

## 6. ENVIRONMENTAL REPORT (Section 1.5 of PERS)

### Environmental Protection at the Port of Montevideo



Fig. 12 - The Port of Montevideo with the Cerro (*Hill*) area in the background.

During the 19th and 20th centuries, several industries (meat salting and meat processing plants, tanneries, etc.) grew and then disappeared at the Montevideo Bay, where the port is located. In light of new sustainable development concepts, which were not applied back then, said industries left their environmental liabilities.

Since 2003, based on the guidelines arising from the Rio Summit in 1992, port environmental issues have been addressed by gradually incorporating port services and port development works into the aforementioned sustainability criteria and environmental regulations adopted by the Uruguayan government, as well as international agreements ratified by its Parliament.

The aim of the Environmental Policy of the National Ports Administration (ANP) is to preserve, prevent and improve the environmental conditions of the Port of Montevideo. For that purpose, several actions and research activities are carried out and new technologies are incorporated for the preservation and reduction of impacts on the environment so that it remains in suitable conditions for use by future generations.

In order to comply with national and international environmental protection laws and regulations, ANP created, within its structure, the National Ports System Area and the Management Systems Department, which includes the Environmental Management Unit, based on a cross-sectional approach, with the aim of taking into consideration the relationship between development and sustainability.

The Environmental Management Unit has been working with a key tool to ensure compliance with environmental legal requirements for operations and services. This tool is the Port Environmental Management Executive Committee (CEGAP), which is composed of experts from public bodies and port-related government agencies, as well as the private sector and the Single Union of Workers of the Port and Related Sectors (SUPRA), so that the Environmental Policy is reflected in the jointly coordinated actions carried out.

Besides these joint actions with the port community, ANP also has to comply with the requirements of Decree No. 349/05 regarding Environmental Impact Assessment due to its location, because port works are carried out in the coastline or at supralittoral, eulittoral and infralittoral areas (such as initial dredging). Environmental impact assessments are to be conducted for all works and submitted to the corresponding authorities.

The authorizations required include the Environmental Viability of the Location (VAL), aiming at developing urban and land planning instruments according to the land use planning (POT) of the Municipality of Montevideo and the land planning requirements of the National Directorate of Land Planning (DINOT) of the Ministry of Housing and Land Planning , as well as the environmental authorizations required by the Ministry of Environment (DINACEA) for activities, constructions or works projects as per the aforementioned decree.

#### Description of the nature and size of port activities at the Port of Montevideo

Goods handled by cargo type in 2023			
TYPE	LOADING	UNLOADING	TOTAL
General cargo	2.224.965	355.965	2.580.930
Containers (*)	5.283.993	4.602.067	9.886.060
Bulk cargo	2.235.097	1.159.453	3.394.550
<b>TOTAL</b>	<b>9.744.055</b>	<b>6.117.485</b>	<b>15.861.540</b>

Total tonnes including container weight, preliminary data. (*) Includes containerized transhipments.
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Containers and TEUs handled in 2023			
	FULL	EMPTY	TOTAL
Containers	490.663	159.781	650.444
TEUs	836.235	289.519	1.125.754

River and sea terminal - Movement of passengers in 2023			
TYPE	EMBARKING	DISEMBARKING	TOTAL
River passengers	306.954	291.513	598.467

(\*\*)Passengers on board/Does not include crew

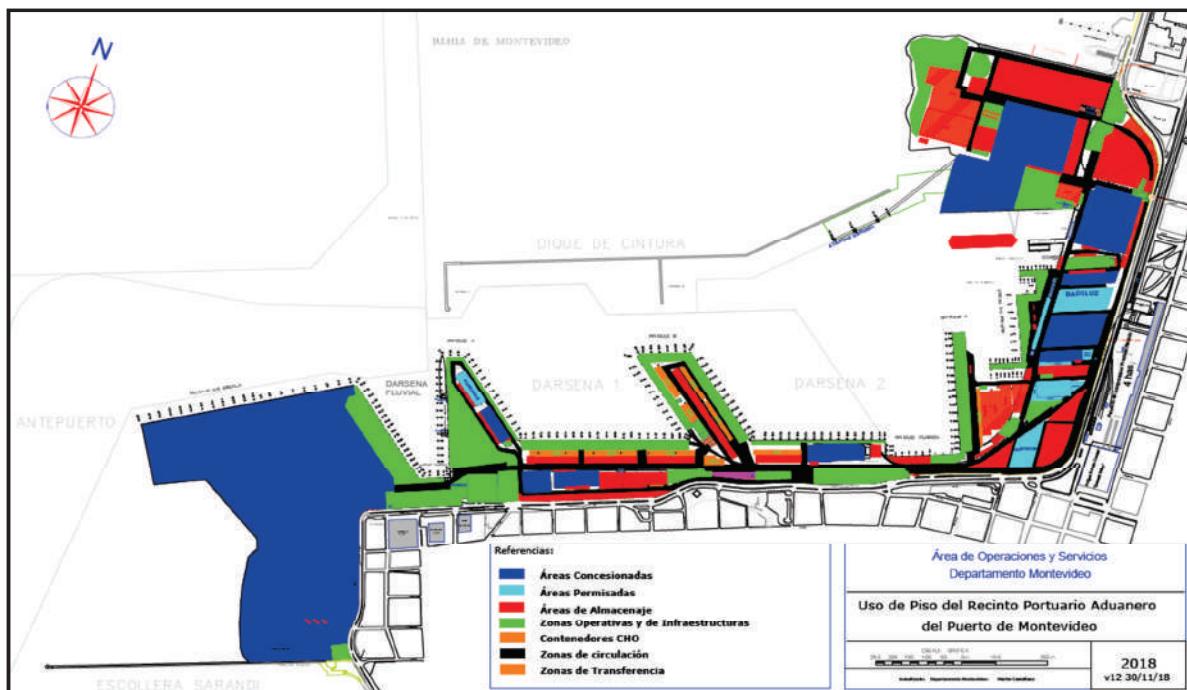


Fig. 13 - Map of the areas of the Port of Montevideo

**ENVIRONMENTAL PRINCIPLES STATEMENT OF THE  
NATIONAL PORTS ADMINISTRATION**

*The National Port Administration, as an essential actor in achieving the most appropriate sustainable port development and therefore directly supporting Uruguay's commercial activities, undertakes to:*

- 1) *Respect current national environmental legislation as well as those conventions, guidelines, and resolutions internationally ratified by the Eastern Republic of Uruguay and aimed at protecting the port environment.*
- 2) *Act, in accordance with the Constitution, the Law, and other Agreements, in accordance with the ethics of sustainable development.*
- 3) *Take voluntary measures to consider, whenever possible and appropriate, the timely application of domestic environmental standards in accordance with the Law.*
- 4) *Oversee, through its General Management, environmental policies and measures in accordance with the guidelines issued by the Institution's Board of Directors.*
- 5) *Establish an Environmental Management System to introduce environmental protection as an integral part of business and management practices. The Environmental Management System (EMS) will aim to:*
  - *Promote environmental ethics among port stakeholders, associated entities, or those related to them, and encourage the importance of individual responsibility in general and, specifically, in the application of the EMS.*
  - *Establish response plans to address any potential incident in port areas, minimizing negative environmental impacts on river, marine, and land areas that could cause damage to the marine and coastal ecosystem and the environment in general.*
  - *Conduct periodic reviews and revisions of the Environmental Policies and the Environmental Management System, taking into account the results of the most recent research related to the environment and trade dynamics.*
  - *Provide all personnel with the necessary support to adopt proactive attitudes regarding environmental issues, emphasizing that the maintenance and preservation of environmental quality is the responsibility of all those who perform tasks in the Company.*
  - *Integrate the environmental dimension into the Company's plans, programs, activities, and operations at all stages.*
  - *Promote the most appropriate integration of ports into the respective cities.*
  - *Incorporate procedures that guarantee compliance with current national and departmental environmental regulations.*
  - *Adopt the necessary actions to implement comprehensive compliance with environmental guidelines, including those of MERCOSUR, IMO (MARPOL 73/78), relevant ISO standards, and the environmental directives of the World Trade Organization.*
  - *Provide, whenever possible, adequate resources to support research on environmental issues related to the sector's activities.*
  - *Constantly seek options for improving port environmental issues by studying and analyzing the most developed ports around the world, using the benchmarking methodology.*
  - *The Environmental Management System will be a tool used to improve environmental parameters, such as*

*air quality monitoring, and will allow for the establishment of corrective measures if necessary. This Environmental Management System will also aim to establish goals to reduce sources of pollution. It will also be a priority to work on optimizing port waste management as much as possible, initially promoting reduction and, if not possible, working toward waste recovery (recycling).*

- The objective will be to participate in the development of proactive port development strategies, seeking to minimize the environmental impact that implementing actions that contribute to port development can have on the growth of the city.*
- Monitoring mechanisms will be established for the quality of marine sediments, in order to protect ecosystems within the port's area of influence, as well as to control relevant parameters in the sediment disposal areas corresponding to dredging.*

- 6) *Promote training for all ANP officials and those involved in port operations in environmental preservation and good practices.*
- 7) *Constantly seek environmental improvement at the Port by studying and analyzing other, more developed ports around the world using the benchmarking methodology.*

*Approved by the Resolution of the Board of Directors 661/3,268 on 18/Dec/2002 (File No. 021758)*

*Updated by the Resolution of the Board of Directors 172/3,974 on 27/Mar/2019 (File No. 182118)*

*Updated by the Resolution of the Board of Directors 421/4,267 on 17/Jul/2025 (File No. 251462)*

## ENVIRONMENTAL POLICY OF THE PORT OF MONTEVIDEO

Montevideo, 17 July 2025.

The Port of Montevideo acknowledges its responsibilities regarding environmental prevention and preservation as outlined in the Environmental Principles of the National Ports Administration. Therefore, it commits to:

1. Adopting, documenting, implementing, and maintaining the necessary measures to minimise environmental impacts that may result from port operations in general.
2. Setting goals and objectives aimed at controlling emissions to land, sea, and air, striving for continuous environmental improvement of port activities within its scope. This requires the identification and control of the port's significant environmental aspects.
3. Recording all activities defined within management processes to serve as indicators of environmental performance.
4. Complying with and closely observing all environmental legal requirements, standards, and procedures within its direct jurisdiction and in its concession areas. This includes preventing adverse environmental effects, safeguarding the community, businesses, the port community, and the general population. Where possible, environmental standards will be improved beyond the requirements of legislation.
5. Maintaining an inventory of relevant environmental legislation and regulations, whether national, international, or derived from commitments undertaken. This inventory will be updated annually at the latest by the competent offices.

- 6.** Establish the necessary communication channels to broadly disseminate to staff, suppliers, concessionary companies, and society as a whole the procedures, established standards, and environmental programs through the publication of a biennial report (every 2 years) that outlines progress and new environmental requirements. This includes publishing environmental performance on our website.
- 7.** Ensure the availability of the necessary resources for the implementation of the Environmental Policy so that port services meet the requirements that guarantee minimal environmental impact through their monitoring, in order to protect port areas and adjacent zones.
- 8.** Promote and provide training on environmental topics to raise awareness among employees, encouraging them to incorporate good environmental practices into their daily activities. In addition, promote corporate social responsibility by collaborating with environmental NGOs.
- 9.** Serve as the headquarters of the Executive Committee for Port Environmental Management (CEGAP) in order to provide a platform for engagement with Authorities, the Port Community, and society as a whole for the development of environmental programs and contingency prevention. Likewise, the CEGAP will be an essential tool for recognizing and addressing the needs and expectations of all port stakeholders.
- 10.** In line with the objectives set by the United Nations (SDGs), our ports will strive to comply with those goals within their scope (in particular SDGs 7, 8, 9, 11, 12, 13, 14, and 17).
- 11.** This Port Administration is committed to meeting the needs and expectations of our clients and other interested parties in accordance with the current legal framework.
- 12.** This Policy shall be reviewed regularly or when its scope is expanded.

Approved by ANP Board Resolution No. 421/4.267.

  
Ing. Civil PABLO GENTA  
President  
Administración Nacional de Puertos

## Main Environmental Aspects, Impacts and Environmental Performance of the Port of Montevideo

The main environmental aspects related to port operations and services of the Port of Montevideo are those considered to be significant by ANP according to an algorithm that determines their importance, as well as those considered to be a priority for sustainable development by the Board of Directors jointly with the Environmental Manager.

- Aspects related to port development works
- Bilge water discharge
- Sewage discharge
- Discharge of solid waste from ships
- Extraction and disposal of dredged material
- Hazardous cargo handling
- Waste management
- Abandoned ships

Said aspects are identified using the environmental aspects identification procedure and assessed according to its guideline.

The applicable environmental legislation is identified using the regulatory and legal requirements procedure and updates thereof.

For infrastructure works, the Port of Montevideo also has an environmental manual on construction works (port sector) available at ANP's website.

The provisions regarding hazardous cargo handling (IMDG) are available on the website and in the link above, the Manual for Handling Hazardous Cargo, pursuant to Decree 183/94 (Harbor Masters):

<https://www.anp.com.uy/sites/default/files/archivos/parrafo-colapsable/2021-01/Manual%20de%20Seguridad%20Portuaria%20y%20Cargas%20Peligrosas%20%28Versi%C3%B3n%20Noviembre%202020%29.pdf>

The chart below shows a summary of the Environmental Management Indicators of the Port of Montevideo:

MANAGEMENT INDICATORS (IDGs)	
Environmental training	<ul style="list-style-type: none"> <li>No. of environmental trainings offered</li> </ul>
Hazardous cargo	<ul style="list-style-type: none"> <li>No. of inspections / Containers*</li> <li>Nonconformities / Inspections</li> </ul> <p>* Containers with hazardous cargo</p>
OPERATIONAL INDICATORS (IDOs)	
Hazardous cargo	<ul style="list-style-type: none"> <li>Incidents</li> </ul>
Discharge of sewage from ships. MARPOL IV	<ul style="list-style-type: none"> <li>m<sup>3</sup> or tonnes</li> </ul>
Discharge of solid waste from ships. MARPOL V	<ul style="list-style-type: none"> <li>m<sup>3</sup> or tonnes</li> </ul>
Bilge water discharge. MARPOL I	<ul style="list-style-type: none"> <li>m<sup>3</sup> or tonnes</li> </ul>
Maintenance dredging	<ul style="list-style-type: none"> <li>m<sup>3</sup> of maintenance dredging</li> <li>m<sup>3</sup> of initial dredging</li> </ul>
Initial dredging	<ul style="list-style-type: none"> <li>m<sup>3</sup> of beneficial use of dredged material / total m<sup>3</sup> of initial dredging</li> </ul>
Electrical power	kW/h
Carbon footprint	tCO <sub>2</sub> e
Used office paper	Kg of paper collected for recycling Number of supplies delivered to public schools
ENVIRONMENTAL INDICATORS (ICAs)	
Physical and chemical quality of water at commercial docks	<ul style="list-style-type: none"> <li>Temperature °C</li> <li>Conductivity mS.cm<sup>-1</sup></li> <li>Salinity ppt</li> <li>Turbidity g.L<sup>-1</sup> - NTU</li> <li>Dissolved oxygen mg.L<sup>-1</sup></li> <li>pH [H<sup>+</sup>]</li> </ul>

## Performance of the Environmental Management System

REQUIREMENT	DESCRIPTION	IMPLEMENTED ACTIONS
<b>Environmental policy</b>	Established as a general framework to contribute to the environmentally sustainable development of the Port of Montevideo.	Adoption of measures to minimize the environmental impact of the operations in the Port of Montevideo. Goals were set out with their management, operational and environmental indicators, based on the assessment of significant environmental aspects of the Port of Montevideo. Availability of resources for environmental management were detailed in the budget of ANP. All the new employees that joined the administration received training.
<b>Legal requirements related to environmental aspects</b>	Collection of regulations applicable to port environmental management and to environmental aspects of port activities	Periodical verification of applicable regulations as well as compliance and updating thereof. The legislation applicable to each environmental aspect is verified depending on the regulations, through compliance, inspection, etc. (See the Conformity review of environmental aspects chart).

<b>Environmental assessments</b>	Assessments performed under agreement with the University of the Republic or other organizations, consulting firms, etc., as inputs for EIA, improvements in the Environmental Management System and innovation	The Port of Montevideo, in accordance with the environmental policy and the goals set out, has financial and specific resources for conducting these environmental assessments in different areas based on the required goal.
<b>Training</b>	Education in environmental matters in connection with the port activity	There is a budget and a training plan in the organization.
<b>Air quality</b>	Process of identification of air pollutants generated as a result of the port activity	Monitoring of solid bulk operations (PM10). Recommendations for environmental management plans (PGA) adapted to different operations. Request of PGA for bulks by companies and monitoring thereof. Assessment of the impact of bulk operations on the water mirror. Change of the vehicle fleet to vehicles powered by electric power. Replacement of dredger engines with others with greater power efficiency.
<b>Water quality</b>	Process of monitoring physical, chemical and biological conditions of the water at commercial docks	Monitoring of physicochemical parameters carried out by ANP. Incorporation of new parameters of fluorescence to chlorophyll and BGA-PC fluorescence of blue green algae as an effective form of measuring phycocyanin cyanobacteria
<b>Soil use</b>	Process of expansion of the port area to reduce congestion and increase the efficiency and safety of operations.	Master plan of the Port of Montevideo and successive revisions thereof, which contains a plan for construction works for the expansion and improvement of port facilities.
<b>Relation with the port community</b>	Coordination between different stakeholders in the port community. Interrelation with society, striving for peaceful coexistence	Within the framework of the Policy, ANP serves as headquarter for the integration of the port community in its different sectors, and in the case of the environment it is carried out by the CEGAP. Engaging in cultural activities for the promotion of environmental and port education. Improvement of port accessibility and planification of uses of port areas for the city. Communication with the community through social media (YouTube, Twitter).
<b>Electrical power consumption</b>	Power consumed at the Port of Montevideo, public and private sector	Independent air conditioning systems were removed and replaced with a centralized system with inverter technology at the headquarter building. In addition, a plan is being implemented to replace existent doors and windows with others of greater insulation efficiency. Change of light bulbs to energy-saving or LED ones in its facilities.

#### Description of the Port of Montevideo environmental management organization

The annual planning performed by the Environmental Management Unit is designed according to the matrix organization system of the Port of Montevideo and addresses the environmental aspects of the key areas of the management system, acting as facilitator in said task.

The Port Environmental Management Executive Committee is a fundamental tool for the development of the system.

## 6.1 Environmental Responsibilities of Key Personnel

By virtue of the detailed organization, the following chart provides a summary showing the personnel within the organization having direct responsibilities that have been established and described regarding environmental aspects of the operations.

RESPONSIBILITIES OF KEY PERSONNEL		
AREAS OF RESPONSIBILITY	JOB TITLE OR POSITION	DEPARTMENT
<b>Senior Management and Strategic Planning</b>	President	President's Office and Board of Directors (Management Team)
<b>Environmental System Management</b>	Environmental Technical Representative	Environmental Management Unit
<b>Port management actions coordination</b>  Adoption of actions in order to protect the port environment	Delegates with technical expertise appointed by public and private bodies, port union, etc.  (Port Community)	Port Environmental Management Executive Committee
<b>Assessments and Applications of Environmental Authorizations</b>	Environmental Technical Manager	Environmental Management Unit
<b>Port infrastructure construction works</b>	Construction Managers	Infrastructure Area
<b>Planning prior to dredging (sediment toxicology)</b>	Environmental Technical Manager	Environmental Management Unit
<b>Planning for dredging execution</b>	Head of Dredging Area	Dredging Area
<b>Dredging execution</b>	Head of Fleet and Dredging Department	Fleet and Dredging Department
<b>Port Operations Management of waste from ships</b>  3 - Sewage 4 - Solid waste from ships 3 - Bilge water	Head of Health and Supply Unit  Head of Operations and Services Area	Health and Supply Unit  Operations and Services Area
<b>Port Operations (hazardous cargo)</b>  Decrees regarding hazardous cargo classification  Authorization to operate with hazardous cargo at the port area  Inspections of terminals and warehouses	Head of Environmental Management Unit	Environmental Management Unit (hazardous cargo)

<b>Emergency planning</b>	Port Facilities Protection Officer (OPIP) Coordination of contingency plans with competent authorities	<b>Operations Area</b> Competent authorities: (Prefecture, Fire Department, Ministry of Public Health, Environmental Management Unit, Occupational Health and Safety Unit, Customs, Police, National Emergency System, etc.)
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The Environmental Management System is complemented by the Port Environmental Management Executive Committee (CEGAP), which includes experts appointed by ministries, public and private bodies, the port union, the civil society and other interested parties related to the port sector.

The CEGAP creates protocols on risk prevention management for the normal functioning of operations and services provided at the Port of Montevideo. This Committee is an efficient tool to promptly address key issues arising from the intense port activity carried out by the stakeholders of the port community.

The CEGAP is the main management tool adopted within the Environmental Management System to act effectively, efficiently and productively when making strategic decisions for the port managed by ANP, and its application has an effect on the sustainable development of the country.

Regarding port coordination and management, the Environmental Management Unit also participates in other organizations, such as the Permanent Commission on Hazardous Goods, which addresses and defines criteria for issues related to hazardous cargo handling, and it is a member of the Environmental Advisory Technical Group of the CIP-OAS and the American Association of Port Authorities (AAPA).

#### Identification of stakeholders and their needs, expectations and engagement

Fig. 13 represents those members of the Port Community who are dedicated to environmental aspects. The structure they form resembles a network of connections which, although brief, represent the interwoven tapestry of interactions generated by port activity.

The Port of Montevideo brings together maritime, port, customs and municipal authorities, those related to sanitary barriers for humans, animals and vegetables, as well as natural and environmental resources, with the port commercial activity carried out by the private sector: (export, import, transit, movement of passengers, etc.); that operates in specific services at the docks and also in terminals and warehouses, and all this is coordinated with society, trying to maintain an optimal relationship between the city and the port.

#### Environmental objectives, actions and projects

We think it is possible to achieve a sustainable development where vessel, cargo and passenger port services, as well as new infrastructure construction works, coexist. All of them are necessary and crucial so that the Port of Montevideo becomes a strong link in the trading chain of the country and the region.

The Port of Montevideo manages its operations and services through its port operators and terminals in line with its environmental policy, which is reviewed and adjusted as appropriate. These operations and services are the objectives of the port and, as mentioned before, many of them involve environmental aspects that need to be managed in order to reduce or, if possible, prevent any environmental impacts related thereto.

As an example of the actions taken, there are protocols in place regarding solid waste from ships, sewage and bilge water removal services, and the management and final disposal thereof are monitored.

Port management of hazardous cargo involves controlling and checking the cargo manifests of each ship, recording the findings in an official document called "Hazardous cargo statement", before arrival in Montevideo, and, among other actions, inspecting them in order to find any irregularities in stowage, segregation or possible spills for the purpose of adopting the corresponding mitigation measures.

Due to the fact that the port development projects are located on the coastline, an Environmental Impact Assessment (EIA) is required, as well as the corresponding Prior Environmental Authorization application (initial stage of works) and the Environmental Authorization for Operation when operations start.

These Environmental Impact Assessments are created based on the information of executive projects and construction managers, as well as data directly obtained from official sources and studies carried out by the Environmental Management Unit or commissioned under agreements with UdelaR.

Studies commissioned under agreements with UdelaR provide relevant scientific and technical information for new port development projects (inputs for the EIA and other requirements set forth in the legislation in force) and for the improvement of port environmental management as a whole. These inputs are sediment samplings for sediment toxicology analysis, geotechnical and hydrodynamic studies, etc.

Documents of the Environmental Management System (SGA), as well as the environmental aspects, are reviewed and updated on a regular basis, including when amendments are made to the applicable legislation or regulations. Said system (SGA) also has financial, human and material resources available for achieving environmental goals, acting by itself and in cooperation with other agencies, universities or consulting firms hired for such purpose.

ANP, through the Environmental Management Unit, maintains close ties with other national and international organizations, government and municipal agencies, and port operators in order to coordinate actions and streamline management aimed at complying with national and international regulations, thus improving the processes and approach to new challenges related to port environmental aspects.

Based on the data related to environmental aspects of the operations and services (statistics, inspections, sampling, reports, etc.) and from studies commissioned under agreements, environmental performance indices are created. Said indices are set forth in this document and will be used as reference for subsequent reviews, in order to assess the improvements in management, and for further certifications.

Compliance Review Table								
Results of Environmental Policy Action Plans							Measurable goals	
Nº	Significant environmental aspect	Environmental impact/problem	Port Policy	Measure taken	Responsible actor	Performance indicator	2023	2024
1	Infrastructure Works	Relevant environmental aspects in the area of influence of the port infrastructure of the projects	Control environmental pollution from different port operations	Manage all corresponding authorizations before the Ministry of Environment of Uruguay	General Manager, National Port System Area Manager and Infrastructure Area Manager	Number of procedures carried out at the Ministry of Environment	3	3
2	Ship bilge water removal services	Water, soil, biodiversity, public health or visual pollution.	Control environmental pollution from various port operations and comply with international and national regulations.	Appropriate final disposal of waste/compliance with MARPOL Convention and national regulations	General Manager, National Port System Area Manager and Operations Area Manager	Quantity (Tons) managed	3824	3465
3	Solid waste removal services from ships	Pollution to water, soil, biodiversity, public health or visual health.	Control environmental pollution from various port operations and comply with international and national regulations.	Appropriate final disposal of waste/compliance with MARPOL Convention and national regulations	General Manager, National Port System Area Manager and Operations Area Manager	Quantities (Tons) Managed	2118	2060
4	Grey and black water removal services	Pollution to water, soil, biodiversity, public health or visual health.	Control environmental pollution from various port operations and comply with international and national regulations.	Appropriate final disposal of waste/compliance with MARPOL Convention and national regulations	General Manager, National Port System Area Manager and Operations Area Manager	Quantity (m3) managed.	2971	4624
5	Handling of Dangerous Cargo	Pollution to water, soil, biodiversity, public health or visual health.	Environmental care and application of international and national regulations	Inspections of terminals and intraport warehouses	General Manager, National Port System Area Manager.	Inspections carried out.	573	297

6	Stakeholder participation in environmental issues at the Port of Montevideo	All environmental impacts/problems	Development of areas of participation (CEGAP - Port Coordinator)	Number of meetings per year	National Port System Area Manager and Operations Manager	Number of Meetings	42	41	The objective is met.	CEGAP meetings have been increased, incorporating a monthly environmental meeting in addition to those already held by the sub-coordinator.
7	Quality of dredged material and its disposal (*)	Pollution of the seabed or body of water	Compliance with international and national standards	Sediment sampling and analysis in external laboratories	Head of Environment and Environmental Representative Professional	Number of Meetings	316	9	The objective of evaluating the dredged material prior to carrying out opening dredging works is met.	The objective has been successfully met, and it is intended to remain the same for the next two years.
8	Ship operations, cranes, port equipment. (*)	Generation of greenhouse gases	Adopt and implement measures to minimize environmental impacts in port operations	Changing equipment or vehicles to hybrid or electric systems	Terminal managers and/or port operators	Quantity of vehicles or equipment purchased	0	12	The greenhouse gas reduction target is met through the adaptation of hybrid or electric equipment.	The objective has been successfully met, and it is intended to remain the same for the next two years.

(\*) The quality of the dredged material is assessed in opening dredging, not maintenance dredging.

Expediente 23094 - (Zona de giro TCP - 52 muestras de sedimento (39 superficiales y 13 a profundidad de -1m )  
 Expediente 231210- Canal de acceso a -14m- 65 puntos de coteo - 264 muestras

The documents submitted have the technical endorsement of:



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## 7. BEST PRACTICES (Section 1.6 of PERS)

### 7.1 Ship Scrapping

Port of:	Montevideo – Republic of Uruguay
Contact person:	Mr. Federico Piñeiro Chem. Grad. Lorena Leal Chem. Eng. Gianfranco Ferraro
Position:	Environmental Management Unit manager and professional staff of the Unit
E-mail:	<a href="mailto:gestionambiental@anp.com.uy">gestionambiental@anp.com.uy</a>
Environmental issue:	6 – Conservation Areas 12 – Garbage/Port Waste 14 – Habitat/Ecosystem Loss (Water) 21 – River Pollution 23 – Port Development (Water-Related) 24 – Sediment Pollution (Marine) 29 – Ship Debris 32 – Relationship with the Local Community 34 – Water Quality
Relevance to the 5 Es framework:	Exemplify, encourage and enforce
<h4>Ship Scrapping</h4> <p>With the goal of improving environmental and operational conditions at the Port of Montevideo, the ANP has been working since 2021 on a project to remove and scrap vessels abandoned in the capital's bay. This process goes hand in hand with the modernization of port operations and the implementation of new infrastructure that will radically change traffic at the country's main port.</p> <p>Pursuant to Decree No. 61/2018, it was decided to proceed with the scrapping and management of scrap and debris generated by vessels declared abandoned and located in the port area and under the jurisdiction of the ANP, as they constitute a serious and risky impact on port operations and safety. This action contributes to achieving a cleaner port.</p> <p>Currently, the ANP has Contract No. 2049 (2021) that contemplates the scrapping of 28 vessels, 19 of which have already been completed. The general work plan includes the scrapping of the vessel on site or its lightening and refloating for subsequent transfer to the Port of Punta Sayago, an authorized location for the fractionation of cut vessels. It is worth noting that the TSAKOS Dock, which had collapsed within the port in 2022, was scrapped this year.</p> <p>The benefits achieved with the removal of these vessels from the port and the bay have included the elimination of obstacles and hazards to navigation, with a consequent increase in operational areas in anchorage zones. Access to these areas and areas where port expansion works are underway have also been cleared, as has a substantial improvement in the bay's image, fostering the concept of a clean port.</p>	

## 7.2 Disposal of material from the UPM – Puerto Montevideo train project for use in filling areas.

Port of:	Montevideo – República Oriental del Uruguay
Contact person:	Mr. Federico Piñeiro Chem. Grad. Lorena Leal Chem. Eng. Gianfranco Ferraro
Position:	Environmental Management Unit manager and professional staff of the Unit
E-mail:	<a href="mailto:gestionambiental@anp.com.uy">gestionambiental@anp.com.uy</a>
Environmental issue:	22 – Port development (land-related) 32 – Relationship with the local community
Relevance to the 5 Es framework:	Exemplifies and encourages
<b>Disposal of material from the UPM – Puerto Montevideo train project for use in filling areas.</b>	
<p>During the 2022-2023 period, construction work was carried out on the railway tracks connecting the Port of Montevideo with the UPM plant in Paso de los Toros. This project generated a large volume of earth and debris, which were removed to lay the tracks and build the necessary infrastructure. Since all this material was waste to be managed for the railway project, it was decided, as a best practice, to use it as fill for the Capurro Port project. This allowed it to be transformed and reused as a useful input for the project, promoting reuse and reducing the consumption of material resources during the port construction. In total, 30,000 m<sup>3</sup> of fill from the railway project were used at Capurro Port, equivalent to approximately 1,500 truckloads of fill material.</p>	

## 8. REPORT ON ENVIRONMENTAL INDICATORS YEAR 2021 TO 2023.

Based on the assessment of the most significant environmental aspects to be monitored (page 50), the National Port Administration determined the main activities to be evaluated using indicators. Below, we analyze the results obtained from the indicators:

The detailed table below shows the environmental indicators selected by the National Port Administration for the years 2021 to 2023:

MANAGEMENT INDICATORS (IDGs)	
Environmental training	<ul style="list-style-type: none"> <li>• No. of environmental trainings offered</li> </ul>
Hazardous cargo	<ul style="list-style-type: none"> <li>• No. of inspections / Containers*</li> <li>• Nonconformities / Inspections</li> </ul> <p>* Containers with hazardous cargo</p>
OPERATIONAL INDICATORS (IDOs)	
Hazardous cargo	<ul style="list-style-type: none"> <li>• Incidents</li> </ul>

Discharge of sewage from ships. MARPOL IV	<ul style="list-style-type: none"> <li>• m<sup>3</sup> or tonnes</li> </ul>
Discharge of solid waste from ships. MARPOL V	<ul style="list-style-type: none"> <li>• m<sup>3</sup> or tonnes</li> </ul>
Bilge water discharge. MARPOL I	<ul style="list-style-type: none"> <li>• m<sup>3</sup> or tonnes</li> </ul>
Maintenance dredging	<ul style="list-style-type: none"> <li>• m<sup>3</sup> of maintenance dredging</li> </ul>
Initial dredging	<ul style="list-style-type: none"> <li>• m<sup>3</sup> of initial dredging</li> <li>• m<sup>3</sup> of beneficial use of dredged material / total m<sup>3</sup> of initial dredging</li> </ul>
Electrical power	kW/h
Used office paper	Kg of paper collected for recycling Number of supplies delivered to public schools
ENVIRONMENTAL INDICATORS (ICAs)	
Physical and chemical quality of water at commercial docks	<ul style="list-style-type: none"> <li>• Temperature °C</li> <li>• Conductivity mS.cm<sup>-1</sup></li> <li>• Salinity ppt</li> <li>• Turbidity g.L<sup>-1</sup> - NTU</li> <li>• Dissolved oxygen mg.L<sup>-1</sup></li> <li>• pH [H<sup>+</sup>]</li> </ul>

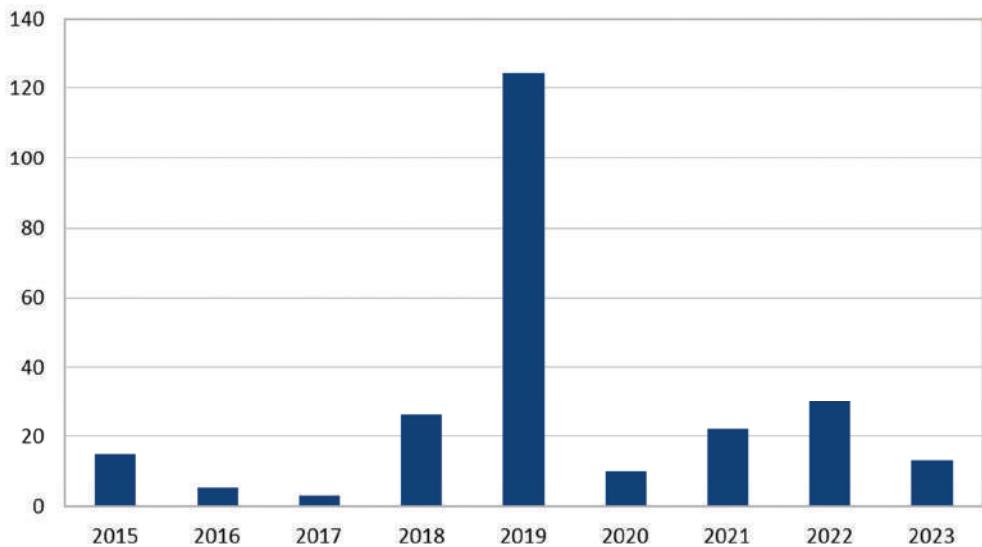
(\*\*) Annual indicators

## MANAGEMENT INDICATORS

### 1- Staff Training

In accordance with the guidelines of the Environmental Policy and related to those Environmental Aspects that have impacts, the Port of Montevideo trains its personnel in both pre-employment induction and its other staff. It also maintains communication channels that allow for the dissemination of critical environmental issues and how to cooperate in mitigating them. Among the training courses related to the organization's Environmental Aspects are courses on Dangerous Cargo (IMO IMDG Code - Maritime Provision No. 146), Port Induction with an emphasis on port Environmental Management, and training in Environmental Management Systems taught by the Uruguayan Institute of Technical Standards (UNIT).

Year	Employees with environmental training
2015	15
2016	5
2017	3
2018	26
2019	125
2020	10
2021	22
2022	30
2023	13



It should be noted that the training provided in 2021 and 2022 was solely for Port Induction, while in 2023, the training of 13 employees corresponded to 7 employees trained through Port Induction, one employee trained in Environmental Quality and Sustainable Development, one employee trained in Noise Control and 4 employees trained through a Workshop on the safe handling of Hazardous Chemical Substances.

## 2- Dangerous Cargoes (IMDG-IMO Code) and Environmental Inspections

Dangerous cargo is inspected once it is unloaded and stowed in container terminals or intraport warehouses. These controls involve proper segregation and identification of the cargo. Control is also carried out in accordance with Decree No. 183/994, a power of the Montevideo Port Authority. This regulation establishes conditions for the storage, stowage, and segregation of dangerous cargo, both in terminals and intraport warehouses.

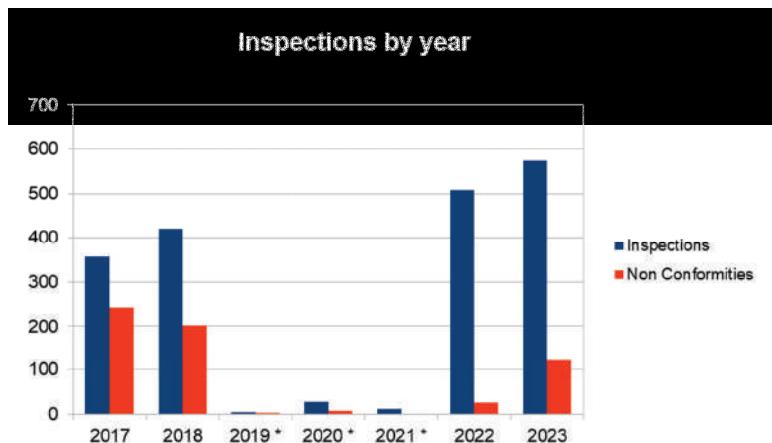
In 2022, the UGMA prepared and updated a Port Security and Dangerous Cargo Manual (IMDG-OMI) for the Port of Montevideo. The latest version of this document is available on the institution's website. <https://www.anp.com.uy/sites/default/files/archivos/parrafo-colapsable/2022-01/Manual%20de%20Seguridad%20Portuaria%20y%20Cargas%20Peligrosas-19%20de%20enero%20de%202022.pdf>

These controls aim to prevent risks associated with this type of cargo, and those dispatched directly (Mandatory Direct Clearance – DDO) fulfill a stricter preventive function due to the close relationship between the City and the Port that surrounds and encompasses us. In addition, inspections are carried out in container storage areas at Terminals and deconsolidated cargo stored in Warehouses, monitoring stowage segregation, labeling, container conditions, and possible spills or leaks.

Environmental inspections are also carried out, some of them assisted by the Ministry of the Environment (the highest authority in our country on environmental matters) to verify compliance with the various current regulations.

Year	Inspections	Non Conformities
2016	460	130
2017	356	243
2018	420	202
2019 *	5	2
2020 *	28	9
2021 *	12	0
2022	507	26
2023	573	120

\* Note: The period between 2019 and 2021 was affected by the global COVID-19 pandemic.



## OPERATIONAL INDICATORS

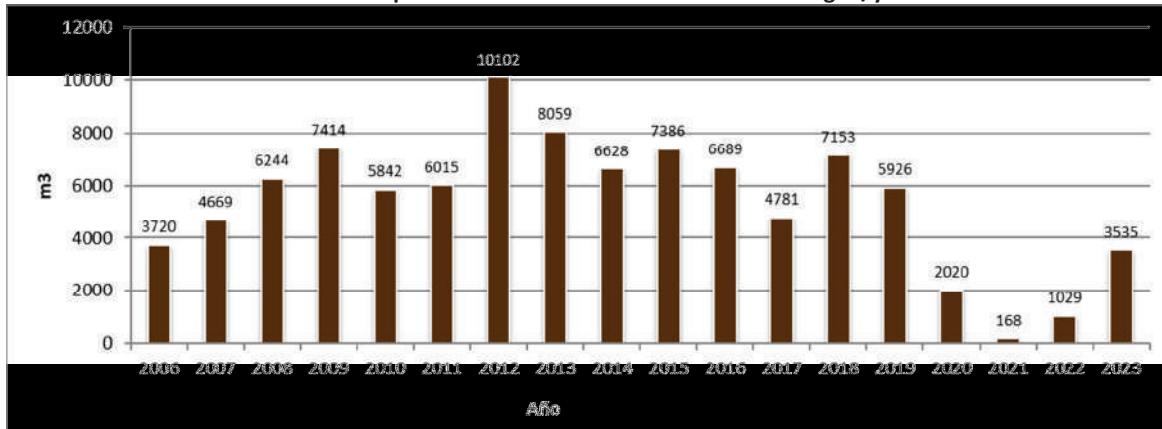
### 3- Incidents with Hazardous Cargo

No incidents were recorded involving hazardous cargo transported in packages (containers, among others) or in bulk during the various operational processes (loading, unloading, removal, etc.).

### 4- Discharge of Sewage from Ships. MARPOL IV

In keeping with the guidelines of the Environmental Policy and in compliance with the international agreements approved by our Parliament, in this case the Maritime Pollution Convention (MARPOL 73/74), MARPOL IV Grey and Black Waters have been discharged since 2002, during which a period of testing and changes was carried out that ultimately led to the direct connection of the vessels to the sanitation network of the City of Montevideo.

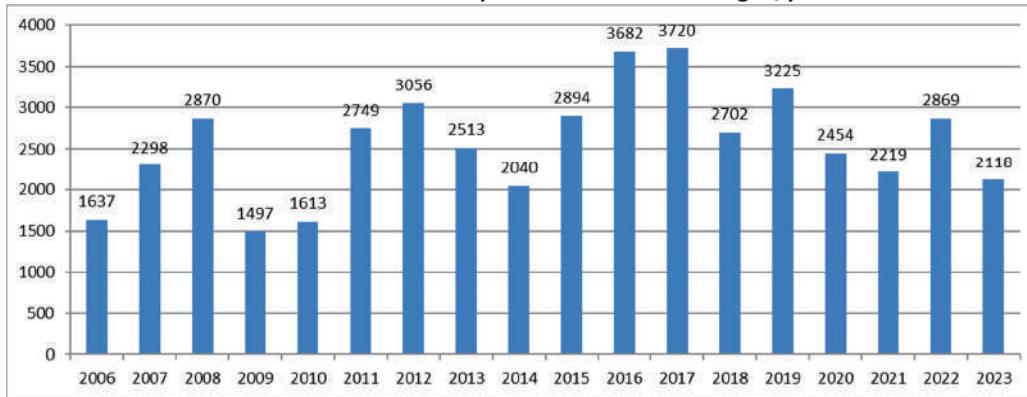
**Graph 1: Cubic meters of wastewater discharged/year**



##### 5- Discharge of Solid Waste from Ships. MARPOL V

*The indicators for solid waste discharge from ships referred to in this section are based exclusively on waste originating overseas, meaning that its provisioning takes place in other countries and therefore may pose a health risk, particularly those with an organic composition. Until September 2021, the latter was managed following the procedure described below: prior to shipment, organic waste was placed in dumpsters and covered with layers of lime (calcium carbonate) and then transferred to a landfill. However, as of September 2021, a new Resolution of the Ministry of the Environment (No. 1238/2021) came into force, establishing the mandatory management of the final disposal of organic waste of foreign origin through incineration or autoclave methods, in order to eliminate potential biological risks. Solid waste from nationally flagged vessels provisioned in the country (Uruguay) is considered and treated as household solid waste because its risk is known.*

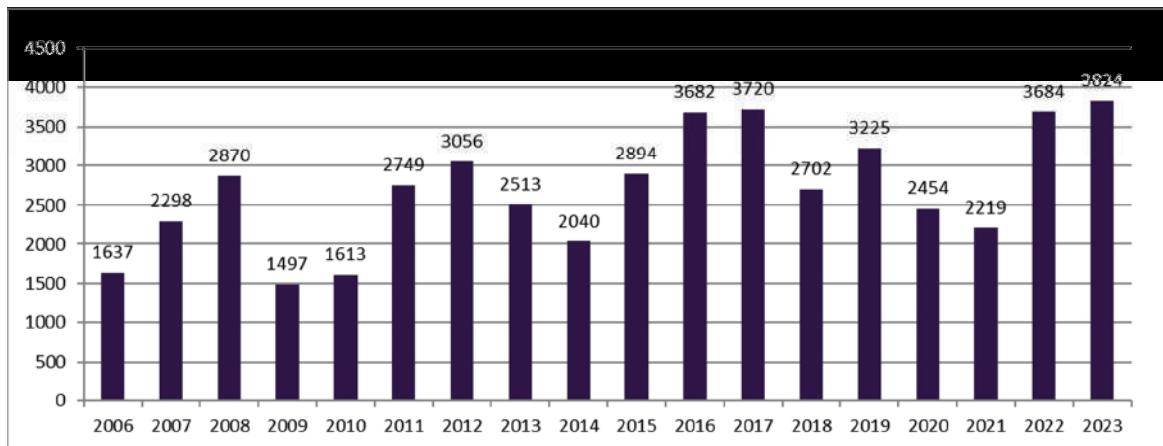
**Graph 2: Solid waste discharged/year**



##### 6- Discharge of Bilge Water from ships (MARPOL I)

The Port of Montevideo receives bilge water from ships, which is unloaded into tanker trucks and transported to a treatment plant that separates the oily fraction (FOAS) from the water. The latter is treated in treatment lagoons until it reaches the levels required by the Water Code (Decree No. 253/979) for disposal into waterways, while the oily fraction is sent to Portland cement production plants for use as secondary fuel. Other operators separate the FOAS by centrifuge and heat it until it reaches a value that meets regulations.

**Graph 3: Tons of bilge water discharged/year**



## 7- Dredging

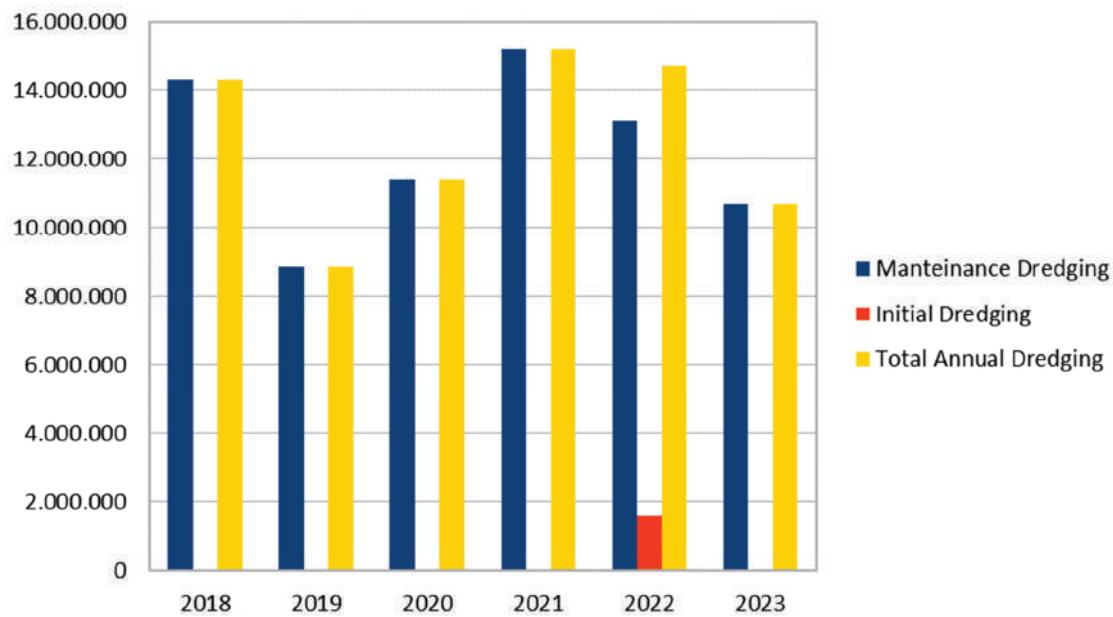
One of the main responsibilities of the National Port Administration, through the Fleet and Dredging Department, is to regularly dredge basins and channels. This dredging is considered maintenance work and has specific disposal sites. Likewise, dredging for opening port infrastructure projects requires Environmental Authorization from DINACEA, and the dredged material is disposed of in accordance with international standards after being characterized.

During 2021, within the framework of the institutional project known as "Puerto de Capurro," the ANP implemented a new method of beneficially managing dredged material. For this purpose, the material extracted in the area during deepening works was disposed of in geotextiles, generating flocculated sludge for use in fillings and foundations for the works.

Dredging type/year	2018	2019	2020	2021	2022	2023
Maintenance Dredging	14.319.578	8.884.480	11.390.590	15.224.055	13.135.275	10.713.708
Initial Dredging	0	0	0	0	1.605.000	0
Total Annual Dredging	14.319.578	8.884.480	11.390.590	15.224.055	14.740.275	10.713.708

\* Volumes correspond to transported m<sup>3</sup>

**Graph 4: Cubic meters of dredged material/year**



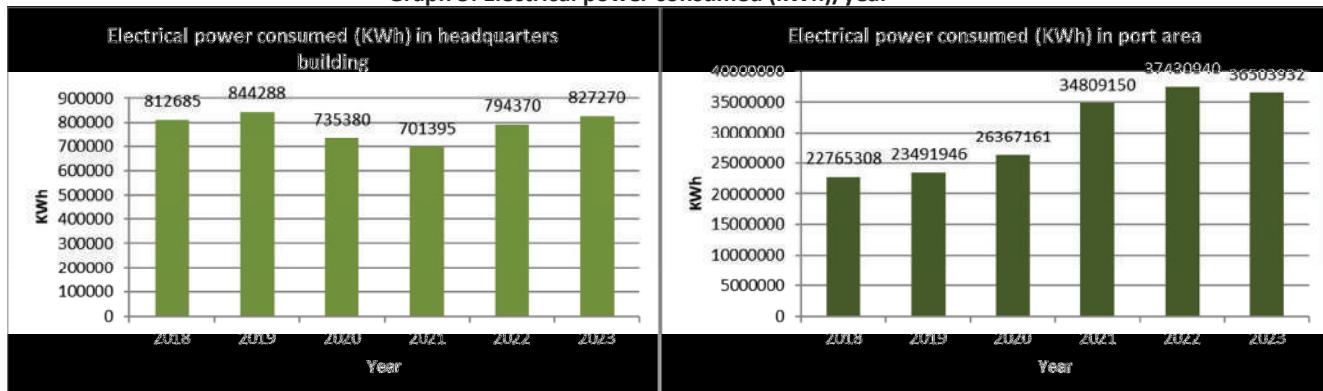
#### 8- Electrical Power Consumption

ANP, through the Networks Unit of the Infrastructure Area, has a network of substations available to supply electrical power taken from the national network and distributed to the port area with different voltages, amperages and powers, depending on the requirements.

It also records the consumption of several areas granted under concession agreements and other relevant State facilities within the port operational area to which energy is supplied.

Electrical power consumed (kWh)						
Year	2018	2019	2020	2021	2022	2023
Headquarters building	812685	844288	735380	701395	794370	827270
Port area	22765308	23491946	26367161	34809150	37430940	36503932

Graph 5: Electrical power consumed (kWh)/year



It is also important to highlight that there have been changes to the energy grid, introducing the use of more environmentally friendly energy sources. Some examples of these improvements include:

I. Replacement of split air conditioning units at the Port of Montevideo's River and Maritime Terminal with more energy-efficient VRV systems incorporating environmentally friendly refrigerants - 2021.

II. Replacement of 400 high-pressure sodium lights with LED technology at the Port of Montevideo's passenger terminal - 2023.

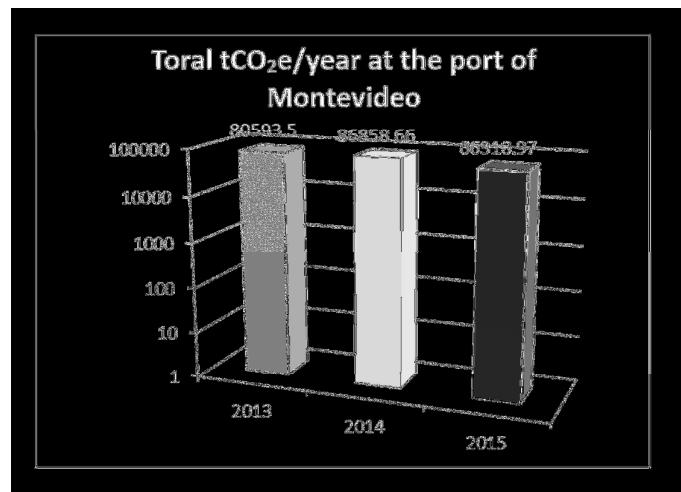
We highlight that this National Port Administration obtained renewable energy certificates issued by the state-owned utility, Power Plants and Electric Transmissions (UTE), under the Ministry of Industry, Energy, and Mining, for the years 2021, 2022, and 2023. These certificates are presented as Annexes (Annex B).

9- This indicator was measured through a study carried out under an agreement with the University of the Republic (Faculty of Engineering - Institute of Physics) where different emission sources were identified: vehicle circulation both within and outside the port area, ships, port machinery, oil refinery of the State-owned oil company (ANCAP), "Jose Batlle y Ordoñez" thermal power plant that belongs to the State-owned electrical power company (UTE), which became a back-up plant when the energy mix of the country changed and, therefore, there are random emissions from oil combustion depending on the electrical power demand.

The carbon footprint value is a baseline value. The possibility of having equipment with fixed sensors in the future, to record the values for a continuous monitoring and, among other measures, designing related projects in order to reduce said value, is being considered.

Carbon footprint measurement studies were not carried on during the years 2019-2020, as a consequence of the pandemic situation of COVID-19 at a national level. This reduced the research studies dependent on the University of the Republic together with this Port Administration, since the renewal of the agreement between said university and this Port Administration is pending and the formalities have been delayed as a result of the administrative processes affected by the health situation of the country.

Years	CO <sub>2</sub>	NO <sub>2</sub>	CH <sub>4</sub>	Total tCO <sub>2</sub> e
2013	79455.99	1117.97	19.54	80593.5
2014	65632.72	1204.87	21.06	86858.66
2015	65382.94	919.96	16.08	66318.97



Port ships	2015	2016	2017	2018
	1.1	0.9	1.1	1.3
Offshore ships (1)	90.7	93.3	105.3	144.9
Total, Criterion 1	91.8	94.1	106.4	146.2
Offshore ships (2)	66.2	73.8	82.3	128.9
Total, Criterion 2	67.2	74.6	83.4	130.2
<b>Total (Average)</b>	<b><math>79.5 \pm 15\%</math></b>	<b><math>84.4 \pm 15\%</math></b>	<b><math>94.9 \pm 12\%</math></b>	<b><math>138.2 \pm 6\%</math></b>

Table 24.- Annual emissions for ships in hotelling mode in kiloton of CO2 equivalent, according to the adopted criteria. The final average value represents the real emissions.

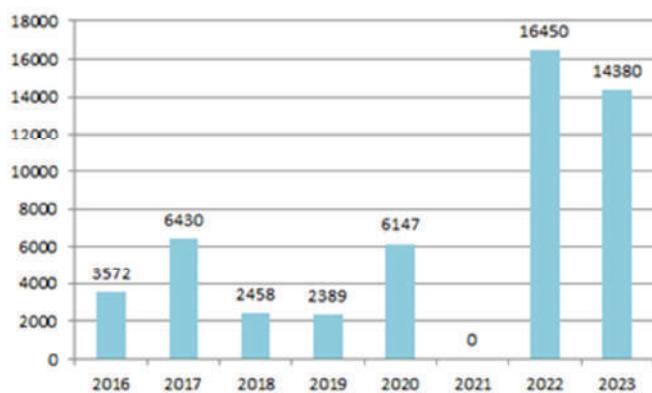
## 9- Office Paper Recycling

All ANP's employees collect waste paper from the offices that is then used as raw material for the REPAPEL Project, which involves the development of the environmental education project, talks, workshops and the delivery of school supplies made of recycled paper to public schools, thus supporting public schools located in the area surrounding the Montevideo Bay. Besides being an environmental and educational project, this is a Corporate Social Responsibility (RSE) action.



Fig. 9 - Day of delivery of school supplies to public schools.

Year	2016	2017	2018	2019	2020	2021	2022	2023
Paper (Kg)	3572	6430	2458	2389	6147	0	16450	14380



10- Physical and Chemical Quality - Water at Commercial Docks

Since 2010, the National Ports Administration performs a monthly monitoring of the water quality of the commercial docks of the Port of Montevideo. For this purpose, a multiparameter probe is used, which measures a variety of physical and chemical parameters, such as the following:

- Temperature (°C)
- Conductivity ( $\mu\text{S}/\text{cm}$ )
- Salinity (ppt) or (%) o (gl-1)
- TDS (mg/L)
- DO Concentration (mg/L)
- PH

In 2021, the National Ports Administration purchased a new multiparameter probe "IN-Situ Aqua TROLL 500".

The Aqua TROLL 500 is a fully customizable multiparametric probe with interchangeable sensors and a smartphone interface that provides accurate data and enables simplified calibration, panoramic data display and reporting.

This new tool enabled the incorporation of new sensors which will help this port administration to monitor new indicators, such as:

- Chlorophyll a
- Fluorescein WT

The results obtained from the analysis of the data are the following:

- The water quality of the commercial docks during the 2021-2023 season was optimal for the activities carried out, based on the data collected on physical and chemical parameters. Likewise, the variation in all physical and chemical parameters over the years has remained stable throughout the various summer seasons. This has demonstrated that, despite the wide variety of infrastructure projects carried out at the Port of Montevideo during the years 2010-2023, water quality based on the physical and chemical parameters monitored monthly did not show significant variations.
- Dissolved oxygen is considered a relevant indicator of water quality. The data obtained indicate that its concentration decreased during the summer months, which may be associated with rising temperatures, but its average value was within the expected concentration..

## 8.2 Upcoming Studies

From the previously conducted evaluation of environmental indicators, the need arises to further investigate the studies associated with dredging. For this reason, the ANP is currently in the process of contracting for the following environmental studies:

I- Sedimentation Study of the Access Channel to the Port of Montevideo – IMFIA – Faculty of Engineering – ANP.  
II- Study of the Agitation in Dock A Due to the Widening of the "Freu A" – IMFIA – Faculty of Engineering – ANP.  
Currently, the ANP is in the process of signing an agreement with the University of the Republic (UDELAR) to gain access to all faculties within the public education system, thereby expanding the contracting possibilities for environmental studies.

## 8.3 Main environmental aspects and regulatory compliance

Among the main environmental aspects that may generate environmental impacts due to their significance are those associated with port development projects. The environmental regulations governing these projects are Decree No. 349/005, Regulations on Environmental Impact Assessment and Environmental Authorizations (Law

No. 16,466). This regulation has been fully complied with, with all the required environmental authorizations and Environmental Impact Studies for the infrastructure works carried out in the Port of Montevideo being processed.

Regarding dredged material, as there are no national regulations for sediment toxicology, the 2017 Guidelines for the Characterization of Dredged Material and its Relocation in Public Maritime-Terrestrial Waters of the Interministerial Commission on Marine Strategies of the Government of Spain have been used as a reference.

Regarding environmental aspects associated with vessel operations (solid waste, bilge water, and sewage), the company has complied with national and international regulations. These regulations are Decree No. 182/2013 (Solid Waste Management Plan) and the international maritime convention MARPOL 73/78 (ratified by Law No. 14885/79). All environmental authorizations have also been obtained, using waste management systems authorized by the Ministry of the Environment.

Regarding the discharge of gray and black (sewage) water into the sewer and for monitoring the water quality of Montevideo Bay, the company has complied with the provisions of Decree No. 253/79 (Water Codes).

**Table 1 - Policy and indicators**

Results of Environmental Policy action plans							Measurable goals	
Nº	Significant environmental aspect	Environmental impact/problem	Port Policy	Measure taken	Responsible actor	Performance indicator	2023	2024
1	<b>Infrastructure Works</b>	Relevant environmental aspects in the area of influence of the port infrastructure works	Control environmental pollution from different port operations	Manage all corresponding permits before the Ministry of Environment of Uruguay	General Manager, National Port System Area Manager and Infrastructure Area Manager	Number of procedures carried out at the Ministry of Environment	3	3
2	<b>Ship bilge water removal services</b>	Pollution to water, soil, biodiversity, public health or visual health.	Control environmental pollution from various port operations and comply with international and national regulations.	Appropriate final disposal of waste/compliance with the MARPOL Convention and national regulations	General Manager, National Port System Area Manager and Operations Area Manager	Quantities (Tons) managed	3824	3465
3	<b>Solid waste removal services from ships</b>	Pollution to water, soil, biodiversity, public health or visual health.	Control environmental pollution from various port operations and comply with international and national regulations.	Appropriate final disposal of waste/compliance with the MARPOL Convention and national regulations	General Manager, National Port System Area Manager and Operations Area Manager	Quantities (Tons) managed	2118	2060

4	<b>Grey and black water removal services</b>	Pollution to water, soil, biodiversity, public health or visual health.	Control environmental pollution from various port operations and comply with international and national regulations.	Appropriate final disposal of waste/compliance with the MARPOL Convention and national regulations	General Manager, National Port System Area Manager and Operations Area Manager	Quantity (m <sup>3</sup> managed).	<b>2971</b> <b>4624</b>
5	<b>Handling of Dangerous Cargo</b>	Pollution to water, soil, biodiversity, public health or visual health.	Environmental care and application of international and national regulations	Inspections of terminals and intraport warehouses	General Manager, National Port System Area Manager.	Number of inspections performed.	<b>573</b> <b>297</b>
6	<b>Stakeholder engagement in environmental issues at the Port of Montevideo</b>	All environmental impacts/problems	Development of areas of participation (CEGAP - Port Coordinator)	Number of meetings per year	National Port System Area Manager and Operations Manager	Number of Meetings	<b>42</b> <b>41</b>
7	<b>Quality of dredged material and its disposal</b>	Pollution of the seabed or body of water	Compliance with international and national standards	Sediment sampling and analysis in external laboratories.	Head of Environment and Environmental Representative Professional	Number of Samples	<b>316</b> <b>0</b>
8	<b>Ship operations, cranes, and port equipment. (*)</b>	Generation of greenhouse gases	Adopt and implement measures to minimize environmental impacts in port operations	Changing equipment or vehicles to hybrid or electric systems	Terminal managers and/or port operators	Quantity of vehicles or equipment purchased	<b>0</b> <b>12</b>

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## **ANNEX**

### **DEFINITIONS**

EGP- Process management team  
MTOP- Ministry of Transport and Public Works  
ANP- National Ports Administration  
UGMA- Environmental Management Unit  
CEGAP- Port Environmental Management Executive Committee  
PNN- National Naval Prefecture  
MVOTMA- Ministry of Housing, Land Planning and Environment  
DINAMA- National Environmental Authority  
DINOT- National Directorate of Land Planning  
IM- Municipality of Montevideo  
POT- Land use planning  
UNIT- Uruguayan Institute of Technical Standards  
CENNAVE- Navigation Center  
EIA- Environmental Impact Assessment  
AAP- Prior Environmental Authorization  
AAO- Environmental Authorization for Operation  
VAL- Environmental Viability of the Location  
DDO- Mandatory Direct Dispatch  
NC- Nonconformities  
SEA- Strategic Environmental Assessment  
ekPis - Environmental Key Performance Indicators  
IDAs- Environmental Performance Indicators

Date: Montevideo, July 16<sup>th</sup>, 2025

## Declaration

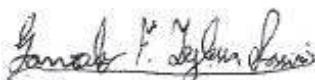
The undersigned, attorneys of law in Guyer & Regules, have controlled the overview of legal Requirements in the PERS report of the Port of Montevideo and declares that the contents are related with the applicable laws and regulations.

This declaration applies to the ECOSLC's EcoPorts Certification only and was made based on the information provided by the Port of Montevideo.

### Signature



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