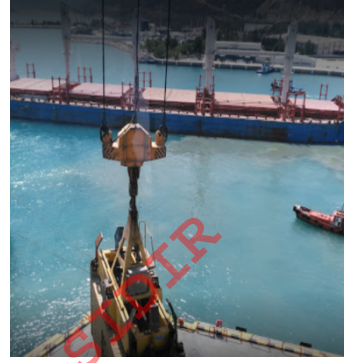



ORTADOĐU ANTALYA LİMAN İŐLETMELERİ A.Ő.
PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT




QTERMINALS
ANTALYA

NOVEMBER, 2021

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	2 / 50

Contents

1. INTRODUCTION.....	3
1.1 About the PERS.....	3
1.2. Ortadoğu Antalya Liman İşletmeleri A.Ş.....	3
1.2.1 General Information.....	3
1.2.2 Technical Information.....	5
1.2.3 Statistics.....	7
2. POLICY STATEMENT.....	8
2.1. Environmental Policy.....	8
2.1.1. Introduction and Purpose.....	8
2.1.2. Scope.....	9
2.1.3. Responsibilities.....	9
2.1.4. Commitments.....	10
2.1.5. Monitoring, Audit and Improvement Process.....	10
2.2. Mission and Vision.....	11
2.2.1. Mission.....	11
2.2.2. Vision.....	11
3. ENVIRONMENTAL ASPECTS AND LEGAL REQUIREMENTS.....	11
3.1 Air Emissions.....	12
3.1.3. Climate Friendly Organization:.....	14
3.1.2 Air Emissions from Combustion Sources.....	14
3.1.3 Dust.....	15
3.2 Waste Management.....	15
3.2.1 Types of waste.....	16
3.3 Energy Management.....	24
3.3.1 Creating a Strategy for Sustainable Energy Modernization.....	27
3.4 Noise.....	27
3.5 Climate Change Resilience.....	27
4. RESPONSIBILITIES AND RESOURCES.....	29
4.1. Environmental Investments and Improvements.....	29
4.2 Ortadoğu Antalya Liman İşletmeleri A.Ş. Organization Structures.....	30
4.3. Responsibilities of Departments on Environmental Activities.....	30
5. CONFORMITY REVIEW OF ENVIRONMENTAL POLICY AND LEGAL REQUIREMENTS.....	32
5.1 Review of Compliance.....	39
5.2 Environmental Impact Assessment Legislation.....	39
5.3 Environmental Permit and License.....	39
5.3.1 Waste Management.....	39
5.3.2 Water and Waste Water Management.....	40
5.3.3 Emission Management.....	41
5.3.4 Noise Management.....	41
5.3.5 Soil Pollution Management.....	41
5.3.6 Chemicals Management.....	41
6. ENVIRONMENTAL REPORT.....	41
6.1. Context of the Organization.....	41
6.1.1. Understanding the Organization and its context.....	41
6.1.2. Understanding The Needs and Expectations of Interested Parties.....	43
7. BEST PRACTISES.....	44

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	3 / 50

1. INTRODUCTION

1.1 About the PERS

The Port Environmental Review System (PERS) is an initiative for the EcoPorts certification of ports belonging to the European Sea Ports Organization (ESPO). The PERS methodology is one of the tools of ESPO to demonstrate that the port meets various requirements relating to environmental protection and sustainable development.

The PERS certificate is valid for a period two years. At the end of this period, the sustainability and environmental protection of the port is reviewed anew. Ortadoğu Antalya Liman İşletmeleri A.Ş. has decided to cooperate with ECOSLC in May, 2019.

The main environmental objectives in Environmental Code of Practice (2004) which ESPO should aim to achieve are:

- To contribute to the development of a sustainable logistics chain.
- To encourage wide consultation, dialogue and cooperation between port administrations and the relevant stakeholders at local level (port users, public, NGOs)
- To generate new knowledge and technology and to develop sustainable techniques which combine environmental effectiveness and cost efficiency.
- To enhance cooperation between port administrations in the field of environment and facilitate the exchange of experiences and implementation of best practices on environmental issues to avoid unnecessary duplication and enable port administrations to share the costs of environmental solutions.
- To increase awareness of environmental concerns and to integrate sustainable development into ports' policies, by encouraging port administrations to prepare a publicly available environmental policy setting out their strategies and methods of achieving them.
- To encourage port administrations to conduct appropriate environmental impact assessments for port projects and appropriate strategic environmental impact assessments for port development plans to assess, at an early stage.
- To stimulate continual improvement in the port environment and its port environmental management by promoting the use of Environmental Management Information System tools.
- To promote monitoring, based on environmental performance indicators, in order to measure objectively identifiable progress in environmental port practices.
- To promote environmental reporting as a means of communicating environmentally good behavior to stakeholders.
- To intensify the communication about environmental improvements achieved by ports.

1.2. Ortadoğu Antalya Liman İşletmeleri A.Ş.

1.2.1 General Information

Port is located in the western medditerrian part of Turkey and located at 30° 36' 5" latitude and 36° 50' longitude, 1117 meters quay length, 6-10 meters depth.

4 Cranes (Rubber Wheels) With A Capacity Of 100 – 150 Tons, 9 Crane Groups With A Capacity Of 5-80 Tons, 6 Crawler Cranes (80-60-15-7-5-5 Tons), 25 Forklifts From 3 To 33 Tons, 7 Loaders From 3 to 28 Tons, 2 Empty Side Lifters ,6 Stackers 40-45 Ton, 17 Pulling Clamps with 3m3 to 36 m3 Capacity Used in Bulk Cargo Handling, 150 m3 3 Bunkers Used in Bulk Cargo Handling, 2 Site Cleaning Vehicles, 1 Flatbed Trailer, 1 Pan Trailer, 22 Tow Trucks (Trailer) 55 Tons,

QTERMINALS ANTALYA	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	4 / 50

32 Attachments and 4 Dust Suppression Equipments are able to meet the existing conventional general cargo and container demands.

The Pilotage and Towage services, which are obligatory to be provided to the vessels in accordance with the Port Management Regulations, are conducted under the supervision of 4 highly trained and qualified Pilot Pilots; 1 Tugboat with 45 bollards pull tons, 2 Tugboats with 30 bollards pull tons , 1 Pilot boat and 2 Morinboats. In addition, the Security Boat, which meets the approved ISPS International Port Security Plan implementation, provides services at the Port.

Port Terminal open storage area of 201.125 m² and closed storage area of 1.260 m² is one of the factors that allow the storage and service of different types of cargo.

Sensitive to environmental protection, measures have been taken to prevent pollution at the Antalya Port and a modern service is provided in the Bonded area, which is completely subject to the shed regime.

Ortadoğu Antalya Liman İşletmeleri A.Ş. also serves cruise tourism with an increasing potential in the last 10-15 years with 2 quay of 170 and 200 meters in length and 10 meters in depth.

QTerminals Antalya is a Turkish port with one of the highest potentials for development. It is the largest organized port on the coastline of about 700 nautical miles between Izmir and Mersin.

QTerminals Antalya is a multi-purpose port providing cruise, container, general cargo, bulk cargo, project cargo, drilling shorebase, and military ship services and is one of the highest development potential ports in Turkey. It is the largest organized port on the coastline of about 700 nautical miles between Izmir and Mersin.

QTerminals Antalya, which has the highest volume of both passenger and freight operations among these ports, is located at the Kemer exit, which is the westernmost point of Antalya, and is connected to important industrial and tourism centres such as Burdur, Isparta, Denizli, Muğla, Afyonkarahisar, Mersin, Konya by high-standard highways.

QTerminals Antalya has an annual acceptance capacity of 1,500 ships, 4 million tonnes of general & bulk cargo and a 350,000 TEU container handling capacity.

As QTerminals Antalya, considering the increase in trading volume, we have initiated many additional investments and new practices to enable our importers and exporters to load and unload without any problems and continue investments in full force.

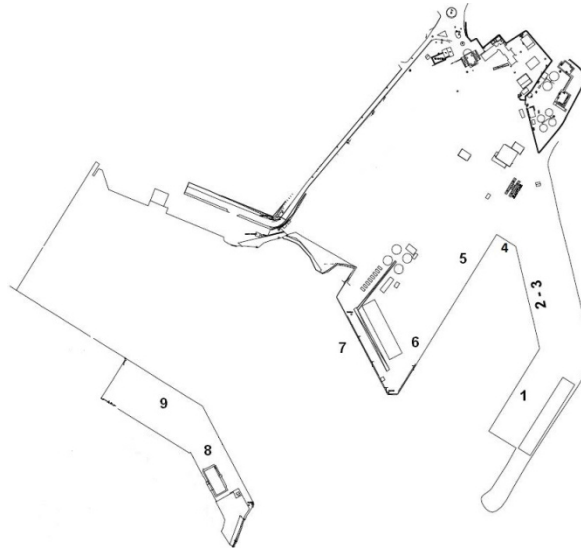




Figure 1: Ortadoğu Antalya Liman İşletmeleri A.Ş.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	5 / 50

1.2.2 Technical Information

Table 1:Port Technical Informations

Port Trade Mark	QTerminals Antalya
Official Company Name	Ortadoğu Antalya Liman İşletmeleri A.Ş.
Un Place Code Of The Port	Trayt-0005
Container Capacity	350,000 TEU
General & Bulk Load Capacity	4,000,000 Tons
Passenger Capacity	600,000 PAX
Shift Hours Worked	24/7 3 shifts (00:00-08:00 / 08:00-16:00 / 16:00-24:00). Break time: 30 minutes per shift.
Number Of Docks	9
Total Dock Length (Cargo Terminal + Cruise Docks)	1.117 Metres
Ship Maneuver Area Diameter	400 Metres
Port Entrance Depth	12.00 Metres
Port Water Depth	10.00 Metres
Allowed Safe Draft	9.50 Metres
Water Density	1.025 Gr/Cbm
Number Of Reefer Container Sockets In Terminal	216 Units
Closed Warehouse	1.260 M2
Container washing and PTI station	Available
Workshop	Service is provided within welding, repair and support services.
Freshwater Replenishment	20 Ton / Hour
Distance, duration and restrictions of the pilot on board	0.6 Nautical miles outside the breakwater and about 10 minutes transportation time, no restrictions.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	6 / 50

PORT EQUIPMENT IS AS FOLLOWS:

- 4 Cranes (Rubber Wheels) With A Capacity Of 100 – 150 Tons
- 9 Crane Groups With A Capacity Of 5-80 Tons
- 6 Crawler Cranes (80-60-15-7-5-5 Tons)
- 25 Forklifts From 3 To 33 Tons
- 7 Loaders From 3 to 28 Tons
- 2 Empty Side Lifters
- 6 Stackers 40-45 Ton
- 17 Pulling Clamps with 3m3 to 36 m3 Capacity Used in Bulk Cargo Handling
- 150 m3 3 Bunkers Used in Bulk Cargo Handling
- 2 Site Cleaning Vehicles
- 1 Flatbed Trailer
- 1 Pan Trailer
- 22 Tow Trucks (Trailer) 55 Tons
- 32 Attachments
- 4 Dust Suppression Equipment


1.2.3 Statistics

Table 2:The number of vessels statistics by years

Year	Cruise	Dry Bulk Cargo	Tanker	General Cargo	Container	Ro-Ro	Other
2010	61	573	319	-	156	-	258
2011	77	444	296	-	191	-	248
2012	60	335	277	-	276	-	173
2013	68	259	296	-	298	-	213
2014	65	220	205	-	241	-	173
2015	55	134	229	-	248	-	124
2016	16	140	174	-	241	-	106
2017	12	128	156	-	208	-	35
2018	3	135	156	-	181	-	78
2019	-	69	181	26	166	-	111
2020	1	134	27	59	171	-	51

Table 3:Handling statistics by years

Year	Passenger Person/year	Dry Bulk Cargo Ton/year	Liquid Cargo m ³ /year	General Cargo Ton/Year	Container TEU/Year	Ro-Ro Pcs./Year
2010	138.827	1.574.993	-	1.544.979	125.670	-
2011	139.795	1.116.952	-	1.243.973	169.424	-
2012	159.756	1.096.123	-	1.323.927	186.463	-
2013	167.689	616.895	-	1.111.544	217.359	-
2014	175.274	651.169	-	993.729	189.337	-
2015	167.883	492.257	-	603.427	178.515	-
2016	45.405	767.312	-	535.103	172.036	-
2017	39.995	672.103	-	740.714	200.117	-
2018	7.518	691.005	-	604.856	186.279	-
2019	-	507.224	-	81.687	150.824	-
2020	91	1.175.895	-	221.956	123.983	-

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	8 / 50

2. POLICY STATEMENT

2.1. Environmental Policy

2.1.1. Introduction and Purpose

The purpose of this Environmental Policy ("Policy") is to explicitly state QTerminals Holding Company ("Company"), approach to environmental awareness and practices. With this Policy, our Group aims to ensure compliance with environment-related laws and regulations, international regulations, and the legal regulations and ethical principles in the countries where it operates, as well as to determine relevant responsibilities and rules.

Business strategy and vision of Akdeniz is based on Integrated Management System (IMS) as a powerful tool for business improvement and successful management of business processes.

The Integrated Management System (IMS) integrates: Quality Management System (QMS 9001: 2015), Environmental Management System (EMS 14001: 2015) ,Occupational Health And Safety Management System (ISO 45001:2018) , Energy Management System (ISO 50001:2018), Customer Satisfaction Management System (ISO 10002:2014), Information Security Management System (ISMS 27001:2017), Green House Gases Management System (14064-1:2007) and Personal Data Management System (PDMS 27701:2019) .


Management of the Ortadoğu Antalya Liman İşletmeleri A.Ş. complies with and commits to the principles of environmental management policy that are integrated in Ortadoğu Antalya Liman İşletmeleri A.Ş. Environmental and Energy Management Policy:

ENVIRONMENTAL AND ENERGY MANAGEMENT POLICY STATEMENT

Ortadoğu Antalya Liman İşletmeleri A.Ş. is aware that it carries out operations that impact the natural environment given its sector and field of activity. It has adopted the principle of carrying out operations that minimize the possible short- and long-term environmental impacts that may arise in connection with the operations it carries out, while at the same time protecting the regional, national, and international environment by ensuring that energy is managed correctly.

Within the scope of the TSE-certified TS EN ISO 14001:2015 Environment Management System, TS EN ISO 50001:2018 Energy Management System, and TS EN ISO 14064-1 Greenhouse Gases Management System, which it established to strengthen its position in the port sector in line with national and international norms, Ortadoğu Antalya Liman İşletmeleri A.Ş.

- has adopted a working approach that seeks ways to protect natural resources by minimizing the environmental impact of its operations.
- It has a structure that complies with national and international environmental and energy legislation relating to all activities carried out in the business enterprise, adopting best practices and standards in matters not regulated by laws and regulations.
- It has adopted the principle of maximizing the effective use of energy by increasing energy efficiency and managing energy expenses with a professional understanding with its policy of providing services by using technologies that will not cause environmental pollution.
- The main agenda of its process-based analyses, which are revised every year, is to reduce the use of products and services that are likely to cause environmental pollution and eliminate them as much as means allow.
- The main goals and real objectives of the business enterprise include preventing pollution, using sustainable resources in the context of the organization, preventing climate change by reducing greenhouse gas emissions as part of energy management, and protecting the marine environment ecosystem.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	9 / 50

- The public and private sector real and legal persons that use the port directly and indirectly and all stakeholders, including business partners, customers, Ortadoğu Antalya Liman İşletmeleri A.Ş. employees, and all members of society bear the responsibility of producing solutions to protect the environment by acting together.
- To effectively implement the Environmental and Energy Management System Policy, Ortadoğu Antalya Liman İşletmeleri A.Ş. guarantees that all employees are familiar with these rules and regulations, and when necessary, supports these rules with training courses and assigns obligations and fields of responsibility to each unit.
- Ortadoğu Antalya Liman İşletmeleri A.Ş. follows examples of good practice in port management activities and all processes include practices that will minimize environmental impact.
- The organization's energy consumption levels and greenhouse gas emissions are monitored and attempts to reduce emission rates are made through taking energy efficiency actions planned by making reports at the local, national, and global level.
- The greenhouse gas emission inventory report is prepared annually and published digitally within the business enterprise for all employees to see while the verification statement of this inventory plus other reports on environmental programs are published on the business enterprise's website and made public.

2.1.2. Scope

The Group expects all its affiliates and joint ventures to act in accordance with this Policy. This Environmental Policy covers the following individuals and organizations:

- The Group's Board Members,
- The Group's executives and employees,
- The third-party service provider companies, consultants, lawyers, persons and institutions working for or with the Group, including external auditors, contractors, agencies and similar parties.

2.1.3. Responsibilities

2.1.3.1. Board of Directors

The Board of Directors is responsible for approving the Policy, along with supervising the determining and operating notifications, examinations, and enforcement mechanisms for non-compliance with rules and regulations.

2.1.3.2. Senior Management


Senior Management is responsible for implementing the Policy.

Senior Management is also responsible for enforcing and auditing policy-related practices, as well as for taking necessary measures to ensure the compliance of employees and external service providers with this document, and reporting infractions to the Compliance and Internal Auditing Department for inspection.

Senior Management consists of the Chief Executive Officer and other C level officers of the Group as indicated in the organizational chart.

2.1.3.3. Legal Department

The Legal Department evaluates the policy with regard to its relevance and areas requiring improvement, and submits suggestions to Senior Management.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	10 / 50

2.1.3.4. Employee

Employees are responsible for:

- Adherence to and compliance with the Group's policies, regulations and procedures,
- Working in compliance with the current legislation,
- Notifying the Compliance and Internal Audit Department in cases where conduct, activities or practices that are in breach of the Policy are encountered.

2.1.3.5. External Service Providers and Joint Ventures

It is mandatory for external service providers, suppliers and joint ventures to ensure compliance with the principles set out in this Environmental Policy, and other relevant regulations.

2.1.3.6. Human Resources Department

The Policy set out herein is distributed to the entire staff; the Human Resources Department is responsible for its distribution.


2.1.4. Commitments

- Abides by the principles and guidance of the European Bank of Reconstruction and Development with respect to Environmental and Social Policy, as published from time to time, insofar as the same are compatible with the operations of a public listed company.
- Carries out its port activities in accordance with the environmental legislations and international standards.
- Is committed to managing and reducing the environmental impacts of its business activities and continuously improving its environmental performance.
- Aims to reduce its greenhouse gas emissions to minimize its impact on climate change.
- Carries out activities to reduce its air emissions.
- Aims to lower the water consumption and use of natural resources while using them in the most efficient way in all its operations. The Group will treat and discharge water emissions (wastewater) in accordance with legal obligations.
- Conducts activities to assess, reduce and recycle waste resulting from our activities at the source, and dispose of them as required by relevant legislation.
- Conducts activities to reduce energy use and increase energy efficiency in all stages of its operations.
- Is aware of the importance of its stakeholders, adopts the principle of informing all stakeholders of our environmental policy, approach and performance through reports and announcements. The Group will organize training to raise awareness among our employees and suppliers.
- Monitors and audits its environmental performance through the Environmental Management System. The Group will continuously monitor our operations, identify areas for improvement, and set targets.
- Ensures stakeholder participation, by consistently enhancing its environmental performance through feedback shared at annual meetings or current communication channels regarding environmental policy and activities.
- Discloses its environmental performance on the website in an explicit and transparent manner.
- Works in accordance with best practices in the industries in which the Group operates.

2.1.5. Monitoring, Audit and Improvement Process

The Policy is regularly reviewed by the Remuneration Committee while the practices are continuously monitored, and relevant assessments are reported annually. The Policy was adopted by the Board of Directors resolution on June 2021.

All departments in Qterminals Antalya determine their targets and create KPI tables annually within the scope of our environmental policy. They determine the follow-up periods of the created goals (monthly, annually, etc.) and follow

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	11 / 50

the rates of reaching the goals in these periods. You can see the HSE-Q department annual plan (2021) in Annex-7 and the HSE-Q KPI tables (2021) in Annex-5.

2.2. Mission and Vision

2.2.1. Mission

To provide a high standard of service to customers as the region's gateway to world trade and tourism with the principle of quality, safe, and fast service.

2.2.2. Vision

To make QTerminals Antalya, which is the region's gateway to world trade and tourism, the best serving port in the sector with its growing business volume and strong corporate and financial structure.


3. ENVIRONMENTAL ASPECTS AND LEGAL REQUIREMENTS

The Port's environmental aspects and risks are mainly focused around natural resource, water and energy consumption, emissions, air and water pollution, natural disasters, handling of hazardous waste and effluents, and impacts on environment due to noise and vibration. The Company responds these aspects and risks in a systematic and proactive manner in line with its environmental management system. You can find our environmental aspect register annex-4

To foster environmental sustainability, the port manages environmental matters in line with laws and regulations where the port operates, international environmental standards and the port's Environmental Policy. The Board supervises determining and operating notifications, examinations, and enforcement mechanisms for non-compliance with rules and regulations regarding the Environmental Policy. Environmental aspect is an element of the port's activities or services that interacts or can interact with the environment. In accordance with the requirements of the Standards ISO 14001:2015, the Company has established a procedure for identifying environmental aspects (SEÇ-PRO-014 Environment and Energy Management and Risk Analyses Procedure) that occur as a result of its activities and services, which the organization can control or are expected to have influences to determine aspects that have or may have a significant impact on the environment. Evaluation of the significance of the aspects is determine by the defined criteria in accordance with the requirements of the standard and the legal regulations. Significant aspects have priority when setting environmental protection objectives and creating programs for their fulfillment.

The following team carries out determination and evaluation of port environmental aspects, legal and other requirements,

- General Manager
- HSE-Q Manager
- HSE-Q Specialist
- Environmental Management System Representative
- Energy Management System Representative
- Environmental Consultant
- Environment and Energy Committee Members
- Greenhouse Gas Data Monitoring and Verification Commission Members
- Employees from all departments in the port who are knowledgeable about possible dangers and risks

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	12 / 50

Environmental issues in the port operations primarily include the followings:

- Water usage
- Air emissions
- Waste management
- Energy management
- Noise
- Climate change resilience

3.1 Air Emissions

Air emissions are generated from land- and sea-based sources during port and terminal activities. During the regular operation processes, land-based activities may result in combustion emissions from the use of port equipment, vehicles and engines (such as cranes, mobile port cranes, towing vehicles, trailers, forklifts, loaders, trucks, etc.).

During operations of a port, combustion exhaust emissions result mainly from diesel engines used for the propulsion of cruise ships, and ship-based auxiliary engines and boilers for power generation. In addition, combustion exhaust emissions are generated from land-based activities involving the use of vehicles.

Other sources of air emissions include volatile organic compound (VOC) emissions from waste transfer activities, in addition to dust emissions from operational phase activities.

3.1.1. Green House Gases Management

Climate change has become one of the most important problems of our age and concerns the whole world. Factors such as population growth, industrialization, urbanization, land use, increase in fossil fuel use, and decrease in forests result in increased greenhouse gas emissions into the atmosphere and changes in emission volumes. This increases global warming, leading to climate change. Climate change plays a role not only in increasing global warming but also in changes in weather events such as excessive rain, floods, severe hurricanes, depletion of the ozone layer, air pollution, drought, desertification, rising ocean and sea levels, and deterioration of the ecosystem. Research shows that to limit the devastating effects of climate change, the average global temperature rise should be no more than 2° C. Climate change and decreasing natural resources directly affect natural life and the global economy. Changing climatic conditions create new needs while decreasing raw material types need to be replaced with rational alternatives.


More and more energy and natural resources are being consumed in the world and this is accompanied by environmental problems. Knowing that natural resources are not endless and unlimited, QTerminals Antalya is aware of the negative effects of climate change and greenhouse gas emissions on our world and makes a conscious effort in its activities to minimize the negative effects on climate and the environment.

Greenhouse Gas Emission Management in QTerminals Antalya regularly monitors the greenhouse gas emissions caused by its operational activities to combat climate change and control air quality and carries out activities to reduce them.

Risk for Greenhouse Gas Emissions and Energy and Environmental Management are managed by the Environment Board under the leadership of the relevant management systems' managing representatives.

The port has adopted an understanding of integrated energy management to combat the emission and energy risks associated

with its operational activities and closely monitors the various accepted risks as far as technological developments will allow, putting into effect improvement opportunities aimed at the identified risks.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	13 / 50

QTerminals Antalya regularly records the fuel and energy consumed as part of its activities and has been using these figures to verify its emissions defined in Scope-1, Scope-2 and Scope-3 regularly since 2019. You can find verification statement in annex-2. Furthermore, QTerminals Antalya continues to work as one with all the subcontractors active in the port area in managing greenhouse gases. Data for the energy consumed by the subcontractors during their port activities is obtained and included as Scope-3 in work to calculate greenhouse gas emissions. Although QTerminals Antalya is not subject to the practices or principles of the "Regulation on the Monitoring of Greenhouse Gas Emissions," it prepares port activity greenhouse gas emission reports every year, and these are verified by the TSE as an independent verification body under ISO 14064-1.

The energy management charts summarize the fuel and energy consumed within QTerminals Antalya in 2020. The total amount of energy consumed within the scope of reporting for 2020 was 2,163,809 kWh.

QTerminals Antalya is continuing its greenhouse gas management studies to raise awareness of emission calculation inside the port operator sector and to share with the public information on emissions that can serve as a reference within the sector.

Studies are continuing under ISO 14064-1: 2006 Guidelines and Specifications for the Calculation and Reporting of Greenhouse Gas Emissions at Organizational Level to calculate greenhouse resulting from direct emissions, and indirect emissions due to energy use within the port limits.

Table 4: Verified Green House Gases Emissions (2019)

Verified Green House Gases Emissions (2019)			
Source	Scope	tCO ₂	%
On-Road Vehicles Diesel Consumption	Scope-1	60,63	1,46
Off-Road Vehicles Diesel Consumption	Scope-1	1.653,38	39,69
Generators Diesel Consumption	Scope-1	24,83	0,60
Current Breakers	Scope-1	1,62	0,04
Fire Extinguishing	Scope-1	66,05	1,59
Air Conditioners	Scope-1	89,35	2,15
Electricity Consumption (Operational)	Scope-2	635,31	15,25
Electricity Consumption (MHC)	Scope-2	367,60	8,83
Electricity Consumption (subcontractors, tenants)	Scope-3	227,70	5,47
Subcontractors Diesel Consumption	Scope-3	1.038,90	24,94
TOTAL		4.165,36	100,00


	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	14 / 50

Table 5:Emission Density

Data	2019	2020
Total Handled Cargo (tonnes)	2.753,718	3.116,003
Total GHG Emissions (tonnes CO ₂)	4.165,36	3.648,58
Emission Density (kg CO ₂ / tonnes cargo)	1,51	1,17

3.1.3. Climate Friendly Organization:

Ortadoğu Antalya Liman İşletmeleri has completed its 2019 Greenhouse Gas Emissions Inventory study and has had it verified by the Turkish Standards Institute. It has purchased the approved "Gold Standard" emissions reduction certificate to neutralize the greenhouse gas emissions verified in 2019 corresponding to a total of 2,898.77 tonnes of Scope-1 and Scope-2 CO₂ and has become **Turkey's first carbon-neutral port in 2019**. Furthermore, as part of our port's work on reducing emissions, the TSE has awarded the port the Climate Friendly Organization Certificate, which aims to ensure that in the fight against climate change, organizations carry out reporting and verification by conducting studies aimed at reducing greenhouse gas emissions and contribute to the renewable energy sector by supplying carbon credits. You can find the this certificate annex-3.

3.1.2 Air Emissions from Combustion Sources

The primary emissions from combustion exhaust sources are sulphur dioxide (SO₂), nitrogen oxides (NOX), carbon monoxide (CO), particulate matter (PM), and greenhouse gases such as carbon dioxide (CO₂). Depending on the fuel type and quality, other substances such as heavy metals, unburned hydrocarbons and other VOCs may be emitted in smaller quantities, but may have a significant influence on the environment due to their toxicity and/or persistence.

Recommended air emissions management strategies relevant to port and terminal operations include:


Application of air quality management procedures (including for GHG emissions) for ship operations while in port areas, such as:

When practical and without affecting the safety of vessel navigation, use reduced ship propulsion power in port access areas.

Where practicable, design port layouts and facilities to minimize travel distances and transfer points, for example from ships' off-loading and on-loading facilities to storage areas, and to avoid/minimize re-storage and reshuffling of cargo.

Where practicable, upgrade land vehicle and equipment fleets with low emission vehicles, including use of alternative energy sources, and fuels/fuel mixtures (e.g., vehicle and equipment fleets powered by electricity or compressed natural gas, hybrid locomotives, etc.).

Maintain cargo transfer equipment (e.g., cranes, forklifts, and trucks) in good working condition to reduce air emissions. Encourage reduced engine idling during on- and off-loading activities.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	15 / 50

All measures of precaution are taken with the defined technological procedures so that air emissions are minimized.

3.1.3 Dust

Emission of dust in the Ortadoğu Antalya Liman İşletmeleri A.Ş. occurs during technological operations.

The main source of dust that is cast during the handling and storing operations of bulk cargoes (unloading from truck to warehouse, loading cargo with the loader / bob cat with loading spoon, handling from warehouse to the container).

Emissions from transport vehicles on concession area of Ortadoğu Antalya Liman İşletmeleri A.Ş. also make a significant share in the total emissions fund, as well as secondary dust emission from active surfaces under wind influence.

It is quite certain that, under certain conditions, small fractions can be carried at greater distances. Under these circumstances, it is necessary to apply technological solutions to prevent the raising of small fractions, or to reduce total dust emissions.

Regular wiping /cleaning of operational and storage areas, with spill kit equipment and dust suppression equipment , solid, dry and wet material is carried out.



Figure 2:Dust Suppressions Equipment




Figure 3: Floor Cleaning Equipment

3.2 Waste Management

Waste in Ortadoğu Antalya Liman İşletmeleri A.Ş. is treated in a manner that ensures the protection of environment and prevents harmful impacts of waste. Waste collecting after the generation of certain amount of waste, its sorting on site (by origin, character, category), temporary storage, and its efficient removal are carried out in an organized manner by handing it over to certified waste management operators, in accordance with the procedure SEÇ-PRO-013 Waste Management (EMS Standard 14001: 2015 request and legal regulations).

Waste generated by Ortadoğu Antalya Liman İşletmeleri A.Ş. all its technological / operational processes, mainly includes industrial waste. A smaller part of non-hazardous waste has a status of secondary raw material.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	16 / 50

Ortadoğu Antalya Liman İşletmeleri A.Ş. has temporary location for waste disposal- temporary waste storage; near to waste reception facility area. Temporary location for disposal of waste/temporary storage is in accordance with requirements of law and by-laws and it meets conditions which ensure protection of harmful effect of waste to environment, OHS of employees and firefighting protection.

Also, in accordance with Regulation of Temporary Waste Storage (Official Gazette of Republic of Turkey, 27533 as of 26.03.2010), during storage of waste, a special attention is paid so that different types of waste do not mix, especially different types of hazardous waste, as well as the waste not yet categorized, until obtaining laboratory finding on examination of that waste.

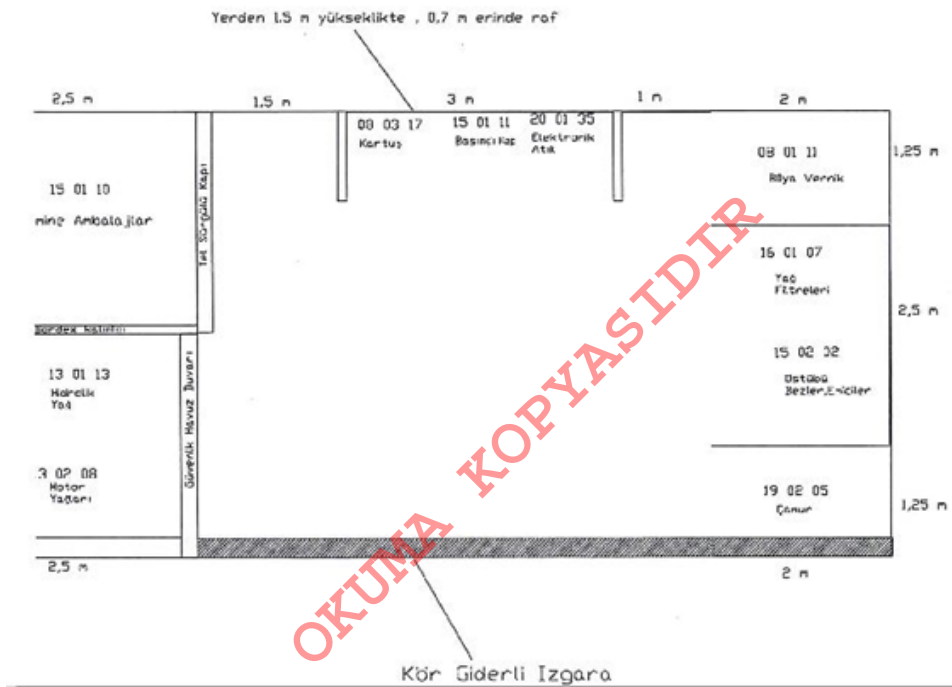



Figure 4: Temporary Waste Storage Area Chart

3.2.1 Types of waste


By reviewing technological/operational processes and materials which are used in the process, the waste types generated on the Ortadoğu Antalya Liman İşletmeleri A.Ş. area are identified and given below.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	17 / 50

3.2.1.1. Hazardous Waste

Table 6:Hazardous Waste Table

WASTE CODE	SOURCE
08 03 17* waste printing toner containing hazardous substances	Offices
13 01 03* other hydraulic oils	Vessels,Port Operations
13 02 08 * other engine, gear and lubricating oils	Vessels, Port Operations
13 05 06 oil from oil/water separators	Waste Water Treatment Plant
13 07 03 other fuels (including mixtures)	Waste Water Treatment Plant
15 01 10* packaging containing residues of or contaminated by hazardous substances	Port Operations
15 01 11* metallic packaging containing a hazardous solid porous matrix (for example asbestos), including empty pressure containers	Port Operations
15 02 02 * absorbents, filter materials, wiping cloths, protective clothing	Port Operations
16 01 07* oil filters	Port Operations
16 06 01* Lead batteries (accumulators);	Port Operations
19 08 10* grease and oil mixture from oil/water separation	Port Operations
19 08 13* sludges containing hazardous substances from other treatment of industrial waste water	Waste Water Treatment Plant
20 01 21* fluorescent tubes and other mercury-containing waste	Offices
20 01 26* oil and fat other than those mentioned in 20 01 25	Vessels
20 01 35* discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	Offices, Port Operations

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	18 / 50

Information on the amount of hazardous waste generated is kept in accordance with the Regulation on the form, content and manner of filling out the waste transport and waste records form (As of 2018, records are creating in integrated environmental information system), annual waste report, contents and manner of keeping the data register and the content and form of the summary report (Regulation of Waste Management , Official Gazette of Republic of Turkey, No. 29314 , 02.04.2015).

The storage of hazardous waste is regulated by the conditions of storage of waste ("Official Gazette of Republic of Turkey " number 27533). Hazardous wastes are stored in storage containers (barrels, containers and other containers) at the location - temporary warehouse which is secured and under constant supervision. Damaged hazardous waste is visible and clearly marked.

Special attention is paid so that various types of hazardous waste are not mixed, i.e. that different types of hazardous waste are separated by the fence.

Ortadoğu Antalya Liman İşletmeleri A.Ş. sign contract with recycle/disposal companies for hazardous wastes. This is legal obligation by the environmental ministry. The company must have an environmental license for the waste code to be sent.

Seperated wastes are sending to recycle/disposal with trucks which has enviromental licence for that waste code.

3.2.1.2. Non – hazardous Waste

Table 7:Non-Hazardous Waste Table


WASTE CODE	SOURCE
20 01 08 Biodegradable kitchen and canteen waste	Cafeteria ,Vessels
15 01 01 paper and cardboard packaging	Offices, Vessels, Port Operations
15 01 04 metallic packaging	Offices, Vessels, Port Operations
15 01 07 glass packaging	Offices, Vessels, Port Operations

Domestic and recyclable wastes (such as paper, plastic, glass) generated from the port are located in different containers in the solid waste collection area. The solid waste collection site consists of two compartments, which can leave the organic wastes and the recyclable waste. Organic wastes are picked up by the Municipality and taken to the landfill. The domestic wastes are transported and recycled by the sub-contractor company of the Municipality. The amount of port generated waste is recorded on a daily basis.

Waste paper and cardboard is separated and collected in the organizational units where it is created and is then disposed at the determined location on a temporary storage, protected from atmospheric impacts.

Construction waste is temporarily stored at a defined location in a temporary warehouse.

Waste wood (pallets) is temporarily stored at a precisely defined place for temporary storage.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	19 / 50

Metal waste is temporarily stored in a defined location, which is marked and available for access of vehicles carrying out loading and / or taking over.

3.2.1.3 Ship Generated Wastes

Ortadoğu Antalya Liman İşletmeleri A.Ş. manage waste from ships with MARPOL 73/78. There is a table below which is waste quantities and categories by years.

Table 8:Hazardous Waste Table

YEAR	NUMBER OF SHIPS	WASTE QUANTITIES (m3)				
		BILGE WATER (ANNEX-I)	SLUGE (ANNEX-I)	WASTE OIL (ANNEX-I)	SEWAGE (ANNEX-IV)	SOLID WASTE (ANNEX-V)
2016	176	116,8	529,32	0	0	576,22
2017	212	137,17	607,82	0	543	870,785
2018	579	1.540,55	1.017,92	0	3.696	2.166,28
2019	365	728,06	468,59	8,60	815	1.794,00
2020	411	339,11	542,16	2,20	184,50	472,73


Wastes from vessels to be accepted to the facility;

MARPOL 73/78 ANNEX-I (bilge water, sludge, waste oil), MARPOL 73/78 ANNEX-IV (sewage) and MARPOL 73/78 EK-V (solid waste). The wastes within MARPOL 73/78 ANNEX-IV and Annex-V are sent directly to the facility without any action. The wastes within the scope of MARPOL 73/78 ANNEX-I are separated from the water by treatment processes after they are picked up from vessels and they are sent to the recycling.

Wastes from port (office activities, port facilities) is treated in a way that ensures the protection of environment and prevents harmful impacts of waste. Waste collecting is carried out in an organized way; waste is sorted on the spot (according to the origin, character, and category), temporary storing, and its efficient removal by its handover to authorized waste management operators, in accordance with the procedure Waste Disposal and Temporary Waste Storage and Legislation.

Under the MARPOL 73/78 ANNEX - I, bilge water is separated from the water by physical processes after picked up from the vessels. The ship's waste is discharged to the truck with providing a connection hose by the port. The waste is discharged to raw material storage tanks at the treatment facility. The wastes were in the tanks are sent to the heaters by means of the pump. The purpose of heating is to increase the efficiency in the separator. After the heater, the waste comes to the separator where the physical separation is realized by using the density difference of oil and water. The separated water is collected in a tank and sent to the chemical treatment. The dewatered waste is stored in a different tank to be sent to the licensed recycle facility.

Under the MARPOL 73/78 ANNEX - V, the solid waste (garbage) will not come to the port for any operations. Domestic waste accepted in garbage bags from the vessel is suitable for recycling as glass, plastic, paper etc. And the others like food and organic waste except the ones suitable for recycling is disposed to the place indicated in accordance with the protocol signed with Konyaaltı Municipality.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	20 / 50

Under the MARPOL 73/78 ANNEX - IV, According to the same protocol, the sewage received from vessels by the sewage truck and discharge to the municipal waste water treatment plant.

3.2.1.4 Spill Prevention and Control Planning

Leaks, liquid, oils and emulsions spills (hazardous substances or waste with the properties of hazardous substances) may occur due to inadequate handling, inadequate packaging or storing conditions.

While working with the hazardous substances, including hazardous waste, incidents (undesired events without consequences) and accidents (undesired events with consequences) occur.

In order to prevent serious consequences of leaks and spills, Ortadoğu Antalya Liman İşletmeleri A.Ş. provides adequate protective equipment for spills: absorbents (sorbent pads, sand, sponge masses etc.), shovel with long handle, the small shovel and also the obligatory equipment for employees engaged in possible recovery actions (eye glasses, protective suit, gloves, boots resistant to acids and bases). Equipment for incident leaks is on storing and handling locations on easily accessible places (so called spill kit usage is recommendable).



Figure 5: Sorbent Pads



Figure 6: Sorbent Booms

Leaks and spills of hazardous substances must be recovered as per the Instruction and internally registered.

Prior to commencement of every new business project – new cargo handling, Ortadoğu Antalya Liman İşletmeleri A.Ş. requests its partners to submit MSDS (Material Safety Data Sheet) in order to prepare its area and employees and provide adequate equipment.

As per requirements of ISO 14001 EMS standard and legal regulation, Ortadoğu Antalya Liman İşletmeleri A.Ş. has a Procedure for reacting in extraordinary situations and Instructions for reaction in extraordinary situations in place. The team with clear duties and responsibilities for reacting in extraordinary situations is also appointed.

QTERMINALS ANTALYA	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	21 / 50

Also we take preventions for dusty bulk cargo. The preventions we take in our bulk cargo operations are given below.

- Tarpaulins are placed to leave no gap between the ship and the dock.



Figure 7: Tarpaulins

- Three rows of barriers are placed around the ship leaving no gaps.

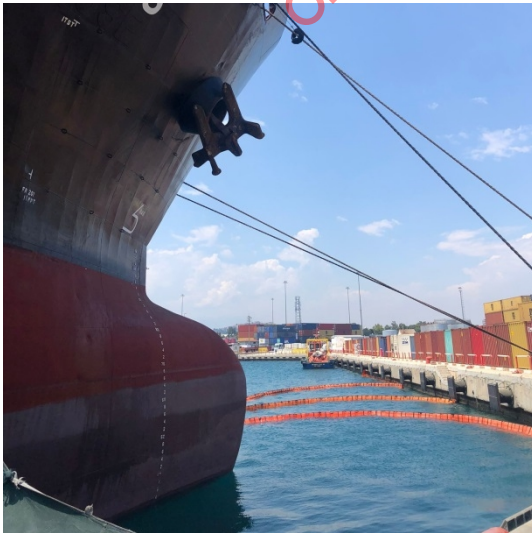


Figure 8: The Row of Barriers

QTERMINALS ANTALYA	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	22 / 50

- Dust suppressors are set up and activated at the ship's bow and stern.



Figure 9: Dust suppressors

- The dock where the bulk cargo is to be handled is surrounded by three layers of container pools.



Figure 10: Container Pools

QTERMINALS ANTALYA	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	23 / 50

- Marine cleanup equipment is placed inside the floating barriers.




Figure 11: Seabin

- Environmental emergency response containers and floor cleaning equipment are kept on standby at the dock.



Figure 12: Environmental emergency response equipments

We carry out all these measures with great care to minimize the risk of pollution in the receiving environment.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	24 / 50

3.2.1.5 Wastewater (Port Sewage, Storm water, and Ship Wastewater)

Domestic wastewater is delivered to the municipal sewerage system.

Rain water is collected in rainwater collection channels. There is an oil trap in these channels. In this way separated oil and water. These oil traps cleaning regularly.

İndüstriyel waste water is generated as a result of the removal of bilge from ships in the waste reception facility. The wastewater from the separation is treated in the chemical treatment plant and sent to municipal sewerage system. Chemical treatment plant has a capacity of 1,3 m³/h.

3.3 Energy Management

Ortadoğu Antalya Liman İşletmeleri A.Ş. is engaged in environmental and energy efficiency issues. It is appointed as an energy champion with agreed key targets, responsibilities and authority and provide the resources necessary to deal efficiently with the port's energy issues. This is essential to avoid the "when everyone is responsible, often no one is responsible" scenario. It then needs to develop an in depth understanding of the port's present and expected energy consumption. Only then can accurate measurements, comparisons and follow-ups be implemented. Ortadoğu Antalya Liman İşletmeleri A.Ş. considers an Energy Management which recognizes that proper procedures for measuring and following up results are as important as being able to plan and implement. The aim of Energy Management is to maximize profits, while minimizing costs and increase the port's competitiveness. For example, it addresses all aspects such as bringing together employees that affect energy performance. Often such employees are physically and organizationally far apart from those making decisions. A 'top down' communication of energy management commitment as part of the desired organizational culture helps galvanize support. Another aspect of energy management is to map and analyse energy usage. This provides data to assess measures and decide on goals for energy efficiency that are challenging but still achievable.

Ortadoğu Antalya Liman İşletmeleri A.Ş. has ISO 50001: 2018 Energy Management System Certification by TSE (Turkish Standards Institute).

Ortadoğu Antalya Liman İşletmeleri A.Ş. has procedure Energy Management System (EYS-PRO-001) (Energy Management System Standard 50001: 2018 request).


The analysis of energy consumption requires a detailed understanding of the portions of the port's energy bill represented by the different operations. To be able to identify the energy consumption levels and profiles of different operations, an activity-based cost approach is adopted because this approach makes it possible to:

- Determination which area of operation is consuming what amount of energy; and
- Establish a set of detailed indicators.

The following energy activity clusters have been considered here: lighting, buildings and cooling. Time is another important factor when it comes to measuring energy consumption and setting indicators for energy efficiency because of:

- The seasonality;
- Variations in the dwell time of different ground operation types
- Vessel operations; all which can trigger significant variations and peaks in energy consumption.

Even though the literature on energy consumption in ports is quite limited, some work has been done on the energy consumption of specific types of port operations.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	25 / 50

The energy sources used in the port are diesel and electrical energy. Heating and cooling activities in the enterprise Energy consumption data per movement/per working hour of construction equipment and vessels are given in the table below.

Table 9:Energy consumption datas

KPI	2019 Act.	2020 Act.
Stacker consumption (per move / lt)	0,59	0,57
Forklift consumption (per move / lt)	2,56	2,00
MHC consumption (per move /kWh)	5,27	5,02
Vessel Fuel Consumption (Portakdeniz 1) (lt/h)	43,19	33,08
Vessel Fuel Consumption (Ixsus) (lt/h)	64,43	62,56
Vessel Fuel Consumption (Alexander The Great) (lt/h)	43,87	38,26
Vessel Fuel Consumption (Klavuz 9) (lt/h)	6,64	7,31
Vessel Fuel Consumption (Güvenlik 1) (lt/h)	7,50	6,09

The table containing the electricity consumption data of the buildings, MHC's and the field is given below.

Table 10:Electricity Consumption Datas

Electricity Consumptions (kWh)	2019	2020
Buildings	298.355	524.148
Field Lighting	162.742	204.652
Field	824.674	933.752
MHC	764.791	501.258
Total	2.050.562	2.163.809


	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	26 / 50

Table 11: Diesel Consumption Datas

Diesel Consumptions (lt)	2019	2020
Forklift - Stacker	343.902	337.317
On-road Vehicles	6.210	6.781
Generators	492	2.574
Vessels	110.095	58.817
Total	460.699	405.489

The energy consumptions for the years 2019-2020 are compared and the reduced energy consumption amounts per movement / working hour are given in the table below.

Table 12: Reduced energy consumption

KPI	2019-2020 Reduction
Stacker consumption (per move / lt)	0,02
Forklift consumption (per move / lt)	0,56
MHC consumption (per move /kWh)	0,25
Vessel Fuel Consumption (Portakdeniz 1) (lt/h)	10,11
Vessel Fuel Consumption (Ixsus) (lt/h)	1,87
Vessel Fuel Consumption (Alexander The Great) (lt/h)	5,61
Vessel Fuel Consumption (Klavuz 9) (lt/h)	-0,67
Vessel Fuel Consumption (Güvenlik 1) (lt/h)	1,41


	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	27 / 50

Table 13: Energy density

Datas	2019	2020
Total Handled Cargo	2.753.718	3.116.003
Electricity consumption (kWh)	2.050.562	2.163.809
Electricity Consumption Ddensity (kWh/ton)	0,74	0,69
Diesel Consumption (lt)	460.699	405.489
Diesel Consumption Density (lt/ton)	0,167	0,130

Periodical training to raise awareness about energy saving is given in all departments by the Energy Management System representative every year. One of the aims of this training is to increase the level of awareness about energy saving.

Ortadoğu Antalya Liman İşletmeleri A.Ş. began work on installing the energy management system in 2019 and this work was validated when it received the Energy Management System Certificate from the TSE on 21 October 2019. The main purpose behind establishing this management system is to reduce costs by reducing the amount of energy used in the processes defined in the operation and to ensure that energy is used efficiently and according to need through compliance with energy-saving measures.

With the understanding that the most important issue in energy management is the ability to monitor energy consumption accurately, the number of meters used to monitor electricity consumption in different locations was increased from 17 to 32 as of the end of 2019.

Energy Action Plans have been prepared for each process (Operation Planning, Technical, Marine Services, Administrative Building) under the Energy Management System. Actions relating to energy efficiency are worked into these plans and operations are carried out in line with these actions.

3.3.1 Creating a Strategy for Sustainable Energy Modernization

Ensuring reliability throughout that modernization of the electric system requires a combination of policy, process and technology-driven solutions. Ortadoğu Antalya Liman İşletmeleri A.Ş. works closely with local authorities, regional and agencies to develop a long-term strategy.


3.4 Noise

Noise is generated from several sources in Ortadoğu Antalya Liman İşletmeleri A.Ş., including ship traffic, port operations, maintenance equipment, all of which is of temporary character with the highest degree of presence at the location of the works execution.

As per legal and ISO 45001:2018 requirements, Ortadoğu Antalya Liman İşletmeleri A.Ş. carried out the examination of working environment conditions – micro climate parameters, lightning, noise, vibrations and chemical hazards. As per evaluation of the measured values, the finding was that noise and vibrations were not a hazard on any of the work places.

3.5 Climate Change Resilience

The Port is aware of the risks that climate change may pose to its operations and regards contributing to the global efforts to tackle climate change among its primary environmental responsibilities. To reduce its impact on climate

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	28 / 50

change, the port tracks its energy consumption and GHG gas emissions, invests in energy efficiency and renewable energy sources, deploys low or zero emission vehicles and raises awareness among its employees and other stakeholders. Port and terminal facilities are vulnerable to the direct and indirect impacts of climate change. For example, in addition to potential changes in water levels and inundation risks resulting from alterations to coastal processes and seabed/coastal geomorphology caused by port infrastructure development, a port operation may in future be exposed to more damaging storms or a higher mean sea level than has historically been the case as a result of climate change, which may impact the viability of port operations. Critical port and vessel related activities (in particular ship movement and mooring, loading and unloading, and dredging activities) and the port's supply chain infrastructure (road and rail movement, intermodal hubs) may be vulnerable to risks related to climate variability such as increased intensity of rainfall, flash floods, heat waves, storms and storms surge, and high wind speeds. Given these risks, projected future climate change-related impacts and the development of adaptation measures to enhance resilience should be assessed in the design phase of new port projects (and significant port expansions), to allow for the identification, analysis, and evaluation of climate change vulnerabilities and risks as part of the consideration of project alternatives, design, and siting. In addition, changing climate conditions should be evaluated on a regular basis during the operational phase of port projects.

Ortadoğu Antalya Liman İşletmeleri A.Ş. is certified and implementing the Quality Management System (ISO 9001:2015 Standart), Energy Management System (ISO 50001:2018 Standart), Environmental Management System in accordance with the ISO 14001: 2015 standard and Green Houses Gases Management (ISO 14064-1:2006), which confirms the commitment to the quality of processes and services, as well as the tendency to preserve the environment. ISO 14001 was first published in 1996 and specifies the requirements for a robust environmental management system, through improvement of environmental performance, fulfillment of obligations for harmonization and achievement of environmental objectives. It is applied to significant aspects of the environment, in accordance with the criteria set by the Company to determine its significant aspects.


The following potential environmental impacts were identified by Ortadoğu Antalya Liman İşletmeleri A.Ş.:

- Water
- Air
- Land

The environmental impact of Ortadoğu Antalya Liman İşletmeleri A.Ş. operation is not expected to be significantly affected by climate change. Under pressure from climate change, the following potential environmental impacts need to be considered:

- Increased energy use and associated GHG emissions due to the effect of increased temperatures on refrigeration
- Increased run-off due to precipitation

Climate change models predict that significant changes in rainfall levels will occur as a result of temperature rise. In theory, changes in rainfall could increase the risk of negative impacts on water quality, through increased run-off, overwhelming of the drainage system and exceeding the capacity of oil/water separators. However, very increased precipitation is unlikely to overwhelm the port's drainage system and lead to surface flooding, because the atmospheric sewerage system of the port is designed to receive large amounts of water. Atmospheric sewage on the area of Ortadoğu Antalya Liman İşletmeleri A.Ş. is very scattered and connected by lateral pipes to the piers quays.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	29 / 50

The priority of the Company, through education and continuous awareness, is to encourage change in behavior, to build employee awareness of climate change, with the necessary primary adaptation measures for the purpose of prevention, preparedness and action to prevent, mitigate and adapt to climate change.

3.6. Environmental Performance

Key Performance Indicators demonstrate how we measure our results and that we are able to demonstrate the results of our policy and of the implementation of the environmental laws and regulations in concrete terms (kg, m3 or others)

At Qterminals Antalya, Key Performance Indicators are followed separately for each process/department. These tables are revised annually. Annual targets and actuals are included in these tables. The methods and frequency with which the defined performance indicators will be followed and detailed in these tables. In Annex-5, you can see the 2021 KPI Table of the HSE-Q department. (All KPI tables are in Turkish. We translate HSE-Q department table so we give this table in annex-5.) In addition, action plans are being prepared for our important environmental aspects. Actions to be taken in order to reach the targets set in these action plans. You can see the action plan of the operations and planning department in Annex-6. (All action plans are in Turkish. We translate Ops & Pln department table so we give this plan in annex-6.) All these documents are managed within the scope of the our quality management system and their up-to-dateness is checked and reviewed by us.

4. RESPONSIBILITIES AND RESOURCES

4.1. Environmental Investments and Improvements

Environment protection involves expenses representing the sum of investments and ongoing expenses for activities related to environment protection.

Investments for environment protection comprehend the investments referring to environment protection activities (methods, technologies, processes, equipment and its parts etc.) in order to gather, treat, follow, control, reduce, prevent or remove pollution or any other environment degradation resulting from business activities.

Current affairs for environment protection comprehend the expenses for functioning and maintaining equipment for environment protection and paying the third parties for environment protection services in order to prevent, reduce, treat or remove pollution or any other environment degradation resulting from business activities.

The annual budget of the port within the scope of environmental management is given in the table below.

Environment Management Investments:

Emergency Response Services and Equipment	260.000 TL
Disposal Hazardous Waste	29.700 TL
Environmental Management (Consultant Services, Certifications, Waste Reception Facility etc.)	845.000 TL
TOTAL	1.134.700 TL

4.2 Ortadoğu Antalya Liman İşletmeleri A.Ş. Organization Structures

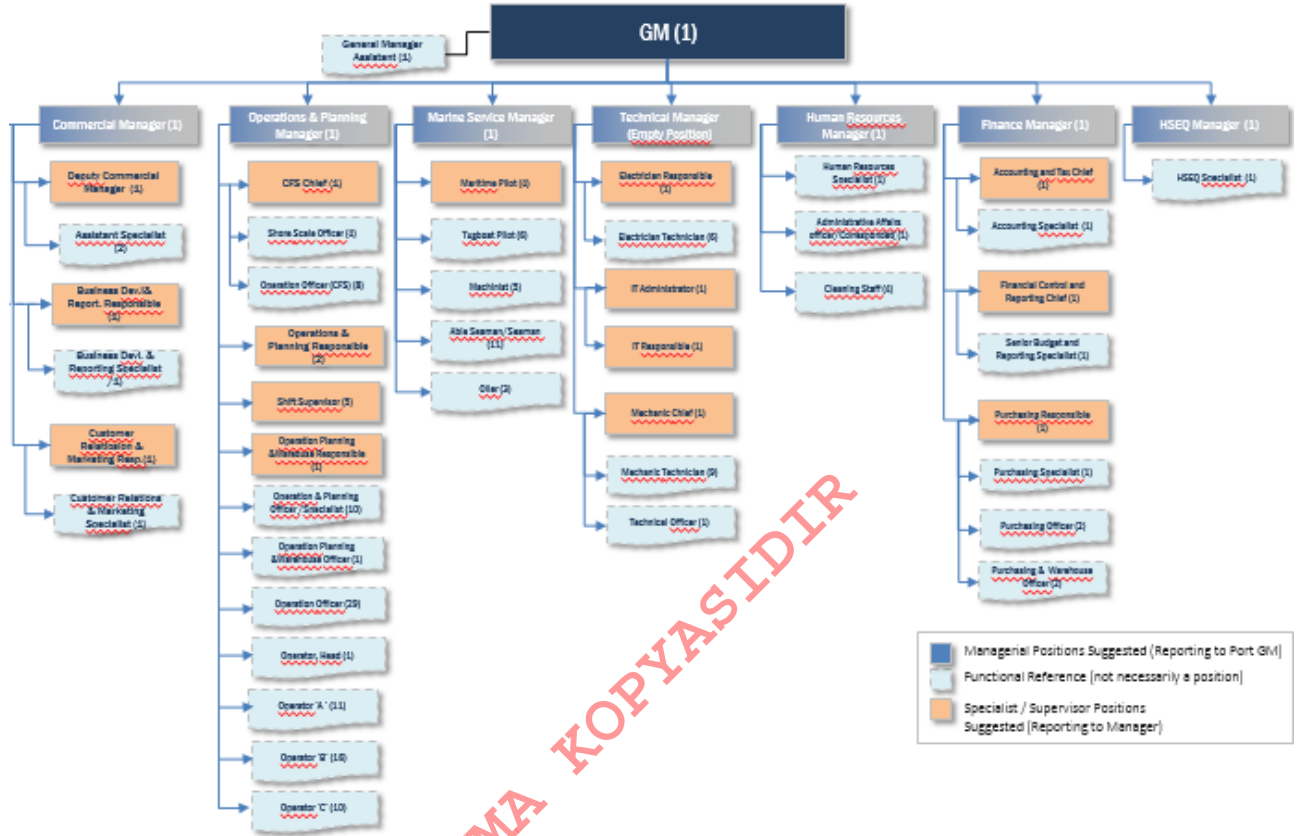


Figure 13: Ortadoğu Antalya Liman İşletmeleri A.Ş. Organization Structure

4.3. Responsibilities of Departments on Environmental Activities

The below table refers those liabilities affecting the environment at Ortadoğu Antalya Liman İşletmeleri A.Ş., which are specified in the requirements of PERS certification. These are tasks that may cause, control or minimize environmental impacts when defined. And that may cause environmental impacts if control was lost, or may conclude in a breach of environmental policy guidelines or regulations.


	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	31 / 50

Table 14: Environmental Responsibilities of Key Personnel

TASK	JOB TITLE	DEPARTMENT
Port Operations (Dredging)	There is not any operation to be specified under this section.	
Port Operations (Navigation)	Marine Services Manager	Marine Services Department
Port Operations (Shipping)	Marine Services Manager	Marine Services Department
Port Operations (Terminals)	Operation and Planning Manager	Operation and Planning Department
Cargo Handling Operations	Operation and Planning Manager	Operation and Planning Department
Jetty/Wharf Management	There is not any operation to be specified under this section.	
Site Management	Planning Responsible	Operation and Planning Department
Strategic Planning	General Manger	Top Management
Supplies acquisition	Purchasing Responsible	Technical Department
Licensing/Permits	HSE-Q Manager	HSE-Q Department
Quality Management	HSE-Q Manager	HSE-Q Department
On site Contractor Management	Technical Manager/ Operations Manager	Technical Department
Emergency Planning	Operation and Planning Manager/ PFSO	Operation and Planning Department / Internal Security Service
Waste Management	HES-Q Manager/Responsible person for waste management/ EMS Specialist	HES-Q Department
Marina / Slipway management	There is not any operation to be specified under this section.	
Environmental Document Management	HSE-Q Manager/ HSE-Q Specialist /Environmental Consultant	HES-Q Department
Environmental Data Management	HSE-Q Manager	HES-Q Department
Soil pollution assessment	Environmental Consultant	Independent Consulting Company
Air Quality monitoring	Environmental Consultant	Independent Consulting Company
Energy and Carbon Footprint monitoring	Technical Chief/Operation&Planning Manager/ Energy Management System Specialist	Technical Department & HSE-Q Department & Operation and Planning Department
Water Quality monitoring	Environmental Consultant	Independent Consulting Company
Noise management	Environmental Consultant	Independent Consulting Company
Vehicular Management of Terminal traffic	Planning Responsible	Operation and Planning Department

5. CONFORMITY REVIEW OF ENVIRONMENTAL POLICY AND LEGAL REQUIREMENTS
Table 15: Conformity Review Table

1	2	3	4	5	6	7	8	9	
Rf Nr	Activity	Aspect	Impact on	Legal and other requirements	Remarks	Calculation Method	Target Value 2021	Indicator Presentation (Calculation Details)	
								2019	2020
ADMINISTRATIVE BUILDINGS									
1	Port Offices	power supplies, batteries and their wastes	Land/Soil	-Waste Battery Control Regulation (Article 13 subparagraphs a,b and c) -Soil pollution control regulation -Waste Management Regulation	The pen batteries are collected and handled to TAP. Waste accumulators are the licensed waste collecting companies. Record are formed and kept.	Hazardous Waste delivery form records	4,5 kg	5 kg	5 kg
		Waste toner, cartridge	Land/Soil	-Soil pollution control regulation -Waste Management Regulation (Art 9 b, g, h)	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	40 kg	55 kg	50 kg
		Electrical wastes (hazardous waste)	Land/Soil	-Soil pollution control regulation -Waste Management Regulation	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	0 kg	0 kg	0 kg
		Water consumption and waste water	Water	-Water Pollution Control Regulation	Water consumption and the quantity of the waste water are monitored on a daily basis	Monitoring of water meters	5000m ³	5000 m ³	5386 m ³
		Fluorescent Wastes	Land-/Soil	-Soil pollution control regulation -Waste Management	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	30 kg	33 kg	39 kg

				Regulation (Art 9 b, g, h)					
2	Lighting and Heating	Electricity consumption	Causes to over consume natural resources	-	electricity consumption is monitored on a daily basis.	Annual electric consumption	140.000 kWh	154.536 kWh	141.450 kWh
CONTAINER OPERATIONS									
3	Container Loading/Unloading Operations	Environment Emissions	Air/Human Health	-	Machinery and Equipment are maintained periodically.	Emission Measurements	3 mg/ m ³ (Limit Value)	0,34 mg/ m ³	0,34 mg/ m ³
		Noise	Human Health	-Regulation On The Evaluation And Management Of Environmental Noise	Machinery and equipment are maintained periodically.	Noise Measurements	Daytime equivalent energy sound levels: quarterly achievement rate of 100% Evening Leq: quarterly achievement rate of 100% Night-time Leq: quarterly achievement rate of 100%	Daytime Leq 100% Evening Leq 100% Night-time Leq 100%	Daytime Leq 100% Evening Leq 100% 0 Night-time Leq 100%
		Electricity consumption	Causes to over consume natural resources	-	electricity consumption is monitored on a daily basis.	Annual electric consumption	2.300.000 kWh	2.560.259 kWh	2.263.795 kWh
		Fuel consumption	Cause to depletion of	-Air pollution Control	-Fuel consumption is monitored on a daily basis.	Annual fuel consumption	450.000 L	589.318 L	405.489 L


			natural resources	Regulation	- energy action plans prepared within the scope of energy management system (ISO 50001:2018)				
DRY BULK CARGO OPERATIONS									
4	Dry Bulk Cargo Loading/Unloading Operations	Environment Emissions	Air/Human Health	Air pollution Control Regulation	-After the bulk load is lifted by the grabber, the unloading is performed when the fall height is at the minimum level. -After the mechanical grab is kept in the hopper for a sufficient time, the process is completed without dusting. -When unloading from trucks, the most appropriate pier is selected.	Emission Measurements	3 mg/ m ³ (Limit Value)	0,34 mg/ m ³	0,34 mg/ m ³
		Noise	Human Health	-Regulation On The Evaluation And Management Of Environmental Noise	Machinery and equipment are maintained periodically.	Noise Measurements	Daytime equivalent energy sound levels: quarterly achievement rate of 100% Evening Leq: quarterly achievement rate of 100%	Daytime Leq 100% Evening Leq 100% Night-time Leq 100%	Daytime Leq 100% Evening Leq 100% 0 Night-time Leq 100%

							Night-time Leq: quarterly achievement rate of 100%		
5	Emission by storage of bulk cargo on the quay	Environment Emissions	Air/Human Health	Air pollution Control Regulation	-Emission shielding is applied with the help of containers. -Transportation distances are reduced. -Dock arrangement is made according to the wind position.	Emission Measurements	3 mg/ m ³ (Limit Value)	0,34 mg/ m ³	0,34 mg/ m ³
OTHER SERVICES									
6	Water supply for vessels	Water consumption and waste water	Water	-Water Pollution Control Regulation	Water consumption and the quantity of the waste water are monitored on a daily basis	Monitoring of water meters	6000 m ³	5000 m ³	7.666 m ³
MAINTENANCE									
7	Maintenance of Construction Machinery	Waste Engine Filters	Land-/Soil	-Soil pollution control regulation -Waste Management Regulation (Art 9 b, g, h)	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	300 kg	350 kg	305 kg
			Land-/Soil/Water	-Soil pollution control regulation -Waste Management	-They are collected in separate location and sent to disposal facilities. - Spill Kit is available	Hazardous Waste delivery form records	7500 kg	7750 kg	7540 kg

		Waste Engine Oil**		Regulation -Regulation On The Control Of Waste Oils					
		Contaminated packages, thread wastes and uniforms*	Land/Soil	-Soil pollution control regulation -Waste Management Regulation(Art 9 b, g, h)	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	1000 kg	1200 kg	1120 kg
		End of Life Tire	Land/Soil	-Soil pollution control regulation -Waste Management Regulation -End of life tire Control Regulation	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	4000 kg	4500 kg	4080 kg
8	Painting	paint, thinner, solvent and similar chemical materials and their wastes	Land/Soil/ Water	-Soil pollution control regulation -Waste Management Regulation (Art 9 b, g, h) -Water Pollution Control Regulation	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	0 kg	0 kg	0 kg
		Contaminated packages, thread wastes and uniforms*	Land/Soil	-Soil pollution control regulation -Waste Management Regulation(Art 9 b, g, h)	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	1000 kg	1200 kg	1120 kg
		Waste Paint Cans	Land-/Soil	-Soil pollution control regulation -Waste	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	0 kg	0 kg	0 kg

MARINE SERVICES									
				Management Regulation (Art 9 b, g, h)					
9	Pilotage and Towage Services	Fuel consumption	Cause to depletion of natural resources	-Air pollution Control Regulation	-Fuel consumption is monitored on a daily basis. - energy action plans prepared within the scope of energy management system (ISO 50001:2018)	Annual fuel consumption	100.000 L	64.710 L	112.335 L
		Sludge, Bilge Water, Waste Oil	Water	-Regulation on Waste Collection and Waste Control from Ships (Art. 6 b)	They are collected in separate location and sent to disposal facilities.	National Waste Transfer Forms records	25 m ³	16,5 m ³	32 m ³
10	Maintenance of Vessels	Waste Engine Oil**	Land-/Soil/Water	-Soil pollution control regulation -Waste Management Regulation -Regulation On The Control Of Waste Oils	-They are collected in separate location and sent to disposal facilities. -Spill Kit is available	Hazardous Waste delivery form records	7500 kg	7750 kg	7540 kg
		Contaminated packages, thread wastes and uniforms*	Land/Soil	-Soil pollution control regulation -Waste Management Regulation(Art 9 b, g, h)	They are collected in separate location and sent to disposal facilities.	Hazardous Waste delivery form records	1000 kg	1200 kg	1120 kg
WASTE RECIVING FACILITY									
11	Waste collection and storage from ships within the scope of	Bilge Water, Sludge or Waste oil spill (Land Pollution)	Land-/Soil	-Soil pollution control regulation - Regulation on Waste	The received liquid waste is stored in the tanks in the safety	Environmental Ministry Records	0 Environmental	0 Environmental	0 Environmental

Marpol Annexes			Collection and Waste Control from Ships (Art. 6 b)	pool. In case of spills or accidents, Emergency Response Team is available at the port.		Accident	Accident	Accident
	Bilge Water, Sludge or Waste oil spill (Sea Pollution)	Water	-Water Pollution Control Regulation - Regulation on Waste Collection and Waste Control from Ships (Art. 6 b)	Within the scope of the Emergency Response Plan approved by the Ministry, drills are carried out every 6 months for emergencies.	Environmental Ministry Records	0 Environmental Accident	0 Environmental Accident	0 Environmental Accident
	Waste disposal to receiving environments	Land/Soil/Water	-Soil pollution control regulation -Water Pollution Control Regulation -Regulation on Waste Collection and Waste Control from Ships (Art. 6 b) -Waste Management Regulation	Within the scope of Marpol 73/78, the request to deliver waste from the Agency under the name of waste reception service is received through the ship waste tracking system (a system controlled by the Ministry). -Recyclable wastes are collected by the contracted companies for recycling. -Non-recyclable solid wastes are taken to waste landfills to be taken to landfill and disposed. -Sewage water is drained by sewage trucks and discharged to wastewater treatment plant.	Environmental Ministry Records	0 Environmental Accident	0 Environmental Accident	0 Environmental Accident

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	39 / 50

Ortadoğu Antalya Liman İşletmeleri A.Ş. strives to do business responsibly and aims to integrate environmental sustainability to the core of its business strategy. The Port is aware of the environmental risks inherent within the business and committed to manage and reduce environmental footprint caused by its activities.

The Port's environmental impacts and risks are mainly focused around natural resource, water and energy consumption, emissions, air and water pollution, handling of hazardous waste, effluents, dredging and impacts on marine ecosystems due to noise and vibration. The Port responds these impacts and risks in a systematic and proactive manner in line with its environmental management systems.

To foster environmental sustainability, the Port manages environmental matters in line with laws and regulations where the Company operates, international environmental standards and the Company's Environmental Policy.

5.1 Review of Compliance

Ortadoğu Antalya Liman İşletmeleri A.Ş. has implemented different processes for the review of its environmental performance and compliance with the port environmental legislation.

These processes are:

- External Audit
- Internal Audit
- Review of Legal Compliance
- Review by the Board

Our compliance with environmental legislation is reviewed monthly and annually by the Environmental Consultant. As a result of this review, a monthly evaluation report and an annual evaluation report are prepared and signed. The preparation of these reports is also an obligation within the scope of environmental legislation.

5.2 Environmental Impact Assessment Legislation

1- The port activity is evaluated outside the scope of the Environmental Impact Assessment Regulation, which was published in the Official Gazette dated 17.07.2008 and numbered 26939, in the scope of the Environmental Impact Assessment Regulation.(Document Date: 07-09-2011 ,Document Number: B.18.4.İÇÖ.4.07.00.06-210-03/9019)


2- The waste reception facility is evaluated outside the scope of the Environmental Impact Assessment Regulation, which was published in the Official Gazette dated 17.07.2008 and numbered 26939, in the scope of the Environmental Impact Assessment Regulation. .(Document Date: 07-09-2011 ,Document Number: B.18.4.İÇÖ.4.07.00.06-210-03/9020)

5.3 Environmental Permit and License

Waste Reception Facility and Air Emissions are subject to Environmental License. The Environment and Urbanization Directorate issued an environmental license subject to the current waste reception facility and Air Emissions for 5 years with the letter dated 12/04/2018 and numbered 23822202-155/78474.

5.3.1 Waste Management

Waste Reception Facility Waste Management Plan as of 27.11.2019 number:84973951-140.07-E.275435 and Industrial Waste Management Plan as of 06.09.2021 number:86960703-145.01-1657354 (Valid Date: 06.09.2024) gave consent to the Waste Management Plan for the following types of waste: 13 04 03 bilge oils from other navigation, 13 07 01 fuel oil and diesel,13 07 02 petrol,13 07 03 other fuels (including mixtures), 13 01 01 hydraulic oils, containing PCBs,13 01 04 chlorinated emulsions,13 01 05 non-chlorinated emulsions,13 01 09 mineral-based chlorinated hydraulic oils,13 01 10 mineral based non-chlorinated hydraulic oils,13 01 11 synthetic hydraulic oils,13 01 12 readily biodegradable hydraulic oils,13 01 13 other hydraulic oils, 13 02 04 mineral-based chlorinated engine, gear and lubricating oils,13 02 05 mineral-

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	40 / 50

based non-chlorinated engine, gear and lubricating oils,13 02 06 synthetic engine, gear and lubricating oils,13 02 07 readily biodegradable engine, gear and lubricating oils,13 02 08 other engine, gear and lubricating oils , 13 05 08 mixtures of wastes from grit chambers and oil/water separators, 16 07 08 wastes containing oil,16 07 09 wastes containing other hazardous substances, 19 11 04 wastes from cleaning of fuel with bases, 15 01 01 paper and cardboard packaging,15 01 02 plastic packaging,15 01 03 wooden packaging,15 01 04 metallic packaging,15 01 05 composite packaging,15 01 06 mixed packaging,15 01 07 glass packaging, 20 01 08 biodegradable kitchen and canteen waste.

Waste oil analysis is carried out in laboratories authorized by the Ministry. According to the analysis report dated 11.05.2018, waste oil was determined as the first category.

Waste in Ortadoğu Antalya Liman İşletmeleri A.Ş. is treated in a manner that ensures the protection of environment and prevents harmful impacts of waste. Waste collecting after the generation of certain amount of waste, its sorting on site (by origin, character, category), temporary storage, and its efficient removal are carried out in an organized manner by handing it over to certified waste management operators, in accordance with the procedure SEÇ-PRO-013 Waste Management (EMS Standard 14001: 2015 request) and legal regulations.

Waste generated by Ortadoğu Antalya Liman İşletmeleri A.Ş. all its technological / operational processes, mainly includes industrial waste. A smaller part of non-hazardous waste has a status of secondary raw material.

Ortadoğu Antalya Liman İşletmeleri A.Ş. has temporary location for waste disposal- temporary waste storage; near to waste reception facility area. Temporary location for disposal of waste/temporary storage is in accordance with requirements of law and by-laws and it meets conditions which ensure protection of harmful effect of waste to environment, OHS of employees and firefighting protection. Also, in accordance with Regulation of Temporary Waste Storage (Official Gazette of Republic of Turkey, 27533 as of 26.03.2010), during storage of waste, a special attention is paid so that different types of waste do not mix, especially different types of hazardous waste, as well as the waste not yet categorized, until obtaining laboratory finding on examination of that waste.

Domestic and recyclable wastes (such as paper, plastic, glass) generated from the port are located in different containers in the solid waste collection area. The solid waste collection site consists of two compartments, which can leave the organic wastes and the recyclable waste. Organic wastes are picked up by the Municipality and taken to the landfill. The domestic wastes are transported and recycled by the sub-contractor company of the Municipality. The amount of port generated waste is recorded on a daily basis.


There is infirmary in the port. Therefore, medical waste is generated. The generated EWC code is 18 01 03 . These code is defined in the industrial waste management plan (Valid date is 2021).

5.3.2 Water and Waste Water Management

1- In 2019, sea water samples were taken during the period of 25.07.2019 in order to determine sea water quality within the scope of coastal facility risk assessment and emergency response plans. Analyzes were made by the laboratory authorized by the Ministry. In the results of the analysis, it was seen that the limit values determined in Table 4 were obtained.

2- The amount of water used for social purposes accepted that all of the water turned into wastewater. Domestic wastewater is delivered to the municipal sewerage system. 15.02.2019 dated and 13050371-314.99-6230 numbered Waste Water Confirming Letters were received from Antalya Metropolitan Municipality.

3-The wastewater from the separation is treated in the chemical treatment plant and sent to municipal sewerage system. 15.02.2019 dated and 13050371-314.99-6230 numbered Waste Water Confirming Letters were received from Antalya Metropolitan Municipality. Also Wastewater Treatment Plant has 02.03.2021 dated and 6815 numbered Channel Connection Letters were received from Antalya Metropolitan Municipality.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	41 / 50

5.3.3 Emission Management

The latest confirmation measurement was made by an accredited company on 27.09.2017 and pm10 and collapsed dust measurement process was completed and reported. The measurement results meet the requirements of the regulation.

Environmental License is obliged to carry out emission confirmation measurements every two years. 2017 emission measurements have been completed and 2019 emission confirmation measurement have started in September.

Within the scope of the emission confirmation measurement, PM10 measurement is carried out at 4 different points and collapsed dust measurement is carried out at 2 different points.

PM10 measurements are instantaneous and collapsed dust measurements are carried out for 2 months.

The measured values are evaluated according to the limit values of the regulation on the Control of Air Pollution Caused by Industry (Official Gazzette of Republic of Turkey , Dated 03.07.2009, Numbered 27277)

5.3.4 Noise Management

The noise that occurs during the technological procedures on Ortadoğu Antalya Liman İşletmeleri A.Ş. area is primarily due to the means of mechanization, means of transportation and maintenance equipment, which is of temporary and is highest on the very site of works/ processes.

The port is exempted from noise permission under the Environmental Permit and License Regulation.

5.3.5 Soil Pollution Management

The port is covered by the Regulation on the Control of Soil Pollution of Hazardous Waste. The Activity Prior Information Form from the annexes of the regulation was filled out by the Ministry of Environment and Urbanization on the Integrated Environmental Information System and submitted to the Directorate of Environment and Urbanization.

5.3.6 Chemicals Management

Ortadoğu Antalya Liman İşletmeleri A.Ş. provides safety sheets (MSDS – Material Safety Data Sheet) at the time of chemicals handling and storing, from the aspect of environmental protection (and also OHS, fire protection, etc.) in accordance with the requirements of the legal regulations and the Integrated Management System, for the purpose of preparation and implementation of environmental protection measures.


6. ENVIRONMENTAL REPORT

The report is prepared by the environmental consultancy company, and not less than once in each subsequent year. The report is issued in at least in 2 copies one of which is given to the Ortadoğu Antalya Liman İşletmeleri A.Ş. environmental representative and is stored in the file in the Port. The other copy is kept by environmental consultancy company. The report consists of a total of 18 pages and includes the year of 2020 datas. Please review the report in annex- 1 as Ortadoğu Antalya Liman İşletmeleri A.Ş. Environmental Report. The report contained year of 2021 data will be prepared in February 2022.

6.1. Context of the Organization

6.1.1. Understanding the Organization and its context

Ortadoğu Antalya Liman İşletmeleri A.Ş. identified internal and external issues related to its objective and strategic aspect and which affect the ability of Integrated Management systems to achieve their intended outcomes.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	42 / 50

Ortadoğu Antalya Liman İşletmeleri A.Ş. monitors and reviews information on these internal and external issues.


Interested Parties;

Outside Context:

- Ministry of Transport, Maritime Affairs and Communications: Implementation of legal terms and regulations in Port Management and Pilotage
- Ministry of Environment, Urbanization and Climate Change: Implementation of requirements, EIA Exemption Report, Implementation of environmental activities,
- Antalya Metropolitan Municipality: Work permit, environmental pollution, legal process of environmental legislation, discharge of wastes, etc. implementation of activities
- CK Akdeniz Electricity Distribution Company : Port operation and pilotage, towage services energy use activities implementation
- ASAT(General Directorate of Antalya Water and Wastewater Management): Implementation of water use activities,
- Coast Guard Command: Status of implementation of campus and surrounding security activities
- Antalya Port Authority: Implementing port operations and customs operations
- Antalya Provincial Directorate of Environment, Urbanization and Climate Change: EIA Report, minimizing environmental pollution
- Customers: Implementation of service delivery of port operations and pilotage activities
- External Supplier (suppliers / subcontractors): Implementation of procurement activities needed during service delivery
- Turkish Standards Institution (TSE): Implementation of certification activities.

Internal Context:

- Acquired Information: Reliable and accurate information obtained / gained from service realization and delivery activities, standards, publications, statistical analysis, records, presence of reports, presence of qualified and expert personnel, research and development
- Culture: Improving / improving employee performance, training, internal communication, qualifications
- Values: Commitment of employees to the organization, training activities, increasing the qualifications of employees
- Performance: Port operation and service type development experience, resource utilization, Employee contribution to their work
- Information System: Hardware status, software used, number of users, licenses, effective use
- Owned Technology: Current status, energy use, waste management
- Facility: Status of infrastructure and other facilities, wastes
- Targets / Strategies: Compliance with policy target audience, compliance with business conditions
- Binding Agreements: Compliance with existing technology, environmental issues, social conditions, legal and customer requirements
- Equipment: Efficiency, waste discharge, energy use
- Management: Decision making, sufficient qualifications, knowledge, experience
- Suppliers: Reliability of suppliers, maintenance of assets by employees, procurement of new suppliers
- Security: Implementation of protection security with security personnel in port campus and surrounding area

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	43 / 50

6.1.2. Understanding The Needs and Expectations of Interested Parties

Ortadoğu Antalya Liman İşletmeleri A.Ş. due to its impact or potential impact on the ability to provide customers and port operators and services regularly meeting the provisions of applicable primary and secondary legislation, it has identified:

- a) Parties related to Quality Management and Environmental Management Systems,
- b) the requirements of these interested parties regarding Quality Management and Environmental Management Systems,
- c) Terms of service; compliance with the requirements of the port operator and pilotage, tugboat services market,
- d) Terms of service; determination of the special conditions of the customers (port management and guidance in accordance with the port operation activities, towage services customer requirement, service delivery etc.)



It monitors and reviews the information of the parties concerned and the terms of those parties, which include:

- Employers
- Board of Directors
- Local people
- Legal regulations
- Customers / End Users
- Banking / Finance
- Insurers
- External suppliers of port operations, services and services
- Unions
- Regulatory bodies (public administration)

Ortadoğu Antalya Liman İşletmeleri A.Ş. has carried out risk analysis of related parties.


Ortadoğu Antalya Liman İşletmeleri A.Ş. monitors and revises the information about these interested parties and the terms of these parties with the "Related Party Needs and Expectations Monitoring Table" (KYS-FRM-054).

7. BEST PRACTISES

Port:	Ortadoğu Antalya Liman İşletmeleri A.Ş.
Country:	Turkey
Contact Person:	Uğur Burhan Yıldırım
Position:	HSE-Q Manager
E-mail:	uyildirim@qterminals-antalya.com
Environmental issue: Sea Side Protection Against to Spills	
Relevance to the 5 Es framework of the ESPO Green Guide: Exemplify, Enable, Engage	
<p>To avoid environmental risks and hazards in the case of a potential malfunction or accident, Ortadoğu Antalya Liman İşletmeleri A.Ş. has started to use "professional marine oil barriers" to avoid these risks and protect the environment. In the port, all cargoes with sea pollutant properties are handled and a barrier is drawn around the vessels.</p>	
 	

Port:	Ortadoğu Antalya Liman İşletmeleri A.Ş.
Country:	Turkey
Contact Person:	Uğur Burhan Yıldırım
Position:	HSE-Q Manager
E-mail:	uyildirim@qterminals-antalya.com
Environmental issue: Control of Dust Emissions	
Relevance to the 5 Es framework of the ESPO Green Guide: Exemplify, Enable, Engage	
When dusting loads are handled, dust suppression equipment is used in the operation area. Thus, both emission control and marine pollution control are provided.	
	

Port:	Ortadoğu Antalya Liman İşletmeleri A.Ş.
Country:	Turkey
Contact Person:	Uğur Burhan Yıldırım
Position:	HSE-Q Manager
E-mail:	uyildirim@qterminals-antalya.com
Environmental issue: Sea Side Protection Against to Spills	
Relevance to the 5 Es framework of the ESPO Green Guide:	
Exemplify, Enable, Engage	
To avoid environmental risks and hazards in the case of a potential malfunction or accident, Ortadoğu Antalya Liman İşletmeleri A.Ş. has started to use tarp to avoid these risks and protect the environment. In the port, all cargoes with sea pollutant properties are handled and stretch a tarp from vessel to berth.	
	


Port:	Ortadoğu Antalya Liman İşletmeleri A.Ş.
Country:	Turkey
Contact Person:	Uğur Burhan Yıldırım
Position:	HSE-Q Manager
E-mail:	uyildirim@qterminals-antalya.com
Environmental issue: Marine Cleaning	
Relevance to the 5 Es framework of the ESPO Green Guide:	
Exemplify, Enable, Engage	
To avoid environmental risks and hazards in the case of a potential malfunction or accident, Ortadoğu Antalya Liman İşletmeleri A.Ş. has started to use seabin equipment (sea cleaning) risks and protect the environment. In the port, Marine cleanup equipment is placed inside the floating barriers.	
	

Port: Ortadoğu Antalya Liman İşletmeleri A.Ş.**Country:** Turkey**Contact Person:** Uğur Burhan Yıldırım**Position:** HSE-Q Manager**E-mail:** uyildirim@qterminals-antalya.com**Environmental issue:** Field Cleaning for Prevent to Marine Pollution**Relevance to the 5 Es framework of the ESPO Green Guide:**


Exemplify, Enable, Engage

To avoid environmental risks and hazards in the case of a potential malfunction or accident, Ortadoğu Antalya Liman İşletmeleri A.Ş. has started to use industrial cleaning equipment for protect the environment. In the port, industrial cleaning equipment clean the field periodically for the prevent to marine pollution.



	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	49 / 50

Port:	Ortadoğu Antalya Liman İşletmeleri A.Ş.
Country:	Turkey
Contact Person:	Uğur Burhan Yıldırım
Position:	HSE-Q Manager
E-mail:	uyildirim@qterminals-antalya.com
Environmental issue: Carbon Offsetting	
Relevance to the 5 Es framework of the ESPO Green Guide:	
Exemplify, Enable, Engage	
It has purchased the approved "Gold Standard" emissions reduction certificate to neutralize the greenhouse gas emissions verified in 2019 corresponding to a total of 2,898.77 tonnes of Scope-1 and Scope-2 CO ₂ and has become Turkey's first carbon-neutral port in 2019. Furthermore, as part of our port's work on reducing emissions, the TSE has awarded the port the Climate Friendly Organization Certificate, which aims to ensure that in the fight against climate change, organizations carry out reporting and verification by conducting studies aimed at reducing greenhouse gas emissions and contribute to the renewable energy sector by supplying carbon credits.	
 TSE TÜRK STANDARDLARI ENSTİTÜSÜ	
HEAD OF SURVEILLANCE AND INSPECTION CENTER CLIMATE FRIENDLY ORGANIZATION CERTIFICATE	
	
Certificate Number	IDK.006.2021/B0002
Certificate Date	19/02/2021
Report Number	IDK.006.2021/R0001
Company Title	Ortadoğu Antalya Liman İşletmeleri A.Ş.
Company Address	Liman Mah. Liman Cad. 07130 Konyaaltı/ANTALYA
Purpose of Verification	Certify that the Greenhouse Gas Declaration prepared on the basis of 01.01.2019 - 31.12.2019 period is in compliance with the requirements of TS EN ISO 14064-1: 2007, Verify the declared emission amount at the "Reasonable trust level" in accordance with the requirements of TS EN ISO 14064-3:2007 and Verify conformity with the criteria of the "Climate Friendly Organization" project prepared by TSE.

	SEÇ-ÇEV-RAP-003	Yayın Tarihi:	21.3.2022
	ECOSLC PORT ENVIRONMENTAL REVIEW SYSTEM (PERS) REPORT	Revizyon Tarihi:	21.3.2022
		Revizyon No :	0
		Sayfa No :	50 / 50

ANNEXES

ANNEX 1: ENVIRONMENTAL REPORT

ANNEX-2: GREENHOUSE GASES VERIFICATION STATEMENT (2019)

ANNEX-3: CLIMATE FRIENDLY ORGANIZATION CERTIFICATE

ANNEX-4: ENVIRONMENTAL ASPECT REGISTER

ANNEX-5 HSE-Q DEPARTMENT KPI TABLE

ANNEX-6 ENVIRONMENTAL ACTION PLAN

ANNEX-7 HSE-Q ANNUAL PLAN

Index of Figures:

Figure 1: Ortadoğu Antalya Liman İşletmeleri A.Ş.....	4
Figure 2:DustSuppressions Equipment.....	15
Figure 3: Floor Cleaning Equipment.....	15
Figure 4:Temporary Waste Storage Area Chart.....	16
Figure 5: Sorbent Pads.....	20
Figure 6: Sorbent Booms.....	20
Figure 7: Tarpaulins.....	21
Figure 8: The Row of Barriers.....	21
Figure 9: Dust suppressors.....	22
Figure 10: Container Pools.....	22
Figure 11: Seabin.....	23
Figure 12:Environmental emergency response equipments.....	23
Figure 13:Ortadoğu Antalya Liman İşletmeleri A.Ş. Organization Structure.....	30

Index of Tables:

Table 1:Port Technical Informations.....	5
Table 2:The number of vessels statistics by years.....	7
Table 3:Handling statistics by years.....	7
Table 4: Verified Green House Gases Emissions (2019).....	13
Table 5:Emission Density.....	14
Table 6:Hazardous Waste Table.....	17
Table 7:Non-Hazardous Waste Table.....	18
Table 8:Hazardous Waste Table.....	19
Table 9:Energy consumption datas.....	25
Table 10:Electricity Consumption Datas.....	25
Table 11: Diesel Consumption Datas.....	26
Table 12: Reduced energy consumption.....	26
Table 13: Energy density.....	27
Table 14:Environmental Responsibilities of Key Personnel.....	31
Table 15: Conformity Review Table.....	32