

# TURKMENBASHI INTERNATIONAL SEAPORT

## Port Environmental Review System (PERS) Report



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## STATEMENT BY THE HEAD OF THE TURKMENBASHI INTERNATIONAL SEAPORT

**Dear partners, colleagues, readers, ladies and gentlemen!**



Environmental protection is a whole system of public and state measures aimed at the harmonious coexistence of nature and the human community. Currently, environmental problems have become one of the most important problems of the world community and their solution is an indicator of the level of well-being not only for a single country, but also for the world civilization as a whole. It should be noted that our state pays great attention to the development of sustainable transport. In this context, I would like to emphasize that the initiatives of the highly respected Arkadag, the National Leader, have always received and receiving the support of the entire world community. Thus, on December 19, 2014, the UN General Assembly adopted the resolution "The role of transport and transit corridors in ensuring international cooperation for sustainable development". On December 22, 2015, the UN General Assembly adopted the resolution submitted by Turkmenistan "On the way to ensuring comprehensive interaction between all modes of transport in order to promote the creation of sustainable multi-modal transit corridors", co-sponsored by 85 states.

Today, the Turkmenbashi International Seaport (hereinafter - TIS) strives to become a "green port", based on the principles of the port's work aimed at strengthening economic prosperity, taking into account its role and social responsibility in environmental protection within the framework of sustainable development in order to achieve a balance between environmental impact and economic interests of TIS.

TIS has successfully implemented an Integrated Management System that operates in accordance with the requirements of international standards ISO 9001:2015 (Quality Management System), ISO14001:2015 (Environmental Management System), ISO 45001:2018 (Occupational Health and Safety Management System), and important steps are being diligently taken to certify PERS (Port Environment Review System).

We are aware of the importance of our influence on the environment and society. Observing the balance of interests and stakeholders, we continue to work on the implementation of a sustainable development system. Currently, we are actively working on the project of the Organization for Security and Co-operation in Europe (OSCE) EcoPorts - an internationally recognized standard for environmental management in ports and port terminals and have already joined the EcoSLC network by completing SDM.

With the diligence of our team to work in new realities, it allowed us to complete the year 2022 with sustainable production indicators.

We are pleased to present you our environmental report for the last period, which covers important indicators achieved during the year in terms of sustainability.

This report is intended to provide an understanding of the processes and actions taken to promote the sustainable development of TIS.

In conclusion, I would like to thank the higher management of the "Turkmendenizderyayollary" agency, our friendly team, as well as partners for their support and contribution to achieving the indicators and wish new achievements!

*With best regards,  
Bayseyidov Seyitguly Tuvakseyidovich.  
Acting Head of TIS*

## History

The seaport was founded in October 1896 on the eastern shore of the Caspian Sea. In order to consolidate and streamline the transportation of goods and passengers, the Commercial Seaport Administration was formed on January 1, 1903. Taking into account the increase in cargo traffic over the years, the construction of a ferry crossing in 1959 was started on the territory of the port. In 2000-2003, a large-scale reconstruction of the port was carried out. The old berths for ships were reconstructed and new ones were built, as well as warehouses and a number of other facilities with the acquisition of modern equipment. This made it possible to provide port services at a higher level.

Taking into account the convenient geo-economic location of Turkmenistan, according to the "Strategy for the development of the Turkmenbashi International Seaport and the Turkmen Merchant Marine fleet until 2020", on the basis of the Decree of the President of Turkmenistan signed on May 29, 2014, the construction of the Turkmenbashi International Seaport, envisaged as one of the main sections of the Great Silk Road, was launched, and on May 2, 2018 with the participation of the President of Turkmenistan, the new Turkmenbashi International Seaport was inaugurated.



*(Opening of the Turkmenbashi International Seaport)*

Today TIS is the largest seaport in the Caspian region and has been awarded a number of prestigious international awards. The port is listed in the Guinness Book of Records as «The largest port below sea level». The collection of world records noted in the same category – «The largest below sea level» – an artificial bird island built during the construction of the port in order to protect the avifauna.

Awards for contribution to environmental protection and protection of birds during the construction of the Turkmenbashi port were presented by the Max Planck Institute of Ornithology (Germany) and the University of Vienna. Equipped with the latest technology, TIS creates the most favorable conditions for European countries to access the commodity and raw materials markets of the Near and Middle East and the states of the Indian Ocean basin, allowing to

significantly reduce the distance and travel time for large-scale cargo flows, acting as the largest transit hub of the region 12 months a year and 24 hours a day.

Awards

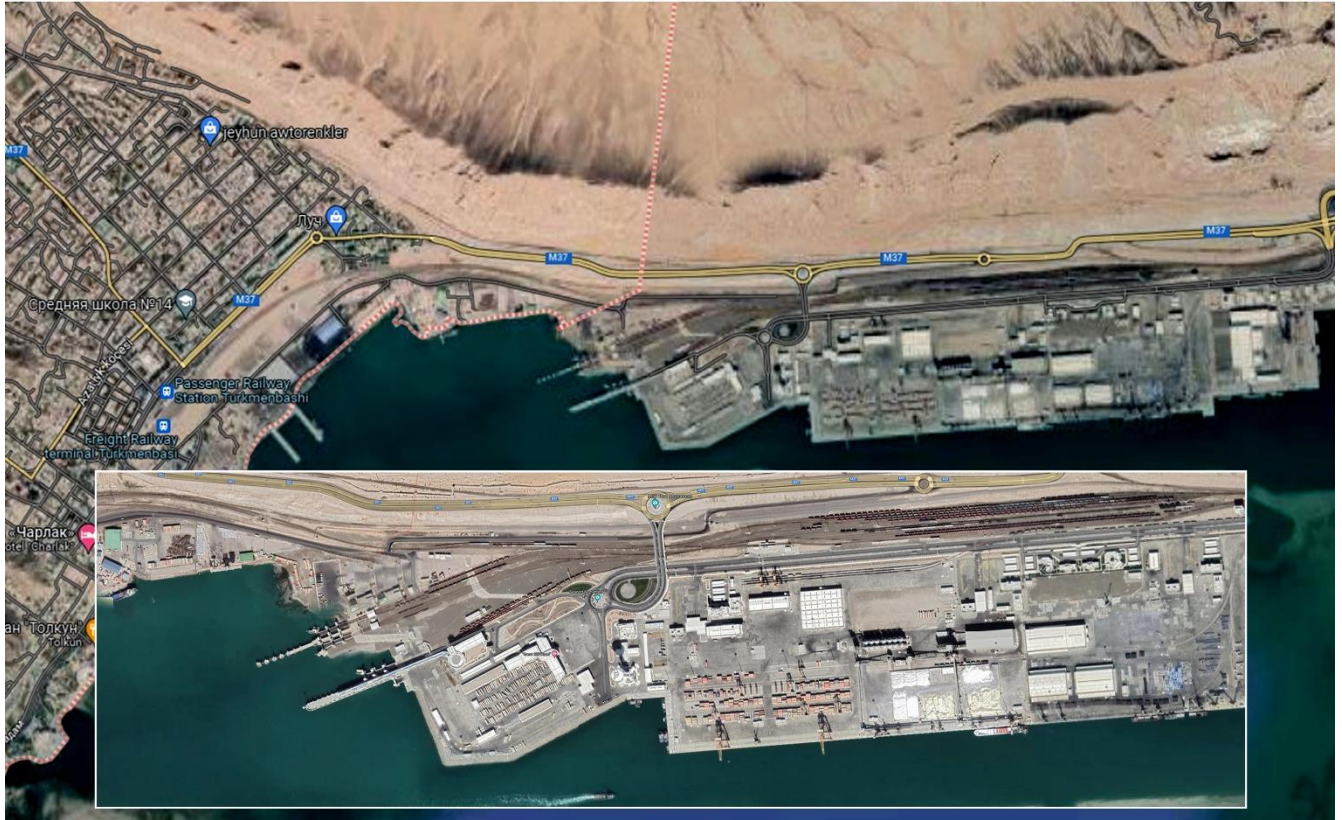




# PORT PROFILE

## Port location and port area

### TURKMENBASHI INTERNATIONAL SEA PORT CLOSE TO CITY



The port is located **on the area** of more than **150 hectares** and includes terminals such as, Its capacity is 17 million tons of cargo per year. The port includes terminals such as, Ferry-passenger and Container terminals, Bulk and General cargo terminals, as well as a Polypropylene terminal.

## Legal status and port operations

Turkmenbashi International Seaport is a **state organization** under the authority of the "Turkmenendenizderyayollary" agency, which in turn is subordinate to the Transport and Communications agency under the Cabinet Ministers of Turkmenistan. The port is located on the eastern coast of the Caspian Sea intended for international transportation of various types of cargo and is a "sea gate" connecting Central Asia and Europe by sea, road and rail serves as the largest transit hub in the region.

The functions of ensuring the safety of navigation, establishing control and supervision over compliance with national and international requirements in the port area are assigned to the Service of the Port Captain of the Administration of State Supervision of Navigation in Turkmenistan.

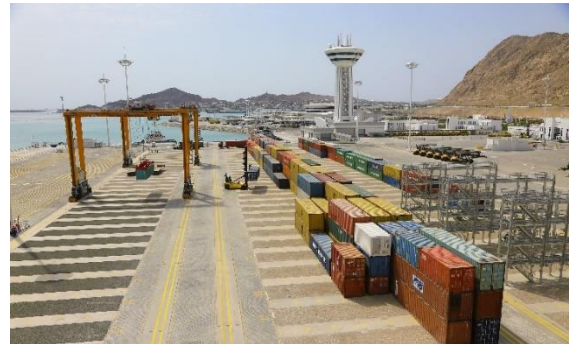
All production operations in the port are carried out in accordance with the technological schemes and rules approved and in force on the territory of TIS.

## Main Commercial Activities

The activities of the Turkmenbashi International Seaport are based on the commercial principles of customer relations when providing the following types of services in a competitive market:

- services for entering the seaport for transshipment of various types of cargo with subsequent exit from the port;
- cargo loading and unloading services from ships to railway wagons, motor vehicles by direct option, and also inversely;
- storage of various types of cargoes, including bulk and big bags, containers, general cargoes;
- general port services, i.e. electric power transmission, water supply, sewage disposal, garbage collection from ships;
- mooring and unmooring of vessels by tugboats of the Auxiliary Fleet of TIS.

Nowadays, TIS, located at the intersection of several transport corridors, plays an important role in the strategic and economic development of the state, since the main flows of export-import, as well as transit cargo in the direction of the Caspian and another foreign countries pass through the port.



*The port has the following berths:*

Number of berth 's	Length, meter	Depth of berth, meter	Purpose
<b>Container terminal</b>			Loading – unloading of containers.
1	165	6,7	
2	165	6,9	
3	165	6,7	
<b>General Cargo Terminal</b>			Loading – unloading of general cargo.
1	156,25	6,5	
2	156,25	6,6	
3	156,25	6,7	

4	156,25	6,5	
Bulk Cargo Terminal			
1	146,66	6,6	Loading – unloading of bulk cargoes.
2	146,66	6,4	
3	146,66	6,3	
Ferry - passenger terminal			
1	256	6,7	Passenger reception and loading, unloading of transport
2	256	6,7	Passenger reception and loading, unloading of vehicles and wagons
3	87	6,7	Passenger reception and loading, unloading of vehicles and wagons
4	87	6,7	Passenger reception and loading, unloading of vehicles and wagons
Polypropylene Terminal			
1	150	6,6	Piers for parking ships
2	150	6,6	
3	180,50	6,7	Loading and unloading of polypropylene
12 (3)	153,95	6,7	Loading and unloading of general and bulk cargoes
13 (4)	140,58	6,7	Transshipment of general cargoes, including heavy cargoes
14 (5)	111	6,5	Loading and unloading of general and bulk cargoes
15 (6)	90	6,5	Loading and unloading of general and bulk cargoes
16 (7)	80	6,5	Transshipment of bulk cargoes, including general cargoes and containers
General infrastructure			
1	100	6,5	For the parking of ships of the Port auxiliary Fleet
2	50	6,5	
3	50	6,5	
4	50	6,5	

***The port has the following lifting machinery and equipment:***

**Container terminal:**

- Portal cranes “Liebherr RTG 7/5/4 WS” with a lifting capacity of 45 tons – 6 units
- Portal cranes “Liebherr RMG S 190L’ with a lifting capacity of 47 tons – 2 units
- Portal cranes ‘Liebherr STS P 150L’ with a lifting capacity of 70 tons – 2 units
- Mobile crane “Liebher LHM-280” with a lifting capacity of 84 tons – 1 unit
- Hyster (Tsm) J3.OXN electric loaders with a lifting capacity of 3 tons - 10 units
- Hyster H60FT car loaders with a lifting capacity of 6 tons - 1 unit
- Hyster (Tsm) H23XM-12ES car loaders with a lifting capacity of 9 tons – 2 units
- Hyster (Tsm) H16XM-6 forklifts with a lifting capacity of 16 tons - 3 units
- Terberg hauler with a lifting capacity of 32 tons - 14 units
- Liebherr LRS 545 reach stackers 45 tons – 5 units

**Polypropylene terminal**

- Gantry cranes "Gans" with a lifting capacity of 5/6 tons – 2 units



- Portal cranes “Albatros” with a lifting capacity of 10/20 tons – 4 units
- Gantry crane “Sokol” with a lifting capacity of 16/22 tons - 1 unit
- Gantry cranes “Liebherr LPS-180” with a lifting capacity of 64 tons – 2 units
- Mobile cranes “Liebherr LTM-1500” with a lifting capacity of 171 tons - 3 units
- Hyundai 25 D-7 forklifts with a lifting capacity of 2.5 tons – 5 units
- Hyster 7-100-F electric loaders with a lifting capacity of 3 tons – 4 units
- Wheeled excavator CAT M322C with a lifting capacity - 1 unit
- CAT D6R IIXLS bulldozer with a lifting capacity - 1 unit
- Loader “Kalmar” (37 tons) with a lifting capacity of 37 tons – 1 unit
- Hauler - “Terberg” with a lifting capacity of 37 tons - 1 unit
- Hauler “Terberg RT223” with a lifting capacity of 84 tons – 2 units
- Wheeled Lieherr L 586 with a lifting capacity of 20 tons – 1 unit
- Liebherr LRS 545 reach stacker with a lifting capacity of 45 tons – 1 unit

#### **General Cargo Terminal**

- Mobile crane "Liebherr LHM 280" with a lifting capacity of 84 tons – 1 unit
- Gantry cranes "Liebherr LPS 180" " with a lifting capacity of 42 tons – 6 units
- Auto crane "Liebherr LG 1750" with a lifting capacity of 330 tons – 2 units
- Hyster (Tsm) J3.OXN electric loaders with a lifting capacity of 3 tons – 5 units
- Hyster (Tsm) J5.OXN electric loaders with a lifting capacity of 5 tons – 3 units
- Hyster H 60 FT forklifts with a lifting capacity of 6 tons - 3 units
- Hyster(Tsm) H16XM-6 forklifts with a lifting capacity of 16 tons - 5 units
- Hyster(Tsm) H30XM-12 forklifts with a lifting capacity of 30 tons - 2 units
- Hyster(Tsm) H54XM-12 forklifts with a lifting capacity of 54 tons - 1 unit
- Hauler Terberg-sea com RT223 4x4 w/Goosneck with a lifting capacity of 36 tons - 3 units
- Terberg tractor with a lifting capacity of 32 tons – 4 units
- Multi-axis modular wheeled platform with Cometto power supply - 1 unit

#### **Bulk Cargo Terminal**

- Portal cranes “Liebherr LPS 280” with a lifting capacity of 42 tons - 3 units
- Hyster (Tsm) H16XM-6 forklifts with a lifting capacity of 16 tons - 1 unit
- Hyster (Tsm) H16XM-6 forklifts with a lifting capacity of 6 tons - 1 unit
- Wheeled loader Liebherr L 586 with a lifting capacity of 20 tons – 4 units
- Forklift truck “Hyundai” HSL 850-7 - 1 unit
- Liebherr R974 C mobile crawler crane with a load capacity of 20 tons – 1 unit

#### **Ferry terminal**

- Hauler "Terberg RT223" XLWRT - 6 units
- Hauler "Terberg RT223" XLWYT - 4 units
- Electric hauler "STILL" 510127H00231 – 1 unit
- HYSTER electric loader with a lifting capacity of 3 tons – 1 unit

#### **Environmental equipment for oil spill elimination:**

- Power unit LPP6HA/75 – 1 unit
- Oil-absorbing bon “Barer 50P” – 400 metre
- Barrel - 4 units
- Manual skimmer – 1 unit
- Skimmer "Lamer minimaks" - 1 unit
- Crawler mini transporter – 1 unit
- Pump – 1 piece

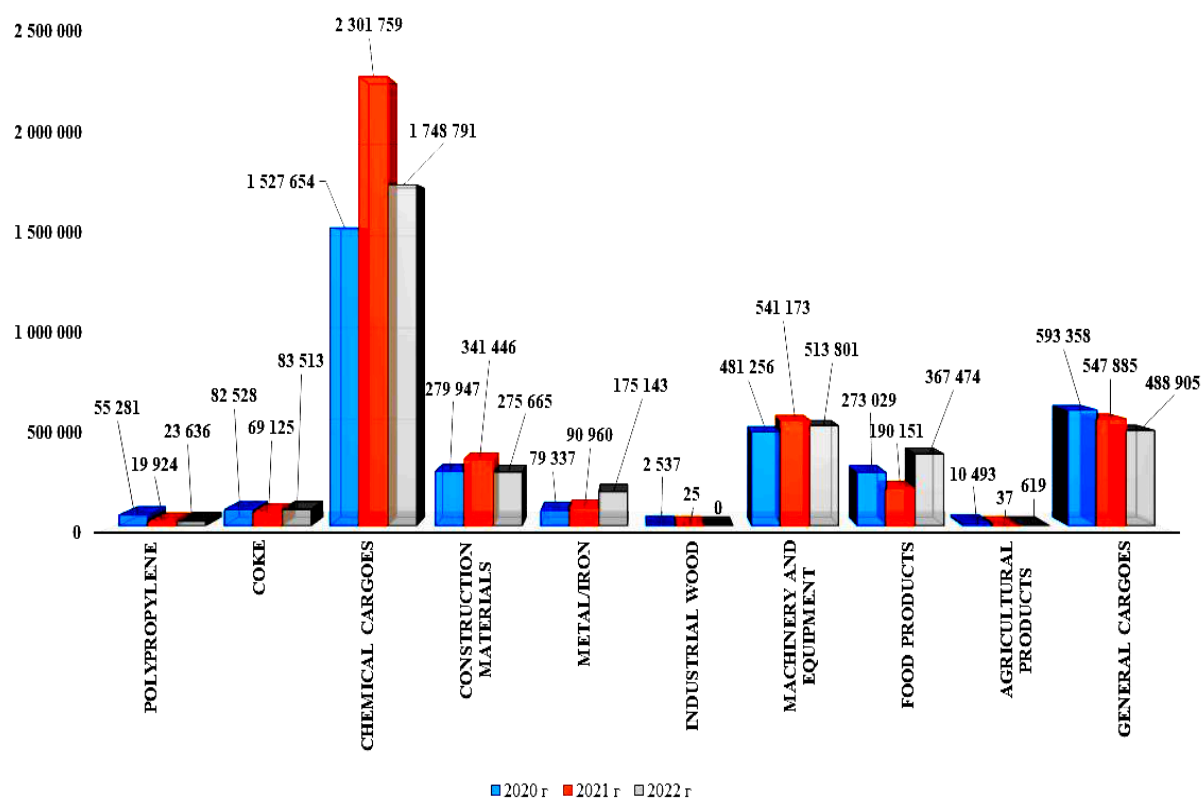
#### **The following vessels are available in the Auxiliary Fleet of TIS:**

- vessel "GAÝRAT" – Sea tugboat-1x725 hp;
- vessel "EKEREM" – Linear tugboat-1x315 hp.;
- vessel "LAÇYN" – Port tugboat – 1x225 hp;

- vessel "JAHAN" – tugboat-2x1251 hp;
- vessel "ÄLEM" – Tugboat – 2x1251 hp;
- vessel "SEÝIL" – tugboat-2x1251 hp;
- vessel "GUDRAT" – Tugboat – 2x1877 hp;
- vessel "GARADAG-14" – Linear Tugboat – 1x315 hp;
- vessel "AÝDAK" – Diving boat – 1x150 hp.;
- "ÝELKEN" – Pilot boat – 2x305 hp.;
- "TOLKUN" – Pilot boat – 2x305 hp;
- "BERKARAR" – Pleasure Yacht – 2x1199 hp;
- "RUHUBELENT" – Passenger sailing yacht - 14411 hp;
- "ÝYLDYRYM" – Fire boat – 2x1150 hp;
- "ADA.K" – A shift vessel – 2x262 hp.;
- "PILOT-02" – A shift vessel – 2x460 hp.

## Main cargoes

**The main cargoes of the port are:** chemical cargoes, agricultural products, construction materials, food products, metal, machinery and equipment, polyethylene and polypropylene, petroleum products, wood and forest materials. Having analyzed the indicators of TIS cargo turnover by type over the past 5 years, the largest part of the total volume is chemical cargo (sulfur, urea, potassium, etc.) and the smallest is wood and forest materials.



*(Chart of TIS cargo turnover indicators for the period 2020-2022)*

## ENVIRONMENTAL MANAGEMENT SYSTEM



The Turkmenbashi International Seaport performs its functions in accordance with the legislation, rules, governing documents in force in Turkmenistan, established in occupational health and safety, in the environmental and quality management system, which were implemented in accordance with the requirements of international standards ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, as well as the needs of and the expectations of stakeholders.

Being motivated to constantly strive to improve new environmental projects, TIS aims to obtain a new environmental certification PERS (Port Environmental Review System).

The main objective of the port's environmental management system is to minimize and prevent the negative impact on the environment as a result of the activities carried out.

To effectively achieve this goal, on the basis of national and international legislation, the port has developed and approved a number of internal regulatory documents regulating the activities of the port and other entities (tenants, customers) on the territory of the port.

Coordination and control of environmental protection activities in the TIS is carried out by the Technical Development and Regulation Department, which also conducts a unified policy at the enterprise to achieve the goals listed below:

1) reduction of environmental damage from oil spills by increasing the efficiency of the Maritime Emergency Rescue Service of TIS to eliminate pollution through the use of advanced technologies and modern equipment, high-tech materials and training of qualified personnel;

2) ensuring the sustainable development of the port of cultural awareness with a clear distribution of responsibilities;

3) efficient use and striving to reduce resources, waste, energy savings, pollution prevention and maximum reduction of greenhouse gas emissions;

4) continuous improvement of Environmental policy;

5) influencing cooperation with customers, suppliers, business partners, government authorities and other stakeholders to achieve sustainable environmental performance through consultations, clear contractual requirements and obligations;

6) interaction with stakeholders through awareness-raising activities and monitoring of customer satisfaction through questionnaires;

7) the desire to mitigate environmental, social and economic aspects through the adoption of environmentally friendly technologies for the purchase of necessary equipment, modes of transport and the maximum use of electricity instead of combustible fuel;

8) preparation of a publicly available annual environmental report describing the trend in the environmental performance of the port and its placement on the TIS website ([www.port.com.tm](http://www.port.com.tm));

9) conducting introductory briefings on environmental safety when applying for a job;

10) conducting trainings, technical sessions on environmental issues for employees in order to raise awareness of sustainability and encourage sincere respect for environmental protection among our employees in their daily work.

### **Internal and external factors affecting the tis environmental management system**

**The main internal factors are:** activity of terminals, auxiliary port fleet, repair and construction service, automobile garage.

**The main external factors:** activities of contractors, tenants located on the territory of the port, clients during the dispatch and arrival of goods, ships arriving and located in the port area.



In accordance with national requirements and the international standard ISO 14001, the Turkmenbashi International Seaport has developed and approved a number of environmental safety documents such as, "Risk analysis by processes and established management measures", "Analysis of internal and external factors, risks and opportunities", "Environmental Aspects Assessment Map", "Hazard assessment Map", "Action plan to achieve the goals", as well as taking into account quality assurance, regulations for all types of processes carried out in the port's activities have been developed and Regulations for working with suppliers have even been developed using the requirements of an integrated management system.

TIS has systems and processes in place to achieve good environmental practices and compliance with environmental lease conditions and applicable environmental legislation.

The objectives of the above-mentioned systems and documents are:

- ensuring reasonable and responsible environmental management;
- determination of measures to prevent and minimize potential adverse environmental impacts as a result of operation;
- definition of a framework for ensuring compliance with environmental regulatory requirements related to the port and port-related activities;
- defining the key environmental role, responsibilities and management mechanisms;
- defining emergency preparedness and response procedures, including detailed incident notification procedures and corrective actions.

### **The new Turkmenbashi International Seaport.**

The design and construction of the TIS was carried out by taking into account the international criteria "Green Port". In order to carefully preserve the ecology of the Caspian Sea, bio-purification facilities were installed at each of the terminals, as well as equipment located inside the structure, loading and unloading equipment with working by electric energy and corresponding to the Euro-5 standard were selected. This confirms the desire of States, in particular TIS, for the latest achievements in the field of safety and environmental protection.

The commissioning of the Turkmenbashi International Seaport has given impetus to the development of public-private partnership. Thus, numerous private transport and logistics companies have been formed in our country. In particular, more than 35 (thirty-five) local companies that contribute to the development of Green Infrastructure cooperate with our port. The relationship between public and private organizations leads to the development and improvement of the legislation of Turkmenistan in the field of maritime cargo transportation.

**Carbon footprint.** Due to global climate change, TIS is exposed to the effects associated with the observed decline in the Caspian Sea level, which has a significant impact on our supply chain, which are crucial to our ability to create long-term value. Minimizing the impact of harmful emissions that negatively affect the environment is one of the main goals of TIS. In order to reduce the negative environmental impact of our current and future activities, we are voluntarily investing in cleaner technologies and have created an anti-idling program. Air quality control measures are included in planning, development and operational activities. Maintaining an efficient transport infrastructure system at the port allows us to reduce emissions into the atmosphere and meets our goal of improving the quality of life and the economy.

TIS realizes and recognizes that not all sources of emissions are under the direct control of the port (for example, emissions from ships arriving at the port, third-party organizations), we are constantly looking for opportunities to improve air quality, and from 2023 the port plans to encourage partnerships, awareness-raising to help customers, tenants and others TIS realizes the need for interested parties to reduce emissions associated with maritime transport.

# **ENVIRONMENTAL POLICY STATEMENT**

## **ENVIRONMENTAL POLICY OF TURKMENBASHI**

### **INTERNATIONAL SEAPORT**

Turkmenbashi International Seaport (hereinafter - TIS) is a provider of continuous, timely and high-quality services to customers in the field of cargo handling, including loading and unloading operations, warehousing operations, cargo transshipment between ships and other types of land transport, as well as servicing of ships arriving at the port and is a "sea gate" connecting the Middle Asia and Europe by sea, road and rail, which in turn serves as the largest transit hub in the region.

**The mission of the Port** - is to create conditions for the successful and sustainable development of Turkmenistan, the Balkan region, as well as to meet the interests of the main stakeholders. To ensure the confidence of every consumer that TIS is constantly striving to use the best methods and methods to ensure the quality of port operations carried out in safe conditions with minimal environmental impact.

**The strategic goal of the Port** – to develop and promote TIS as the main hub port connecting Central Asia and Europe, promoting and protecting strategic maritime interests, with the sustainable development of the transport industry of our state, as a result, to increase the volume of cargo turnover to design capacity, positioning the organization as a benchmark in the port industry of the Caspian region.

To comply with the above, TIS always takes into account its obligations related to environmental sustainability and development, complying with the requirements of current environmental legislation, and an integrated management system has been implemented in accordance with the requirements of international standards ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, including EcoPorts SLC.

**Based on the foregoing, the TISP management assumes the following obligations:**

- ✓ comply with the requirements of national legislation and international legislative and regulatory acts, conventions ratified by Turkmenistan in the field of ecology, environmental protection and health and safety, as well as other requirements applicable to the activities of the port;
- ✓ analyze and continuously improve the existing integrated management system and EMS to improve environmental performance;
- ✓ constantly implement measures to protect the environment and prevent pollution, including the coastal zone of the Caspian Sea, including strict compliance with the principle of "zero discharge" and minimizing the impact on the atmospheric air of the working area and adjacent areas;
- ✓ use and save natural resources and energy efficiently to reduce CO2 emissions;
- ✓ implement risk and hazard management mechanisms at appropriate levels, develop response plans for all kinds of incidents and eliminate hazards and reduce environmental risks in all areas of the organization's activities;
- ✓ create a favorable working environment, working conditions and mechanisms for the active participation of workers on environmental protection issues at all levels;
- ✓ planning and allocating the necessary resources to achieve the set EMS goals;
- ✓ regularly participate in the city's greening events by allocating resources and involving workers in planting seedlings;
- ✓ constantly improve the professional level and knowledge of employees in the field of EMS, by conducting periodic training;
- ✓ cooperate with customers, suppliers, authorities and other stakeholders to implement the Environmental Policy of the port;
- ✓ demonstrate leadership in the transport sector in the field of environmental protection and sustainable development, encouraging port tenants, logistics companies to adopt similar standards;
- ✓ periodically provide information on the results of environmental activities to all interested parties, as well as publish an annual report on the environmental activities of TIS on its website.
- ✓ fulfill the above obligations.

Observance of this Policy is the responsibility of every employee of the organization. TIS management is responsible for the implementation of this Policy and undertakes to communicate it to all Port employees and other interested parties.

**Acting Head of TIS**

**S. Bayseyidov**

« \_\_\_\_\_ » \_\_\_\_\_ 2022 y.

## ENVOIRNMENTAL ASPECTS AND LEGAL REQUIRMENTS

### Environmental regulations

#### *National environmental laws and regulations*

<b>Law</b>	<b>Aim of the law</b>	<b>National Authority</b>	<b>Local Enforcement Agency</b>
The Water Code of Turkmenistan (2018)	This Code regulates relations in the field of sustainable and rational use of water in order to meet the needs for water resources of legal entities and individuals and is aimed at increasing the importance of water resources, ensuring the protection of water from pollution, clogging and depletion, preventing and eliminating the negative impact of water, restoring and improving the condition of water bodies.	Cabinet of Ministers of Turkmenistan, authorized state bodies in the field of water use and protection (Ministry of Agriculture and Environmental Protection of Turkmenistan, State Committee of Water Management of Turkmenistan, GC "Turkmengeologiya")	Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan
The Law of Turkmenistan "On Waste" (2018)	This Law regulates relations in the field of waste management, is aimed at reducing waste generation and ensuring their rational use in economic and other activities in order to prevent their negative impact on public health and the environment	Cabinet of Ministers of Turkmenistan, Association of Public Utilities of the Balkan Velayat; Ministry of Agriculture and Environmental Protection of Turkmenistan; Ministry of Health and Medical Industry of Turkmenistan	The Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan, the Department of Public Utilities of Turkmenbashi, the Sanitary and Epidemiological Service of Turkmenbashi
The Land Code of Turkmenistan (2017)	This Code defines the legal, organizational and economic foundations of land management, rational use, protection of land, preservation and improvement of the natural environment, the use of various forms of economic activity on land, regulation of land relations.	Cabinet of Ministers of Turkmenistan, Ministry of Agriculture and Environmental Protection of Turkmenistan	Turkmenbashi City Administration, Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan



The Law of Turkmenistan "On the Protection of Atmosphere Air" (2016)	This Law defines the legal and organizational basis for the protection of atmospheric air from emissions of pollutants and is aimed at ensuring environmental safety, preventing harmful effects of economic and other activities on the environment and public health.	Cabinet of Ministers of Turkmenistan, Ministry of Agriculture and Environmental Protection of Turkmenistan, Ministry of Health and Medical Industry of Turkmenistan	Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan, Sanitary and Epidemiological Service of Turkmenbashi
The Law of Turkmenistan "On Nature Protection" (2017)	This Law defines the legal, economic and organizational foundations of nature protection and is aimed at ensuring environmental safety, preventing the harmful effects of economic and other activities on ecological systems, preserving biological diversity and rational use of natural resources.	Cabinet of Ministers of Turkmenistan, Ministry of Agriculture and Environmental Protection of Turkmenistan	Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan
The Law of Turkmenistan "On Environmental Safety" (2017)	This Law regulates relations in the field of environmental safety in the implementation of economic and other activities of legal entities and individuals and is aimed at ensuring the vital interests of man and society, protecting the environment from danger arising from anthropogenic and natural impacts on it.	Cabinet of Ministers of Turkmenistan, Ministry of Agriculture and Environmental Protection of Turkmenistan	Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan
Rules for the protection of coastal Waters of Turkmenistan from pollution from ships (2016)	These Rules regulate the prevention and elimination of pollution and littering of coastal waters of the sea, ensuring the protection of coastal waters from pollution, taking into account the priority of hygienic standards for marine waters, marine water use and health needs of the population, as well as for habitat and reproduction of fish resources, aquatic animals and plants. These Rules apply to the internal and territorial sea waters of the Turkmen sector of the Caspian Sea. The Rules apply to all	Ministry of Agriculture and Environmental Protection of Turkmenistan, Ministry of Health and Medical Industry of Turkmenistan	Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan, Sanitary and Epidemiological Service of Turkmenbashi

	vessels of any type operating in the marine environment, including hydrofoils, airbags, underwater vessels, floating vehicles, as well as stationary or floating platforms. (within 12 miles according to Article 6 of the Law "On the state. Border")		
Rules on the Requirements Imposed by Diverted (Discharged) into Water Bodies of Turkmenistan (2005)	<p>These Rules have been developed in accordance with the Code of Turkmenistan "On Water", the Code of Turkmenistan "On Land", the Law of Turkmenistan "On Nature Protection", and other regulatory legal acts.</p> <p>The purpose is to prevent and eliminate existing wastewater pollution of water bodies: rivers, streams, reservoirs, lakes, ponds and artificial channels used for household and drinking water supply, cultural and household needs of the population and for fisheries purposes.</p> <p>State control (supervision) over compliance with the requirements of these Rules is carried out by specially authorized executive authorities (khyakimliks of velayats, etraps and cities)</p>	Ministry of Agriculture and Environmental Protection of Turkmenistan, Ministry of Health and Medical Industry of Turkmenistan State Committee of Fisheries of Turkmenistan, State Committee of Water Management of Turkmenistan	Caspian Environmental Control Service of the Environmental Protection Service of the Ministry of Agriculture and Environmental Protection of Turkmenistan, Sanitary and Epidemiological Service of Turkmenbashi
The Law of Turkmenistan "On Electric Power"	This Law establishes the legal, economic and organizational basis for activities in the field of electric power industry and is aimed at increasing the capacity of the country's electric power system on the basis of further modernization of the industry, the use of innovative energy-saving technologies and equipment.	The Cabinet of Ministers of Turkmenistan and the Ministry of Energy of Turkmenistan	Electric power supervision is carried out by the structural divisions of the Authorized Body with powers of supervision

### *International Conventions*

<b>Conventions</b>	<b>Objective</b>	<b>Corresponding local legislation</b>
Agreements/Conventions	Target	Relevant local legislation
<p>MARPOL 1973/1978 International Convention for the Prevention of Pollution from Ships with Annexes 1-2-3-4-5, 02.11.1973 Protol- 02/17/1978 Annex VI "Rules for the prevention of air pollution from ships", January 1, 2013</p>	<p>MARPOL 73/78 is the main international agreement covering the prevention of environmental pollution by ships from operational or accidental causes. Annex I - Instructions for the prevention of oil pollution Annex II - Instructions for the control of contamination with toxic liquid substances Annex III - Prevention of pollution by harmful substances transported in packaged form Annex IV - Prevention of wastewater pollution from ships (not yet in force) Annex V - Prevention of garbage pollution from ships Annex VI - Prevention of atmospheric pollution from ships</p>	<p>Rules of protection of coastal waters of turkmenistan from pollution from ships The national plan of Turkmenistan for the prevention and elimination of oil spills. Rules for keeping a ship's log, a machine log... Of wastewater operations, The order of the state Maritime and river transport services of Turkmenistan no. 71/dg dated 21.05,2012 (04,06,2012 no. 647 Ministry of Justice of turkmenistan)</p>
<p>International Convention for the Safety of Human Life at Sea –London - SOLAS-74, Turkmenistan joined on 23.10.2008.</p>	<p>The establishment of minimum standards that meet the safety requirements for the construction, equipment and operation of ships is the main objective of the International Convention for the Protection of Human Life at Sea. The State under whose flag the vessel is located must ensure that the vessels comply with the requirements of SOLAS</p>	<p>The National Plan of Turkmenistan for the prevention and elimination of oil spills.</p>
<p>Framework Convention for the Protection of the Marine Environment of the Caspian Sea" dated 4 2003 Tehran, entered into force on August 12, 2006.</p>	<p>The purpose of the Convention, which is often referred to as the Tehran Convention, is "the protection of the marine environment of the Caspian Sea from pollution, including the protection, conservation, restoration, sustainable and</p>	<p>Rules of protection of coastal waters of turkmenistan from pollution from ships The national plan of Turkmenistan for the prevention and elimination of oil spills. The law of turkmenistan “on nature protection”</p>



Ratified by Turkmenistan on 19.08.2004.	rational use of its biological resources" (article 2 of the Convention).	Water code of Turkmenistan The law of Turkmenistan "on the protection of atmospheric air" The law of Turkmenistan "on waste" The law of Turkmenistan "on fishing and conservation of aquatic biological resources"
Protocol on Environmental Impact Assessment in a Transboundary Context to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea	The purpose of this Protocol is to conduct effective and open environmental impact assessment procedures in the transboundary context of planned activities that may have a significant transboundary impact on the marine environment and land affected by the proximity of the sea, in order to prevent, reduce and control pollution of the marine environment and land affected by the proximity of the sea, in order to promote its conservation. biodiversity and rational use of its natural resources and protection of human health.	The Law of Turkmenistan "On Nature Protection" THE LAW of Turkmenistan "On Environmental Expertise" REGULATION on the Procedure for Conducting State Environmental expertise, Decree of the President of Turkmenistan No. 2864 of November 13, 1996 Environmental impact assessment of planned economic and other activities in Turkmenistan TDS 579-2001 dated 05.06.201
Protocol on the Protection of the Caspian Sea from Pollution from Land-based Sources and Activities carried out on Land to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea	The purpose of this Protocol is to prevent, reduce, control and, to the maximum extent possible, eliminate pollution of the marine environment from land-based sources and as a result of activities carried out on land in order to achieve and maintain an ecologically healthy marine environment of the Caspian Sea.	The Law of Turkmenistan "On Nature Protection" Water Code of Turkmenistan The Law of Turkmenistan "On the protection of Atmospheric Air" The Law of Turkmenistan "On waste" The Law of Turkmenistan "On the Protection of the Ozone Layer" The Law of Turkmenistan "On Fisheries and Conservation of aquatic biological Resources" Rules on the requirements for wastewater discharged (discharged) into the water bodies of Turkmenistan, approved. Research Institute of Methodology and Development of Public Utilities at the KM of Turkmenistan 05,09,2005 (registered with the Ministry of Adalat of Turkmenistan 18,10,2005 № 361)

		<p>Instructions on the regulation of emissions (discharges) of pollutants into the atmosphere and into water bodies, Approved by the Deputy. Chairman Goskompirody USSR 11.09. 1989</p> <p>Instructions on the procedure for reviewing, approving and examining air protection measures and issuing permits for the release of pollutants into the atmosphere according to design decisions, OND 1-84, 04/19/1984 Gosstroy of the USSR from 01.01.1985</p>
<p>Protocol on Regional Preparedness, Response and Cooperation in the Event of Oil Pollution Incidents to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea</p>	<p>The purpose of this Protocol is to provide regional measures for preparedness, response and cooperation in the event of oil pollution of the Caspian Sea caused by activities listed in Articles 8 and 9 of the Convention and oil pollution of the sea from land-based sources.</p>	<p>The Law of Turkmenistan “On Nature Protection”, The Water Code Of Turkmenistan</p> <p>The National Plan of Turkmenistan for the prevention and elimination of oil spills.</p> <p>Rules of protection of coastal waters of Turkmenistan from pollution from ships</p> <p>Rules for the development of hydrocarbon deposits in the Golden Age of the Turkmen people The Law of Turkmenistan No. 4416 of 22,10,1999</p>
<p>Protocol on the Conservation of Biological Diversity to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea</p>	<p>The objectives of this Protocol are to protect, preserve and restore the viability and integrity of the biological diversity and ecosystem of the Caspian Sea, as well as to ensure the sustainable use of biological resources and in this context: the conservation of endangered species and vulnerable ecosystems to ensure their long-term viability and diversity; prevention of deterioration, degradation and damage to species, habitats and ecosystems in accordance with the precautionary principle; protection and preservation of those areas that most fully represent a wide range of species, special habitats, ecological systems and natural, as well as related cultural heritage.</p>	<p>The Law of Turkmenistan “On Nature Protection”</p> <p>The Law of Turkmenistan "On fishing and conservation of aquatic biological resources"</p> <p>The Law of Turkmenistan "On specially protected natural territories"</p>

<p>The International Convention on Civil Liability for Oil Pollution Damage adopted in the city of Brussels on 11/29/1969. Protocol on the Amendment of this Convention dated November 27, 1992.</p>	<p>Provides for civil liability of the registered owner of the vessel for pollution and aimed at ensuring adequate compensation for damage caused by pollution of the sea from tankers carrying oil.</p> <p>The Convention imposes liability for such damage on the owner of the vessel. With some exceptions, the responsibility of the owner is objective; he has the burden of proving that these exceptions apply to him. However, unless an oil spill or leak occurred due to the intent or negligence of the owner of the vessel, the latter, according to the Convention, has the right to limit its liability in respect of each individual incident[1].</p>	<p>The National Plan of Turkmenistan for the Prevention and Elimination of Oil Spills, Resolution of the President of Turkmenistan No. 5361 of August 21, 2001</p> <p>Rules of protection of coastal waters of Turkmenistan from pollution from ships</p> <p>Code of Turkmenistan on Administrative Offences</p> <p>The Law of Turkmenistan "On Hydrocarbon Resources"</p> <p>The Law of Turkmenistan "On Subsoil"</p> <p>Methodology for assessing and calculating damage caused to the environment due to pollution of water bodies in Turkmenistan</p> <p>Methodology of assessment and calculation of damage caused to the environment due to soil pollution in Turkmenistan</p>
<p>Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal 22.03.1989 adopted</p>	<p>Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal. It has 170 participating countries and is designed to protect human health and the environment from the harmful effects caused by the production, use, transboundary movement and disposal of hazardous waste.</p>	<p>The Law of Turkmenistan "On Waste"</p> <p>The Law of Turkmenistan "On Chemical Safety"</p> <p>The Law of Turkmenistan "On Industrial Safety and Hazardous production Facilities" dated 04.02.2017; entered into force on 15.02.2017.</p> <p>The Law of Turkmenistan "On Environmental Safety"</p> <p>Rules for keeping a ship's log, a machine log... of wastewater operations,</p> <p>The order of the State. Sea and River Transport Services of Turkmenistan No. 71/DG dated 21.05,2012 (04,06,2012 No. 647 Ministry of Adalat of Turkmenistan)</p>
<p>Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, signed in Aarhus (Denmark) on June 25, 1998,</p>	<p>The Aarhus Convention was adopted to strengthen the role of citizens and civil society organizations in addressing environmental issues and is based on the principles of participatory democracy.</p> <p>The Aarhus Convention establishes a number of rights of citizens and civil society organizations related to the</p>	<p>The Law of Turkmenistan "On Nature Protection"</p> <p>The Law of Turkmenistan "On Environmental Information"</p>

	<p>environment. The Parties to the Convention shall take the necessary measures to ensure that public authorities at the national, regional or local levels assist in the effective realization of these rights. The Aarhus Convention provides for:</p> <p>Access to environmental information:</p> <ul style="list-style-type: none"> <li>• The right of citizens to receive environmental information available to state bodies</li> </ul> <p>Public participation in the decision-making process on environmental issues:</p> <ul style="list-style-type: none"> <li>• The right of citizens to participate in the preparation of plans and programs, strategies and legislation that may affect the state of the environment.</li> </ul> <p>Access to justice:</p> <ul style="list-style-type: none"> <li>• The right of citizens to have access to review procedures in cases of violation of their rights regarding access to information or public participation.</li> </ul>	
<p>Vienna Convention on the Protection of the Ozone Layer of 22.03.1985</p> <p>-Montreal Protocol on Substances that Deplete the Ozone Layer of 16.09.1987</p> <p>-Amendments to the Montreal Protocol of 25,11,1992, 17,09,1997,03,12,1999</p>	<p>It acts as a basis for international efforts to protect the ozone layer. However, the Convention does not include legally binding targets for reducing the use of chlorofluorocarbons, the main chemicals causing depletion of the ozone layer. They are set out in the accompanying Montreal Protocol.</p> <p>The Montreal Protocol on Substances That Deplete the Ozone Layer is an international protocol to the Vienna Convention for the Protection of the Ozone Layer of 1985, developed to protect the ozone layer by decommissioning certain chemicals that deplete the ozone layer.</p>	<p>The Law of Turkmenistan “On Nature Protection”</p> <p>The Law of Turkmenistan "On The Protection of Atmosphere Air"</p> <p>The Law of Turkmenistan "On the protection of the Ozone layer"</p>

<p>The United Nations Framework Convention on Climate Change was adopted (UNFCCC) on 09.05.1992 in New York, entered into force in 1994.</p>	<p>The ultimate goal of this Convention and all related legal instruments that the Conference of the Parties may adopt is to achieve, in compliance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would not allow dangerous anthropogenic impact on the climate system. Such a level should be achieved in a time sufficient for the natural adaptation of ecosystems to climate change, allowing not to endanger food production and ensuring further economic development on a sustainable basis.</p>	<p>The Law of Turkmenistan “On Nature Protection” The Law of Turkmenistan "On the Protection of Atmosphere Air" The Law of Turkmenistan "On the Protection of the Ozone Layer" Instruction on the regulation of emissions (discharges) of pollutants into the atmosphere and into water bodies, Approved by the Deputy. Chairman Goskomprirody USSR 11.09. 1989 Instructions on the procedure for reviewing, approving and examining air protection measures and issuing permits for the release of pollutants into the atmosphere according to design decisions, OND 1-84, 04/19/1984 Gosstroy of the USSR from 01.01.1985</p>
<p>Kyoto Protocol to the United Nations Framework Convention on Climate Change of 11.12.1997 gor.Kyoto, Japan</p>	<p>an international agreement concluded to reduce greenhouse gas emissions into the Earth's atmosphere to counter global warming</p>	<p>The Law of Turkmenistan “On Nature Protection” The Law of Turkmenistan "On the protection of Atmosphere Air" The Law of Turkmenistan "On the protection of the Ozone layer"</p>
<p>Amendment to Annex "B" to the Kyoto Protocol to the United Nations Framework Convention on Climate Change adopted on November 17, 2006.</p>		<p>The Law of Turkmenistan “On Nature Protection” The Law of Turkmenistan "On the protection of Atmosphere Air" The Law of Turkmenistan "On the protection of the Ozone layer"</p>



<p>Paris Agreement adopted at the 21st Conference of the Members of the United Nations Framework Convention on Climate Change 2015</p>	<p>The agreement provides for the commitment of all countries to reduce their emissions and work together to adapt to the effects of climate change, and also calls on countries to strengthen their commitments over time. The Agreement opens the way for developed countries to assist developing countries in their efforts to mitigate and adapt to climate change, while at the same time creating a framework for transparent monitoring and reporting on countries' achievement of climate goals.</p>	<p>The Law of Turkmenistan "On Nature Protection" The Law of Turkmenistan "On the protection of Atmosphere Air" The Law of Turkmenistan "On the protection of the Ozone layer"</p>
<p>Convention on Biological Diversity, signed on June 5, 1992 in the city of Rio de Janeiro.</p>	<p>The objectives of the Convention are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of benefits associated with the use of genetic resources, including by providing the necessary access to genetic resources and through the appropriate transfer of appropriate technologies, taking into account all rights to such resources and technologies, as well as through adequate financing.</p>	<p>The Law of Turkmenistan "On Nature Protection" The Law of Turkmenistan "On specially protected natural territories" The Law of Turkmenistan "On fishing and conservation of aquatic biological resources" The Law of Turkmenistan "On the animal world" The Law of Turkmenistan "On the plant world"</p>
<p>Cartagena Protocol on Biosafety to the Convention on Biological Diversity of 29.01.2000, Montreal</p>	<p>In accordance with the precautionary principle contained in Principle 15 of the Rio Declaration on Environment and Development, the purpose of this Protocol is to promote an appropriate level of protection in the safe transfer, processing and use of living modified organisms resulting from the application of modern biotechnology and capable of having an adverse impact on conservation and sustainable use of biological diversity, taking into account also the risks to human health and paying special attention to cross-border movement.</p>	

## Environmental aspects related to each department of TIS

Environmental Aspects Register							
№	Этапы работы	Aspects	Impact on	Responsible person	Applicable Legislation	Legal Requirments	Меры по снижению воздействия
1	2	3	4	5	6	7	8
BULK CARGO TERMINAL							
BC1	Loading and unloading of bulk cargo including oil products, chemical bulk cargo	Emissions of pollutants from bulk cargo scattering	Atmospheric air pollution	Shift supervisor of Bulk cargo terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.3, p.5, p.6; Article 26 p.2; Article 40 p.1	To take into account the quantity and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air, to carry out measures to reduce emissions of pollutants in adverse meteorological conditions. Industrial control over the protection of atmospheric air at enterprises that have sources of harmful effects is carried out by the environmental service.	<ol style="list-style-type: none"> <li>1. Carrying out control over loading and unloading operations.</li> <li>2. Water irrigation of the working area air.</li> <li>3. Periodic analysis of atmospheric air samples for compliance with the norms of the project of permissible emissions of the enterprise.</li> <li>4. Accounting for the amount of cargo handled.</li> </ol>
BC2	Loading and unloading of bulk cargo including oil products, chemical bulk cargo	The ingress of loose cargo on the water surface	Pollution of the marine water area and coastal zone	Shift supervisor of Bulk cargo terminal	Water Code of Turkmenistan 15.01.2018, Article 41 p.6, Article 90 p.1, p.2	Maintain sanitary protection zones of coastal strips of waterways and other hydraulic structures in proper condition. In order to protect water bodies from pollution, it is prohibited to discharge any types of waste.	<ol style="list-style-type: none"> <li>1. Monitoring compliance with the Action Plan for the Prevention of Marine Pollution during Loading of Oil products and Chemical Bulk cargo in the port</li> <li>2. The presence and use of a tarpaulin between the berth and the vessel to prevent cargo from entering the sea according to the Work Flow Chart.</li> <li>3. Strict compliance with the Work Flow Chart.</li> </ol>

							4. Periodic sampling and analysis of seawater samples by an accredited laboratory.
BC3	Loading and unloading of bulk cargo including oil products, chemical bulk cargo	The scattering of bulk cargo on the ground surface of the working area, the formation and accumulation of waste (cargo residues)	Soil pollution, (the fertile layer of the earth)	Shift supervisor of Bulk cargo terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Asphaltting/concreting of land plots in the working area. 2. Timely cleaning in the work area.
BC4	Loading and unloading of bulk cargo including oil products, chemical bulk cargo	Emissions of pollutants (CO, NOx, SO2, CnHm, soot, greenhouse gases) during operation of internal combustion engines of loading and unloading equipment	Atmospheric air pollution, depletion of natural resources (hydrocarbon fuel)	Shift supervisor of Bulk cargo terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.2, p.3, p.6; Article 21 p.4	To take into account the quantity and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air. Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification for compliance with specific standards for emissions of pollutants into the atmospheric air.	1. The use of equipment with an electric drive for loading and unloading operations. 2. The use of serviceable machinery and equipment; 3. Use of lifting equipment (loaders) conforming to Euro-5 standards 4. Conducting quarterly reporting "1-Air" and monitoring not exceeding the permissible standards of the project of permissible emissions 5. Turning off the engine when idle. 6. Carrying out periodic technical inspection and repair of lifting equipment.
BC5	Loading and unloading of bulk cargo including oil products, chemical bulk cargo	Fuel and Lubricants spill during operation of internal combustion engines	Soil pollution	Shift supervisor of Bulk cargo terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Visual inspection of equipment for leakage of fuels and lubricants, malfunctions before starting work. 2. Carrying out periodic technical inspection and repair of lifting equipment. 3. Availability of means to eliminate fuel and lubricants spills. 4. Asphaltting/concreting of land plots in the working area.
BC6	Loading and unloading of bulk cargo including oil products,	Operation of loading and unloading equipment	Noise pollution	Shift supervisor of Bulk cargo terminal	The Law of Turkmenistan «On Protection of Nature»	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared	1. Carrying out timely lubrication of equipment to avoid the occurrence of excessive noise and vibration, not

	chemical bulk cargo				31.03.2017 Article 35 p.1	radiation and other harmful physical effects on the environment.	provided by the manufacturer of the equipment.
BC7	Loading and unloading of bulk cargo including oil products, chemical bulk cargo	Use of energy resources (electricity) during operation of electric motors	Depletion of natural resources (energy resources)	Shift supervisor of Bulk cargo terminal	The Law of Turkmenistan «On Electric power industry» 08.06.2019 Article 23 p.2	Maintain the proper technical condition of electrical installations.	1. Turning off the engine of the equipment when idle. 2. The operation of the equipment is not at full capacity. 3. Timely maintenance.
BC8	Storage of bulk cargo, including oil products, chemical bulk cargo	Emissions of pollutants into the atmospheric air, dispersion of pollutants during storage and loading of bulk cargo	Atmospheric air pollution	Warehouse supervisor of Bulk cargo terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.3, p.5, p.6; Article 26 p.2; Article 40 p.1	To take into account the quantity and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air, to carry out measures to reduce emissions of pollutants in adverse meteorological conditions. Industrial control over the protection of atmospheric air at enterprises that have sources of harmful effects is carried out by the environmental service.	1. Conducting internal control. 2. Fencing of storage areas of bulk materials, by type. 3. Covering of bulk materials with a tarpaulin, if necessary. 4. Water irrigation of the working area air. 5. Use of silos for grain and cement storage.
BC9	Storage of bulk cargo, including oil products, chemical bulk cargo	Formation of cargo spillage, depressurization of containers, damage to containers (big bags), dispersion and deposition of bulk cargo on the water surface under adverse meteorological conditions	Pollution of the marine water area and coastal zone	Warehouse supervisor of Bulk cargo terminal	Water Code of Turkmenistan 15.01.2018, Article 41 p.6, Article 90 p.1, p.2	Maintain sanitary protection zones of coastal strips of waterways and other hydraulic structures in proper condition. In order to protect water bodies from pollution, it is prohibited to discharge any types of waste.	1. Conducting internal control. 2. Fencing of storage areas of bulk materials, by type. 3. Covering of bulk materials with a tarpaulin, if necessary. 4. Use of silos for grain and cement storage.
BC10	Storage of bulk cargo, including oil products, chemical bulk cargo	The scattering of bulk cargo on the ground surface of the working area, the formation and accumulation of waste (cargo residues), the	Soil pollution	Warehouse supervisor of Bulk cargo terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the	1. Conducting internal control. 2. Asphaltting/concreting of soil areas in storage areas. 3. Periodic visual inspection of the cargo. 4. Timely cleaning in the work area.

		deposition of pollutants on the ground surface				environment, flora and fauna, subsoil and others	
<b>GENERAL CARGO TERMINAL</b>							
GC1	Loading and unloading of general cargo, including heavy cargo	Emissions of pollutants when packaging containers are damaged as a result of falling cargo	Atmospheric air pollution by pulverized substances	Shift supervisor of General cargo terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17, p/1	Comply with the requirements stipulated by the legislation of Turkmenistan for the protection of atmospheric air	<ol style="list-style-type: none"> <li>1. Control of loading and unloading operations.</li> <li>2. Cargo securing control.</li> <li>3. Strict compliance with the work flow chart.</li> <li>4. Reloading of cargo with broken packaging.</li> <li>5. Emergency liquidation of the consequences of placers and spills.</li> </ol>
GC2	Loading and unloading of general cargo, including heavy cargo	The scattering of bulk cargo on the ground surface of the working area, the formation and accumulation of waste (cargo residues)	Soil pollution (the fertile layer of the earth)	Shift supervisor of General cargo terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	<ol style="list-style-type: none"> <li>1. Control of loading and unloading operations.</li> <li>2. Cargo securing control.</li> <li>3. Strict compliance with the work flow chart.</li> <li>4. Reloading of cargo with broken packaging.</li> <li>5. Emergency liquidation of the consequences of placers and spills.</li> </ol>
GC3	Loading and unloading of general cargo, including heavy cargo	The ingress of pollutants into the marine environment and on the water surface as a result of the scattering of cargo and damage to containers	Pollution of the marine area	Shift supervisor of General cargo terminal	Water Code of Turkmenistan 15.01.2018, Article 41 p.6	Maintain sanitary protection zones of coastal strips of waterways and other hydraulic structures in proper condition. In order to protect water bodies from pollution, it is prohibited to discharge any types of waste.	
GC4	Loading and unloading of general cargo, including heavy cargo	Emissions of pollutants (CO, NOx, SO2, CnHm, soot, greenhouse gases) during operation of internal combustion engines of loading and unloading equipment	Atmospheric air pollution, depletion of natural resources (hydrocarbon fuel)	Shift supervisor of General cargo terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.2, p.3, p.6; Article 21 p.4	<p>To take into account the quantity and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air.</p> <p>Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification for</p>	<ol style="list-style-type: none"> <li>1. The use of equipment with an electric drive for loading and unloading operations.</li> <li>2. The use of serviceable machinery and equipment;</li> <li>3. Use of lifting equipment (loaders) conforming to Euro-5 standards</li> <li>4. Conducting quarterly reporting "1-Air" and monitoring not exceeding the permissible standards of the project of permissible emissions.</li> <li>5. Turning off the engine when idle.</li> </ol>



						compliance with specific standards for emissions of pollutants into the atmospheric air.	6. Carrying out periodic technical inspection and repair of lifting equipment.
GC5	Loading and unloading of general cargo, including heavy cargo	Formation and accumulation of waste (used oils, lubricants and coolants) as a result of loading and unloading equipment, fuel spill during operation of internal combustion engines of loading and unloading equipment	Soil pollution (the fertile layer of the earth)	Shift supervisor of General cargo terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Visual inspection of equipment for leakage of fuels and lubricants, malfunctions before starting work. 2. Carrying out periodic technical inspection and repair of lifting equipment. 3. Availability of means to eliminate fuel and lubricants spills. 4. Asphaltting/concreting of land plots in the working area.
GC6	Loading and unloading of general cargo, including heavy cargo	Operation of loading and unloading equipment	Noise pollution	Shift supervisor of General cargo terminal	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	1. Carrying out timely lubrication of equipment to avoid the occurrence of excessive noise and vibration, not provided by the manufacturer of the equipment.
GC7	Loading and unloading of general cargo, including heavy cargo	Use of energy resources (electricity) during operation of electric motors	Depletion of natural resources (energy resources)	Shift supervisor of General cargo terminal	The Law of Turkmenistan «On Electric power industry» 08.06.2019 Article 23 p.2	Maintain the proper technical condition of electrical installations.	1. Turning off the engine of the equipment when idle. 2. The operation of the equipment is not at full capacity. 3. Timely maintenance.
GC8	Storage of general cargo, including heavy cargo	Emissions of pollutants into the atmospheric air due to improper storage of goods	Atmospheric air pollution	Warehouse supervisor of General cargo terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17, p/1	Comply with the requirements stipulated by the legislation of Turkmenistan for the protection of atmospheric air	1. Conducting internal control over compliance with storage conditions. 2. Reloading of cargo with broken packaging. 3. Asphaltting/concreting of soil areas in storage areas.
GC9	Storage of general cargo, including heavy cargo	Formation and accumulation of waste (cargo residues)	Soil pollution (the fertile layer of the earth)	Warehouse supervisor of General cargo terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	4. Periodic visual inspection of the cargo. 5. Timely cleaning in the work area. 6. Cargo storage on special stands (pallets).

CONTAINER TERMINAL							
C1	Loading and unloading of all types of containers (including containers with perishable goods, tank containers)	Emissions of pollutants into the atmospheric air when the container is damaged due to a fall	Atmospheric air pollution	Shift supervisor of Container terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17, p/1	Comply with the requirements stipulated by the legislation of Turkmenistan for the protection of atmospheric air	<ol style="list-style-type: none"> <li>1. Control of loading and unloading operations.</li> <li>2. Cargo securing control.</li> <li>3. Strict compliance with the Work Flow Chart.</li> <li>4. Reloading of cargo with broken packaging.</li> <li>5. Emergency liquidation of the consequences of placers and spills.</li> </ol>
C2	Loading and unloading of all types of containers (including containers with perishable goods, tank containers)	The ingress of cargo residues onto the Earth's surface, the formation and accumulation of waste (cargo residues, damaged containers) when the container is damaged due to a fall	Soil pollution (the fertile layer of the earth)	Shift supervisor of Container terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	<ol style="list-style-type: none"> <li>1. Control of loading and unloading operations.</li> <li>2. Cargo securing control.</li> <li>3. Strict compliance with the Work Flow Chart.</li> <li>4. Reloading of cargo with broken packaging.</li> <li>5. Emergency liquidation of the consequences of placers and spills.</li> </ol>
C3	Loading and unloading of all types of containers (including containers with perishable goods, tank containers)	Emissions of pollutants (CO, NO <sub>x</sub> , SO <sub>2</sub> , CnHm, soot, greenhouse gases) during operation of internal combustion engines of loading and unloading equipment	Atmospheric air pollution, depletion of natural resources (hydrocarbon fuel)	Shift supervisor of Container terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.2, p.3, p.6; Article 21 p.4	<p>To take into account the quantity and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air.</p> <p>Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification for compliance with specific standards for emissions of pollutants into the atmospheric air.</p>	<ol style="list-style-type: none"> <li>1. The use of equipment with an electric drive for loading and unloading operations.</li> <li>2. The use of serviceable machinery and equipment;</li> <li>3. Use of lifting equipment (loaders) conforming to Euro-5 standards</li> <li>4. Carrying out quarterly reporting "1-Air" and monitoring of not exceeding the permissible norms of MPV.</li> <li>5. Turning off the engine when idle.</li> <li>6. Carrying out periodic technical inspection and repair of lifting equipment.</li> </ol>
C4	Loading and unloading of all types of containers (including	Formation and accumulation of waste (used oils, lubricants and coolants) as a result of loading and	Soil pollution (the fertile layer of the earth)	Shift supervisor of Container terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the	<ol style="list-style-type: none"> <li>1. Visual inspection of equipment for fuel leaks, malfunctions before starting work.</li> </ol>

	containers with perishable goods, tank containers)	unloading equipment, fuel and lubricants spill in case of malfunctions in loading and unloading equipment				environment, flora and fauna, subsoil and others	2. Carrying out periodic technical inspection and repair of lifting equipment. 3. Availability of means of liquidation of fuel spills. 4. Asphaltting/concreting of land plots in the working area.
C5	Loading and unloading of all types of containers (including containers with perishable goods, tank containers)	Operation of loading and unloading equipment	Noise pollution	Shift supervisor of Container terminal	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	1. Carrying out timely lubrication of equipment to avoid the occurrence of excessive noise and vibration, not provided by the manufacturer of the equipment.
C6	Loading and unloading of all types of containers (including containers with perishable goods, tank containers)	Use of energy resources (electricity) during operation of electric motors	Depletion of natural resources (energy resources)	Shift supervisor of Container terminal	The Law of Turkmenistan «On Electric power industry» 08.06.2019 Article 23 p.2	Maintain the proper technical condition of electrical installations.	1. Turning off the engine of the equipment when idle. 2. The operation of the equipment is not at full capacity. 3. Timely maintenance.
C7	Storage of containers with perishable goods	Use of land resources	Soil pollution	Warehouse supervisor of Container terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Conducting internal control over compliance with storage conditions. 2. Ensuring uninterrupted supply of electricity. 3. Periodic visual inspection of the cargo. 4. Asphaltting/concreting of soil areas in storage areas.
C8	Storage of special tank containers (gaseous cargo)	Emissions of pollutants into the atmospheric air in case of leak-tightness violation during storage of gaseous cargoes in special tank containers	Atmospheric air pollution	Warehouse supervisor of Container terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.7	Take measures in accordance with the established procedure to eliminate salvo and emergency emissions of pollutants into the atmospheric air	1. Conducting internal control over compliance with storage conditions. 2. Ensuring proper cargo storage conditions and tightness of containers. 3. Periodic visual inspection of the cargo.

C9	Storage of special tank containers (gaseous cargo)	Use of land resources	Soil pollution	Warehouse supervisor of Container terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	<ol style="list-style-type: none"> <li>1. Conducting internal control over compliance with storage conditions.</li> <li>2. Availability of a special storage area intended for tank containers.</li> <li>3. Periodic visual inspection of the cargo.</li> <li>4. Asphaltting/concreting of soil areas in storage areas.</li> </ol>
<b>FERRY-PASSENGER TERMINAL</b>							
FP1	Loading and unloading of vehicles	Emissions of pollutants (CO, NO <sub>x</sub> , SO <sub>2</sub> , CnHm, soot, greenhouse gases) during operation of internal combustion engines of loading and unloading equipment, emissions of hydrocarbons and volatile organic compounds (VOCs) during the spill of Fuels and lubricants	Atmospheric air pollution, depletion of natural resources (hydrocarbon fuel)	Shift supervisor of Ferry-passenger terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.2, p.3, p.6; Article 21 p.4	Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification for compliance with specific standards for emissions of pollutants into the atmospheric air.	<ol style="list-style-type: none"> <li>1. The use of serviceable equipment.</li> <li>2. Carrying out periodic technical inspection and repair of the tractor.</li> <li>3. Control of loading and unloading operations.</li> <li>4. Strict compliance with the Work Flow Chart.</li> <li>5. Emergency response to the consequences of spills.</li> <li>6. Availability of means of liquidation of fuel and lubricants spills</li> </ol>
FP2	Loading and unloading of vehicles	Formation and accumulation of waste (used oils, lubricants) as a result of loading and unloading equipment, fuel and lubricants spill in the presence of faulty Fuel and lubricants lines in vehicles	Soil pollution (fertile layer of the earth)	Shift supervisor of Ferry-passenger terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	<ol style="list-style-type: none"> <li>1. The use of serviceable equipment.</li> <li>2. Carrying out periodic technical inspection and repair of the tractor.</li> <li>3. Control of loading and unloading operations.</li> <li>4. Strict compliance with the Work Flow Chart.</li> <li>5. Emergency response to the consequences of spills.</li> <li>6. Availability of means of liquidation of fuel and lubricants spills.</li> </ol>
FP3	Storage of vehicles and trailers	The presence of faulty fuel and lubricants lines in vehicles	Soil pollution	Warehouse supervisor of Ferry-passenger terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the	<ol style="list-style-type: none"> <li>1. Conducting internal control over compliance with storage conditions.</li> <li>2. Availability of special parking lots for the storage of motor vehicles.</li> </ol>

						environment, flora and fauna, subsoil and others	3. Periodic visual inspection of the cargo for leaks. 4. Asphaltting/concreting of soil areas in storage areas. 5. Availability of means of liquidation of fuel and lubricants spills.
<b>POLYPROPYLENE TERMINAL</b>							
P1	Loading and unloading of polypropylene and polyethylene	Emissions of pollutants from the scattering of bulk material	Atmospheric air pollution	Shift supervisor of Polypropylene terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.3, p.5, p.6; Article 26 p.2; Article 40 p.1	To take into account the quantity and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air, to carry out measures to reduce emissions of pollutants in adverse meteorological conditions. Industrial control over the protection of atmospheric air at enterprises that have sources of harmful effects is carried out by the environmental service.	1. Control of loading and unloading operations. 2. Periodic analysis of atmospheric air samples for compliance with the project standards Maximum permissible emissions of the enterprise. 3. Accounting for the amount of cargo handled.
P2	Loading and unloading of polypropylene and polyethylene	Ingress of loose material on the water surface	Pollution of the marine water area and coastal zone	Shift supervisor of Polypropylene terminal	Water Code of Turkmenistan 15.01.2018, Article 41 p.6, Article 90 p.1, p.2	Maintain sanitary protection zones of coastal strips of waterways and other hydraulic structures in proper condition. In order to protect water bodies from pollution, it is prohibited to discharge any types of waste.	1. Monitoring compliance with the Action Plan for the Prevention of Marine Pollution during loading of oil-containing and chemical bulk cargo in the port. 2. Strict compliance with the Work Flow Chart. 3. Periodic sampling and analysis of seawater samples by an accredited laboratory.
P3	Loading and unloading of polypropylene and polyethylene	The scattering of bulk material on the Earth's surface, the formation and accumulation of waste (cargo residues)	Soil pollution (fertile layer of the earth)	Shift supervisor of Polypropylene terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Asphaltting/concreting of land plots in the working area. 2. Timely cleaning in the work area.



P4	Loading and unloading of polypropylene and polyethylene	Emissions of pollutants (CO, NO <sub>x</sub> , SO <sub>2</sub> , CnHm, soot, greenhouse gases) during operation of internal combustion engines of loading and unloading equipment, emissions of hydrocarbons and volatile organic compounds (VOCs) during the spill of Fuels and lubricants	Atmospheric air pollution, depletion of natural resources (hydrocarbon fuel)	Shift supervisor of Polypropylene terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.2, p.3, p.6; Article 21 p.4	To take into account the amount and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air.  Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification for compliance with specific standards for emissions of pollutants into the atmospheric air.	<ol style="list-style-type: none"> <li>1. The use of equipment with an electric drive for loading and unloading operations.</li> <li>2. The use of serviceable machinery and equipment;</li> <li>3. Use of lifting equipment (loaders) conforming to Euro-5 standards</li> <li>4. Conducting quarterly reporting "1-Air" and monitoring not exceeding the permissible limits of permissible emissions.</li> <li>5. Turning off the engine when idle.</li> <li>6. Carrying out periodic technical inspection and repair of lifting equipment.</li> </ol>
P5	Loading and unloading of polypropylene and polyethylene	Formation and accumulation of waste (used oils, lubricants) as a result of loading and unloading of equipment, fuel and lubricants spill in the presence of faulty fuel lines in vehicles	Soil pollution (fertile layer of the earth)	Shift supervisor of Polypropylene terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	<ol style="list-style-type: none"> <li>1. Visual inspection of equipment for leakage of fuel and lubricants., malfunctions before starting work.</li> <li>2. Carrying out periodic technical inspection and repair of lifting equipment.</li> <li>3. Availability of means of liquidation of fuel and lubricants spills.</li> <li>4. Asphaltting/concreting of land plots in the working area.</li> </ol>
P6	Loading and unloading of polypropylene and polyethylene	Operation of loading and unloading equipment	Noise pollution	Shift supervisor of Polypropylene terminal	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	<ol style="list-style-type: none"> <li>1. Carrying out timely lubrication of equipment to avoid the occurrence of excessive noise and vibration, not provided by the manufacturer of the equipment.</li> </ol>
P7	Loading and unloading of polypropylene and polyethylene	Use of energy resources (electricity) during operation of electric motors	Depletion of natural resources (energy resources)	Shift supervisor of Polypropylene terminal	The Law of Turkmenistan «On Electric power industry» 08.06.2019 Article 23 p.2	Maintain the proper technical condition of electrical installations.	<ol style="list-style-type: none"> <li>1. Turning off the engine of the equipment when idle.</li> <li>2. The operation of the equipment is not at full capacity.</li> <li>3. Timely maintenance.</li> </ol>

P8	Storage of polypropylene and polyethylene in Big bags	Emissions of pollutants (polyethylene and polypropylene dust) into the atmospheric air when the packaging is damaged	Atmospheric air pollution	Warehouse supervisor of Polypropylene terminal	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 40 p.1	Industrial control over the protection of atmospheric air at enterprises that have sources of harmful effects is carried out by the environmental service.	1. Conducting internal control. 2. Fencing of storage areas of bulk materials, by type. 3. Repacking of damaged packaging
P9	Storage of polypropylene and polyethylene in Big bags	The scattering of polyethylene and polypropylene on the Earth's surface, the formation and accumulation of waste (remnants of material, packaging), the deposition of pollutants on the Earth's surface	Soil pollution (fertile layer of the earth)	Warehouse supervisor of Polypropylene terminal	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Conducting internal control. 2. Asphaltting/concreting of soil areas in storage areas. 3. Periodic visual inspection of the cargo. 4. Timely cleaning in the work area.
<b>Auxiliary Fleet</b>							
AF1	Operation of Auxiliary Fleet vessels	Emissions of pollutants (CO, NO <sub>x</sub> , SO <sub>2</sub> , CnHm, soot) and greenhouse gases during the operation of marine engines	Atmospheric air pollution	Head of Auxiliary Fleet Master of vessel	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.3, p.6; Article 32 p.3, p.4.	To take into account the amount and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air. Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification for compliance with specific standards for emissions of pollutants into the atmospheric air.	1. Turning off the engines of ships when idle and connecting to the shore power supply. 2. The use of fuel for internal combustion engines in accordance with the requirements of the Marpol Convention. 3. Conducting quarterly reporting "1-Air" and monitoring not exceeding the permissible norms of the maximum permissible emissions of the enterprise. 4. Inspection of the technical condition of the vessel by the inspectors of the Captain's Port before receiving the departure. 5. Carrying out periodic technical inspection and repair of vessels.
AF2	Operation of Auxiliary Fleet vessels	Ship operation (ship engine room)	Noise pollution	Head of Auxiliary Fleet	The Law of Turkmenistan «On Protection of Nature»	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared	1. Anti-noise measures are provided in the engine room of ships (flexible inserts, muffler, vibration-isolating bases).

				Master of vessel	31.03.2017 Article 35 p.1	radiation and other harmful physical effects on the environment.	2. Inspection of the technical condition of the vessel by the inspectors of the Captain's Port before receiving the departure.
AF3	Operation of Auxiliary Fleet vessels	Leakage of oil-containing, household wastewater, garbage disposal	Pollution of the marine water area, coastal waters	Head of Auxiliary Fleet Master of vessel	Rules for the Protection of Coastal waters of Turkmenistan 23.08.2016 Chapter IV p.7- p.10	Dumping of harmful substances from ships in the coastal waters of Turkmenistan is prohibited. All types of work carried out on ships in the coastal waters of Turkmenistan should not lead to deterioration of the quality of sea water. Harmful substances and mixtures containing them that are prohibited for dumping in the internal and territorial waters of Turkmenistan must be collected on the vessel in special containers and then handed over to shore or floating reception facilities or destroyed on board the vessel	<ol style="list-style-type: none"> <li>1. Compliance with the requirements of the Tehran Framework Convention on Zero Discharge.</li> <li>2. The outlet pipes for the discharge of oily and wastewater are sealed when the vessel departs.</li> <li>3. Oily and waste waters on ships are handed over to a specialized vessel for further disposal on land.</li> <li>4. Control over compliance with the rules with the state supervisory authority.</li> <li>5. Accounting for oily and wastewater.</li> </ol>
AF4	Operation of Auxiliary Fleet vessels	Removal from ships, disposal of oily, household waste water and garbage (waste paper, plastic, solid household waste, oiled rags, used batteries)	Soil pollution (fertile layer of the earth)	Head of Auxiliary Fleet Master of vessel	<p>Land Code of Turkmenistan 09.12.2017 Article 100 p.3</p> <p>Rules for the Protection of Coastal waters of Turkmenistan 23.08.2016 Chapter V p.26</p>	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	<ol style="list-style-type: none"> <li>1. Storage of waste on the ship in special containers and subsequent delivery to the shore.</li> <li>2. Timely removal of garbage on land for further disposal.</li> <li>3. Spent batteries are handed over to the appropriate military service.</li> <li>4. Waste accounting by type.</li> <li>5. Timely cleaning on the ship.</li> </ol>
AF5	Operation of Auxiliary Fleet vessels	Ship navigation	Physical (electromagnetic, noise, thermal) pollution of the environment	Head of Auxiliary Fleet Master of vessel	The Merchant Shipping Code Article 18,19,21	Vessels must comply with the requirements of the Classification Society authorized in Turkmenistan, which carry out technical supervision of vessels.	<ol style="list-style-type: none"> <li>1. The movement of vessels through a special navigable channel for navigation, equipped with navigation buoys.</li> <li>2. Dredging works are carried out on the shipping channel to prevent accidents (stranding).</li> </ol>
GARAGE SERVICE							

G1	Movement of all types of cargo on the territory of the port by motor transport and equipment	Emissions of pollutants as a result of loose cargo scattering, blowing of transported material from the body surface, friction of vehicle wheels with the roadbed	Atmospheric air pollution	Head of Garage service	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.3, p.5, p.6; Article 26 p.2; Article 40 p.1	To take into account the quantity and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air, to carry out measures to reduce emissions of pollutants in adverse meteorological conditions. Industrial control over the protection of atmospheric air at enterprises that have sources of harmful effects is carried out by the environmental service.	<ol style="list-style-type: none"> <li>1. Conducting internal control.</li> <li>2. Before the departure of vehicles with bulk cargo, the cargo is covered with a tarpaulin covering.</li> <li>3. Reloading of cargo with broken packaging.</li> <li>4. Compliance with the speed limit.</li> </ol>
G2	Movement of all types of cargo on the territory of the port by motor transport and equipment	The scattering of bulk cargo on the Earth's surface during the movement of cargo as a result of blowing and deposition on the Earth's surface, the formation and accumulation of waste (cargo residues, waste oils, batteries, tires), man-made load on the Earth's surface, soil degradation	Soil pollution, (the fertile layer of the earth)	Head of Garage service	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	<ol style="list-style-type: none"> <li>1. The movement of vehicles and equipment along established routes.</li> <li>2. Asphaltting/concreting of land plots in the working area.</li> <li>3. Conducting an introductory briefing for drivers with an explanation of the rules of transportation on the territory of the port.</li> <li>4. Compliance with the speed limit.</li> <li>5. Timely cleaning in the work area.</li> <li>6. The use of vehicles intended for the transportation of a certain type of cargo.</li> </ol>
G3	Movement of all types of cargo on the territory of the port by motor transport and equipment	Emissions of pollutants (CO, NOx, SO2, CnHm, soot, aldehydes) and greenhouse gases during operation of the internal combustion engine of vehicles and machinery, emissions of hydrocarbons and volatile organic	Atmospheric air pollution	Head of Garage service	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.2, p.3, p.6; Article 21 p.4	<p>To take into account the amount and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air.</p> <p>Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to</p>	<ol style="list-style-type: none"> <li>1. The use of equipment with an electric drive for loading and unloading operations.</li> <li>2. The use of serviceable machinery and equipment;</li> <li>3. Use of lifting equipment (loaders) conforming to Euro-5 standards</li> <li>4. Conducting annual reporting on Form No. 1-"Air" and monitoring of not exceeding the permissible norms of MPV.</li> </ol>

		compounds (VOCs) during the spill of Fuels and lubricants				mandatory verification for compliance with specific standards for emissions of pollutants into the atmospheric air.	5. Quarterly inspection of vehicles and equipment for compliance with specific standards for emissions of pollutants into the atmospheric air. 6. Turning off the engine when idle. 7. Carrying out periodic technical inspection and repair of lifting equipment.
G4	Movement of all types of cargo on the territory of the port by motor transport and equipment	Formation and accumulation of waste (used oils, lubricants, used batteries, tires) as a result of the operation of vehicles and machinery, fuel and lubricants spill in the presence of faulty Fuel and lubricants lines in vehicles	Soil pollution (fertile layer of the earth)	Head of Garage service	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Visual inspection of equipment for fuel and lubricants. , malfunctions before admission to the territory of the enterprise (entry of faulty vehicles into the territory of the port is prohibited). 2. Carrying out periodic technical inspection and repair of equipment and vehicles of the port. 3. The movement of vehicles and equipment along established routes. 4. Asphaltting/concreting of land plots in the working area. 5. Availability of means of liquidation of fuel and lubricants spills.
G5	Movement of all types of cargo on the territory of the port by motor transport and equipment	Operation of vehicles and equipment	Noise pollution	Head of Garage service	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	1. Carrying out timely lubrication of machinery and vehicles in order not to cause unnecessary noise and vibration, not provided by the manufacturer of the equipment. 2. It is prohibited to enter the territory of the port of faulty vehicles.
G6	Movement of non-cargo vehicles on the territory of the port	Operation of non-cargo vehicles (operation of the internal combustion engine)	Air pollution, depletion of natural resources	Head of Garage service	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.2, p.3, p.6;	To take into account the amount and composition of emissions of pollutants into the atmospheric air, to comply with the established standards of maximum permissible harmful physical effects on the atmospheric air.	1. Turning off the engines of vehicles when idle. 2. The use of serviceable vehicles. 3. Conducting quarterly reporting "1-Air" and monitoring not exceeding the permissible limits of maximum permissible emissions.



					Article 21 p.4	Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification for compliance with specific standards for emissions of pollutants into the atmospheric air.	4. Compliance with the speed limit. 5. The use of serviceable machinery and equipment; 6. Turning off the engine of the equipment when idle. 7. Carrying out periodic technical inspection and repair of vehicles and equipment.
G7	Movement of non-cargo vehicles on the territory of the port	Formation and accumulation of waste (used oils, lubricants, used batteries, tires) as a result of the operation of vehicles and machinery, fuel and lubricants spill in the presence of faulty Fuel and lubricants lines in vehicles	Soil pollution (fertile layer of the earth)	Head of Garage service	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Visual inspection of equipment for fuel and lubricants, malfunctions before admission to the territory of the enterprise (entry of faulty vehicles into the territory of the port is prohibited). 2. Carrying out periodic technical inspection and repair of equipment and vehicles of the port. 3. The movement of vehicles and equipment along established routes. 4. Asphaltting/concreting of land plots in the working area. 5. Availability of means to eliminate fuel and lubricants spills 6. The movement of vehicles along established routes.
G8	Movement of non-cargo vehicles on the territory of the port	Operation of non-cargo vehicles	Noise pollution	Head of Garage service	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	1. Turning off the engines of vehicles when idle. 2. Carrying out periodic technical inspection and repair of port vehicles, in order to avoid noise unintended by the manufacturer. 3. It is prohibited to enter the territory of the port of faulty vehicles
G9	Gas station	Emissions of hydrocarbons when refueling equipment with fuel	Atmospheric air pollution	Head of Garage service	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.9	Legal entities and individuals whose activities are associated with emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to take measures to eliminate	1. Accounting for the amount of fuel injected. 2. Checking with the control and measuring devices of the filling station

						unorganized stationary sources of emissions of pollutants into the atmospheric air, transfer them to the category of organized sources	3. Control and visual inspection during the refueling of equipment. 4. Refueling of equipment and vehicles with fuel is carried out only in a closed way – at a gas station, at specially equipped sites.
G10	Gas station	Spillage of fuels and lubricants and petroleum products in the presence of faulty lines of fuels and lubricants in vehicles, when refueling vehicles	Soil pollution (fertile layer of the earth)	Head of Garage service	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Refueling of equipment and vehicles with fuel is carried out only in a closed way – at a gas station, at specially equipped sites. 2. Availability of spill response facilities.
G11	Gas station	Hydrocarbon emissions and Local treatment facilities during fuel storage in tanks at gas stations	Atmospheric air pollution	Head of Garage service	The Law of Turkmenistan «On Protection of Atmosphere Air» 26.03.2016, Article 17 p.9	Legal entities and individuals whose activities are associated with emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to take measures to eliminate unorganized stationary sources of emissions of pollutants into the atmospheric air, transfer them to the category of organized sources	1. Fuel storage is carried out only in a closed way – at a gas station, at specially equipped sites. 2. Annual certification of equipment and tanks by the state service of the total number of particles dissolved in water. 3. Accounting for the amount of fuel.
G12	Gas station	Spillage of fuels and lubricants and petroleum products during filling, depressurization of underground tanks and fuel leakage	Soil pollution (fertile layer of the earth)	Head of Garage service	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Fuel storage is carried out only in a closed way – at a gas station, at specially equipped sites. 2. Annual certification of equipment and tanks by the state service of the total number of particles dissolved in water. 3. Accounting for the amount of fuel. 4. Storage of the minimum required amount of filling material. 5. Availability of spill response facilities.
G13	Maintenance and repair of	Emissions of exhaust gases (CO, NOx, SO2, CnHm, soot,	Atmospheric air pollution	Head of Garage service	The Law of Turkmenistan "On the protection	It is prohibited to manufacture and operate mobile sources of emissions of pollutants into the atmospheric air,	The air ejected from the exhaust general exchange ventilation system first undergoes rough cleaning in the

	machinery, vehicles	aldehydes) into the atmosphere during repair work and maintenance of vehicles			of atmospheric air" dated 26.03.2016, Article 21, paragraph 1	in the emissions of which the content of pollutants exceeds the specific emission standards established by the legislation of Turkmenistan	central cyclone, and then a more subtle one – in bag filters.
G14	Maintenance and repair of machinery, vehicles	Discharge of pollutants (drainage and waste water) into storm sewers through oil separators into a water body	Pollution of the marine water area and coastal zone	Head of Garage service	Water Code of Turkmenistan dated 15.01.2018, Article 74, paragraph 1, paragraph 3	The use of water bodies for the discharge of wastewater and return waters is carried out in the order of special water use. The use of water bodies for wastewater discharge may be carried out in exceptional cases, subject to their appropriate treatment on the basis of a permit issued by the authorized body of state administration in the field of environmental protection in coordination with the authorized body, the authorized state body in the field of sanitary and epidemiological welfare of the population and the authorized body of state fisheries management.	<ol style="list-style-type: none"> <li>1. Carrying out maintenance and repairs in special workshops located in each terminal.</li> <li>2. Drainage of sewage, stormwater and drainage water into treatment separators installed at each terminal.</li> </ol>
G15	Maintenance and repair of machinery, vehicles	Generation and disposal of industrial waste (including oiled rags, used tires, filters)	Soil pollution (fertile layer of the earth)	Head of Garage service	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 37	Legal entities and individuals are obliged to take the necessary effective measures to reduce the formation, use, neutralization, processing, storage and disposal of production and consumption waste.	<ol style="list-style-type: none"> <li>1. Maintenance and repair is carried out in special workshops located in each terminal.</li> <li>2. Arrangement of special areas and containers for temporary storage of garbage, by type.</li> <li>3. Timely removal of industrial waste by a specialized enterprise, with disposal at the landfill of Solid household waste according to the contract.</li> <li>4. Oiled rags are handed over to the Kenar oil depot.</li> <li>5. Used tires are handed over to the appropriate military service.</li> <li>6. Учёт отходов по видам.</li> </ol>

G16	Maintenance and repair of machinery, vehicles	Formation and disposal of used batteries	Soil pollution, (the fertile layer of the earth)	Head of Garage service	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 37	Legal entities and individuals are obliged to take the necessary effective measures to reduce the formation, use, neutralization, processing, storage and disposal of production and consumption waste.	1. Export for processing under the contract to the Balkan shipyard. 2. Control and accounting of storage in a special warehouse for collecting used batteries before delivery. 3. Spent batteries are handed over to the appropriate military service.
G17	Washing of machinery and vehicles	Consumption of water resources and discharge of pollutants (detergents) into the utility sewer	Pollution of water resources, depletion of water resources	Head of Garage service	The Water Code of Turkmenistan dated 15.01.2018, art.41, p.1, p.4, p.5, p.7	Water users are obliged to use water resources rationally, take care of economical use of water, restoration and improvement of water quality, comply with the established standards of maximum permissible discharge of pollutants and established limits of water intake, as well as sanitary and other requirements, take measures to prevent pollution of water bodies with wastewater, keep records of the volume of intake and use of water, monitor monitoring of water quality and quantity of return waters and pollutants discharged into water bodies, and also provide reports to the relevant state bodies in accordance with the procedure established by regulatory legal acts of Turkmenistan	1. Using a minimum amount of water. 2. Washing in special designated areas. 3. Drainage of wastewater into the treatment separators installed at each terminal. 4. The use of environmentally friendly detergents. 5. Accounting and control of water consumption. 6. Elimination of leaks on pipelines. 7. Periodic technical inspection of pipelines. 8. Use of closed water circulation systems.
G18	Washing of machinery and vehicles	Use of energy resources (electricity) during operation of electrical equipment	Depletion of natural resources (energy resources)	Head of Garage service	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 32, paragraph 2(4)	Measures to protect the climate system from anthropogenic climate change include the introduction and use of energy-saving and (or) resource-saving technologies, the best available technical methods	1. Economical electricity consumption. 2. Power off of electrical equipment when idle. 3. The operation of the equipment is not at full capacity. 4. Accounting for electricity consumption.
<b>TECHNICAL DEVELOPMENT AND REGULATION DEPARTMENT</b>							
TD1	Dredging works	Emissions of pollutants into the atmosphere from dredging equipment	Atmospheric air pollution	Chief engineer	The Law of Turkmenistan "On the protection of atmospheric	Legal entities and individuals whose activities are related to emissions of pollutants into the atmospheric air and harmful physical effects on the	1. Turning off the DG of the excavator when idle.

					air" dated 26.03.2016, Article 17, paragraph 2	atmospheric air are obliged to ensure the effective operation of facilities and equipment to reduce emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air and to monitor them	2. The use of fuel for DG in accordance with the requirements of the Marpol Convention. 3. The use of technically sound equipment.
TD2	Dredging works	Emissions and discharges of pollutants during excavation and storage of soil, formation and disposal of waste	Pollution of the soil of the marine water area and coastal zone, atmospheric air pollution	Chief engineer	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 38	Legal entities and individuals engaged in economic and other activities in the Turkmen sector of the Caspian Sea are obliged to take all necessary measures to protect the marine environment of the Caspian Sea and its coastal zone from pollution from marine and terrestrial sources in order to achieve and maintain an ecologically clean marine environment of the Caspian Sea. At the same time, mandatory measures should be provided for the protection of the marine environment of the Caspian Sea, its restoration, conservation, reproduction and rational use of its biological resources, and ensuring environmental safety.	1. Performing dredging works in a short time, which will reduce the time of exposure to increased turbidity on an environmentally sensitive environment. 2. Dredgers must be dumped in the immediate vicinity of the bottom, which minimizes the increase in turbidity of water at the surface. 3. Storage of excavation soil for certain offshore areas. 4. Conducting an EIA study before the start of work. 5. Development of an Action Plan for environmental protection.
TD3	Dredging works	Operation of dredging machinery and equipment	Noise pollution	Chief engineer	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	1. The use of technically sound equipment. 2. Turning off the DG of the dredger when idle.
<b>REPAIR AND CONSTRUCTION SERVICE</b>							
RC1	Carrying out repair and installation works	Emissions of pollutants (Local sewage treatment plants, paint spray) during painting works	Atmospheric air pollution	Head of Repair and construction service	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 17,	Legal entities and individuals whose activities are related to emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to ensure the effective operation of facilities and equipment to reduce emissions of	1. The use of environmentally friendly paint and varnish materials. 2. Carrying out painting works with a roller and a brush. 3. Accounting for the amount of paint and varnish materials.

					paragraph 2, paragraph 3, paragraph 9	pollutants into the atmospheric air and harmful physical effects on the atmospheric air and to monitor them, to account for the amount and composition of emissions of pollutants in atmospheric air, take measures to eliminate unorganized stationary sources of emissions of pollutants into the atmospheric air, transfer them to the category of organized sources.	
RC2	Carrying out repair and installation works	Formation and disposal of construction waste (including scrap metal)	Soil pollution	Head of Repair and construction service	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 37	Legal entities and individuals are obliged to take the necessary effective measures to reduce the formation, use, neutralization, processing, storage and disposal of production and consumption waste.	<ol style="list-style-type: none"> <li>1. Arrangement of special areas and containers for temporary storage of garbage, by type.</li> <li>2. Timely removal of construction debris by a specialized enterprise, with disposal at the landfill according to the contract.</li> <li>3. Oiled rags are handed over to the Kenar oil depot.</li> <li>4. Scrap metal is handed over to metal processing enterprises.</li> <li>5. Waste accounting by type.</li> </ol>
RC3	Carrying out repair and installation works	Release of pollutants (welding aerosol, suspended solids, white corundum) during welding operations	Atmospheric air pollution	Head of Repair and construction service	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 17, paragraph 2, paragraph 3, paragraph 9	Legal entities and individuals whose activities are related to emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to ensure the effective operation of facilities and equipment to reduce emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air and to monitor them, to account for the amount and composition of emissions of pollutants in atmospheric air, take measures to eliminate unorganized stationary sources of emissions of pollutants into the atmospheric air,	<ol style="list-style-type: none"> <li>1. Accounting of used electrodes.</li> <li>2. Carrying out welding work in certain areas.</li> </ol>

						transfer them to the category of organized sources.	
RC4	Carrying out repair and installation works	Use of energy resources (electricity) during the operation of equipment	Depletion of natural resources (energy resources)	Head of Repair and construction service	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 32, paragraph 2(4)	Measures to protect the climate system from anthropogenic climate change include the introduction and use of energy-saving and (or) resource-saving technologies, the best available technical methods	<ol style="list-style-type: none"> <li>1. Economical electricity consumption.</li> <li>2. Power off of electrical equipment when idle.</li> <li>3. The operation of the equipment is not at full capacity.</li> <li>4. Accounting for electricity consumption.</li> </ol>
RC5	Heating and heat supply	Emission of pollutants (CO, NOx) during operation of gas boilers	Atmospheric air pollution	Head of Repair and construction service	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 17, paragraph 2, paragraph 3, paragraph 7, paragraph 9	Legal entities and individuals whose activities are related to emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to ensure the effective operation of facilities and equipment to reduce emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air and to monitor them, to account for the amount and composition of emissions of pollutants in atmospheric air, to take measures in accordance with the established procedure to eliminate salvo and emergency emissions of pollutants into the atmospheric air, to take measures to eliminate unorganized stationary sources of emissions of pollutants into the atmospheric air, to transfer them to the category of organized sources.	<ol style="list-style-type: none"> <li>1. Strict compliance with technological regulations.</li> <li>2. Annual certification of equipment by the state «Turkmenstandartlary» service.</li> <li>3. Periodic technical inspection and repair of boilers.</li> <li>4. Thermal insulation of pipelines.</li> </ol>
RC6	Heating and heat supply	Operation of boilers, steam generation	Physical (thermal) pollution of the environment	Head of Repair and construction service	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	<ol style="list-style-type: none"> <li>1. Strict compliance with technological regulations.</li> <li>2. Carrying out periodic technical inspection and repair of boilers.</li> <li>3. Thermal insulation of pipelines.</li> </ol>

RC7	Heating and heat supply	Natural gas combustion in the boiler furnace of the boiler plant	Depletion of natural resources (natural gas)	Head of Repair and construction service	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 31, paragraph 6	Legal entities and individuals operating buildings, structures and other facilities are required to comply with approved technologies and requirements in the field of nature protection, restoration of the natural environment, rational use of natural resources	<ol style="list-style-type: none"> <li>1. The use of serviceable equipment.</li> <li>2. Accounting of the gas used.</li> <li>3. Periodic technical inspection and repair of boilers.</li> <li>4. Compliance with the heating season according to the schedule.</li> <li>5. Thermal insulation of pipelines.</li> </ol>
RC8	Heating and heat supply	Use of water resources	Depletion of natural resources (water resources)	Head of Repair and construction service	Water Code of Turkmenistan dated 15.01.2018, Article 41, paragraph 1, paragraph 2, paragraph 3	Water users are obliged to use water resources rationally, take care of the economical use of water, restore and improve water quality, take measures to reduce water consumption and reduce wastewater discharge by improving production technology and water supply schemes (the use of waterless technological processes, air cooling, recycled and re-sequential water supply and other technological techniques), use water objects in accordance with the purposes and conditions of their provision.	<ol style="list-style-type: none"> <li>1. Elimination of leaks on pipelines.</li> <li>2. Periodic technical inspection of pipelines.</li> <li>3. Accounting for water consumption.</li> <li>4. Use of closed water circulation systems.</li> </ol>
<b>POWER SUPPLY DEPARTMENT</b>							
PS1	Lighting of the port territory	Use of energy resources (electricity) in the operation of lighting devices	Depletion of natural resources (energy resources)	Chief Power Engineer	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 32, paragraph 2(4)	Measures to protect the climate system from anthropogenic climate change include the introduction and use of energy-saving and (or) resource-saving technologies, the best available technical methods	<ol style="list-style-type: none"> <li>1. Economical electricity consumption.</li> <li>2. Power off of electrical equipment when idle.</li> <li>3. The operation of the equipment is not at full capacity.</li> <li>4. Accounting for electricity consumption.</li> <li>5. The use of energy-saving lamps.</li> </ol>
PS2	Lighting of the port territory	Waste generation and disposal (lamps)	Environmental pollution	Chief Power Engineer	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 37	Legal entities and individuals are obliged to take the necessary effective measures to reduce the formation, use, neutralization, processing, storage and disposal of production and consumption waste.	<ol style="list-style-type: none"> <li>1. Arrangement of special areas and containers for temporary storage of garbage, by type.</li> <li>2. Timely garbage collection by a specialized enterprise, with disposal at the landfill according to the contract.</li> </ol>



							3. Waste accounting by type.
PS3	Lighting of the port territory	Artificial lighting at night	Physical (light load) environmental pollution	Chief Power Engineer	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 35, paragraph 1	Legal entities and individuals are obliged to take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment in industrial, public and residential premises, on streets, courtyards, squares of cities and other settlements, in recreation areas population and habitats of wild animals	1. Lighting of the minimum work area. 2. The use of low-power lamps. 3. Use lighting only when necessary.
<b>TENANTS</b>							
T1	Office space rental for logistics and shipping companies	Use of water resources	Depletion of natural resources (water resources)	Tenant	Water Code of Turkmenistan dated 15.01.2018, Article 40, paragraph 6	Water users have the right to use water resources for the purposes for which they are provided, in compliance with the requirements provided for by this Code and other regulatory legal acts of Turkmenistan	1. Accounting and control of water consumption 2. Rational use of drinking water. 3. Informing Tenants about the Environmental policy of the port 4. Sending a letter to Tenants in case of violation.
T2	Rent of the territory	Cargo storage, formation and accumulation of waste (cargo residues)	Soil pollution (fertile layer of the earth)	Tenant	Land Code of Turkmenistan 09.12.2017 Article 100 p.3	Measures aimed at the rational use of land are of an environmental, resource-saving nature and provide for the preservation of soils, limiting the negative impact on the environment, flora and fauna, subsoil and others	1. Control of storage conditions 2. Informing Tenants about the Environmental policy of the port 3.. Sending a letter to Tenants in case of violation.
<b>OPERATOR</b>							
O1	Loading and unloading operations on the ferry	Emission of pollutants (dust) during rolling-out of wagons, contamination of railway tracks with petroleum products, garbage	Atmospheric air pollution	JSC «Demiryollary»	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 21, paragraph 4	Transport and other mobile means, as a result of the operation of which emissions of pollutants into the atmospheric air occur, are subject to mandatory verification in accordance with the established procedure for compliance with specific standards for emissions of pollutants into the atmospheric air.	1.Periodic visual inspection of the port territory, monitoring of emissions from diesel locomotives, leaks of fuel and lubricants. 2. Sending relevant letters to JSC "Demir Yollary" upon detection of contamination.

EMERGENCIES							
E1	Drop of special tank containers with cargo under pressure	Environmental incident (Fire or explosion)	Salvo air pollution	Head of Container terminal	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 17, paragraph 7	Legal entities and individuals whose activities are associated with emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to take measures in accordance with the established procedure to eliminate salvo and emergency emissions of pollutants into the atmospheric air	<ol style="list-style-type: none"> <li>1. The presence of a fire service on the territory of the port, fire trucks and fire extinguishing agents.</li> <li>2. Immediate extinguishing of the fire.</li> <li>3. Replacement or repair of the affected equipment.</li> </ol>
E1	Drop of special tank containers with cargo under pressure	Waste generation and accumulation	Soil pollution (fertile layer of the earth)	Head of Container terminal	The Law of Turkmenistan "On Waste" dated 05.01.2018, Article 20, paragraph 2	Legal entities and individuals, when handling hazardous waste, are obliged to ensure the prevention of environmental pollution by them, and in the event of such pollution, eliminate pollution and its consequences; take measures aimed at preventing accidents, limiting and eliminating their consequences, and protecting people and the environment from their influence	<ol style="list-style-type: none"> <li>1. Cleaning of the territory from fire waste and fire extinguishing reagents.</li> <li>2. Disposal of collected waste.</li> <li>3. Restoration of damaged asphalt or concrete pavement.</li> </ol>
E2	Oil spills as a result of ship collisions	Discharge of pollutants (petroleum products, oily waters) into a reservoir	Pollution of the marine area	Harbor master of Maritime administration	Water Code of Turkmenistan dated 15.01.2018, Article 41, paragraph 16, paragraph 17	Water users are obliged to inform the local executive authorities, the authorized body, the authorized state administration body in the field of environmental protection and the authorized state body in the field of sanitary and epidemiological welfare of the population in a timely manner about the occurrence of accidental pollution; to carry out urgent work related to the elimination of the consequences of accidents that may lead to deterioration of water quality, and to provide the necessary technical means intended for the elimination of accidents at water bodies of other water users, in accordance with the	<ol style="list-style-type: none"> <li>1. Compliance with the notification scheme and the oil spill response plan.</li> <li>2. The presence of enclosing booms on ships for collecting spilled petroleum products in accordance with the Marpol Convention.</li> <li>3. Disposal of collected petroleum products at the appropriate sites.</li> <li>4. Emergency response of the Emergency Rescue Service of the port.</li> </ol>

						procedure established by the legislation of Turkmenistan	
E3	Oil spills as a result of ship collisions	Formation of oily waste	Pollution of soil, marine environment, depletion of natural resources	Harbor master of Maritime administration	The Law of Turkmenistan "On Waste" dated 05.01.2018, Article 20, paragraph 2	Legal entities and individuals, when handling hazardous waste, are obliged to ensure the prevention of environmental pollution by them, and in the event of such pollution, eliminate pollution and its consequences; take measures aimed at preventing accidents, limiting and eliminating their consequences, and protecting people and the environment from their influence	<ol style="list-style-type: none"> <li>1. Cleaning of the territory from fire waste and fire extinguishing reagents</li> <li>2. Disposal of collected waste.</li> <li>3. Emergency response of the Emergency Rescue Service of the port.</li> </ol>
E3	Large oil spill on the coastal areas of the port	Oil spill	Pollution of soil, marine environment		The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 50	Areas of the territory, water and air space are declared zones of ecological disaster, where, as a result of economic or other activities, or the destructive influence of natural forces of nature, or an accident or catastrophe that took place, stable and irreversible changes in the natural environment associated with the destruction of ecological systems have occurred.	<ol style="list-style-type: none"> <li>1. Availability of means of liquidation of fuel and lubricants spills.</li> <li>2. Disposal of collected waste.</li> <li>3. Compliance with the notification scheme and the oil spill response plan.</li> </ol>
E4	Large oil spill on the coastal areas of the port	Formation of oily waste	Pollution of soil, marine environment, depletion of natural resources		The Law of Turkmenistan "On Waste" dated 05.01.2018, Article 20, paragraph 2	When dealing with hazardous waste, legal entities and individuals are obliged to ensure the prevention of environmental pollution by them, and in the event of such pollution, to eliminate pollution and its consequences; take measures aimed at preventing accidents, limiting and eliminating their consequences, and protecting people and the environment from their influence	<ol style="list-style-type: none"> <li>1. Cleaning of the territory from fire waste and fire extinguishing reagents.</li> <li>2. Disposal of collected waste.</li> <li>3. Restoration of damaged asphalt or concrete pavement.</li> </ol>

E5	Fires of bulk cargo, including oil-containing, chemical bulk cargo.	Environmental incident (Fire or explosion)	Atmospheric air pollution	Head of Bulk cargo terminal	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 17, paragraph 7	Legal entities and individuals whose activities are associated with emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to take measures in accordance with the established procedure to eliminate salvo and emergency emissions of pollutants into the atmospheric air	<ol style="list-style-type: none"> <li>1. The presence of a fire service on the territory of the port, fire trucks and fire extinguishing agents.</li> <li>2. Immediate extinguishing of the fire.</li> <li>3. Replacement or repair of the affected equipment.</li> </ol>
E6	Fires of bulk cargo, including oil-containing, chemical bulk cargo.	Waste generation and accumulation	Soil pollution, (the fertile layer of the earth)	Head of Bulk cargo terminal	The Law of Turkmenistan "On Waste" dated 05.01.2018, Article 20, paragraph 2	Legal entities and individuals, when handling hazardous waste, are obliged to ensure the prevention of environmental pollution by them, and in the event of such pollution, eliminate pollution and its consequences; take measures aimed at preventing accidents, limiting and eliminating their consequences, and protecting people and the environment from their influence	<ol style="list-style-type: none"> <li>1. Cleaning of the territory from fire waste and fire extinguishing reagents.</li> <li>2. Disposal of collected waste.</li> <li>3. Restoration of damaged asphalt or concrete pavement.</li> </ol>
E7	Explosion of tank containers, fuel in tanks, gas boilers	Environmental incident (Fire or explosion)	Atmospheric air pollution	Chief engineer	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 17, paragraph 7	Legal entities and individuals whose activities are associated with emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to take measures in accordance with the established procedure to eliminate salvo and emergency emissions of pollutants into the atmospheric air	<ol style="list-style-type: none"> <li>1. The presence of a fire service on the territory of the port, fire trucks and fire extinguishing agents.</li> <li>2. Immediate extinguishing of the fire.</li> <li>3. Replacement or repair of the affected equipment.</li> </ol>

E8	Explosion of tank containers, fuel in tanks, gas boilers	Environmental incident (Fire or explosion)	Soil pollution by waste	Chief engineer	The Law of Turkmenistan "On Waste" dated 05.01.2018, Article 20, paragraph 2	Legal entities and individuals, when handling hazardous waste, are obliged to ensure the prevention of environmental pollution by them, and in the event of such pollution, eliminate pollution and its consequences; take measures aimed at preventing accidents, limiting and eliminating their consequences, and protecting people and the environment from their influence	<ol style="list-style-type: none"> <li>1. Cleaning of the territory from fire waste and fire extinguishing reagents.</li> <li>2. Disposal of collected waste.</li> <li>3. Restoration of damaged asphalt or concrete pavement.</li> </ol>
E9	Explosion of tank containers, fuel in tanks, gas boilers	Environmental incident (Fire or explosion)	Noise pollution	Chief engineer	The Law of Turkmenistan "On Nature Protection" dated 31.03.2017, Article 35, paragraph 1	Legal entities and individuals are obliged to take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment in industrial, public and residential premises, on streets, courtyards, squares of cities and other settlements, in recreation areas population and habitats of wild animals	Immediate elimination of an emergency situation.
E10	Disconnection of centralized power supply	Emissions of pollutants (gases (CO, NO <sub>x</sub> , SO <sub>2</sub> , CnHm, soot, formaldehyde, hydrogen sulfide) and greenhouse gases during operation of emergency diesel generators	Atmospheric air pollution	Chief Power Engineer	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 17, paragraph 2	Legal entities and individuals whose activities are related to emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air are obliged to ensure the effective operation of facilities and equipment to reduce emissions of pollutants into the atmospheric air and harmful physical effects on the atmospheric air and to monitor them	<ol style="list-style-type: none"> <li>1. The use of serviceable Emergency Diesel Generator.</li> <li>2. Carrying out periodic technical inspection and repair of Emergency Diesel Generator.</li> </ol>

E11	Disconnection of centralized power supply	Use of hydrocarbon fuel	Depletion of natural resources (hydrocarbon fuel)	Chief Power Engineer	The Law of Turkmenistan "On the protection of atmospheric air" dated 26.03.2016, Article 32, paragraph 2(4)	Measures to protect the climate system from anthropogenic climate change include the introduction and use of energy-saving and (or) resource-saving technologies, the best available technical methods	1. The use of serviceable machinery and equipment; 2. Carrying out periodic technical inspection and repair of lifting equipment.
E12	Disconnection of centralized power supply	Fuel and lubricants spill	Soil pollution	Chief Power Engineer	The Law of Turkmenistan "On Waste" dated 05.01.2018, Article 20, paragraph 2	Legal entities and individuals, when handling hazardous waste, are obliged to ensure the prevention of environmental pollution by them, and in the event of such pollution, eliminate pollution and its consequences; take measures aimed at preventing accidents, limiting and eliminating their consequences, and protecting people and the environment from their influence	1. Visual inspection of equipment for leakage of fuel and lubricants. 2. Carrying out periodic technical inspection and repair of Emergency Diesel Generator. 3. Availability of spill response means Fuel and lubricants. 4. Asphaltting/concreting of Emergency Diesel Generator land plots.
E13	Disconnection of centralized power supply	Equipment operation	Noise pollution	Chief Power Engineer	The Law of Turkmenistan «On Protection of Nature» 31.03.2017 Article 35 p.1	Take the necessary effective measures to prevent and eliminate the harmful effects of noise, vibration, harmful effects of magnetic fields, infrared radiation and other harmful physical effects on the environment.	Carrying out timely lubrication of equipment to avoid the occurrence of excessive noise and vibration, not provided by the manufacturer of the equipment.

## Environmental performance Indicators

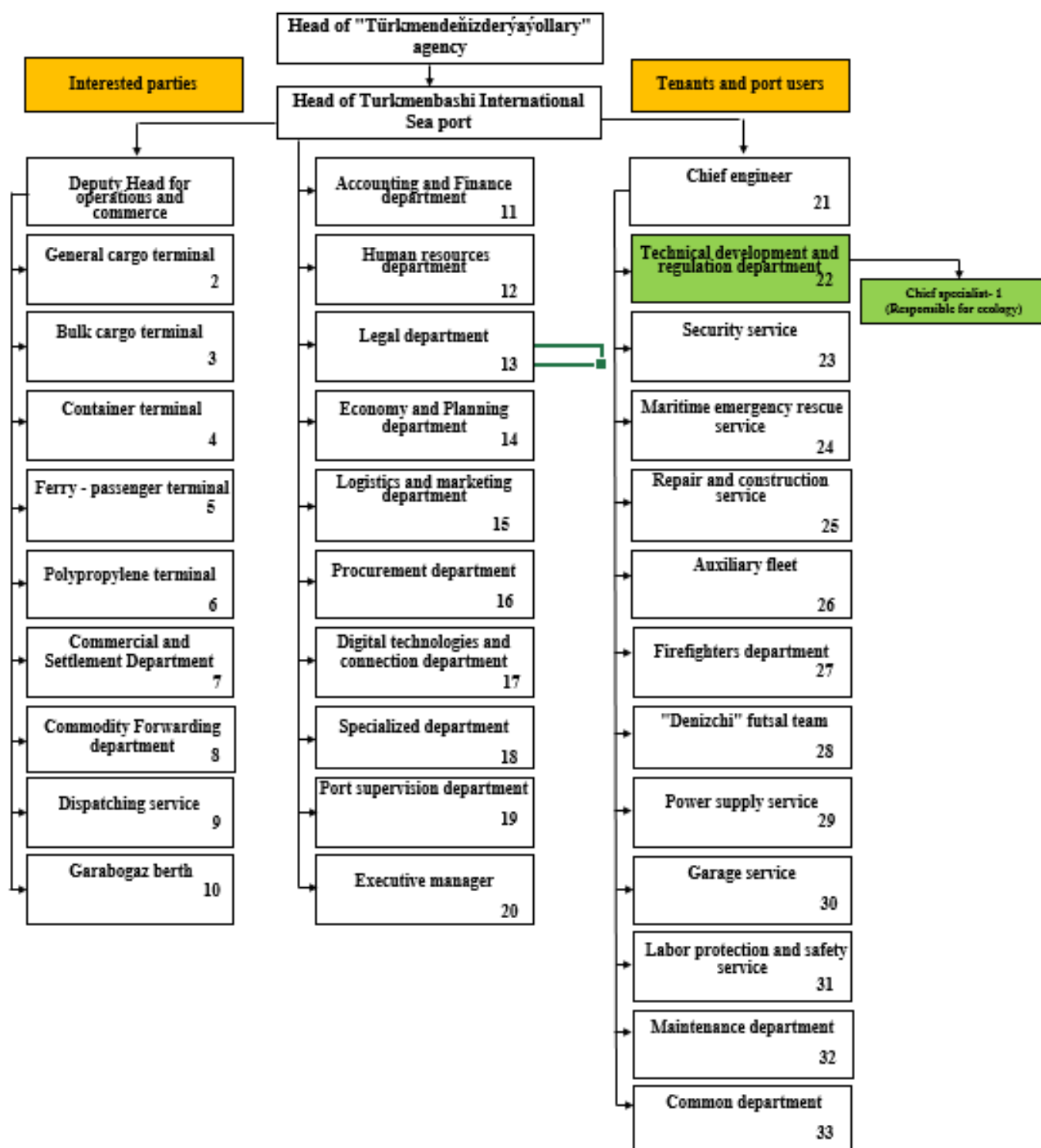
No.	KPI	Target	Key Performance Indicator for Environmental Protection	
			2021	2022
1	Spills (major > 100 l) (ea)	0	0	0
2	Spills (moderate 20-100 l) (ea)	0	0	0
3	Spills (minor < 20 l) (ea)	0	0	0
4	Emissions from own combustion exhaust of vessels (CO <sub>2</sub> -tonne)	As low as possible	2435	1950
5	Generation of non-hazardous solid waste (m <sup>3</sup> )	750,0	570,76	740,15
6	Generation of hazardous solid waste (port area and own vessels) (m <sup>3</sup> )	As low as possible	19,423	4,253
7	Plastic waste (kg)	100% recyclable	114,152	148,03
8	Paper waste (kg)	100% recyclable	228,304	296,06
9	Accidental spill of fuel or other hazardous substance from own vessels into the sea (major > 100 l) (ea)	0	0	0
10	Accidental spill of fuel or other hazardous substance from own vessels into the sea (moderate 20-100 l) (ea)	0	0	0
11	Accidental spill of fuel or other hazardous substance from own vessels into the sea (minor < 20 l) (ea)	0	0	0

12	Collection of sewage water from vessels (m <sup>3</sup> )	100% of received requests	252,978	251,624
13	Collection of bilge water from vessels (m <sup>3</sup> )	100% of received requests	54,61	46,98
14	Collection of solid waste from vessels (m <sup>3</sup> )	100% of received requests	7,514	6,845
15	Accidental spill of fuel during bunkering (major > 100 l) (ea)	0	0	0
16	Accidental spill of fuel during bunkering (moderate 20-100 l) (ea)	0	0	0
17	Accidental spill of fuel during bunkering (minor < 20 l) (ea)	0	0	0
18	Emission of noise from own equipment and vehicles, trains and vessels (dB)	≤ 80	< 80	< 80
19	Consumption of energy (electricity) (thousand kW)	As low as possible	28409,016	26297,109
20	Consumption of natural gas (thousand m <sup>3</sup> )	As low as possible	1296,1	2057,54
21	Customer satisfaction (point)	4,5	4,5	5,0



## RESPONSIBILITIES AND RESOURCES

### Environmental management organization structure



## Environmental responsibilities of key personnel

№	Sphere	Full name	Post	Responsibility
1	Management and coordination	Seyitguly Bayseyidov	Acting Head of TIS	Responsible for the overall operation of the port and coordinates the various parties in the planned performance of their duties in the port. The head of TMMP reports to the Chairman of the agency "Turkmendenizderyaellary"
2	Port Operations (Dredging)	Muhammad Nurlyev	Chief Engineer	Monitoring and control of the technical condition of the shipping channel. Preparation of Technical Specifications for dredging operations to maintain the depths of the channel, in order to ensure safe navigation.
		Dovletmammet Seyitmammedov	Head of Technical Development and Regulation Department	As responsible for the environment, ensures control of environmental aspects and compliance with the "Environmental Protection Plan for Dredging".
3	Port Operations (Navigation)	Meylis Amanberdiev	Head of Dispatching Service	Organizes the navigation of vessels in the waters of the TIS and oversees compliance with current shipping requirements .
4	Port Operations (Port Fleet)	Jepbar Sukhanov	Head of the Port's Auxiliary Fleet	Ensures compliance of port fleet vessels in accordance with the requirements of the Code of Merchant Shipping of Turkmenistan and international conventions ratified by Turkmenistan.
		Dovletmammet Seyitmammedov	Head of Technical Development and Regulation Department	As responsible for the environment, ensures the control of the delivery of waste, bilge and sewage from ships, as well as compliance with environmental standards.
5	Cargo Handling Operations (General Cargo terminal)	Hezret Annataganov	Head of the General Cargo Terminal	Ensures the prevention of negative impacts of environmental aspects that may arise during the operation of the terminal.
6	Cargo Handling Operations (Bulk Cargo terminal)	Rustem Bayramberdiev	Head of the Bulk Cargo Terminal	Ensures the prevention of negative impacts of environmental aspects that may arise during the operation of the terminal.
7	Cargo Handling Operations (Container Terminal)	Perman Soyunov	Head of the Container Terminal	Ensures the prevention of negative impacts of environmental aspects that may arise during the operation of the terminal.
8	Cargo Handling Operations (Ferry - passenger terminal)	Aman Muhammedov	Head of the Ferry-Passenger Terminal	Ensures the prevention of negative impacts of environmental aspects that may arise during the operation of the terminal.
9	Cargo Handling Operations (Polypropylene terminal)	Begli Nedirov	Acting Head of the Polypropylene Terminal	Ensures the prevention of negative impacts of environmental aspects that may arise during the operation of the terminal.

10	Cargo Handling Operations (all terminals)	Dovletmammet Seyitmammedov	Head of Technical Development and Regulation Department	As responsible for the environment, provides control of environmental aspects related to the processes of cargo transportation on the territory of the port.
11	Strategic Planning – on ecology	Dovletmammet Seyitmammedov	Head of Technical Development and Regulation Department	Analyzing the indicators for the past period, prepares data for the formation of the budget for environmental protection.
		Sohbet Saparov	Acting Head of the Economics and Planning Department	Develops a budget for the coming year, which is subsequently approved by the Head of TIS
12	On-site Contractor Management	Dinara Kamiljanova	Head of the Legal Department	Ensures that environmental requirements are taken into account in agreements, contracts for port activities, as well as in contracts for the performance of services and works.
		Dovletmammet Seyitmammedov	Head of Technical Development and Regulation Department	Provides control over the implementation of environmental requirements in agreements, contracts for port activities, as well as in contracts for the performance of services and works.
13	Supply acquisition	Dinara Kamiljanova	Head of the Legal Department	Ensures that environmental requirements are taken into account in contracts for the purchase of goods (materials, spare parts, etc.)
		Begench Hanmammedov	Head of the Procurement department	Provides control over the implementation of environmental requirements in accordance with the terms of contracts for the purchase of goods (materials, spare parts, etc.)
14	Website Management – on ecology	Hojabibi Annajanova	Chief Specialist of the Technical Development and Regulation Department (responsible for the OOS)	Prepares an environmental report, articles and photo reports of events dedicated to environmental protection for posting on the website.
		Mashat Sallarov	Head of Digital Technologies and Communications Department	Provides control over the timely placement of environmental reports, articles and photo reports on environmental protection for posting on the site.
16	Quality Management	Arslanmammet Kakabayev	Executive manager	Supports management systems in action: ISO 9001:2015, ISO 14001:2015, ISO 45001:2018.
17	Marketing Management	Azat Podarov	Head of Logistics and marketing department	Provides information about cargo of environmental interest to the port
18	Waste Management	Hojabibi Annajanova	Chief Specialist of the Technical Development and Regulation Department (responsible for the OOS)	Ensures the organization of proper waste sorting, keeps records of the formation and disposal of waste and transfer to the landfill.

		Dovletmammet Seyitmammedov	Head of the Technical Development and Regulation Department	Ensures timely conclusion of Contracts with relevant organizations for the delivery and disposal of waste in accordance with legal requirements.
19	Compliance and implementation of laws (Permits)	Hojabibi Annajanova	Head of the Legal Department	Responsible for monitoring, supervises all changes and additions to national and international legislation, timely provides relevant information for further implementation in the activities of the organization.
20	Emergency planning	Merdan Shamuradov	Head of the Specialized Department	Develops an action plan to eliminate the consequences of emergency, emergency situations, in which responsibilities and work to eliminate the consequences are distributed.
		Ilmammed Yarmammedov	Head of the Marine Emergency Rescue Service	Ensures the implementation of the action plan to eliminate the consequences of emergency, emergency situations,
21	Employee training	Annadurdy Khaidov	Head of the Labor protection and Safety Service	Provides control and organization of environmental introductory briefings and external training sessions.
		Sapargul Tachmammedova	Head of Human Resources Department	Conducts reports on training and professional training of employees.
22	Environmental Documentation and Environmental Data Management	Hojabibi Annajanova	Chief Specialist of the Technical Development and Regulation Department (responsible for the OOS)	Ensures compliance of existing documentation with national and international legislation and standards, as well as responsible for updating all necessary data.
23	Environmental Monitoring	Dovletmammet Seyitmammedov	Head of the Technical Development and Regulation Department	Responsible for monitoring and supervises environmental problems and issues through timely analyses and continuous monitoring.
24	Monitoring of air and water quality	Hojabibi Annajanova	Chief Specialist of the Technical Development and Regulation Department (responsible for the OOS)	Monitors the quality of atmospheric air and water together with the authorized state service "Caspian Control", which has the authority to assess the quality of air and sea water by sampling.
25	Terminal traffic management	Annamukhammet Khojaev	Head of Port Supervision Service	Provides control of the movement of vehicles along the marked paths on the territory of the terminals, with the help of round-the-clock video surveillance.
		Serdar Babayev	Head of the Security service	Provides monitoring for the presence of fuel leakage at the entrance to the terminals.
26	Noise Managment	Muhammad Nurliev	Chief engineer	Provides control over timely maintenance, repair of machinery, vehicles and ships in order to avoid unnecessary noise.

## Environmental resource allocation

TIS for 2023 has planned a budget for environmental activities totaling 830 500 TMT. The cost structure is provided as follows:

Part of organization	Item	Amount
Staff	Training of personnel responsible for environmental protection	40 000 TMT
Environmental Maintenance and Management	Landscaping and improvement of the territory of the port, as well as suburban areas.	100 000 TMT
	Maintenance of sewage separator systems	30 000 TMT
Environmental Monitoring	Carrying out control measurements of the degree of pollution of water, atmospheric air by the state service "Caspian Environmental Control"	5 000 TMT
Waste Management	Removal and disposal of production and consumption waste (garbage, waste oil, oily rags, batteries, etc.)	13 000 TMT
	Purchase of vacuum sweeper for regular cleaning of the port area	640 000 TMT
Insurance	Port environmental insurance	2 500 TMT

# CONFIRMITY REVIEW AND ENVIRONMETNAL REPORT

## Environmental Report Turkmenbashi International Seaport

In the preparation of this Environmental Report, the data of the annual statistical reporting in the field of environmental protection and energy efficiency, as well as other materials contained in the reports on the environmental activities of the port, were used.

The report provides information on the activities of the Turkmenbashi International Seaport in the field of environmental protection and energy efficiency in 2022, including the actual indicators of the impact on atmospheric air, water and land resources, waste management, greenhouse gas emissions and measures taken to reduce such impacts. The Report highlights the issues of the organization of management and financing of the environmental protection system aimed at improving the environmental safety of the Turkmenbashi International Seaport.

### Environmental performance indicators

No	Activity indicator	Reporting data for the years	
		2021	2022
1	Emissions of pollutants into the atmosphere from stationary sources, ton	255,025	297,764
2	Wastewater discharge, m3	5613	5417
3	Production and consumption waste, t	740,15	570,76
4	Fines and excess payments, man.	0	0
5	Expenses for the elimination of environmental consequences, accidents (wrecks, accidents of rolling stock, malfunctions of equipment, machinery, machines, etc.), including expenses for compensation for environmental pollution, man.	0	0
6	Total costs for the elimination of accidents with environmental consequences, man.	0	0
7	The number of implemented measures aimed at reducing emissions into the environment, units.	1	1
8	The total number of unfulfilled and partially fulfilled requirements of the environmental legislation of Turkmenistan and other requirements in the field of ecology, units.	1	0

9	The number of unfulfilled requirements of the environmental legislation of Turkmenistan and other requirements in the field of ecology, units.	3	2
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### Environmental performance indicators

In the process of carrying out production activities, the Turkmenbashi International Seaport ensures compliance with environmental requirements in accordance with current legislation, implements modern management models based on international standards (ISO, PERS), carries out activities aimed at the socio-economic development of the region, and also actively works to prepare for EcoPorts certification to obtain the status of "Green port".

Minimization of the negative impact on the environment is achieved by the port through rational consumption of natural resources, consistent reduction of emissions, discharges of pollutants, reduction of waste generation and reuse, as well as the use of energy-saving technologies.

### Emissions into the environment

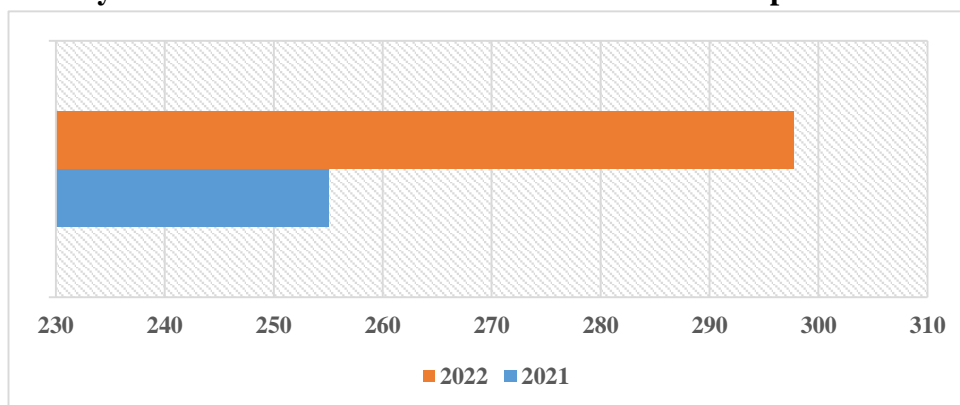
There are a total of 51 sources of pollutant emissions in the Turkmenbashi International Seaport, of which 32 are organized and 19 are unorganized sources.

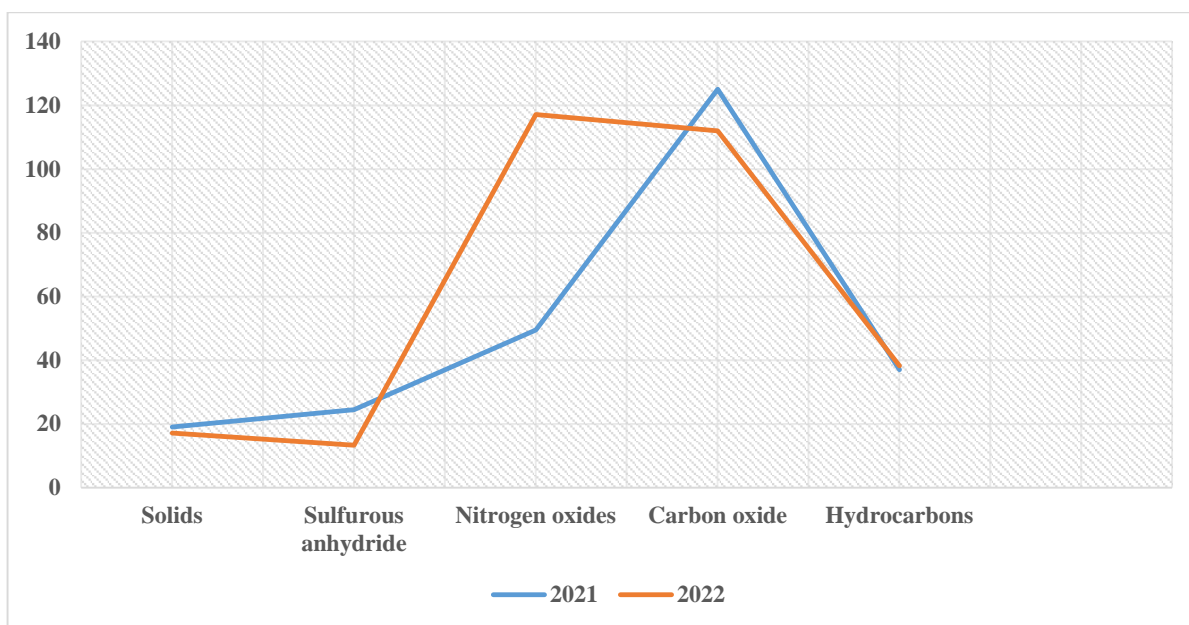
The volume of emissions of pollutants into the atmospheric air for the current reporting period is 297,764 tons, with a permitted limit of 698,6423 tons. The actual volume of emissions for the same period last year is 255.025 tons. In 2021-2022, the volume of emissions of pollutants into the atmospheric air from sources of pollution at enterprises did not exceed the permitted limit. Compared to last year, the intake of pollutants into the atmospheric air increased by 16% (42.738 tons). The increase in the volume of pollutant emissions is associated with the acquisition of TIS 2 observation vessels with an increase in the number of ship calls and the gross parking time of ships.

### Emissions of pollutants for 2021-2022yy

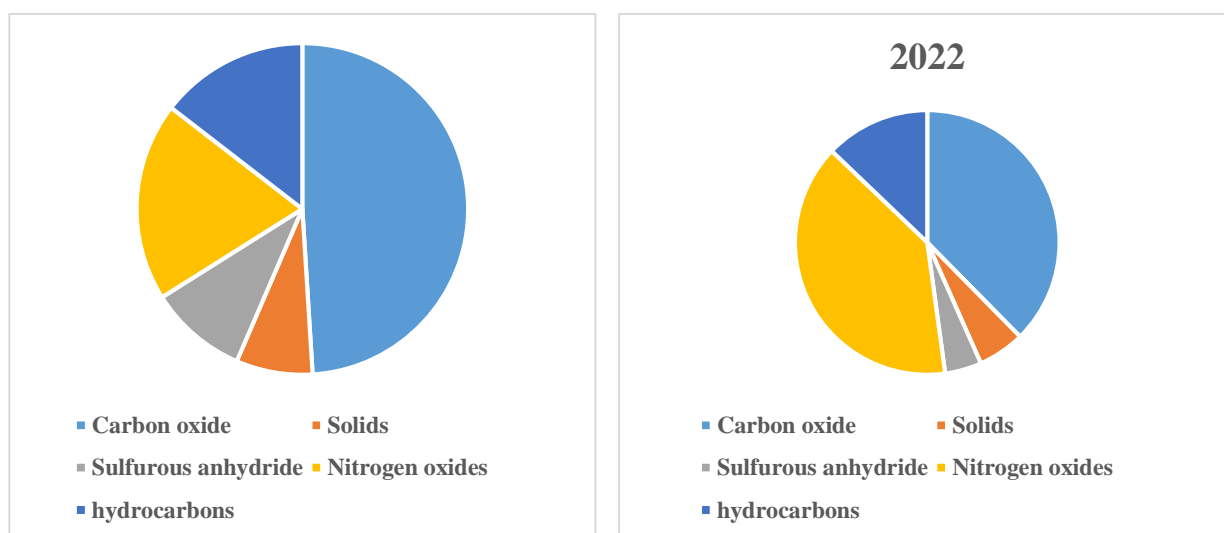
Year	Solid substances	Sulphurous anhydride SO <sub>2</sub>	Nitrogen oxides NO <sub>x</sub>	Carbon monoxide CO	Hydrocarbons CH	Volatile organic compounds	Total, t/year
<b>2021</b>	19,040	24,439	49,475	124,991	37,074	0,006	255,025
<b>2022</b>	17,096	13,348	117,075	111,999	38,246	0,000	297,764

### Dynamics of emissions into the environment in the period 2021-2022





### Component structure of air emissions



### Environmental payments from stationary sources

The planned environmental payments from stationary facilities for the reporting period amount to 17,611.38 manats, the actual payment is 5,948.53 manats. For the reporting period of 2021, the actual payment of environmental payments amounted to 3,470.5 manat.

The increase in environmental payments compared to the same period last year is 71% more, this is due to an increase in nitrogen oxide emissions with an increase in the number of vessel calls and gross vessel parking time.

### Environmental payments from mobile sources

For 12 months of 2022, the fee for emissions from mobile sources amounted to 450.93 manat, and in 2021 – 428.19 manat. At the same time, the increase in the amount of the fee is 5% compared to the same period in 2021.

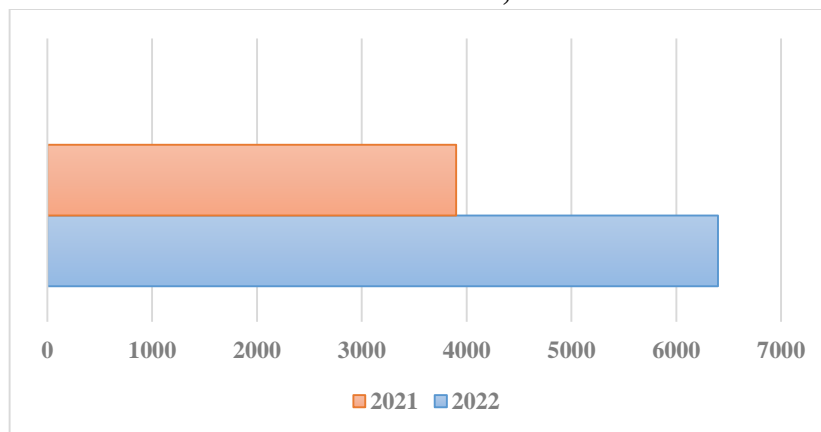


The increase in the fee for emissions from motor vehicles is due to the total mileage of motor vehicles for the year (The calculation of emissions of pollutants was carried out according to the "Methodological guidelines for calculating the emission of harmful substances by road", Moscow, 1985).

### Excess payments

No excess payments were detected during the reporting period.

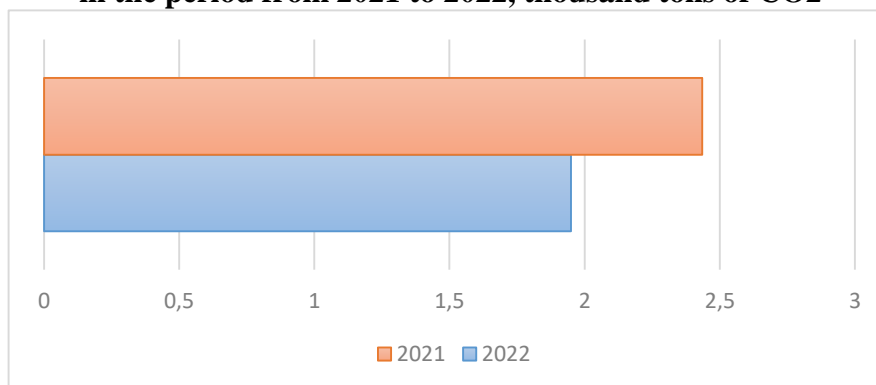
**Dynamics of environmental payments in the period from 2021 to 2022, TMT**



### Greenhouse gas emission

For 12 months of 2022, greenhouse gas emissions from stationary facilities amounted to 1.95 thousand tons of CO<sub>2</sub>, and in 2021 amounted to 2.435 thousand tons of CO<sub>2</sub>. Calculation of greenhouse gas emissions from mobile sources is not carried out.

**Dynamics of greenhouse gas emissions into the atmosphere from stationary installations in the period from 2021 to 2022, thousand tons of CO<sub>2</sub>**



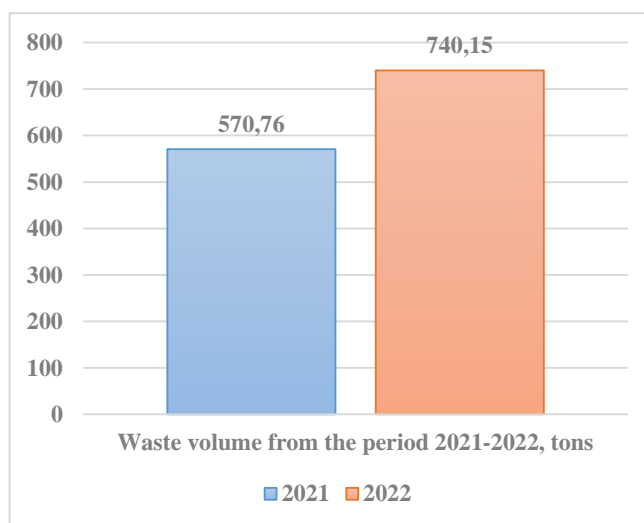
### Waste management

The Turkmenbashi International Seaport strives to minimize the impact of waste from ships on the environment. All vessels entering the port of Turkmenbashi must pay general fees (port fees), regardless of whether they hand over waste or not. In accordance with this requirement, this contributes to the prevention of pollution of the sea and the port area from ships. This service for receiving waste without volume restrictions in the port is available around the clock by request.

The liquid, solid household and other types of waste generated in the Turkmenbashi International Seaport, as well as those received from foreign vessels entering the territorial waters

of Turkmenistan, are collected by a specialized collector vessel of JSC "Merchant Marine" and, according to the concluded agreements, are placed in specially designated places.

During the reporting period, the volume of waste consumption and production amounted to 740.15 tons, for the same period last year amounted to 570.76 tons. The increase in the volume of waste is 169.39 tons compared to the same period last year.



The increase in the volume of waste during the reporting period compared to the same reporting period in 2021 is due to:

- 1) increasing the number of ship calls and processing of vessels;
- 2) the formation of decommissioned scrap metal based on the results of the inventory;
- 3) lifting quarantine restrictions and ensuring the activities of all port personnel and companies operating in the port territory.

In total, during the reporting period, plastic, waste paper, defective electronic equipment, used oil, used tires, batteries, fluorescent lamps and scrap metal in the amount of 744,403 tons in the amount of 13,000 manats were transferred to third-party organizations for recycling under concluded contracts.

Environmental protection			
The amount of exported production and consumption waste		2021	2022
Solid household waste	кг	570,76	740,15
Industrial waste	кг	19,423	4,253
Defective electronic equipment	кг	128,304	196,06
Paper and cardboard	Кg	228,304	296,06
Plastic	Кg	114,152	148,03
Number of instrumental measurements of atmospheric air and sea water			
Water sampling (Turkmenbashi Bay)	units	24	11
Air sampling (SPZ)	units	50	30
The amount of waste received from ships			
Dry garbage	m <sup>3</sup>	7,514	6,845
Waste-fecal water	m <sup>3</sup>	252,978	251,624
Bilge water	m <sup>3</sup>	54,61	46,98
Emissions of pollutants into the atmosphere			
From stationary sources of pollution	ton	255,025	297,764

From mobile sources of pollution	ton	127,876	132,484
Payment for emissions to the environment			
From stationary sources of pollution	manat	3470,5	5948,53
From mobile sources of pollution	manat	428,19	450,93
Discharges of pollutants			
Total	m <sup>3</sup>	5613	5417
Payment for discharges into the environment			
Total	manat	0	0

### Water consumption

The water supply of the Turkmenbashi International Seaport is provided from the urban water supply networks of the city of Turkmenbashi in the amount established in accordance with the Agreement with the Office "Turkmenbashiagyzsuv". The actual consumption of fresh water for 2022 is 311,451 m<sup>3</sup>, which is 11,304 m<sup>3</sup> less than in 2021 (2021 - 322,755 m<sup>3</sup>).

The Turkmenbashi International Seaport is equipped with a sewerage system for the disposal of wastewater, household, industrial and atmospheric effluents. The piers are equipped with means for collecting and subsequent transfer of wastewater from sea vessels standing on the berths to coastal sewerage facilities.

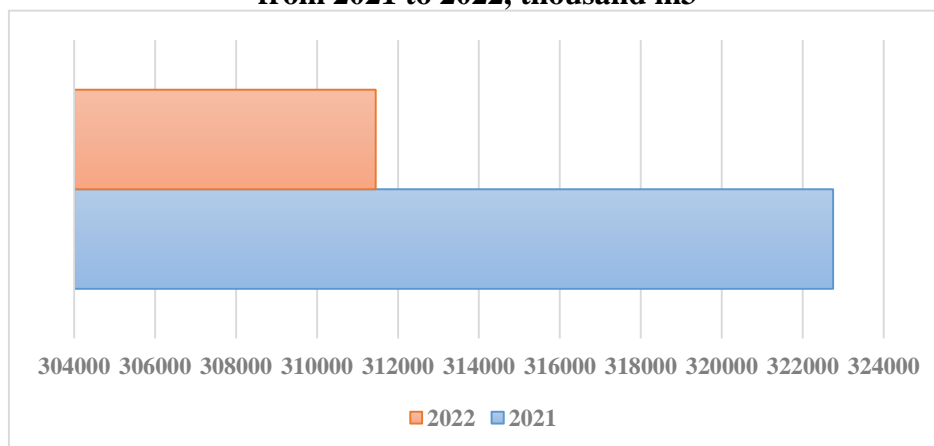
All domestic wastewater generated in the territory of the seaport is treated at the central wastewater treatment plant located on the eastern border of the seaport. The collected wastewater must be pumped to the domestic wastewater treatment plant through a pressure pipeline laid parallel to the territory of the seaport, within the engineering network strip along the port road.

Industrial effluents from the seaport terminals are subjected to preliminary treatment at the respective terminals. Treated industrial effluents, together with household effluents from the territory of the seaport, are treated at the central wastewater treatment plant located on the eastern border of the seaport.

The underground waters formed on the territory of the Turkmenbashi International Seaport are discharged into the Turkmenbashi Bay after preliminary treatment at the SPEL Puraçetor type plant. Monitoring control over the quality of discharged waters is carried out by the Hydrochemical Laboratory of the Caspian Environmental Control Service.

The port of Turkmenbashi is aware of the importance of caring for natural resources and strives for their rational use.

### Dynamics of water consumption during the period from 2021 to 2022, thousand m<sup>3</sup>



### **Conservation costs**

For 2022, the Turkmenbashi International Sea Port, according to the plan of environmental measures, is scheduled for a total of 830,500 manats.

The structure of costs for environmental protection measures is presented as follows:

5% - for training responsible persons for environmental protection;

15% - maintenance and landscaping of the port area;

0.6% - for concluding agreements with third-party specialized organizations (Caspian Environmental Control Service) for conducting control measurements of the degree of environmental pollution (water, atmosphere);

79% - to conclude contracts with third-party specialized organizations for the export and disposal of production and consumption waste;

0.4% - environmental insurance.

### **Emergency situations**

Preparedness and response to contain and eliminate oil spills in the Turkmen sector of the Caspian Sea is handled by a special full-time department in the amount of 5 people working full-time in the Turkmenbashi International Seaport.

This department has at its disposal a set of booms of the "Barrier-50-P" type, with a total length of 400 meters, 4 sets of rubberized tanks with a volume of 5 m<sup>3</sup> each for collecting oil, 2 sets of an oil skimmer (skimmer) of the "Lamor Minimax" type, 1 set of the "Lamor Rock Cleaner, a Kamaz car specially equipped with localization tools. The specialized assembler vessel "Aladepe" is in a non-working condition. The available facilities and equipment are delivered to the oil spill sites on other ships of the port.

### **Management of environmental aspects**

In order to assess activities that have an impact on the environment, the Caspian Environmental Control Service conducts quarterly environmental monitoring: monthly (twice a month) samples of sea water and atmospheric air are taken. The selected samples of sea water are examined for such components as chlorides, ammonium nitrogen, iron, nitrites, suspended solids, oxygen, sulfates, oil products, the water temperature is measured at the sampling site.

## BEST PRACTICES

<b>Turkmenbashi Internatinal Seaport</b>	Turkmenistan
<b>Contact person</b>	H.Annajanova
<b>Position:</b>	Chief specialist of Technical development and regulation department (responsible for ecology)
<b>Email:</b>	tisp.techdev@port.com.tm
<b>Ecological question:</b>	planting of greenery
<b>Conformity with the concept ESPO 5 E:</b>	encourage, involve

### **The employees of Turkmenbashi International Seaport participated in the tree planting ceremony**

In our country, appropriate work is being carried out to ensure environmental well-being, protect and increase the biodiversity of flora and fauna, rational use of natural resources, as well as greening our Motherland. Turkmenbashi International Seaport held cleanup activities on its territory, and actively support ecological undertakings at the state and city level.

On 5<sup>th</sup> of November 2022, employees of Turkmenbashi International Seaport voluntarily attended to the tree planting activity at the city level, which is located on the north of Turkmenbashi city. During these event employees take part actively and planted 1000 trees on the territory.

Large-scale tree planting is our contribution to global efforts to combat the negative effects of climate change. Around every city and village, forested areas appear and they create favorable climatic conditions.





<b>Turkmenbashi Internatinal Seaport</b>	Turkmenistan
<b>Contact person</b>	H.Annajanova
<b>Position:</b>	Chief specialist of Technical development and regulation department (responsible for ecology)
<b>Email:</b>	tisp.techdev@port.com.tm
<b>Ecological question:</b>	save the ozone layer
<b>Conformity with the concept ESPO 5 E:</b>	encourage, involve

### **Support for schools and kindergartens in remote areas.**

On September - October of 2022, Turkmenbashi International Seaport voluntarily installed electric heating systems in kindergarten №5 and at district school №7 in the town of “Gyzylsuw” located on the island in the Caspian Sea. Previously, the school and kindergarten were heated by burning firewood. All the expenses allocated for these transactions were made on Turkmenbashi International seaport’s own account.

The purpose of this assistance is primarily to provide comfortable and safe conditions for children to receive a quality education. And also to protect the environment, because. burning fire negatively affects the environment.



<b>Turkmenbashi Internatinal Seaport</b>	Turkmenistan
<b>Contact person</b>	H.Annajanova
<b>Position:</b>	Chief specialist of Technical development and regulation department (responsible for ecology)
<b>Email:</b>	tisp.techdev@port.com.tm
<b>Ecological question:</b>	wastes, trashes
<b>Conformity with the concept ESPO 5 E:</b>	encourage, involve

#### **Turkmenbashi International Seaport voluntarily attended to the Cleanup events**

One of the ecology protection cleanup events was held on 17th of December in the territory of the artificial island, Employees, volunteers and residents of the city collected trashes, wastes from the territory. Diverse environments were created to attract rich variety of birds on the Turkmen coast of the Caspian Sea. Platforms and perching poles were built for different birds and also artificial shelduck nests were built. Turkmenbashi International Seaport strive to be ecofriendly port by achieving high goals. All stuff of the port voluntarily took part in cleanup days and they support national environment protection program. From all activities, you can see that measures such as environmental protection, environmental cleanliness, tree planting publicly, preventing things that can harm nature, and teaching the younger generation to love nature are being implemented in the country.

