336 MWh.

In November 2017, Puerto Ventanas was re-certified in ISO 50,001 standard. The conclusions of the audit conducted by Lloyd Register are the following:

Result of the audit:

Based on the result of the audit, the Audit Team recommends the ISO 50001: 2011 certification of Puerto Ventanas S.A. for the agreed scope.

The purpose of this visit was to verify that the system continues to meet the requirements of ISO 50001: 2011 for the scope defined for certification. The results indicate, based on the evidence obtained from the audited samples, that the company has an energy management system implemented in accordance with the regulatory requirements and the commitments established by the organization. In the same way, these results indicate that the objectives of the processes reviewed are effective to achieve the expected results of its Management System.

The conclusion of the audit team is to recommend the recertification of the Energy Management System of Puerto Ventana SA in accordance with the requirements of ISO 50001: 2011, for the scope of the certificate: "Management of services of loading, unloading, portage, storage and dispatch of solid and liquid bulk and fractional cargo".

Continuous improvement:

The management system evidences its capacity for improvement by introducing actions to develop a centralized monitoring system for electrical consumption, as well as implementing participation actions in communication spaces to promote commitment to energy efficiency at the regional and national levels.

ENERGY EFFICIENCY GOLD SEAL 2017

In November 2017, the Ministry of Energy, delivered to Puerto Ventanas S.A the Gold Seal of Energy Efficiency, the highest distinction granted to the leading companies of different productive sectors of the country, which demonstrate a high commitment in this area. The seal is a recognition of the Ministry of Energy, administered by the Chilean Energy Efficiency Agency.

Puerto Ventanas S.A was awarded this recognition for its energy management policy, through which it develops a set of actions aimed at the responsible and efficient use of electricity, one of the main inputs of the Port's operations.

Because of this plan, the Port has decreased by more than 4% the energy consumption per ton transferred, through actions such as the incorporation of equipment with high energy efficiency and the installation of LED luminaires in its terminals.

MEASUREMENT OF CARBON FOOTPRINT

Puerto Ventanas SA was the first company to report its carbon footprint through the "Huella Chile" program implemented by the Ministry of the Environment, for which, in 2015, it quantified and verified greenhouse gas emissions (GHG), calculation that was certified by the Spanish Association for Standardization and Certification "AENOR".

The carbon footprint is the set of greenhouse gas emissions produced directly or indirectly, and its measurement serves as a management tool to know the behaviors or actions that are contributing to increase emissions, as well as identify actions to reduce them and conduct a more efficient use of resources.

The first measurements of Puerto Ventanas S.A indicated that 92% of greenhouse gas (GHG) emissions are indirect emissions derived from the consumption of electricity, the main source of energy in the operation of the port. The remaining 8% are direct emissions from the vehicles and diesel equipment used.

With the quantified emissions, an analysis of opportunities and risks was carried out in order to advance in the reduction of the carbon footprint by implementing measures and strategies to reduce the impact, internally encouraging innovation and process optimization.

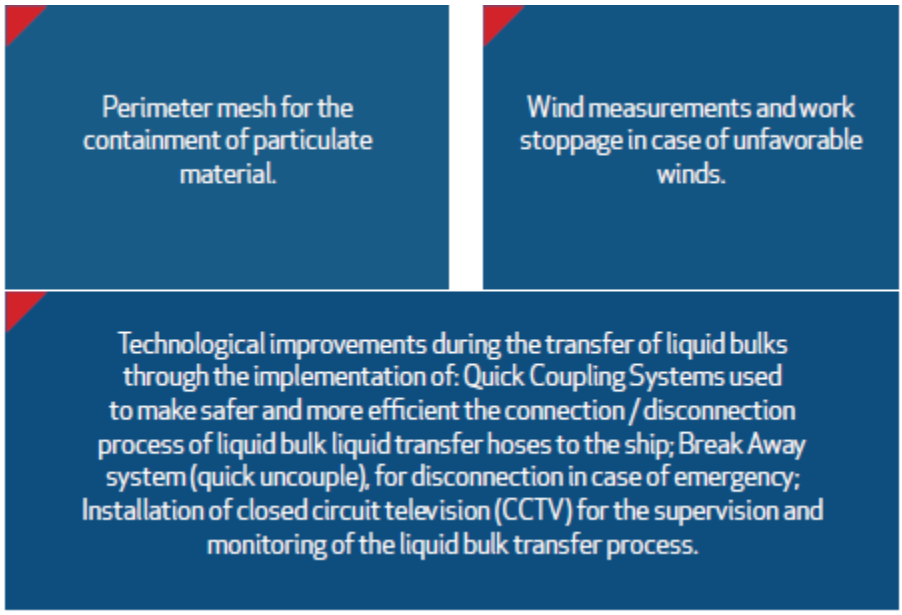
2.5.2. CONTROL MEASURES AND MONITORING

Puerto Ventanas SA, in compliance with the environmental legislation in force and the commitments assumed in the environmental resolutions (EQR) of which Puerto Ventanas SA is the owner, performs periodically, and within the deadlines established by the legislation, monitoring and quality measurement reports of air, which to date have not presented observations by the public inspection bodies.

Puerto Ventanas S.A constantly applies control measures, avoiding the alteration or impairment of the environment resulting from our activities.

Likewise, we apply control measures that avoid the alteration or affectation of the environment. These are:

Conveyor belts and closed towers for the transport of solid bulks.	Encapsulated systems that prevent the dispersion of particulate material	Ecological shovels completely sealed for the transfer of solid bulks.
Reception of copper concentrate by sealed containers which offers greater security for people, optimizes the time of operation, and contributes to the care of the environment.	Solid bulk storage warehouses with last generation of emission control systems.	Specific operational control measures during the coal unloading and transfer process.
Moistening of load during the unloading process (in those bulk that is possible to do it).	Permanent industrial cleaning program for the entire conveyor system.	Road vacuum system permanently to keep product free with suspension possibilities.
Cover of trucks that enter and leave our facilities to avoid the dispersion of material and the generation of particulate material.	Washing of truck wheels in order to avoid the dragging of material towards public roads.	Rainwater treatment plant.



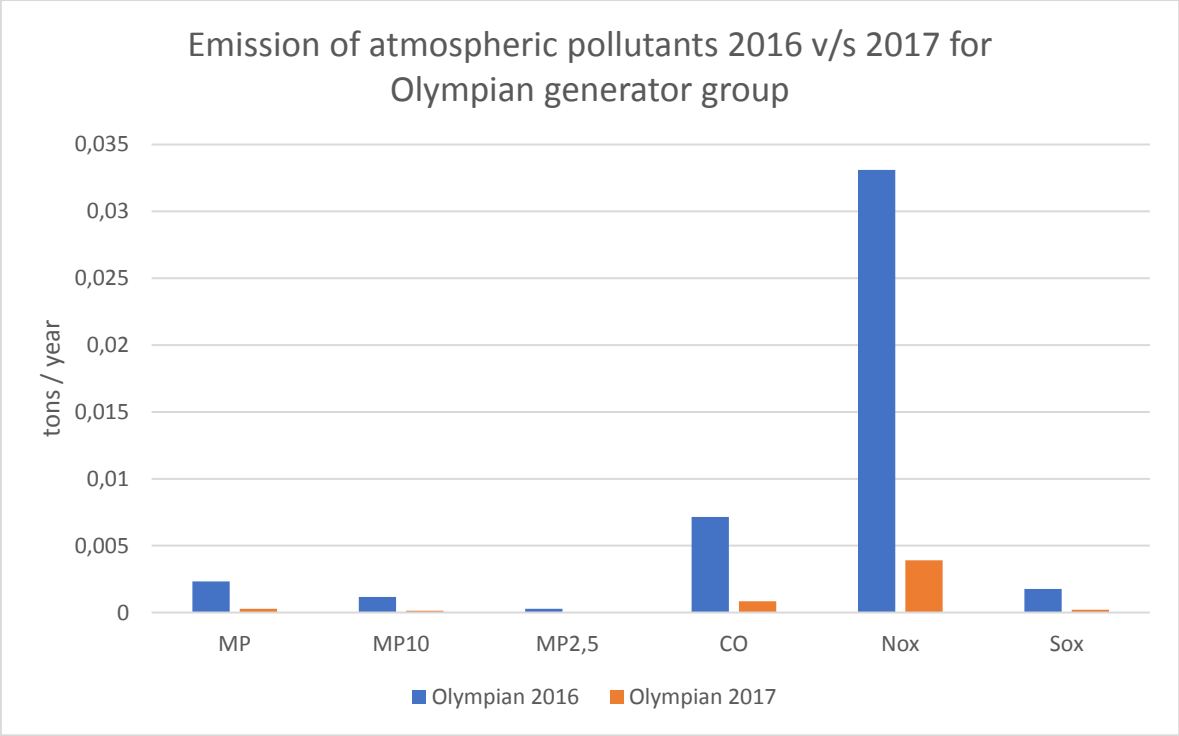
DECLARATION OF EMISSIONS

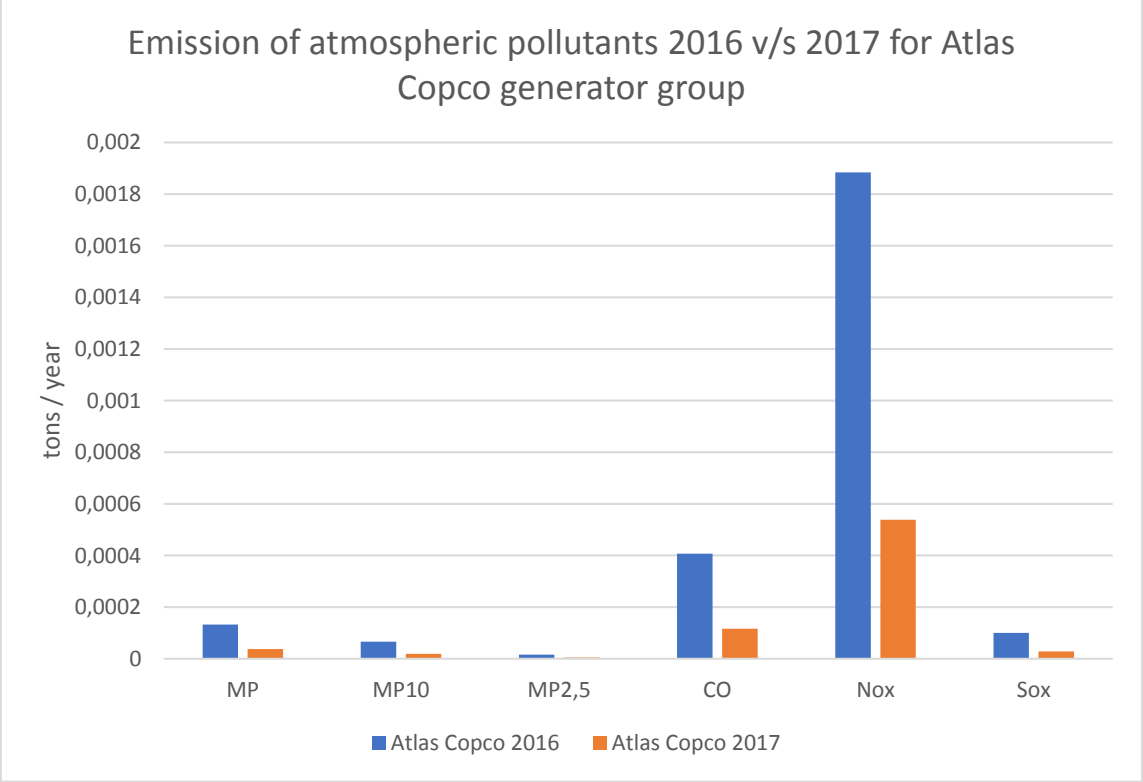
In order to generate declaration of emission of atmospheric pollutants, based on Supreme Decree no. 138, that can produce effects on the health of the population. The declaration of electronic Form 138 is generated annually, through which the declaration of emissions generated in PVSA is made.

The last declaration of emission of atmospheric pollutants for the year 2017 is shown in the following Table. In addition, the graph shows the comparison with the year 2016

	MP	MP10	MP2,5	CO	Nox	Sox
Emission factor	0,00563	0,00282	0,00068	0,0173	0,0801	0,00425
Atlas Copco	3,7834E-05	1,89504E-05	4,5696E-06	0,00011626	0,00053827	0,00002856
Olympian	0,00027429	0,00013739	3,3129E-05	0,00084286	0,00390247	0,00020706

* Reference: AP-42 of the EPA


Emission of atmospheric pollutants 2016 v/s 2017 for Olympian generator group
tons / year
0,035
0,03
0,025
0,02
0,015
0,01
0,005
0
MP
MP10
MP2,5
CO
Nox
Sox
Olympian 2016
Olympian 2017


Emission of atmospheric pollutants 2016 v/s 2017 for Atlas Copco generator group
tons / year
0,002
0,0018
0,0016
0,0014
0,0012
0,001
0,0008
0,0006
0,0004
0,0002
0
MP
MP10
MP2,5
CO
Nox
Sox
Atlas Copco 2016
Atlas Copco 2017

POSITIVE IMPACTS ON THE ENVIRONMENTAL INDICATORS OF THE PORT COMPLEX

The long-term vision and our focus on the efficiency and quality of the services delivered, encourages us to continuously improve the infrastructure of our facilities, to deliver a service with the highest industry standards, both in technology and in control of environmental aspects.

Within the investment plan for the modernization of its facilities, Puerto Ventanas S.A. has developed important infrastructure projects, destined to the storage and shipment of copper concentrate, thus consolidating its leadership in the handling of solid bulk in the central zone of the country.

The implementation of the Master Plan for the modernization of the Port facilities allows, at present, to operate with high standard facilities, achieving a reduction of 72% of particulate material emissions (PM 10); 55% reduction of particulate matter emissions (PM 2.5); 33% reduction of other environmental components such as NOX, SO2, CO and COV.

In the same way, the new technology implemented in the copper concentrate reception system, through sealed containers, has allowed that the material arrives at the port by trains, thus reducing the road circulation of approximately 1,700 trucks (with a capacity of 30 tons of copper concentrate transport), which has a positive impact on traffic congestion and road safety.

MODERNIZATION PROJECT OF COPPER CONCENTRATE LOADING SYSTEM BY SITE NO. 3 (2017-2018)

This important project consists of the assembly of a traveling ship-loader, the most modern one of its kind, with a nominal capacity of 1,500 Tons / Hour (TPH) for the transfer of copper concentrate, increasing this way the efficiency of the loading process of the ships in the port. The project has more than 1,100 meters of encapsulated conveyor belts, totally sealed, which interconnect all the current storage areas with the different docking sites for the shipment of copper concentrate in the Port.

The new loader is the first shipper of this type in Chile and involved an investment of 35 million dollars. It allows the shipment of bulk, without needing that the ships change of position, achieving greater speed in the process of boarding and efficiency in the use of the ships when using a site with greater draft. This increases the speed of rotation of the cargo in the warehouses and consequently generates an increase in storage capacity in the port to triple the current capacity, without the need for new investments. Additionally, the length of stay of the ships in the dock decreases, which generates an annual transfer capacity of up to 7 million tons of copper concentrate in the Port.

Characteristics:

- Capacity of 1500 Tons / Hour (TPH), for the transfer of copper concentrate, increasing in this way, in almost three times the efficiency of the loading of ships.

- Reduces in 50% of the time of the stay of the ships, by increasing the boarding speed, which allows the decongestion of the bay.

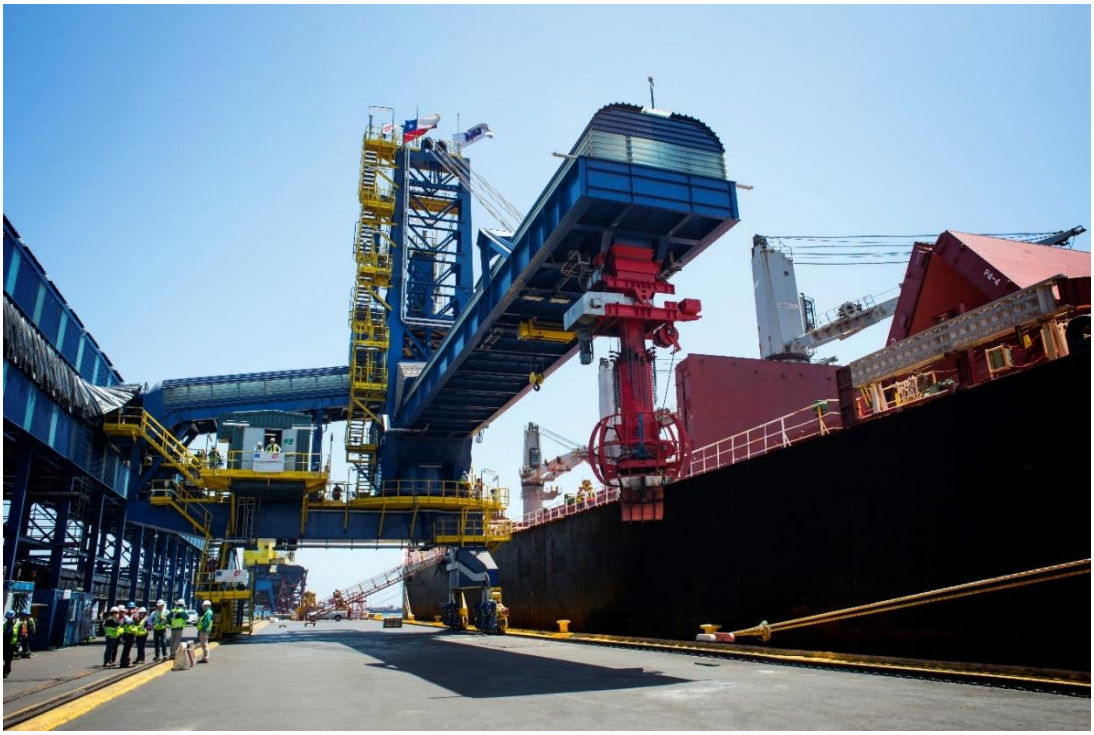
- It has 1,100 meters. of encapsulated, fully sealed conveyor belts, which interconnect all storage areas with berths for the shipment of copper concentrate. This allows control of possible emissions to the environment and marine environment.

- It has 8 high efficiency filters that allow a 99% retention of particulate material.

- It is operated by remote system which guarantees greater security

This project guarantees an efficient and safe operation for the coming years and represents a great asset for the growth in the transfer of solid bulks with a standard of quality in service, health and safety at work and environment.

With the entry into operation of the boarding modernization system, the total capacity of shipment of copper concentrate will increase to 7,000,000 tons / year. This, without the need to generate new facilities in the port, since this increase in transfer capacity is achieved only thanks to the efficiency of the new charger. This aspect is very relevant, given that through technology, the needs of customers are met without generating environmental impacts in the bay.



INTEGRATED OPERATIONS CENTER (IOC)

In 2017, one of the most innovative projects in Puerto Ventanas was developed: The Integrated Operations Center (IOC), an initiative that represents a breakthrough for the automation, control and supervision of our operating processes, significantly contributing to efficiency and greater productivity of our business.

The objective of this center is to centralize and efficiently manage the operations of Puerto Ventanas, establish dependency relationships between the different operations, monitor on-line the main variables of the processes and in this way, have sufficient and timely information for decision making.

The process was carried out in two stages. **The first one** corresponded to the replacement of obsolete control equipment that allowed to support the new technology and the latest software developed by the technology industry. In addition to the creation of new visualizations and animations of the processes under the PlantPAx model, global standard of development for visualization applications

The second phase consisted in the integration and centralization of all the systems and processes described, in a control room called the "Integrated Operations Center" (IOC). In the IOC resides and access to operational screens connected to a communications network that runs through the facilities. The functionality of the IOC is achieved through a system called "Industrial Data Center" (IDC), that allows centralized management, supervision, and implementation of modules for the control of port operations in a coordinated and more complete manner.

Main benefits of the Integrated Operations Center are:

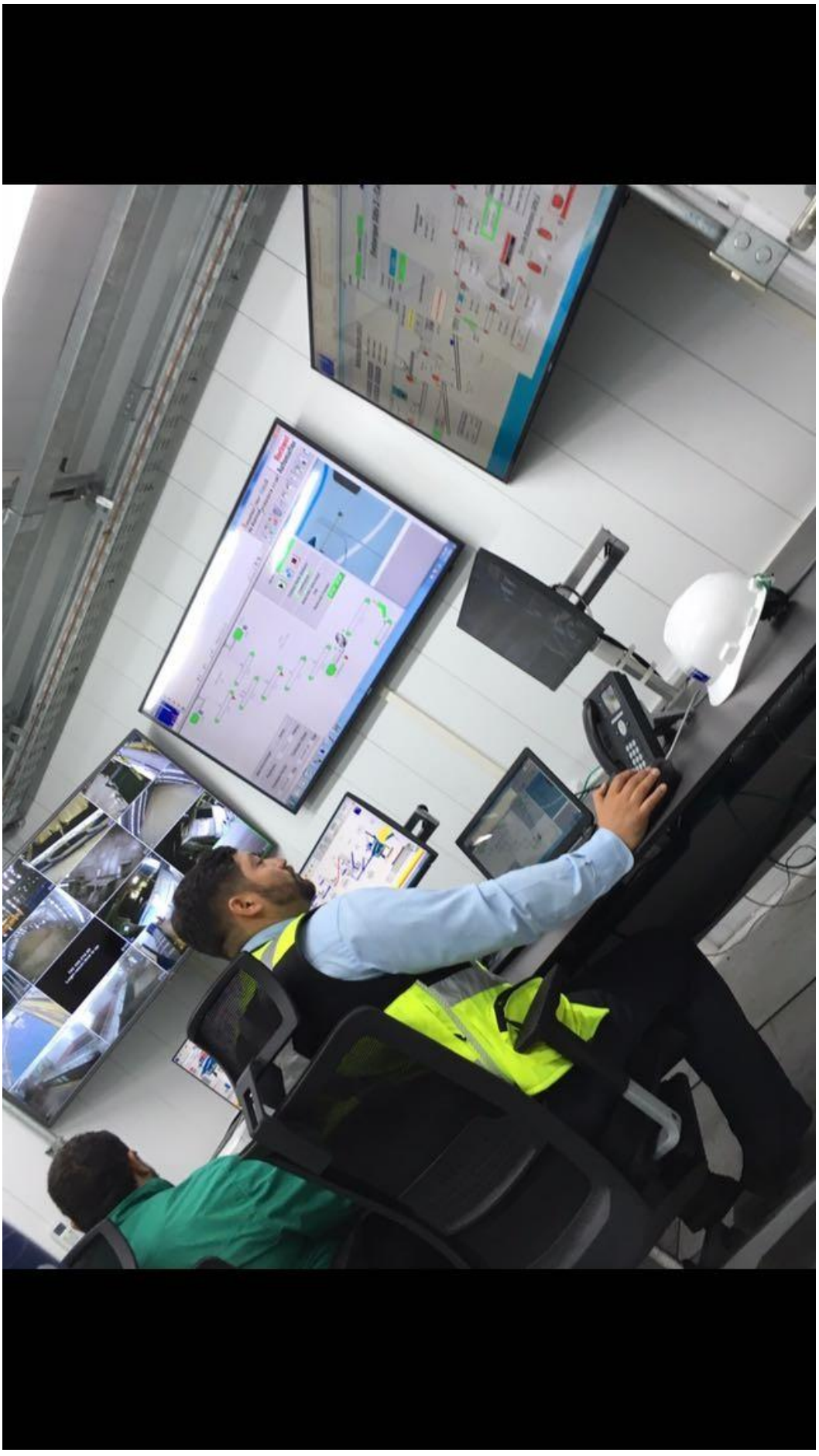
- Implement improvements that allow the solid bulk transport system to be operated in an automated way through the transfer belts, from the storage warehouse to the cargo warehouse.
- Optimize the response time in the event of possible operational problems during a shipment, reception and / or unloading of solid bulk cargoes.
- Have a single control room so that the personnel in charge of the operation knows the status of each of the port's equipment.
- Share the visualization and the status of all the systems to the personnel and corresponding heads via web (on-line).
- Monitor the operation through a television closed-circuit system in 360 °.
- Allow storage of operational information within servers to keep a statistical record of PVSA operations.

- Have a digital platform that allows connecting to the communications network, future equipment that can operate in the port and thus maintain the same control standard of all systems.

Indicators:

- Number of processes that are displayed in the IOC: 110
- Control of main variables of load flow and transfer speed
- Environmental control: supervises the operation of the 18 dust collectors installed in the transfer belts
- Allows online display of weather information such as winds and temperatures
- Allows online visualization of oceanographic variables such as wave height

The following images show the IOC in operation:



ACKNOWLEDGMENTS RECEIVED BY PUERTO VENTANAS DURING 2017

Industrial Development

Award: the association of companies of the Fifth Region, ASIVA, awarded the prize in the Industrial Development category to Puerto Ventanas SA, for its new La Greda warehouse, a project that was inaugurated in September 2016 and incorporates state-of-the-art technology. with characteristics that make it unique in Chile. The company was recognized at the Annual Members Meeting held in April 2017.

Corporate Social Responsibility Award:

Puerto Ventanas received, for the second time, the Corporate Social Responsibility (CSR) award, which is delivered annually by the Regional Chamber of Commerce of Valparaíso, which recognized the company for the implementation of its CSR strategy. to good practices for the business sector, and to demonstrate proactive management that contributes to the sustainable development of the fifth region.

Puerto Ventanas was recognized for its sustainability practices, consistent with its policies, which are reflected in multiple initiatives in the workplace, environmental and social, which were considered by the Regional Chamber of Commerce, as a model that can motivate their companies associated to carry out actions, programs, projects and strategies with the same inspiration and motivation.

Maritime Award of the Americas 2017:

The Secretariat of the Inter-American Committee on Ports (ICP) of the Organization of American States (OAS) awarded the 2017 Maritime Award of the Americas to the company Puerto Ventanas in the category "Green Operations" in Ports and / or Terminals, being the first Chilean operator port that receives this important distinction.

This is the fourth edition of this international award, which recognizes successful practices of ports, public or private, terminals, port and / or maritime companies of any of the 35 Member States of the ICP / OAS, for their contribution to port operations environmentally sustainable and the implementation of green measures that promote the protection of the maritime environment.

Among the main actions carried out by Puerto Ventanas that made him worthy of this award is the development of a Master Investment Plan for the modernization of its facilities and infrastructure, incorporating new technologies for a sustainable operation, as well as the development of a energy efficiency plan and an integrated management model.

OEA Más derechos para más gente

PREMIO MARÍTIMO DE LAS AMÉRICAS

CIP Comisión Interamericana de Puertos

GS-OAS/SEDI/CIP/OF-09-02-2018
13 de febrero de 2018

Antigua y Barbuda
Argentina
Bahamas
Barbados
Belize
Bolivia
Brasil
Canadá
Chile
Colombia
Costa Rica
Cuba
Dominica
Ecuador
El Salvador
Estados Unidos
Grenada
Guatemala
Guyana
Haití
Honduras
Jamaica
México
Nicaragua
Panamá
Paraguay
Perú
República Dominicana
San Kitts y Nevis
Santa Lucía
San Vicente y las Granadinas
Suriname
Trinidad y Tobago
Uruguay
Venezuela

Luis Fuentes Martínez
Puerto Ventanas
Chile

Estimado Sr. Fuentes:

En nombre de la Secretaría de la Comisión Interamericana de Puertos (S/ CIP) de la Organización de los Estados Americanos (OEA), es un gran honor felicitar a Puerto Ventanas por haber ganado el Premio Marítimo de las Américas 2017 en la categoría Operaciones Portuarias Verdes en Puertos y/o Terminales.

Durante un proceso sumamente competitivo, el jurado recibió postulaciones tanto del sector portuario público y privado de Norte-, Centro- y Sudamérica, así como del Caribe. Además de obtener una alta puntuación, las prácticas ganadoras mostraron resultados medibles y sobre todo de impacto sostenible. La S/ CIP se enorgullece en honrar su destacado compromiso con el desarrollo de un sector portuario seguro, competitivo y sostenible en las Américas.

La ceremonia de premiación se llevará a cabo durante la *II Seminario Hemisférico sobre Responsabilidad Social Empresarial y Equidad de Género: Creando un Sector Portuario Competitivo e Incluyente*, a realizarse del 23 al 25 de mayo, 2018, en Lima, Perú. En el evento se le otorgará la palabra para presentar un resumen ejecutivo de su práctica ganadora (5 a 10 minutos) a los representantes de los puertos públicos y privados, la academia, empresas portuarias y funcionarios líderes de la industria.

Esperando tener el honor de su participación, aprovecho la oportunidad para una vez más felicitarle por su excelencia y dedicación, y agradecerle por haber contribuido a que el Premio Marítimo de las Américas 2017 sea un éxito.

Atentamente,

Jorge Durán
Secretario
Comisión Interamericana de Puertos
Organización de los Estados Americanos

Ccp. Misión Permanente ante la OEA

Figure 6: Letter for obtaining the Maritime Award of the Americas 2017, issued by the Inter-American Commission of Ports of the Organization of American States

Certification Gold Seal of Energy Efficiency 2017:

The Minister of Energy, delivered to Puerto Ventanas, the Gold Seal granted by the Energy Efficiency Agency of the Ministry of Energy and which represents an acknowledgment to the management that the company has made in different areas, thanks to the measures implemented to reduce the impact of electricity consumption and CO2 emissions to the environment. It is important to note that the Gold Seal for Energy Efficiency corresponds to the highest possible distinction, which requires companies to have at least two energy efficiency measures implemented, together with an energy management system already incorporated in their system, based on the ISO 50.001 standard.

Figure 7: Gold Seal of Energy Efficiency 2017

Energy Management Leadership Awards 2018:

Clean Energy Ministerial (CEM), a high-level global forum of 24 countries and the European Commission that promotes policies and programs to advance clean energy, is pleased to inform that Puerto Ventanas S.A. is a recipient of an Energy Management Insight Award in recognition of the valuable insights it provided on the diverse benefits of using energy management systems certified to the ISO 50001 standard. An independent panel of international experts determined that the case study shows how an energy management system can be successfully integrated into existing business systems to better manage resources, sustain achieved savings, and continuously improve energy performance.

The publication of CEM about Energy Management Leadership Awards 2018 can be seen in the following link:

http://www.cleanenergyministerial.org/publications-clean-energy-ministerial/puerto-ventanas-sa-global-energy-management-implementation

COMMITMENTS WITH THE LOCAL COMMUNITY

PVSA's activities involve the Puchuncaví community in order to ensure the good for the people and the environment that surrounds them.

That is why the area of environment and communities proposes the development of activities in search of generating a work in conjunction with the community.

The activities to be developed correspond to the following:

- Celebration of the environment day.
- International beach cleaning day, once a year.

- Visits to the PVSA facilities, in order to know the operation, where knowledge and experiences can be acquired from the academic and community point of view.

- Compliance with the socialization plan with the community of area of influence of the project to be developed, indicated as compliance with the environmental qualification resolution (EQR) of each project.

OTHER INTERNAL COMMUNICATIONS

Through written and participative communications, important days are commemorated to promote the environmental and social awareness of all personnel of Puerto Ventanas.

Figure 8: World Recycling Day, May 17

Figure 9: International Day of Energy Efficiency, March 5

Figure 10: World Environment Day, June 5

2.6. EXAMPLES OF THE BEST PRACTICES OR ENVIRONMENTAL MANAGEMENT SOLUTIONS

2.6.1. Practices or environmental management solutions N°1.

1. Background

1.1. Contact for information

- Port of: Puerto Ventanas S.A
- Contact name: Luis Fuentes M.
- Job title/position: Sustainability Manager
- Telephone: +56 - 322272821
- E-mail: luis.fuentes@pvsa.cl

1.2. Environmental issue

- (1) Air quality
- (10) Dust
- (17) Industrial emissions to air

For the framework of the 5 actions of the ESPO green guide, apply: Enable and Commit, because this guide to "Good Practices for Storage, Transportation, and Handling of Solid Bulk in Industrial Facilities" is applied in routine activities of the port and commits a sustainable operation.

2. GUIDE TO GOOD PRACTICES FOR STORAGE, TRANSPORTATION, AND HANDLING OF SOLID BULK IN INDUSTRIAL FACILITIES

2.1. Project Description

The elaboration of this guide of good practices corresponds to a document elaborated by Ministerial Regional Secretariat of the Environment with collaboration of public services like Agricultural and Livestock Service, Ministerial Regional Secretariat of Health and the Maritime Authority. The preparation of this guide is an initiative that responds also to the strategy of the future plan of decontamination and prevention of the communes of Con-Con, Quintero and Puchuncaví and that goes to improve the environmental standards, strengthening the compliance of the objectives that approach the territory and the region, to the sustainable development of the industrial sector.

The purpose of this guide of good practices in the storage, transport and handling of solid bulks in industrial facilities, is to guide the port and industrial sector in environmental matters, giving it tools of prevention and control of contamination for an adequate handling of its productive processes in solid bulk matters, establishing harmonized procedures and criteria based on the best available techniques, for the transportation, storage and handling of these bulks. This is how regional authority invited Puerto Ventanas to be part of this work, due to his handling of solid bulk and expertise in its constant improvement of operational control in security, environment, and quality.

The guide can be downloaded from the following link:

http://portal.mma.gob.cl/wp-content/uploads/2016/07/GUIA-2-Valparaiso-web.pdf

The news can be seen from the following link:

https://www.mundomaritimo.cl/noticias/lanzan-guia-practica-para-la-manipulacion-de-graneles-solidos-en-puerto-ventanas

2.6.2. Practices or environmental management solutions N°2

1. Background

1.1. Contact for information

- Port of: Puerto Ventanas S.A
- Contact name: Mariette Aros E.
- Job title/position: Environment and Communities Coordinator
- Telephone: +56 - 322272821
- E-mail: mariette.aros@pvsa.cl

1.2. Environmental issue

- (12) Garbage / port waste
- (32) Relationship with local community

For the framework of the 5 actions of the ESPO green guide, apply: Enable, Encourage and Commit, because in Puerto Ventanas there is a solid Waste Management Program that involves segregation, management, and disposal. This allows for recycling campaigns, complying with the Comprehensive Waste Management, and generating a commitment in the staff.

2. CONTAINERS FOR WASTE RECYCLING

2.1. Project Description

Puerto Ventanas promotes the recycling of waste which is contemplated in the “solid waste procedure”.

World Environment Day, which is celebrated on June 5, is the most important annual event to promote action in favor of the environment.

It poses the challenge of discovering fun and interesting ways to experience and value this essential relationship between human and environment. Puerto Ventanas is not immune to this celebration and our challenges during 2017 is to manage waste, thus beginning the **“Puerto Recicla”** program as part of social and environmental awareness.

Puerto Ventanas installed containers to separate the waste generated from the different operational and administrative activities.

The separation of waste is done by type of waste, classification, and place for disposal.

- RESIDUES COMPARABLE TO DOMICILIARY
  - Container location: in all Puerto Ventanas Terminals
- PLASTICS
  - Container location: in all Puerto Ventanas Terminals
- PAPER AND PAPERBOARD
  - Container location: in all Puerto Ventanas Terminals offices
- DANGEROUS RESIDUES
  - Container location: warehouse for hazardous waste
- PLASTIC BOTTLES
  - Container location: Recycling boxes located in storeroom and container in the dining room
- PILES
  - Container location: Located in storeroom, management building, risk prevention building, site 5, Human Resources building, Grain Terminal and Petcoke Terminal
- IRONS AND SCRAP
  - Container location: Collection site for non-hazardous waste, south side of warehouse hazardous waste

Puerto Recicla

Conectar a las personas con la naturaleza, el tema del Día Mundial del Medio Ambiente 2017, nos anima a salir al aire libre y adentrarnos en los espacios naturales para apreciar su belleza y su valor, y a impulsar el llamamiento a la protección de la Tierra, nuestro hogar común.

El ***Día Mundial del Medio Ambiente,*** que se celebra el 5 de junio, es el evento anual más importante para promover la acción en favor del medio ambiente. El país anfitrión de este año, el Canadá, ha elegido el tema que será el eje de las celebraciones en todo el planeta.

El tema de este año nos invita a reflexionar sobre nuestro lugar en la naturaleza y nuestra dependencia estrecha. Nos plantea el reto de descubrir vías divertidas e interesantes de experimentar y valorar esta relación esencial. Como Puerto Ventanas no estamos ajenos a esta celebración y nuestros desafío para este 2017 es manejar nuestros residuos, dando así inicio al programa puerto recicla como parte de nuestra concientización socioambiental de nuestro entorno.

Para ello necesitamos que nos ayudes a segregar los residuos de la siguiente manera:

Revisar tabla de segregación de residuos.

RESIDUOS	CLASIFICACIÓN	UBICACIÓN
 RESIDUOS ASIMILABLES A DOMICILIARIOS	Restos de Alimentos | Restos de envoltorios de comida | Residuos de oficina no perteneciente a otros grupos. | Restos de papeles y plásticos (Domiciliarios) | Servicios Higiénicos	*En todos los Terminales de PVSA*
 PLÁSTICOS	Bolsas plásticas de EPP | Plásticos de embalaje | Envases de plástico no contaminados | PET | PEAD | Otros	
 PAPEL Y CARTÓN	Papel impreso de oficina | Cartones de embalaje | Cajas	*En todas las Oficinas de los Terminales de PVSA*
 RESIDUOS PELIGROSOS	EPP contaminados | Madera contaminada | Huaipe y paños contaminados | Tubos fluorescentes | Tierra o arena contaminada | Otros | Mezcla de agua con hidrocarburos | Solidos contaminados con hidrocarburo (EPP, paños, cartón, plástico, tierra) | Sólidos mezcla mineral | Sólidos contaminados con pintura (EPP, brochas, paños, guaipes, rodillos, envases vacíos) | Sólidos contaminados con grasa y aceite | Envases vacíos de solventes, diluyentes y aerosol | Aceites y grasas usadas | Epp contaminados con ácido sulfúrico.	*Bodega de residuos peligrosos 148*
 BOTELLAS PLÁSTICAS	Todo tipo de Botellas Plásticas	*Jaulas de recidaje ubicadas en Pañol y contenedor en el comedor.*
 PILAS	Baterías cadmio - Plomo	*Ubicados en pañol, costado edificio gerencia, prevención de riesgos, sitio 5, RR.HH, terminal de granos y terminal Petcoke*
FIERROS Y CHATARRAS	Fierros | Chatarra metalica | Cucho | Residuos de cobre | Paños no contaminados | Huaipe no contaminado | Maderas no contaminadas.	*Sitio de Acopio de residuos no peligrosos costado sur de bodega residuos peligrosos*