PUBLIC FUND «WATER INITATIVES CENTER»

APPROVED
By Chair of Public Fund
«Water Initiatives Center»
_____K. Balabekova
« » _____2021

NATIONAL REPORT OF THE REPUBLIC OF KAZAKHSTAN ON IMPLEMENTATION OF THE FRAMEWORK CONVENTION FOR THE PROTECTION OF MARINE ENVIRONMENT OF THE CASPIAN SEA FOR 2019-2020

Nur-Sultan, 2021

CONTENT

ABSTRACT

The National Report on the Implementation of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (hereinafter “Report”) consists of _ pages, including the report - on 67 pages, annexes - on _ pages. It uses the following list of keywords: TEGERAN CONVENTION, CONFERENCE OF THE PARTIES, PROTOCOLS, SECRETARIAT TO THE CONVENTION, PREVENTION, REDUCTION, CONTROL, POLLUTION OF THE CASPIAN SEA, CONSERVATION, SUSTAINABLE USE, BIOLOGICAL RESOURCES.

The purpose of the Report is to review the activities of Kazakhstan related to implementation of obligations under the Tehran Convention in the period from 2019 to 2020. It includes an analysis of the decisions adopted by the Conference of the Parties to the Convention and the national environmental legislation, as well as an overview of prorgam documents of Kazakhstan aimed at protecting the Caspian Sea environment.

The Report incorporates information of interested national agencies of Kazakhstan and oil-gas companies, who submitted written replies with information on measures to protect the Caspian Sea environment. In particular, the Forestry and Wildlife Committee, Fisheries Committee, Committee for Environmental Regulation and Control, Water Resources Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, the Transport Committee of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan, Akimats of Atyrau and Mangistau regions, RSE Kazhydromet ", JSC" NC "Kazmunaigas" and others submitted information.

Materials (decisions, statements of ministers, references) published on the website of the Tehran Convention: http://www.tehranconvention.org, number of regulatory legal acts, including the Environmental Code of the Republic of Kazakhstan, related Decrees of the President of Kazakhstan and resolutions of the Government of Kazakhstan, published at the information and legal system "Adilet" - http://adilet.zan.kz. have been used to develop the Report.

A number of recommendations on priority actions to implement the Tehran Convention have been developed. The report was prepared in the National, Russian and English languages.

DEFINITIONS AND ABBREVIATIONS

JSC	-	Joint Stock Company
EU	-	European Union
UNECE	-	United Nations Economic Commission for Europe
CP	-	Conference of the Parties to the Tehran Convention
KSCS	-	Kazakhstani Sector of the Caspian Sea
MIID	-	Ministry of Industry and Infrastructural Development of the Republic of Kazakhstan
MEGNR	-	Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
EIA	-	Environmental Impact Assessment
SPA	-	Special Protected Areas
MPC	-	Maximum permissible concentration
RSE	-	Republic State Enterprise
RK	-	Republic of Kazakhstan
SAPC	-	Strategic Action Programme for the Convention
LLP	-	Limited Liability Partnership
SHW	-	Solid household wastes
FAO	-	Food and Agriculture Organization of UN
ES	-	Emergency Situations
UNEP	-	United Nations Environment Programme

INTRODUCTION

The Caspian Sea is the largest water body in the world with huge reserves of hydrocarbons and unique biodiversity. It has a very fragile and vulnerable ecosystem. In recent decades, due to an increase in anthropogenic pressure on the environment of the Caspian Sea, there has been a decrease in biological resources and degradation of its ecosystem. Mothballed oil wells and coastal oil fields, accidents at exploration wells and vehicles, as well as transboundary transport of pollutants pose a major threat to the Caspian.

Realizing that the preservation of the unique Caspian ecosystem is possible only through the effective regional cooperation, in November 2003 in Tehran, Iran the Caspian countries signed the Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran Convention), which serves as the main instrument in the protection of the Caspian environment. The Convention is a universal legal framework that sets out general requirements and institutional arrangements. The purpose of the Convention is to protect the marine environment of the Caspian sea from all sources of pollution, including the protection, conservation, restoration, sustainable and rational use of the biological resources of the Caspian Sea. It provides basis for cooperation of the Parties on a wide range of environmental issues of the Caspian Sea, including the development of protocols prescribing specific measures, procedures and standards for the implementation of its provisions.

In Kazakhstan, the Tehran Convention was ratified by the Law of the Republic of Kazakhstan of December 13, 2005 No. 97. According to the Resolution of the Government of Kazakhstan No 749 from August 28, 2007 "On some measures to implement the Framework Convention for the Protection of the Marine Environment of the Caspian Sea", the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan is the body responsible for coordinating the implementation of the Convention on the territory of Kazakhstan.

This report has been developed on the basis of the Article 27 of the Tehran Convention. The report has been prepared in accordance with the requirements of the Convention's Standard Reporting Format adopted at the Third Session of the Conference of the Parties to the Convention August 12, 2011 in Aktau (see Appendix E). The report was prepared on the basis of an analysis of the legislation of the Republic of Kazakhstan, program documents, plans, declarations, etc.

GENERAL INFORMATION

1.Reporting Party

Contracting Party	Republic of Kazakhstan
Reporting period	2019-2020
National Focal Point	MEGNR of RK
Full name of the institution	Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
Name of the National Focal Point	Aigerim Kuat, Director of Department for International cooperation
Mailing address	35-A street 8, House of Ministries 010000, Astana, Kazakhstan
Tel	7 7172 750947
Fax	7 7172 740348
Email	serik.akhmetov@mail.ru
Contact point for the national report	MEGNR of RK
Full name of the institution	Department for International cooperation of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
Mailing address	Mangilik Yel 8, House of Ministries 010000, Astana, Kazakhstan
Tel	7 7172 74 0348
Fax	7 7172 74 0348
Email	e.kozhakayev@ecogeo.gov.kz
Date of submission	2021

2. National organizations providing data for the Report

Full name of the institution	Department of Natural Resources and Environmental Management of Atyrau Oblast
Mailing address	Aiteke bi, 77, 3rd floor, Atyrau
Tel	+7 (7122) 32-55-12

Fax	+7 (7122) 35-45-59
Email	atr_priroda@mail.ru

Full name of the institution	Department of Natural Resources and Environmental Management of Mangystau Oblast
Mailing address	130000, Aktau, 14 mircodistrict. B.1
Tel	+7 (7292)31 90-30
Fax	+7 (7292) 43 45 52
Email	moup@mangystau.gov.kz

Full name of the institution	Fisheries Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
Mailing address	010000, Nur-Sultan, Mangilik Yel street, 8. House of Ministries
Tel	+ 7 (7172) 74 1035
Fax	+ 7 (7172) 74 0126
Email	zh.toleukadyrov@ecogeo.gov.kz

Full name of the institution	Committee for Environmental Regulation and Control of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
Mailing address	010000, Nur-Sultan, Mangilik Yel street, 8. House of Ministries
Tel	+ 7 (7172) 74 0826
Fax	
Email	a.batyrbaev@ecogeo.gov.kz

Full name of the institution	Water Resources Committee of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
Mailing address	010000, Nur-Sultan, Mangilik Yel street, 8. House of Ministries

Tel	+ 7 (7172) 74 11 40
Fax	+ 7 (7172) 74 98 53
Email	zh.uashpaev@ecogeo.gov.kz

Full name of the institution	Transport Commitee, Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan
Mailing address	010000, Nur-Sultan, 32/1, Kabanbai batyr str.
Tel	+7 (7172) 983 580
Fax	-
Email	g.nurmakhanova@miid.gov.kz

Full name of the institution	JSC «NC «Kazmunaigaz»
Mailing address	010000, Nur-Sultan, 19, Kabanbai batyr str.
Tel	+ 7 (7172) 786101
Fax	+ 7 (7172) 786 000
Email	astana@kmg.kz

Full name of the institution	RSE Kazhydromet, Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan
Mailing address	010000, Nur-Sultan, Mangilik Yel street, 11/1
Tel	+ 7 (7172) 798 393
Fax	+ 7 (7172) 798 344
Email	kazmeteo@gmail.com

References

The following regulatory legal acts and program documents of Kazakhstan were used in the Report:

- Environmental Code of the Republic of Kazakhstan of January 2, 2021 No. 400 - VI ZRK;

- Water Code of the Republic of Kazakhstan of July 9, 2003 No. 481-II;

- Law of the Republic of Kazakhstan "On the protection, reproduction and use of the animal world" updated on November 27, 2019 No. 593-II;

- Decree of the Government of the Republic of Kazakhstan No. 749 of August 28, 2007 "On some measures to implement the Framework Convention for the Protection of the Marine Environment of the Caspian Sea";

- Code of the Republic of Kazakhstan "On Subsoil and Subsoil Use" of December 27, 2017 No. 125-VI;

- Law of the Republic of Kazakhstan "On Civil Protection" of April 11, 2014 No. 188-V;

- Law of the Republic of Kazakhstan "On Specially Protected Areas" of July 7, 2006 No. 175-III;

- Concept for the transition of the Republic of Kazakhstan to a "green economy";

- Order of the Minister of Industry and Infrastructure Development of the Republic of Kazakhstan "On Approval of the Rules for the Prevention of Pollution from Ships" of July 30, 2019 No. 578;

- Instructions for organizing and conducting environmental assessment, approved by order of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan of March 10, 2021 No. 63;

- Methodology for determining the standards for emissions into the environment;

- National Plan for Preparedness and Action for Oil Spill Response at Sea, Inland Waters and in the Safety Zone of the Republic of Kazakhstan, approved by order of the Minister of Energy of the Republic of Kazakhstan of May 15, 2018 No. 182;

- Guidelines for the Implementation of the Aarhus Convention;

- Decree of the Akimat of Mangistau Region No. 144 of June 6, 2021 "On approval of the Regional Plan for the Prevention and Response to Oil Spills in the Sea and Inland Waters in Mangistau Region for 2021-2025."

Report Volume

Volume of the report is 167 pages.

Information about the status of the Tehran Convention and its Protocols in Kazakhstan

The Tehran Convention was ratified by the Law of the Republic of Kazakhstan "On Ratification of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea" of December 13, 2005 No. 97. According to paragraph 3 of Article 4 of the Constitution of the Republic of Kazakhstan, international treaties ratified by the Republic have

priority over its laws. It means that the provisions of the Tehran Convention take precedence over the national legislation of Kazakhstan.

According to paragraph 1 of Article 26 of the Tehran Convention, the parties must determine a national body coordinating the implementation of the provisions of the Convention on their territory. For these purposes, the Resolution of the Government of the Republic of Kazakhstan No. 749 of August 28, 2007 "On some measures to implement the Framework Convention for the Protection of the Marine Environment of the Caspian Sea" was adopted, according to which the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan is designated as the national body responsible for the implementation of the Convention on the territory of the Republic of Kazakhstan.

As part of the implementation of the Tehran Convention, five protocols have been developed, of which Kazakhstan has ratified the following:

- Protocol on regional preparedness, response and cooperation in case of incidents causing oil pollution, Law of the Republic of Kazakhstan of March 18, 2016 No. 474-V ZRK;

- Protocol for the Protection of the Caspian Sea Against Pollution from Land-based Sources and Activities, Law of the Republic of Kazakhstan of November 1, 2021 No. 71-VII ZRK;

- Protocol on the conservation of biological diversity of the Caspian Sea to the Tehran Convention, Law of the Republic of Kazakhstan of October 23, 2021 No. 70-VII ZRK;

- Protocol on Environmental Impact Assessment in a Transboundary Context to the Framework Convention for the Protection of the Marine Environment of the Caspian Sea, Law of the Republic of Kazakhstan of October 4, 2021 No. 66-VII ZRK.

The Caspian countries have developed a draft Protocol on Monitoring, Analysis and Information Exchange. Currently, the Parties are negotiating on its agreement and further signing.

PART 1. GENERAL PROVISIONS

Legal, institutional, economic and other measures for the Tehran Convention implementation and its Protocols adopted in Kazakhstan

The basis for the implementation of the Tehran Convention in Kazkahstan is the Law of the Republic of Kazakhstan "On Ratification of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea" No. 97 of December 13, 2005.

The legislative instruments related to the implementation of the Tehran Convention also include all laws and regulations related to the country's environmental legislation. First of all, it is a Chapter 19 (Articles from 260 to 280) of the Environmental Code of the Republic of Kazakhstan, devoted to environmental requirements in the implementation of economic and other activities in the state protected area in the northern part of the Caspian Sea.

In accordance with the provisions of the Law "On State Control and Supervision in the Republic of Kazakhstan" of August 5, 2009, as well as other regulatory legal acts establishing requirements in the field of industrial safety, control is carried out to ensure industrial safety by organizations during oil operations in the Kazakh sector of the Caspian Sea. In accordance with the provisions of the Law of the Republic of Kazakhstan "On Civil Protection" and the Code of the Republic of Kazakhstan "On Subsoil and Subsoil Use", regular exercises are monitored to eliminate emergency oil spills, equipment, materials and substances in the amount required to carry out work on cleaning the sea, as well as control whether they have approved plans for the prevention and elimination of oil spills at sea.

The Law of the Republic of Kazakhstan "On Merchant Shipping" of January 17, 2002 and the Law of the Republic of Kazakhstan "On Inland Water Transport" of July 6, 2004 regulate compliance with the safety requirements of merchant shipping.

Order of the Minister of Industry and Infrastructure Development of the Republic of Kazakhstan "On Approval of the Rules for the Prevention of Pollution from Ships" of July 30, 2019 No. 578, registered by the Ministry of Justice of the Republic of Kazakhstan on July 31, 2019 No. 19157, approved the requirements for ships aimed at preventing pollution from ships.

By the Resolution of the Government of the Republic of Kazakhstan of August 28, 2008, the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan is the body responsible for the implementation of the Tehran Convention in Kazakhstan.

On January 2, 2021, a new version of the Environmental Code of the Republic of Kazakhstan was adopted, which provides for the application of more stringent environmental

requirements, changes in environmental impact assessment and obtaining environmental permits, the use of the best available technologies and a waste management system.

In order to implement the new Environmental Code of the Republic of Kazakhstan, by orders of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan, the Instructions on the organization and conduct of environmental assessment and the Methodology for determining the standards for emissions into the environment were approved.

A number of ministries and departments are involved in the implementation of the Tehran Convention in Kazakhstan. First of all, this is the Ministry of Ecology, Geology and Natural Resources (Committee for Forestry and Wildlife, Committee for Fisheries, Committee for Water Resources, Committee for Environmental Regulation and Control, Committee for Geology and others), Ministry for Emergency Situations, Ministry of Industry and Infrastructure Development, as well as the Departments of Natural Resources and Environmental Management of the Atyrau and Mangistau obasts. In addition to the listed state bodies, some issues related to the implementation of the Tehran Convention are also related to the activities of the Ministry of Education and Science, the Ministry of Health, etc. At the political level, activities under the Tehran Convention are coordinated by the Ministry of Foreign Affairs.

According to the decision of the Conference of the Parties to the Tehran Convention, adopted at the Second Session on November 12, 2008, in Tehran (Iran), since 2009, Kazakhstan has been paying contributions to the UNEP Trust Fund in the amount of 72 thousand US dollars on an annual basis. Since 2010, funds have been allocated from the republican budget for the preparation of Kazakhstan's national report on the Tehran Convention for the corresponding period.

Policy documents aimed at the implementation of the Tehran Convention

Environmental policy in Kazakhstan is the basis for sustainable development of the country. The principles of environmental policy are laid down in many strategic and program documents. The main strategic and program documents, including the task of environmental protection and rational use of natural resources, including the protection of the marine environment of the Caspian Sea, include the following:

1) Strategy "Kazakhstan-2050", Message of the President of the Republic of Kazakhstan in 2012.

2) Strategic development plan of the Republic of Kazakhstan until 2025, approved by the Decree of the President of the Republic of Kazakhstan No. 636 of February 15, 2018.

3) Concept for the transition of the Republic of Kazakhstan to a "green economy", approved by the Decree of the President of the Republic of Kazakhstan No. 577 of May 30, 2013.

4) State program for the development of the agro-industrial complex for 2017-2021, approved by the Decree of the Government of the Republic of Kazakhstan of July 12, 2018 No. 423.

5) State program of industrial and innovative development for the period 2015–2019, approved by the Decree of the President of the Republic of Kazakhstan of August 1, 2014 188 No. 874.

6) Concept of development of the tourism industry until 2023, approved by the Decree of the Government of the Republic of Kazakhstan of June 30, 2017 No. 406.

7) Concept for the development of the fuel and energy complex until 2030, approved by the Decree of the Government of the Republic of Kazakhstan of June 28, 2014 No. 724.

8) Strategic plan of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan for 2019-2023.

9) Program "Development of regions" for the period up to 2020, approved by the Decree of the Government of the Republic of Kazakhstan of June 28, 2014 No. 728.

Akimats approved comprehensive plans to improve the environmental situation, which included sections on reducing the emission of pollutants into the atmosphere, developing the "green belt", landscaping and landscaping, managing production and consumption waste, regulating water resources, protecting land resources, monitoring the state of the environment, information work.

Cooperation of Caspian countries in the field of preservation and restoration of the marine environment of the Caspian Sea, prevention, reduction and control of its pollution

Protecting the vulnerable Caspian environment requires close cooperation between the Caspian states. In this regard, the five countries successfully interact in the field of environmental protection and rational use of the natural resources of the Caspian Sea. In addition to the Tehran Convention in a five-sided format, the Caspian states cooperate under the following agreements:

- Agreement on cooperation in the field of prevention and elimination of emergencies in the Caspian Sea;

- Agreement on the conservation and rational use of aquatic biological resources of the Caspian Sea;

- Agreement on cooperation in the field of hydrometeorology of the Caspian Sea.

The first of the above agreements regulates the interaction of the Parties in the event of natural and man-made emergencies in the Caspian Sea. It is used for the purpose of preventing and / or liquidating emergencies in the Caspian Sea, if they cannot be eliminated by the own forces of the state of any of the Parties, as a result of which this Party has the right to seek assistance from

the other Party or Parties. In Kazakhstan, the Agreement on cooperation in the field of prevention and elimination of emergencies in the Caspian Sea was ratified by the Law of the Republic of Kazakhstan dated June 23, 2015.

Within the framework of the Agreement on the Conservation and Rational Use of Aquatic Biological Resources of the Caspian Sea, the Parties shall cooperate in the development of measures to regulate the fishing of shared aquatic biological resources and measures to combat illegal, unreported, unregulated fishing and illegal circulation of aquatic biological resources, exchange data on fishery statistics, develop and implementation of programs for the reproduction and conservation of joint aquatic biological resources and their habitat, etc. The agreement was ratified by the Law of the Republic of Kazakhstan dated July 17, 2015.

The Caspian countries successfully interact within the framework of the Agreement on Cooperation in the field of hydrometeorology of the Caspian Sea, signed in Astrakhan on September 29, 2014. Regional exchange of hydrometeorological data and information is carried out on the basis of bilateral agreements between RSE Kazhydromet and Roshydromet, Azhydromet and Turkmengidromet. Cooperation with the Caspian countries is being carried out within the framework of CASPCOM. The legal basis for cooperation between the Tehran Convention and CASPCOM was laid down by a Memorandum of Understanding signed in 2013. In accordance with this Memorandum, CASPCOM provides the Tehran Convention with the data and information received by CASPCOM that are relevant to the solution of social, economic and environmental problems of the Caspian Sea. In addition, CASPCOM cooperates with the Tehran Convention on the issues of fluctuations in the level of the Caspian Sea.

On February 8, 2019 Kazakhstan ratified the Convention on the Legal Status of the Caspian Sea, which is a fundamental document. It creates the basis for further comprehensive interaction of coastal countries and defines the rights and obligations of the parties in relation to the Caspian Sea, including its waters, seabed, subsoil, natural resources and airspace.

Cooperation of Kazakhstan with the Caspian countries and international organizations for implementation of the Tehran Convention

In order to protect the environment of the Caspian Sea, the Republic of Kazakhstan cooperates with coastal states both in a multilateral format and in a bilateral one. Bilateral cooperation of Kazakhstan with coastal countries is carried out on the basis of the following agreements:

- Agreement between the Government of the Republic of Kazakhstan and the Government of the Russian Federation on the joint use and protection of transboundary water bodies, signed in Ust-Kamenogorsk on September 7, 2010;

- Agreement on the conservation of the ecosystem of the Ural River, signed on October 4, 2016:

- Agreement between the Government of the Republic of Kazakhstan and the Government of the Russian Federation on cooperation in the field of maritime transport;

- Agreement between the Republic of Kazakhstan and the Russian Federation on delimiting the bottom of the northern part of the Caspian Sea for the purpose of exercising sovereign rights to subsoil use, made in Moscow on July 6, 1998, and the Protocol to the Agreement between the Republic of Kazakhstan and the Russian Federation on delimiting the bottom of the northern part of the Caspian Sea in order to the exercise of sovereign rights to subsoil use of July 6, 1998, performed in Moscow on May 13, 2002;

- Agreement between the Government of the Republic of Kazakhstan and the Government of the Republic of Azerbaijan on cooperation in the field of maritime merchant shipping.

Currently, together with the Caspian countries, work is underway to develop and adopt a Protocol on cooperation in the field of ensuring the safety of navigation in the Caspian Sea, the List of International Maritime Organization conventions, the requirements of which are mandatory in the Caspian Sea, a Memorandum on the control of ships by the port state in the Caspian Sea.

In the protection of the marine environment, Kazakhstan is actively cooperating with international organizations. With the support of international organizations, the Caspian countries have achieved significant results in cooperation in the field of environmental protection of the Caspian Sea and the implementation of the Tehran Convention. Undoubtedly, impressive results have been achieved within the framework of the Caspian Environmental Program with the support of the United Nations Development Program (UNDP), the United Nations Environment Program (UNEP), and the United Nations Food and Agriculture Organization (FAO). Significant funding for the implementation of the Tehran Convention was provided by the Global Environment Facility (GEF), the World Bank, the Organization for Security and Cooperation in Europe, the International Maritime Organization, the European Union and others.

In the period 2009-2012, with the support of the GEF, the CASPECO Regional Project was carried out with a control center in Nur-Sultan. The Kazakh side has made every effort to ensure decent working conditions for international and national experts involved in the implementation of the Program.

With the support of the Coca-Cola Foundation, Kazakhstan was also involved in the implementation of a regional project to combat marine litter and became a center for cooperation between the Caspian countries from 2018 to 2020.

Kazakhstan is a Party to many multilateral environmental agreements. For example, Kazakhstan is a Party to the UNECE Convention on Environmental Impact Assessment in a Transboundary Context, to which Azerbaijan is one of the parties. Kazakhstan is a Party to the Aarhus Convention, to which Azerbaijan and Turkmenistan are also parties. Kazakhstan is also a Party to the Convention on the Use and Protection of Transboundary Watercourses and International Lakes, to which Azerbaijan, Russia and Turkmenistan are also parties.

Application of rules and procedures of Tehran Convention and its Protocols

The rules and procedures of the existing international treaties are applied In Kazakhstan. In accordance with the legislation of the country, the provisions of international agreements take precedence over the provisions of national legislation after their entry into force. It should be added only the Protocol on Regional Preparedness, Response and Cooperation in the Event of Oil Pollution Incidents has entered into force. It was ratified by the Law of the Republic of Kazakhstan of March 18, 2016 No. 474-V ZRK.

PART 2. REVIEW OF ACTIVITIES FOR THE IMPLEMENTATION OF THE PROVISIONS OF THE TEHRAN CONVENTION AND ITS PROTOCOLS

Prevention, Reduction and control of pollution.

The Protocol on the Protection of the Caspian Sea against Pollution from Land-Based Sources and Activities to the Tehran Convention (Moscow Protocol) was ratified by the Law of the Republic of Kazakhstan of November 1, 2021 No. 71-VII ZRK. In accordance with paragraph 5 of Article 22 of the Protocol, it enters into force on the ninetieth day after the date of deposit of the instrument of ratification, acceptance, approval or accession by all Caspian littoral states. To date, the Protocol has been ratified by four parties only. According to the Secretariat of the Tehran Convention, the Protocol will enter into force after the completion of domestic procedures in the Russian Federation.

Kazakhstan has not adopted a national action program for the Caspian Sea, which provides for the implementation of the provisions of the Protocol. At the same time, the norms aimed at fulfilling the obligation under the Protocol have already been laid down in the new Environmental Code of the Republic of Kazakhstan.

Existence of warehouses, sites, etc. of solid consumer wastes and oil development wastes that do not meet the environmental requirements

With an increase in the growth of the level of well-being of the population of the Caspian region, there is an increase in the volume of municipal waste generation, mainly in regional centers, since as a result of labor migration, a significant part of the rural population has moved in search of work to the city.

In the settlements of Mangistau region, 89.9% of solid domestic waste (SDW) is located at eight landfills that meet special sanitary requirements, in which 188.3 thousand tons of solid waste were accumulated in 2019, of which 63.7 thousand tons, or 33 , 8% were sorted and disposed of. The utilization rate is 0.03%. In the region, one of 8 landfills that meet sanitary requirements is privately owned and belongs to Ecoterra LLP. There are also 16 temporary waste disposal sites that do not meet sanitary requirements. Polygons that meet sanitary requirements are located in the cities. Zhanaozen, Fort Shevchenko and in the village of Bayandy in the Munaysky region, in the villages of Zhetybai and Kuryk in the Karakiyansky region, in the village of Beineu, in the Beineu region, in the village of Shetpe, in the Mangistau region.

Waste recycling plant in Zhanaozen with a capacity of 50,000 tons per year began

operations in September 2014. In addition, 6 organizations are engaged in separate waste collection (IT ProfService LLP, EcoWeste Aktau LLP, ZherAnaGroup LLP, Qala Zholdary LLP, Esimov FE, Caspiy Operating LLP). Since April 2018, Global Ecosort LLP has installed and launched at its own expense a line for sorting solid household waste at the site of the Koktem GKP SDW landfill. In December 2018, AktauTazagala LLP, located in the area of the Baskudyk settlement of the Munaily district, launched a waste sorting station with a capacity of 50,000 tons per year.

In 2019, as a result of space monitoring, 194 unauthorized dumps were discovered in the region, 65 of which were cleared and destroyed. Work in this direction continues.

Also in the region there are landfills for the storage of industrial waste from enterprises. For example, on the territory of Mangistau region there are landfills for waste disposal: Landfill for disposal of drilling waste "Atash" and Site of treatment facilities for drill cuttings and oily waters of Koshanai.

Practically in all settlements of the Atyrau region, and especially in the cities of Atyrau and Kulsary, there is an acute issue of storing and processing ever-increasing volumes of household waste. At the same time, the operation of most landfills and landfills for municipal solid waste (MSW) does not meet regulatory criteria. The region has 81 landfills for the collection of solid waste. In 2019, the total volume of solid waste increased by 15% compared to 2017. The total volume of generated hazardous waste amounted to 469,085 thousand tons, the volume of non-hazardous waste amounted to 181,068 thousand tons.

To solve the problems of solid waste, a program for the management of solid household waste in the Atyrau region for 2017-2021 has been developed. A step-by-step introduction of the separate collection of solid household waste is underway. In the city of Atyrau, containers for the collection of plastic waste are installed in the amount of 96 units. Work is underway among the population to explain the principles of separate waste collection. On the territories of residential buildings, industrial and social facilities 322 there are 1,002 container sites, where 7,929 containers are installed.

LLP "Spetsavtobaza" was purchased and installed at the operating landfill in the city of Atyrau, a sorting shop of the Belarusian company "Sifania-Ecotekhnika". The cost of the project is 130 million tenge. In July 2019, the workshop began to work. Accepts 50 tons of municipal solid waste per day.

Zhylyoi Tazalyk LLP entered into an agreement with Montazh Stroy LLP on the construction of an object for the acceptance and sorting of solid household waste. The project for the construction of a plant for storage, disinfection, sorting of solid household waste is planned to be completed in 2021.

In the Zhylyoi region in the city of Kulsary, Eco City XXI LLP invested 250 million tenge for the construction of a modern complex for receiving, processing and sorting solid household waste. A complex with a total processing and sorting capacity of 30 thousand tons of solid waste per year was built on the 6th kilometer of the Kulsary-Beineu highway on an area of 6.5 hectares; in September 2019, the complex was put into operation.

Also LLP "Zhylyoi Tazalyk" has begun construction of a plant for sorting, secondary processing and disposal of solid household waste.

Acceptance and sorting of solid household waste in the city of Atyrau is carried out by SpetsAvtobaza LLP, TSO LLP, West Dala LLP. There are large markets in the city of Atyrau, in particular Caspy Trade IMPEX LLP (Merey market), Saraishyk Atyrau LLP (Saraishyk market), BTT LLP (Koktem market), Dina Trading House, Nasikha LLP in 2020 year signed contracts with LLP "SpetsAvtobaza" for the removal of solid waste. In 2020, PromEkologiya LLP plans to build a solid waste sorting complex in the left-bank part of the city of Atyrau. In the districts, Zhylyoi district: Zhylyoi Tazalyk LLP, PromEkologiya LLP, Eco Gorod XXI LLP - in Makat district: Tazalyk LLP carriy out SDW reception and sorting.

In order to increase the potential for combating marine litter in the period from 2018 to 2020, Kazakhstan took an active part in the implementation of the regional project "Solving the problem of marine litter in the Caspian Sea region", implemented with the financial support of the Coca Cola Foundation. The main goal of the project was to raise awareness and raise awareness among stakeholders about the problem of marine litter, as well as reduce pollution of the coastal zone of the Caspian Sea from land-based sources by developing an appropriate Caspian action plan to combat marine litter in the region. The project has created a national network of stakeholders to combat marine litter in the Caspian region, studied international practice in combating marine litter, and developed proposals for the draft Caspian Regional Action Plan on Marine Litter.

Licensing/permitting by the national authorities of waste-water discharges for prevention, reduction and control of pollution from land-based sources

On 2 January 2021 a new Environmental Code of the Republic of Kazakhstan was adopted, which provides a number of changes, including in terms of the classification of entities and an integrated environmental permit. Depending on the level and risk of negative impact on the environment, facilities are classified into 4 categories, where the most hazardous (polluting) activities are assigned to the first category, which also implies stricter regulation. So, for objects of the first category, a mandatory transition to integrated environmental permits is provided with the condition of introducing the best available techniques. Applications for obtaining integrated

environmental permits are submitted electronically to the authorized body in the field of environmental protection and must contain a comparative description of the equipment used or intended for use with the best available techniques, given in the conclusions on the best available techniques for the respective areas of their application. The time frame for the examination and issuance of an integrated environmental permit is 55 working days.

Environmental impact permits for objects of category I are issued by the authorized body in the field of environmental protection in the case provided for in part two of paragraph 4 of Article 418 of the Environmental Code. Environmental permits for impact for objects of the II category are issued by local executive bodies of regions, cities of republican significance, the capital. To obtain an impact permit, an application is submitted in the established form in electronic form to the authority issuing the environmental permit. The terms for the examination and issuance of an environmental impact permit - 45 working days (authorized body in the field of environmental protection), 30 working days (local executive body)

According to Article 418 of the Environmental Code, permits for emissions into the environment, the emission standards received before July 1, 2021 by operators operating at facilities classified as Category I or II facilities from July 1, 2021, are valid until the expiration of such permits and documents. or until the day of obtaining an environmental permit in accordance with this Code. Operators of facilities commissioned before July 1, 2021 and classified as Category III facilities are required to submit an environmental impact declaration in accordance with this Code no later than December 31, 2021. objects classified as objects of category III - terminated from the date of submission of the declaration on the impact on the environment in accordance with this Code; objects of category IV - will be terminated from July 1, 2021.

The main environmental requirements for wastewater discharge are defined in Article 222 of the Environmental Code of the Republic of Kazakhstan, which provides the following:

- discharge of wastewater into natural surface and underground water bodies is allowed only with an appropriate environmental permit;

- persons using wastewater storage tanks and (or) artificial water bodies intended for natural biological wastewater treatment are obliged to take the necessary measures to prevent their impact on the environment, as well as carry out land reclamation after the termination of their operation;

- creation of new (expansion of existing) storage tanks-evaporators is allowed with the permission of the local executive bodies of regions, cities of republican significance, the capital if other methods of utilization of the generated wastewater are impossible or to prevent the formation of wastewater in the technological process, which must be justified when conducting an environmental impact assessment Wednesday;

- designed (re-commissioned) wastewater storage-evaporators must be equipped with an anti-filtration screen, excluding the penetration of pollutants into the subsoil and groundwater. Determination and justification of technological and technical solutions for preliminary wastewater treatment prior to their placement in storage facilities are carried out during an environmental impact assessment;

- operators of facilities of I and (or) II categories are obliged to ensure compliance with environmental standards for discharge established in the environmental permit.

- the temperature of wastewater discharged into surface water bodies should not exceed 30 degrees Celsius;

- the discharged wastewater must not contain substances that are aggressive to concrete and metal;

- it is not allowed to discharge wastewater, regardless of the degree of its purification, into surface water bodies in the zones of sanitary protection of sources of centralized drinking water supply, resorts, in places designated for swimming.

Operators of facilities of I and (or) II categories, discharging wastewater or having a closed water supply cycle, must use metering devices about

Waste water treatment.

The issue of pollution of a unique reservoir rich in flora and fauna - the Caspian Sea - has become especially acute. The state of the Caspian Sea receives pollutants discharged along the Volga and Ural rivers from their upper reaches. In the Ural River, the bulk of pollution comes from the surface runoff of small rivers of the Russian Federation, as well as from the territory of the Aktobe and West Kazakhstan regions. Throughout it is subject to pollution with mineral fertilizers, wastes from industrial enterprises, construction organizations, communal and livestock complexes. To date, all volumes of pollutants discharged with wastewater fall on the fields of evaporation and filtration, as well as on the terrain, since the discharge of wastewater into surface waters has been completely stopped.

The main pollutants of water bodies are oil and gas enterprises. This is explained by the formation of oil and drill cuttings at the field sites, oil spills at the industrial sites. Industrial waste from the oil and gas industry has the most powerful anthropogenic impact on soils and groundwater. Pollutants migrate from contaminated sites into rivers and water bodies with surface or groundwater runoff. This process is especially intense in the coastal strip of the Caspian, which has been flooded as a result of sea level rise and is affected by surges.

The main enterprises discharging pollutants with wastewater into filtration fields, evaporation ponds and water bodies in the Mangystau region are ErsayKaspianKontraktor LLP, KazAzot LLP, Karazhanbasmunai JSC, Karakudukmunai LLP, Mangistau JSC, LLP MAEK-Kazatomprom, GKP Caspiy zhylu, su arnasy, LLP KazGPZ, LLP Ken-Sary, FC BuzachiOperating Ltd. The main contribution among the above enterprises is made by MAEKKazatomprom LLP, which discharges into the Caspian Sea. It accounts for about 90% of the total volume of discharges. Along with MAEK-Kazatomprom LLP, the discharge into the Caspian Sea is carried out by KazAzot LLP. These waters are classified as normatively clean waters.

The current state of the sewerage networks in Atyrau makes it possible to cover only about 45% of the urban area and about 30% of the Balykshi settlement. Water disposal of the right-bank and left-bank parts of the city is carried out by separate sewerage systems. The territory of the city is characterized by a flat relief. The overwhelming majority of pumping stations are in a pre-emergency condition. The lack of sewage treatment facilities negatively affects the ecological situation in the area.

In 2019, work began on the construction of a STP in the left-bank part of the city of Atyrau with a capacity of 70,000 m3 / day. Also, design and estimate documentation for the project "Reconstruction of sewage treatment plants in the right-bank part of Atyrau" is being developed. The capacity of the treatment plant will be 31,000 m3 / day with the possibility of increasing up to 60,000 m3 / day.

Due to the growth of the population of the city of Aktau, the capacity of STP-2 was not enough, therefore, design and estimate documentation was developed to increase the capacity of STP-2 by another 40 thousand m3 per day, which will ensure unhindered collection, disposal and treatment of surface wastewater. At STP-1, work is required to reconstruct the sewage pumping station.

Pollution load from watercourses, which flow through the territories of two or more Contracting Parties.

On the territory of Kazakhstan, from the territory of the Russian Federation, water flows from the Ural River (Ilek and Chagan tributaries) to the Caspian Sea basin, as well as, in a relatively small volume, water from the Volga River through the Kigach channel.

The state of the Ural River is of particular concern because of the decrease in its water content. As a result, the natural environment of the Urals has undergone significant changes, the river becomes shallow and polluted, the water quality deteriorates, and floodplain forests die. In some periods, the maximum permissible concentration (MPC) of hexavalent chromium is exceeded

in the Ilek River (a tributary of the Urals). The source of contamination of ground and surface waters with 6-valent chromium is the old sludge ponds of the plant of chrome compounds, built in Soviet times.

The solution of many interstate issues between Kazakhstan and Russia on transboundary rivers is carried out within the framework of the Intergovernmental Agreement on the joint use and protection of transboundary watercourses, signed in Ust-Kamenogorsk on September 7, 2010. In accordance with this Agreement, a Kazakh-Russian Joint Commission on the Use and Protection of Transboundary Rivers has been established, the meetings of which are held once a year alternately in Kazakhstan and Russia. By the decision of this Commission, working groups were created for the basin of the transboundary rivers Ural, Kigach, Bolshoi and Maly Uzeni. Cooperation is also carried out within the framework of the Agreement on the Conservation of the Ecosystem of the Basin of the Transboundary River Zhaiyk (Ural).

On December 4, 2020, the Program of Kazakh-Russian cooperation for the preservation and restoration of the ecosystem of the basin of the transboundary river Zhaiyk (Ural) for 2021-2024 was signed, which was developed pursuant to the instructions of the President of the Republic of Kazakhstan K.K. Tokayev following the results of the XVI Forum of Interregional Cooperation between Kazakhstan and Russia, held on November 6-7, 2019 in Omsk.

The Joint Program consists of the following areas:

- research activities under the Kazakh-Russian cooperation program for the preservation and restoration of the ecosystem of the basin of the transboundary river Zhaiyk (Ural) (carried out by each party independently);

- inventory and identification of sources of pollution in the basin of the transboundary river Zhaiyk (Ural) (carried out by each party independently);

- implementation of measures in the territory of the Republic of Kazakhstan and the Russian Federation aimed at improving the basin of the transboundary river Zhaiyk (Ural) (carried out by each party independently);

- education, development of volunteering.

As part of the implementation of this Program, the terms of reference for research work on the topic "Environmental assessment of the consequences of flow regulation in the basin of the transboundary river Zhaiyk (Ural) and the development of scientifically grounded proposals for the preservation and restoration of the transboundary river Zhaiyk (Ural)" have been developed. Currently, work is underway to mobilize funds to carry out these works.

A comprehensive survey of the Zhaiyk river basin (Ural) was carried out, the task of which was to survey the territory of the river basin to clarify all sources of pollution and other factors of

negative impact on the state of the basin's ecosystem. Observations of surface water quality were carried out along the Zhaiyk River and its tributaries Elek, Shagan, Derkol, and the Yaik and Peretaska channels. Samples were taken in places where wastewater discharges are observed, in transboundary territories, in areas where cities and large industrial settlements are located. At the sampling site, a visual inspection of the state of water bodies and its coastal zone was carried out, and hydrological indicators were measured. Hydrochemical analysis of water quality was carried out according to 33-38 indicators. In the places of the alleged source of pollution, measurements of the level of air pollution were carried out according to 6 indicators. During the survey, samples of atmospheric air were also taken; no excess of the maximum permissible concentrations of pollutants was found.

In order to exchange information on the hydrochemical and hydrological state of the Zhaiyk River basin (Ural), Kazhydromet RSE performs joint water sampling and exchange of hydrochemical information (data) with the Russian side.

In order to improve the environmental situation in the Zhaiyk River basin (Ural), in October 2020, a Unified Roadmap for enhancing cooperation on research in large river basins was approved.

It should be noted that the Russian Federation and the Republic of Kazakhstan have ratified the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes, thereby undertaking obligations to fulfill the basic principles set forth in it for transboundary water bodies. From 2019 to 2021, the Republic of Kazakhstan chaired the Bureau of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes.

System of regular inspection and survey that regulates emissions into the environment

In the Caspian region of Kazakhstan, the organizations inspecting and supervising emissions and discharges into the environment are the Departments of Ecology for the Atyrau and Mangistau regions of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan. At the central level, these activities are carried out by the Environmental Regulation Committee of the MEGPR of the Republic of Kazakhstan. Its functions include carrying out state environmental control over the following:

- compliance with the environmental legislation of the Republic of Kazakhstan;
- taking measures to eliminate the consequences of environmental pollution;
- bringing lands released as subsurface use operations or other disturbing processes and works are completed to a state suitable for their further use in accordance with the requirements of the land legislation of the Republic of Kazakhstan;

- observance of license and contract conditions related to environmental protection;

- the safety of the subsoil from pollution, watering and man-made processes leading to damage to environmental objects;

- observance of the right of state ownership of subsoil;

- conservation of the subsoil plot and subsoil use objects, elimination of the consequences of subsoil use operations;

- observance of environmental norms and rules when using subsoil and processing minerals;

- compliance with design decisions on environmental protection during the extraction and processing of minerals;

- implementation of measures to prevent emergency or other dangerous situations during subsoil use operations;

- burial of hazardous substances, radioactive waste and wastewater discharge into the bowels;

- compliance with water quality standards;

- compliance with technical regulations, standards, rules and other requirements for the protection of atmospheric air, including when putting into operation and operation of transport and other mobile vehicles;

- compliance with the requirements for the protection of atmospheric air during storage and incineration of waste;

- compliance with the requirements for the implementation of greenhouse gas emissions;

- compliance with the rules for the use, storage, transportation, disposal, disposal or other handling of radioactive and other environmentally hazardous substances in terms of environmental requirements for the prevention of environmental pollution;

- the fulfillment of the environmental management conditions established by environmental permits;

- compliance with the established norms and rules for accounting, disposal and disposal of production and consumption waste;

- compliance with environmental requirements for facilities that have stationary sources of emissions, discharges of pollutants and dispose of production and consumption waste;

- observance of technological regulations for the operation of treatment facilities;

- compliance with the norms and rules of industrial environmental control;

- compliance with the legislation of the Republic of Kazakhstan on compulsory environmental insurance;

- compliance with qualification requirements and rules for the implementation of the licensed type of activity in the field of environmental protection;

- compliance with the requirements for the obligatory conduct of the state ecological expertise and the fulfillment of its conditions;

- compliance with the requirements for conducting a mandatory environmental audit and providing reliable information on environmental protection issues;

- compliance with the rules for the transboundary transportation of hazardous waste;

- compliance with the requirements of environmental legislation on the territory of the Baikonur complex;

- compliance with the requirements for the submission of data on the actually exported, exported and sold amount of ozone-depleting substances to the authorized body in the field of environmental protection;

- fulfillment by manufacturers (importers) of requirements for payment of fees for organizing the collection, transportation, processing, disposal, use and (or) disposal of waste;

- fulfillment by the operator of the extended obligations of manufacturers of the requirements determined by the Environmental Code of the Republic of Kazakhstan

Prevention, control and reduction of pollution of the Caspian Sea resulting from seabed activities

The Environmental Code of the Republic of Kazakhstan defines specific environmental requirements for the implementation of activities in the state protected area in the northern part of the Caspian Sea. When carrying out activities in the state protected area in the northern part of the Caspian Sea, the following environmental requirements must be observed:

- work related to the excavation and movement of soil is allowed with a special permit issued by the authorized state body for the study of subsoil, with the exception of emergency rescue operations;

- construction, installation and dismantling of structures can only be carried out using technologies that ensure the collection of all types of pollutants;

- when carrying out any types of construction and other work, it is prohibited to use blasting operations in the water column and on the seabed;

- blasting operations under the seabed may be carried out with the permission of the authorized state bodies in the field of environmental protection, use and protection of water resources and the study of subsoil;

- it is prohibited to disturb the nesting sites of waterfowl and near-water birds, as well as to block access to the spawning grounds of sturgeon fish;

- water intake from the sea is allowed only if the water intake facilities are equipped with fish protection devices;

- technical devices must be installed at the water intake facilities for continuous monitoring of the efficiency of the fish protection devices;

- dumping of wastes to the sea is prohibited;

- discharge of wastewater into the sea is prohibited, with the exception of a limited list of treated wastewater, including water from cooling and fire extinguishing systems, purified sea water from oil, ballast water discharged with the permission of authorized state bodies in the field of environmental protection, use and protection of water the fund, as well as the state body in the field of sanitary and epidemiological well-being of the population;

- the water temperature as a result of the discharge outside the control section should not increase by more than five degrees in comparison with the average monthly water temperature during the discharge period over the last three years;

- transport routes should be selected in such a way as to prevent or reduce their impact on marine mammals, fish and birds;

- it is prohibited to lay railways, highways, main pipelines that are not envisaged by projects in the area where special requirements are applied.

- to carry out work in the water protection zone and in shallow coastal areas with a depth of no more than ten meters, vehicles must be used to ensure the preservation of highly productive benthic communities and spawning grounds. If necessary, when monitoring the state of the environment, it is allowed to use special vehicles on extended tracks, low-pressure tires, an air cushion, minimally violating the integrity of the soil and vegetation cover and existing biocenoses.

When conducting exploration and production of hydrocarbons at sea, the subsoil user must comply with the following requirements:

- if previously drilled wells are discovered within the contract area, the subsoil user is obliged to take them to the balance sheet and monitor them;

- it is prohibited to flare fluids during the operation of wells, except in cases of the threat of an emergency;

- flaring of hydrocarbons during well testing should be minimized using the best available technology;

- combustion of hydrocarbons in flares is possible only under favorable weather conditions conducive to the dispersion of the smoke plume, while the design of the flare units should ensure the complete combustion of hydrocarbons;

- if the well is located on the bird migration routes, organizational and technical measures should be taken to prevent damage to the avifauna;

- emissions into the atmosphere during exploration and production of hydrocarbons at sea are subject to monitoring and control by proven principles and methods adopted in international practice in the field of environmental protection;

- injection of drilling waste into the subsoil is prohibited without preliminary operations for their neutralization, determined in the approved project document for carrying out subsoil use operations;

- injection of associated gas into the subsurface in the northern part of the Caspian Sea, ensuring an increase in oil recovery by maintaining reservoir pressure, in excess of the norms provided for by the approved project document for conducting subsurface use operations, as well as injection of associated gas in excess of the design parameters are prohibited;

- all operations for the disposal and storage of drilling waste that are not involved in reuse and are not pumped into the subsoil must be carried out at a special landfill located outside the state protected area in the northern part of the Caspian Sea.

Prevention, reduction and control of pollution from vessels

Measures to prevent pollution of the Caspian Sea from ships are provided for by the environmental legislation of Kazakhstan, in particular in the Environmental Code of the Republic of Kazakhstan, the Law of the Republic of Kazakhstan of January 17, 2002 "On merchant shipping", Rules on the prevention of pollution from ships, approved by order of MIIR RK of July 30 2019 No 19157 and other regulatory legal acts.

Separate requirements for ships are defined in a special section of the Environmental Code of the Republic of Kazakhstan "State Protected Area in the Northern Part of the Caspian Sea", according to which routes for transport should be selected in such a way as to prevent or reduce their impact on marine mammals, fish and birds, and In shallow water operations, vehicles should be used to ensure the conservation of highly productive benthic communities and spawning grounds. If necessary, when monitoring the state of the environment, it is allowed to use special vehicles on extended tracks, low-pressure tires, an air cushion, minimally violating the integrity of the soil and vegetation cover and existing biocenoses.

Drilling operations from a drilling barge or platform in the presence of ice cover in the water area is possible with the constant presence of an icebreaker-type ship with equipment for oil spill containment. In order to avoid accidental introduction of flora and fauna objects into the Caspian Sea, the use of equipment and apparatus, as well as vessels that previously worked in other water basins, is prohibited without an environmental survey. All types of movements by water transport must be presented as part of the pre-design and design documentation. At the stage of detailed design and during the organization of work, a timetable for the seasons should be determined and the routes for vessels to follow on cartographic materials should be indicated. When choosing routes of movement, hydrometeorological conditions, including ice conditions, as well as periods and places of spawning and migration of valuable fish species, seal rookeries, and nesting of birds should be taken into account.

Vessels should be equipped with closed fuel bunkering systems, tanks for collecting contaminated water and household waste, equipped with devices that do not allow discharge and discharge into open water bodies. Transportation of bulk materials, chemicals and dangerous goods should be carried out in closed containers and special containers, excluding their release into the environment in accordance with the requirements of the legislation of the Republic of Kazakhstan on merchant shipping. The mode of navigation is established by agreement with the authorized state bodies in the field of protection, reproduction and use of wildlife and the use and protection of water resources.

In 2019, the Law of the Republic of Kazakhstan "On Merchant Shipping" was amended regarding the obligation of the captain of a sea vessel to inform the Maritime Port Authority about all detected pollution in the territorial waters of Kazakhstan and about an incident with his vessel that caused the pollution of the territorial waters of the Republic of Kazakhstan or created a threat of such pollution. A message shall be provided in any case when an incident entails a discharge from a ship or a possible discharge of oil, harmful substances and waters containing them for any reason and in any form and packaging.

On July 30, 2019, the order of the Minister of Industry and Infrastructure Development of the Republic of Kazakhstan No. 578 “On approval of the rules for the prevention of pollution from ships” was adopted. The rules determine the procedure for conducting ship operations that entail the risk of sea pollution (for example, ship bunkering or washing a tanker with crude oil), as well as requirements for ship equipment and systems designed to prevent sea pollution by oil, hazardous chemicals transported in bulk and in packaging, waste water and debris.

The List of dangerous goods intended for transportation by ships has been supplemented. Dangerous goods specified in the List are transported in accordance with the requirements of the

International Code for the Carriage of Dangerous Goods by Sea and the Rules for the Carriage of Goods by Sea Transport of the Republic of Kazakhstan to prevent their pollution of the marine environment.

Reception of waste from ships is currently carried out in the port of Aktau. In accordance with the order of the MIIR RK of January 30, 2015 No. 77 "On approval of the list of mandatory services of the seaport", the port provides services for the acceptance from the vessel without any restrictions of all types of existing pollution (except ballast water) while staying in the port. For the collection of ship-generated waste in the port of Aktau, 2 specialized vessels are used, which cover 100% of the need for vessels entering the port for the delivery of liquid and solid waste. These vessels are the property of JSC "NC" Aktau International Sea Trade Port ". Information on the categories of waste accepted in the port of Aktau, the volumes and availability of the receiving port facilities, the time of preliminary notification of delivery from

LLP "NMSK" Kazmortransflot "provides timely updates and changes to work instructions, methods and other regulatory documents within the system of industrial environmental control in accordance with the requirements of national legislation. In order to assess compliance with international and legislative requirements of the Republic of Kazakhstan, periodic inspections are carried out on ships. Employees of NMSK Kazmortransflot LLP undergo advanced training courses in this area as needed.

Reception of waste from ships is currently carried out in the port of Aktau. In accordance with the order of the MIIR RK dated January 30, 2015 No. 77 "On approval of the list of mandatory services of the seaport", the port provides services for the acceptance from the vessel without any restrictions of all types of existing pollution (except ballast water) while staying in the port. For the collection of ship-generated waste in the port of Aktau, 2 specialized vessels are used, which cover 100% of the need for vessels entering the port for the delivery of liquid and solid waste. These vessels are the property of JSC "NC" Aktau International Sea Trade Port ". Information on the categories of waste received at the port of Aktau, the volume and availability of port reception facilities, the time of preliminary notification of the delivery of waste by the ship is posted in the Global Integrated Shipping Information System of the International Maritime Organization. There are no treatment facilities on the territory of the Aktau port, in this regard, all waste is transferred to the city treatment facilities or specialized organizations for disposal.

The waste management procedure in the port of Aktau is regulated by the Draft Waste Management Standards, agreed with the regional department of ecology

Order of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated 02.09.2021 No. 353 approved the Rules for determining, agreeing and deciding

on the choice of optimal methods for responding to oil spills at sea, inland water bodies and in the safety zone of the Republic of Kazakhstan based on an analysis of the total environmental benefit. The rules regulate the procedure for applying oil spill response methods based on the analysis of the total environmental benefits at sea, inland water bodies and the safety zone of the Republic of Kazakhstan.

For the purposes of Article 398 of the Environmental Code of the Republic of Kazakhstan, by order of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated June 10, 2021 No. 191, the Rules for the inclusion of dispersants and harders in the list of dispersants and harders for the elimination of emergency oil spills at sea and inland water bodies and in the safety zone were adopted Republic of Kazakhstan.

When conducting prospecting and exploration work for oil and gas in the Kazakh sector of the Caspian Sea (KSCS), at each stage of oil operations, subsidiaries and affiliates of JSC NC KazMunayGas conduct background environmental studies, environmental impact assessments and subsequent monitoring. Offshore oil operations are carried out based on the principles of compliance with the environmental legislation of the Republic of Kazakhstan. For example, NMSK Kazmortransflot LLP applies the principle of “preventing any discharge, spill of oil and oil products into the environment, regardless of the reasons and sources”. In order to ensure the fulfillment of this task, NMSK Kazmortransflot LLP has introduced a system of industrial environmental control, which is part of the integrated control of NMSK Kazmortransflot LLP for the safety of navigation and fleet operation. A Garbage Management Plan has been developed for each ship, which provides for written procedures for the collection, storage, handling and disposal of garbage, including the use of equipment available on the ship; A Shipboard Oil Pollution Emergency Plan (SOPEP) with recommendations for actions to be taken in the event of a pollution incident or the likelihood of such an incident. Each vessel is supplied with a logbook of operations with garbage, operations with sewage ", oil operations part I and part II", which record each operation for the collection and removal of garbage, sewage and are stored on board the vessel for two years after the last records.

In accordance with the requirements of the MARPOL 73/78 convention, all vessels of NMSK Kazmortransflot LLP are equipped with the necessary systems and devices to prevent sea pollution: collection tanks and drain connections for pumping oily mixtures and bilge water ashore, waste water, containers for garbage collection and operational waste. All generated garbage and operational waste, sewage and bilge water are transferred to onshore facilities for treatment, processing and disposal, burial. The hulls of the ships are covered with modern certified anti-fouling materials. LLP "NMSK" Kazmortransflot "provides timely updates and changes to work

instructions, methods and other regulatory documents within the system of industrial environmental control in accordance with the requirements of national legislation. In order to assess compliance with international and legislative requirements of the Republic of Kazakhstan, periodic inspections are carried out on ships. Employees of NMSK Kazmortransflot LLP undergo advanced training courses in this area as needed.

Prevention, reduction and control of pollution caused by land reclamation and associated coastal dredging and construction of dams

Due to natural conditions, irrigated agriculture is practically absent in the Caspian regions of Kazakhstan. Accordingly, the threat of land pollution caused by land reclamation is not an urgent problem for this region.

Prevention of the introduction of invasive alien species, prohibiting those that may have harmful impacts

Kazakhstan is a Party to the UN Convention on Biological Diversity. Article 8 of the Convention requires member states to prevent the introduction, control or eliminate those alien species that threaten ecosystems, habitats or species. The national legislation of Kazakhstan also contains norms related to the conservation of biological diversity, including the regulation of the introduction of alien species. In particular, these are the Laws of Kazakhstan "On the protection, reproduction and use of the animal world", "On specially protected areas" and others.

According to clause 1 of Article 20 of the Law of the Republic of Kazakhstan "On the Protection, Reproduction and Use of the Wildlife", the introduction and hybridization of animals, with the exception of rare and endangered animals, their import into the Republic of Kazakhstan and export from the Republic of Kazakhstan is allowed only with the permission of the authorized body in accordance with biological substantiation and a positive conclusion of the state ecological expertise ". In paragraph 2 of the same article, it is said the same applies to the introduction, reintroduction and hybridization of rare and endangered animal species. The Law of the Republic of Kazakhstan "On Specially Protected Areas" also provides for a ban on the introduction of new species of plants and animals on the territory of a state natural reserve, where a reserved regime of protection is established.

According to Art. 267 of the Environmental Code of the Republic of Kazakhstan, it is prohibited to use equipment and apparatus, as well as vessels that previously worked in other water basins, without an environmental survey and state sanitary and epidemiological expertise in order to avoid accidental introduction of flora and fauna into the Caspian Sea.

Invasive species enter the Caspian Sea mainly through ballast water. In recent decades, the penetration of the ctenophore Mnemiopsis from the Black Sea into the Caspian Sea, which entailed a significant decrease in the food supply of sturgeon fish species, caused particular concern. Studies of this problem have been carried out mainly in Russia and Iran. In Kazakhstan, special studies on this problem have not been carried out.

By the Law of the Republic of Kazakhstan No. 70-VII ZRK of October 23, 2021, the Protocol on Biological Diversity to the Tehran Convention was ratified, which provides for measures to regulate the introduction of alien species and study the state of all alien species introduced into the Caspian Sea, as well as to implement the regional Action Plan on invasive species.

The measures provided for in the Protocol will strengthen the cooperation of the five Caspian states in preserving the ecosystem of the Caspian Sea, and will also allow regulating their joint activities to prevent the negative impact of invasive species.

A regional action plan on alien species is expected to be developed and implemented after the entry into force of the Protocol on the Conservation of Biological Diversity to the Tehran Convention.

Environmental Emergencies

Protection of human beings and the marine environment against consequences of natural or man-made emergencies

In accordance with the current legislation of the Republic of Kazakhstan, the state civil protection system consists of territorial and sectoral subsystems. Territorial subsystems are created at the regional, city and district levels for the prevention and elimination of emergencies and their consequences, for the implementation of civil defense measures within their territories and consist of links corresponding to the administrative-territorial division of these territories. Sectoral subsystems are created by central executive bodies to organize work on the implementation of civil protection measures within their competence.

The management of the state civil protection system is carried out: at the republican level - by the Government of the Republic of Kazakhstan, at the territorial level - by the akims of the corresponding administrative-territorial units, at the facility level - by the heads of organizations, in the sectoral subsystems - by the heads of central executive bodies.

The Ministry of Emergency Situations of the Republic of Kazakhstan is the central executive body in charge of the prevention and elimination of natural and man-made emergencies, civil defense, ensuring the functioning and further development of the state civil protection system.

The ministry coordinates the work of central and local executive bodies, develops programs, approves or coordinates regulations, standards, rules, maintains state records in the field of emergency situations. He directs the participation of the civil defense forces in measures to prevent and eliminate emergencies, mobilizes material and technical resources for the prevention and elimination of emergencies.

The basis of legal regulation of actions in emergency situations, including at water bodies, in Kazakhstan is formed by a number of legislative acts, the leading place among which is the Law of the Republic of Kazakhstan “On Civil Protection”. The law regulates public relations arising in the process of carrying out civil protection measures, and is aimed at preventing and eliminating natural and man-made emergencies and their consequences, and also defines the main tasks, organizational principles for the construction and functioning of civil defense in Kazakhstan.

Protection of the population, economic facilities and the territory of the country from the impact of damaging (destructive) factors of emergencies is also carried out on the basis of the Environmental Code of the Republic of Kazakhstan, the Law of the Republic of Kazakhstan "On Subsoil and Subsoil Use", the Law of the Republic of Kazakhstan "On Merchant Shipping" and other acts.

The procedure for organizing a civil protection warning system in emergency situations in Kazakhstan is carried out in accordance with the Rules for organizing a civil protection warning system and warning the population, state bodies in emergency situations in peacetime and wartime, approved by Order of the Minister of Internal Affairs of the Republic of Kazakhstan of December 26, 2014 No. 945. Information about the threat or occurrence of natural and man-made emergencies is generated by the monitoring, situation control and forecasting services and is transmitted to the Crisis Management Center of the Ministry of Emergency Situations of the Republic of Kazakhstan (CMC). The receipt of such information by the CMC is the basis for organizing the notification of the population and state bodies.

The population is alerted to the degree of risk, necessary safety, consequences, measures to prevent and eliminate oil spills through the mass media.

Preventive and preparedness measures as well as response to incidents caused by hazardous activities

In accordance with the provisions of the Tehran Convention, the achievement of its goals is expected through the development of a number of interstate protocols prescribing additional measures for the protection of the marine environment of the Caspian Sea. One of these protocols is the Protocol on Regional Preparedness, Response and Cooperation in the Event of Oil Pollution

Incidents (Aktau Protocol). The protocol has been ratified by all five countries and entered into force in 2016. It provides for the joint response of countries to large oil spills exceeding 250 tons in volume, as well as the development of national plans for the prevention and response to oil spills at sea.

In Kazakhstan, such a plan was developed and approved in 2015, which was updated in 2018 and approved by a joint order of the Ministry of Energy of the Republic of Kazakhstan. The National Plan for the Prevention and Response to Oil Spills in the Sea and Inland Waters of the Republic of Kazakhstan provides for the creation and maintenance in readiness of systems for the detection (monitoring) of oil spills, communication and warning, forecasting and hazard assessment of possible emergencies in the Caspian Sea. It is applied throughout Kazakhstan, including the Caspian Sea.

Oil spill prevention and response is carried out: within the framework of the National Plan, it is carried out in accordance with the republican level of management; within the framework of the Regional Plan, it is carried out in accordance with the territorial level of management; within the framework of oil spill prevention and response plans, subsoil users and individuals and legal entities carrying out offshore activities associated with the risk of oil spills are carried out in accordance with the facility management level.

The list of measures to prevent oil spills includes prompt collection, processing and analysis of information on potential sources of oil spills, forecasting the possible occurrence of an oil spill and their consequences based on operational factual and monitoring information, development and assessment of the effectiveness of implementation of measures for prevention, response and response. oil spill and its consequences, creation of own formations (services) for oil spill response of the first and second levels, certification of these formations, equipping them with special technical means or conclusion of contracts with professional emergency rescue teams (services) performing work on oil spill response etc.

Subsoil users operating in the Caspian Sea pay a lot of attention to issues of preparedness for oil spills at sea. For example, NCOC ensures that we are always ready to respond quickly and efficiently by identifying spill risks at all stages of a project from design to construction and operation, and applying safety standards to mitigate these risks. The company applies innovative technologies such as remote sensing from the air using portable GSP-GIS devices and other remote sensing methods to monitor, map and detect oil spills, as well as determine the thickness of oil slick in open water and in ice conditions. Computer models of oil spill trajectories help responders obtain information about the possible spread of an oil spill, depending on weather and sea conditions. In

line with the Comprehensive Oil Spill Response Plan, NCOC conducts regular training sessions, including joint drills with responsible government agencies.

NCOC has a dedicated oil spill response team staffed with 100 fully trained and full-time response and maintenance personnel, as well as crews of a dozen shallow draft vessels and several oil recovery barges, tens of kilometers of oil containment booms, absorbent materials, floating and collection tanks, containers, and other equipment.

In 2019, at the Bautino Base and in Atyrau, training courses were held for NCOC employees in accordance with international IMO level-2 and level-3 standards. The training was conducted by Oil Spill Response Limited (OSRL), which provides additional support in the event of a Level-3 oil spill.

As part of the Integrated Environmental Benefit Analysis project (IEBA) in Kazakhstan, NCOC jointly with the Regional Oil Spill Preparedness Initiative and Shell, under the auspices of the Ministry of Ecology, Geology and Natural Resources and the Ministry of Energy of the Republic of Kazakhstan, organized a workshop entitled “Practical Application and making decisions on the choice of oil spill response methods based on a comprehensive environmental benefit analysis (IEBA). The aim of the workshop was to inform about the results of testing oil recovery chemicals, discuss data on oil recovery chemicals and dispersants, communicate the importance of IEBA and evaluate spill mitigation measures for a quick response.

As part of continuous improvement of the quality of process management, in 2019 the company updated and supplemented its response plan for detecting oil-contaminated animals. The updated plan is integrated into the current oil spill response scheme. The plan includes measures to be taken when animals contaminated with oil are found, including from finding and capturing animals to releasing them into a habitat free from oil pollution. At the moment, equipment is being purchased to equip field camps for stabilizing animals and a rehabilitation center at NCERB (Dam). The plan is considering the possibility of stabilizing animals at sea (on sea barges with shallow draft) and creating an animal rehabilitation center at the Bautino Base. In view of the large volume of work on rescuing animals, it is planned to attract and train volunteers from among local residents, for whom special courses on safety and rescue of animals will be held.

NCOC has established the North Caspian Environmental Oil Spill Response Base (NCERB), located in the Ural River Delta, 3.6 km south of the village of Damba. The base is an object of service infrastructure to support oil operations in the northern part of the Caspian Sea, as well as a unique specialized facility for responding to emergency oil spills. The main goal of NCERB is emergency response to oil spills during the industrial development and operation of the

Kashagan field and other oil and gas fields in the northern part of the Kazakh sector of the Caspian Sea. Since 2015, the base has been operated by KMG Systems & Services LLP.

By the Decree of the Akimat of Mangistau Region No. 144 of June 6, 2021, the Regional Plan for the Prevention and Response of Oil Spills in the Sea and Inland Waters in the Mangystau Region for 2021-2025 was approved.

During the reporting period, an incident was recorded at the Kalamkas field. According to the information of the Ministry of Energy of the Republic of Kazakhstan, on March 13, 2019, during the construction of a well at the Kalamkas field of Mangistaumunaigas JSC, during the well flushing and repair and isolation measures, on March 25, a gas-water mixture was ignited. To take the necessary measures to localize the source of fire, an interdepartmental operational headquarters was created from among representatives of the departments for emergency situations, ecology, police, central government agencies, KMG, Mangistaumunaigas JSC, SiBu LLP and the Akimat of Mangistau region. More than 80 specialists and 25 units of various equipment were involved in the liquidation. In the course of extinguishing, work was carried out to localize the fire with portable fire monitors. 03/28/2019 at 01.05 a griffin fire center near well No. 8237 was localized. There are no casualties or injuries. During the inspection of JSC "Mangistaumunaigas" on the fact of an accident at the field, the mobile laboratory of the Department of Ecology in the Mangistau region and the regional branch of the RSE "Kazhydromet" made measurements, took samples of atmospheric air, soil and associated water around the well of the Kalamkas field on the border of the sanitary protection zone and in the Caspian Sea. Based on the results of laboratory analysis of atmospheric air at the site of the accident in the area of well No. 8237, concentrations were established for the following substances: carbon monoxide - 5 MPC, soot-5 MPC, methane-50 MPC, which is due to the release of gas as a result of the accident and its ignition. Also, measurements were carried out at the border of the sanitary protection zone of the field, high concentrations and excess of pollutants in the atmospheric air were not established. There is no discharge of oil onto the terrain, the distance to the protective dam of the Caspian Sea from well No. 8237 is 4.5 km, the ingress of associated water into the sea is excluded.

According to the results of monitoring the quality of the sea waters of the Caspian Sea in March 2019, no excess of the MPC was found in the area of the Buzachi peninsula. The analysis of seawater samples was carried out for 29 indicators, including main ions, biogenic, organic matter and heavy metals.

In relation to JSC Mangistaumunaigas, its contractor LLP Engineering Drilling Company SiBu, measures were taken in accordance with the current legislation.

Protection, preservation and rational use of biological resources of the Caspian Sea

The Caspian region is rich in biological resources and is the world's largest sturgeon spawning ground. The biological diversity of the Caspian Sea is characterized by high endemism. According to LLP "Scientific and Production Center of Fisheries" in the Ural-Caspian basin, there are such commercial fish species as sturgeon (beluga, stellate sturgeon, Russian sturgeon, thorn, sterlet), large parts (carp, pike perch, asp, catfish, pike, silver carp, mullet, kutum), herring (Caspian belly, big-eyed belly, round-headed belly), small pieces (roach, bream, crucian carp, perch, tench, rudd, silver bream, blue bream, sabrefish, white-eyed fish).

Currently, there is a steady decline in the aquatic biological resources of the Caspian, which is associated with the influence of natural factors and negative anthropogenic impact. The situation is aggravated by large-scale poaching, spontaneous penetration of alien organisms, depletion of the food base and reduction of habitats.

In Kazakhstan, more attention is paid to the problem of preserving the biological resources of the Caspian Sea and a set of measures is being taken to restore fish stocks in the Ural-Caspian basin. On water bodies and areas of international, republican and local significance, research work is carried out on an annual basis within the framework of the budget program. The leading role in their implementation is played by the Research and Production Center for Fisheries LLP (the former Kazakh Research Institute of Fisheries). The center carries out constant monitoring of the state of ecosystems of water bodies in Kazakhstan and their biological resources, development of biological foundations for the rational use and reproduction of fish stocks in the country. The results of the Center's research are used in the work of the Commission on Aquatic Bioresources of the Caspian Sea in the interstate distribution of the total allowable catches of sturgeon and other commercial fish.

In 2020, the Research and Production Center for Fisheries carried out research work in order to implement state accounting and monitoring of fish resources. Based on the results of scientific research, a conclusion was issued on the state of fish resources and other aquatic animals, reflecting their ability to natural reproduction, substantiation of the maximum permissible harvest volume and a forecast of its impact on the state of fish resources, scientific recommendations on the age group of juveniles (larvae, underyearlings, two-year-olds) and the volume of stocking with each fish species, according to the optimal regime, as well as restrictions and prohibitions on fishing.

LLP "Kazekoproekt" in 2020 carried out comprehensive marine research to assess the state of biological resources of the Kazakh part of the Caspian Sea. Based on the results of scientific research, biological justifications were issued with recommendations for the maximum permissible volume of withdrawal of fish resources, the regime and regulation of fishing, in terms of volume,

species, age composition of stocking, optimization of the fishing regime, including recommendations on restrictions and prohibitions. On the basis of these biological substantiations and a positive conclusion of the state ecological expertise, the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan approved the limits for catching fish and other aquatic animals in fishery reservoirs for the corresponding period.

In 2020, more than 2 billion tenge was invested in the development of fisheries by fisheries entities, of which 109 million tenge was spent on scientific work.

In order to preserve sturgeon fish species, the following measures have been taken: firstly, since 2010, there has been a ban on commercial fishing of sturgeon fish species; secondly, in June 2016, a ban was introduced on their fishing for scientific purposes; thirdly, if earlier it was possible to transport sturgeons under the pretext of surrendering them to the state, then in June 2017 a law was adopted that prohibits the transportation of sturgeons, they must be released into the natural environment. Thus, today it is impossible to catch and transport sturgeon under one pretext or another.

At the same time, artificial rearing of sturgeon in cages on the Ural River and at three modern industrial fish-breeding enterprises in the cities of Atyrau, Aktau and Uralsk is developing in the region with a total design capacity of about 420 tons per year. Fish farming is supported by the allocation of investment subsidies within the framework of the approved Program for the Development of the Agro-Industrial Complex until 2021. The progressive development of fish farming is predicted on the basis of state support for entrepreneurial initiatives in the following areas:

- reimbursement of part of the expenses of entrepreneurs with investment investments in two groups - the purchase of machinery and equipment for cooperatives that combine lake-commercial fish farms and cages with 50% cost recovery and the purchase of machinery and equipment for fish farms with closed water supply installations, cages and for lacustrine commercial fish farms with 30% cost recovery;

- Reimbursement of 30% of the cost of feed costs for growing sturgeon, salmon and carp fish species.

The complex of the above measures will reduce the fishing load on the fish resources of natural reservoirs, including the population of sturgeon fish species.

In 2020, state fish breeding enterprises raised and released into fishery reservoirs 69.5 million juveniles of valuable fish species (juveniles of sturgeons, whitefish and carp larvae, underyearlings and two-year-old carp and herbivorous fish species (grass carp, silver carp). In

2020, within the framework of the Development Plans, users released 125.8 million juveniles of valuable fish species into the designated reservoirs.

On the basis of the state order and contracts with fishery organizations, the Ural-Atyrau sturgeon plant produces 4.9 million sturgeon fry, and the Atyrau sturgeon plant has not released 3.7 million sturgeon fry into the Ural River. Caspian Royal Fish LLP released over 1 million sturgeon fry into the Ural River. The construction of a plant for the production of commercial fish farms with a design cost of 850 million tenge, with a capacity of 13 million sturgeon fry and 80 tons of commercial fish per year has begun at the A-Dana farm in the Makhambet region.

In order to create conditions for the natural reproduction of valuable fish species, from 2018 to 2020, projects for the reproduction and improvement of the hydrological regime of the Zhaiyk and Kigash rivers have been implemented within the Atyrau region. The goal of the projects is to ensure the smooth migration of fish during the spawning period through dredging.

Dredging works with a total length of 25.5 km were carried out on the Zhaiyk River, a new canal with a length of 16.9 km was created. The implementation period is 2018-2020. The work has been completed in full. Dredging works with a total length of 150.7 km were carried out on the Kigash River. The implementation period is 2018-2021. To date, dredging works have been carried out over a length of 133.7 km. As a result of dredging operations on the Zhaiyk and Kigash rivers, in recent years, the fish catch within the Atyrau region has increased to 14 thousand tons. This testifies the effectiveness of the work.

Strengthening the fight against poaching is a key task in solving the problem of preserving sturgeon stocks. In this regard, in order to provide the material and technical base of the Ural-Caspian Interregional Basin Fisheries Inspection in the period 2019-2020, at the expense of the regional budget, 10 units of the Corvette 600 speedboat, 1 new self-propelled barge (Brandwach), 3 units of the NIVA car were purchased , 6 units of a UAZ vehicle, as well as 10 units of a Mercury outboard engine for a small ship with a capacity of 200 horsepower.

Subsoil users operating in the Caspian Sea also take part in solving the problem of preserving and restoring biological resources. Subsidiaries and affiliates of JSC NC KazMunayGas, carrying out exploratory drilling in the Caspian, carry out compensatory measures for the protection of fish resources and compensation for damage caused to and caused to fish resources and calculated on the basis of the appropriate methodology (in accordance with Article 17 of the Law of the Republic of Kazakhstan dated July 9 2004 № 593-II "On the protection, reproduction and use of the animal world"). For example, LLP "KMG Systems & Services" in order to compensate and compensate for damage to fish resources through the reproduction of juvenile sturgeon fish and release into the Ural-Caspian basin on July 17, 2019, released 100,000 fry of sturgeon breeds, in

accordance with an agreement with the State Enterprise Ural-Atyrau sturgeon fish breeding plant "No. 7-2019 dated 17.02.2019

LLP "TenizService" entered into an agreement No. 50-m dated May 31, 2019 with LLP "Scientific and Production Center of Fisheries" for the development of scientific recommendations on the feasibility and determination of the scope of work within the amount of compensation for damage to fish resources, calculated in accordance with the EIA to the project “Route of transportation of goods for facilities in the north-eastern part of the Caspian Sea. The North Caspian Sea Canal with berthing facilities. Adjustment "in Zhylyoi district of Atyrau region", including stocking.

Tengizchevroil LLP continues a project to collect abandoned orphan fishing nets and marine debris in the northeastern part of the Caspian Sea, as well as a project to support a sturgeon fish hatchery.

In order to maintain and restore the number of valuable commercial species, in particular sturgeon, Zhambyl Petroleum LLP is taking measures to organize compensation for the inevitable damage caused to fish resources by purchasing from fish factories and releasing young sturgeon breeds into the Ural River in an amount that is agreed with authorized body.

NCOC has funded a number of activities to maintain and restore the abundance of valuable commercial species, in particular sturgeon. Thus, financial support was provided for research work, the equipment of a molecular genetic laboratory was carried out to carry out species genetic identification of sturgeon fish in the Ural-Caspian basin.

Kazakhstan is making great efforts to restore the biological resources of the Caspian Sea. At the Fourth Summit of the Heads of the Caspian States in 2014 in Astrakhan, an Agreement was signed on the conservation and rational use of aquatic biological resources of the Caspian Sea by all the Caspian states, which entered into force on May 24, 2016. The agreement is aimed at the conservation and rational use of aquatic biological resources of the Caspian Sea, including the definition of a mechanism for introducing a moratorium on the commercial catch of sturgeon fish species in the Caspian Sea. Within the framework of the Agreement, a Commission for the Conservation and Rational Use of Aquatic Biological Resources was established. One of the results of the Commission's work is the introduction of a ban from 2017 on the commercial catch of sturgeon fish species.

On October 23, 2021, Kazakhstan ratified the Protocol on the Conservation of Biological Diversity to the Tehran Convention. The measures provided for in the Protocol will strengthen the cooperation of the five Caspian states to preserve the ecosystem of the Caspian Sea, as well as

allow regulating their joint activities to prevent negative impact on protected species of animals and their habitats. This will allow the designation of protected areas in the marine environment and in coastal areas in order to protect the habitats of endangered species. The Caspian countries will be able to jointly take environmental measures to prevent pollution of the marine environment, as well as regulate activities related to construction or exploration work in the Caspian Sea.

Protect, preserve and restore endemic, rare and endangered biological species of the Caspian Sea

The legal basis for the protection, reproduction and use of the animal world is the Law of the Republic of Kazakhstan of July 9, 2004 "On the protection, reproduction and use of the animal world", which is aimed at ensuring conditions for the conservation of the animal world and its biological diversity, sustainable use of wildlife objects.

In accordance with the Resolution of the Government of the Republic of Kazakhstan of October 31, 2006 No. 1034 "On approval of the Lists of rare and endangered species of plants and animals", 18 species of aquatic animals are included in the list of rare and endangered species of animals, including 17 species fish. By order of the Minister of Agriculture of the Republic of Kazakhstan of February 16, 2015 No. 18-03 / 106, a list of valuable species of animals that are objects of fishing was approved. This list includes fifty-two aquatic animals, of which 50 are fish.

In Kazakhstan, including in the Caspian region, much attention is paid to the problems of biodiversity conservation through the creation of specially protected natural areas (SPNA). It should be noted that in accordance with article 257 of the Environmental Code of Kazakhstan, the following regime of use is established within the state protected zone in the northern part of the Caspian Sea:

1) to ensure the normal spawning course of fish and the downstream migration of juveniles in the sea, it is prohibited from April 1 to July 15 to carry out construction and geophysical work, test wells and navigation in the estuarine areas of the Ural and Volga rivers within a radius of 50 kilometers from the point most advanced to the sea the Kazakhstani part of the Volga river delta and the point of the Ural river delta that is most advanced towards the sea, as well as in a strip 15 kilometers wide from the coastline as of January 1, 1994, between the boundaries of the above deltaic spaces and further east to the Emba River. At the same time, navigation of vessels engaged in fishing and transporting fish, displaying, replacing, removing and checking aids to navigation, research work and control and inspection activities in agreement with the authorized state body in the field of protection, reproduction and use of the animal world is allowed;

2) during the period specified in subparagraph 1) of this paragraph, the oil production process must be transferred to autonomous provision of equipment, chemical reagents, fuels and lubricants and other materials, food. All measures should be taken to ensure the accumulation and storage of waste from the oil production process for their subsequent removal after the end of the prohibition period;

3) in order to preserve birds in nesting places (reed thickets, sandy coastal spits and islands), it is prohibited during the period specified in subparagraph 1) of this paragraph to carry out construction work, as well as test wells;

4) carrying out work in terms different from those specified in subparagraph 1) of this paragraph, within the reed thickets (natural biological filter) at the land-sea border, is regulated by decisions of authorized state bodies in the field of environmental protection and specially protected natural areas, taking into account the season of the year ;

5) in order to preserve the population of the Caspian seal, oil operations from October to May should be carried out at a distance of no closer than 1852 meters (1 nautical mile) from the places of their concentration. Taking into account the change of rookeries, all possible measures should be taken to identify the places of concentration of seals;

6) in order to avoid negative impacts on birds and Caspian seals, it is prohibited to fly over their established habitats and breeding areas at an altitude below 1 kilometer, except for cases of research and rescue operations with prior notification of authorized state bodies in the field of environmental protection and specially protected natural areas.

Today, on the territory of the Atyrau region, there are 3 specially protected natural areas of republican significance: the state protection zone of the northern part of the Caspian Sea, with a total area of 700 thousand hectares, the Novinsky state natural (zoological) reserve, located in the coastal zone of the Caspian Sea on the territory of the Kurmangazin region , with a total area of 45 thousand hectares., Akzhaik State Natural Reserve, located on the territory of Atyrau and Makhambet region, with a total area of 111.5 thousand square meters. m.ha. In addition, at present, it is planned to create specially protected natural areas of local importance and reserves, i.e. specially protected natural areas on the Zheltau site of the Zhylyoi district of the Atyrau region (357.0 hectares by 2021), on the Balbulak site of the Kyzylkoginsky district (112.038 thousand ha by 2025) and on the Teshagyl site (86.42 thousand ha by 2026).

In the Mangistau region there are also specially protected natural areas of local significance - the state natural (zoological) reserve of local significance "Tasorpa", created by the decree of the Akimat of the Mangistau region of July 31, 2012 No. 182 (without the status of a legal entity), the state natural (zoological) reserve of local value "Adamtas", created by the decree of the Akimat of

the Mangistau region of 12.24.2013 No. 359 (without the status of a legal entity), the state natural (complex) nature reserve of local importance "Manashy". Of these, 74758.7 hectares on the territory of the Beineu region, 153 269.5 hectares on the territory of the Mangistau region.

The Caspian seal is the only marine mammal found in the Caspian Sea and therefore plays a unique role in its ecosystem. Due to its habitat throughout the sea, it is an indicator species of the state of the Caspian ecosystem. By feeding on fish, the Caspian seal responds in a timely manner to changes in the marine environment, including the stocks of food organisms. The current state of the Caspian seal population became the basis for its inclusion in the List of rare and endangered species of animals (Decree of the Government of the Republic of Kazakhstan dated November 9, 2020 No. 746).

In 2019, at the initiative of NCOC, the implementation of the Program for Integrated Research of the Caspian Seal was launched with the participation of experts and specialists from Kazakhstan and Russia. The aim of the program is to protect the environment and key habitats of the Caspian seal. The program is designed for 5 years (2019 - 2023) and provides for the study of the following problems: distribution and structure of the range of the Caspian seal, population size; welfare of the Caspian seal population; condition of habitats of the Caspian seal (assessment of the quality of the habitat). The program will make it possible to compare the results of studies of the Caspian seal carried out by scientists from different countries, as well as to determine the main scientific and applied measures for the conservation of the species. Leading research organizations of Kazakhstan and Russia, such as Kazakhstan Agency of Applied Ecology LLP, Kazakhstan Research and Production Center for Fisheries, Research and Production Center for Microbiology and Virology, Institute of Ecology and Evolution named after V.I. A. N. Severtsova of the Russian Academy of Sciences, All-Russian Research Institute of Fisheries and Oceanography.During the implementation of the program, work is planned on aerial survey of the seal population

In, the study of population welfare (assessment of biochemical, physiological, genetic, serological indicators) and migration of seals (tagging with satellite tags). For example, in April 2019, a multispectral aerial survey of seal molting haul-outs was tested on sandbanks in the Kazakh part of the Northern Caspian. The aerial survey is based on the method of multispectral imaging of sea mammals 'haul-outs: synchronous aerial photography in the infrared and visible spectral ranges of the Caspian seal puppies' haul-outs. In November, in the area of the North Caspian Sea Canal (Prorva), 9 individuals of the Caspian seal were caught and marked with satellite transmitters and morphometric studies were carried out. The study of the demographic structure of the Caspian seal population (the ratio of males and females of different ages in it) was carried out in parallel with the

sampling of their genetic material and other samples at the seals' haul-out sites. Selection of biological material was carried out to assess the current state of the Caspian seal population

The first research results showed an unfavorable situation for the Caspian seal at various stages: high mortality at an early age, not reaching sexual maturity, a decrease in individuals over 20-30 years old. Work is to be continued.

Management of the land affected by proximity to the sea

Coastal area management activities are carried out within the framework of programs and development plans for the Mangistau and Atyrau regions.

In the Mangistau region there are 5 specially protected natural areas (SPNA) of republican significance, there are also 7 natural zones of local significance. On the territories of protected areas, measures are being taken to protect and preserve fauna and the natural environment. The territory of the protected natural zones of the Mangistau region is covered with saxaul and new saxaul seedlings are planted every year. Over the past two years, 300 hectares have been included in the forest fund lands. The total area of the forest fund of Beineu and the Samsk state forest land institution, financed from the regional budget, is 254.199 thousand hectares, including 125.411 thousand hectares of forest cover. During the year, 300 hectares of black saxaul seeds were sown on their territories. There are more than 50 species of mammals and 270 species of birds in the region. There were 557 raids in 2019, including 51 joint raids. As a result of enhanced measures to protect wildlife and the natural environment, the population of wild animals is growing. Thus, the number of argali in 2019 was 2,100 units, gazelles - 800 units, and the Ustyurt saiga population - 5900 units.

The development of tourism in the region is one of the priority areas of the economy. As part of the State Program for the Development of the Tourism Industry of the Republic of Kazakhstan for 2019-2025, the Mangistau Region entered the 10 promising tourist zones of the country. The development of a seaside resort, beach tourism in areas from the city of Aktau to the port of Kuryk, located on the coast of the Caspian Sea, are identified as promising areas of tourism. In this regard, the region pays great attention and work is underway to develop the engineering and transport infrastructure of the region.

There are three specially protected natural areas on the territory of the Atyrau region: the state protected area in the Northern part of the Caspian Sea, the Novinsky state nature reserve, and the Akzhaiyk state nature reserve. In 2019, in order to develop ecological tourism on the territory of the Akzhaiyk state natural reserve, 4 ecological routes were developed and a passport was approved. At the end of 2019, 1,500 people visited the specially protected natural zone on the

territory of the reserve for tourist and recreational purposes, with inspection and guide guides - 230 tourists. In 2019, 32 excursions were organized.

The problem of fighting moving sands is relevant for the Caspian region, especially in the Mangistau region. The fresh water level under the sand massifs in recent years has been greatly reduced due to the massive water intake for the city of Zhanaozen and the Kalamkas field, as well as the irrational use of sand massifs. These factors contributed to the degradation of sand massifs. In this regard, work continues in the region to restore the vegetation cover of degraded sand massifs.

The Koshkar-Ata storage of uranium-containing waste from chemical production remains the most serious environmental problem in the Caspian region, which is located at a distance of 7-8 km from the Caspian Sea and 3-4 km from the regional center. Since 1965, the drainless Koshkar-Ata basin has been used as a storage facility for tailings from three plants of the former giant - the Caspian Mining and Metallurgical Plant: a chemical hydrometallurgical plant (KhGMZ), a sulfuric acid plant (SCZ) and a nitrogen fertilizer plant (ATZ) for storage and storage unused solid waste from chemical and mining and metallurgical production. The total volume of accumulated solid waste is 104.8 million tons, 406 of which are 51.8 million tons of radioactive waste. With its area of 77.18 km2, the storage facility has no analogues in the world. The total area of the disposed waste is 66 km2, the area of bare beaches at this time is about 50 km2 and the process of decreasing the level of the water phase continues. The implementation of work on the creation of a green protection zone continues. Design and estimate documentation for the working project “I stage of reclamation of the Koshkar-Ata tailing dump” has been developed. The reclamation of the tailing dump is planned within the framework of the Comprehensive Plan for the Socio-Economic Development of the Mangistau Region for 2021-2025.

In accordance with the Environmental Code of the Republic of Kazakhstan, the Mangistau regional maslikhat approved the Target indicators of the environmental quality of the Mangistau region. On February 8, 2019, a discussion meeting "On the list of the most pressing environmental problems to achieve the target environmental indicators of the Mangistau region" was held, based on the results of which a roadmap for 23 indicators was developed. On December 25, 2019, the Deputy Akim of the Mangistau Region approved a set of measures to achieve the target environmental quality indicators, taking into account the acute environmental problems of the Mangistau Region for 2019-2026.

The target environmental indicators for the Atyrau region were approved by the decision of the regional maslikhat dated April 19, 2019 No. 309-VI. The targets are set for the period from

2019 to 2023. In order to gradually achieve the target indicators, the regional akim approved the Action Plan and identified those responsible for its implementation.

Caspian Sea level fluctuation

The Caspian Sea, as a closed body of water, is characterized by significant fluctuations in sea level. Sea level is subject to long-term, interannual and seasonal fluctuations. Since 2005, there has been a downward trend in the background sea level. Over the period of systematic observations from 1900 to 2020, it varied from minus 25.74 m BS (1900) to minus 29.01 m BS (1977). Since 1978, there has been a modern intensive rise in the level of the Caspian Sea, which lasted for 18 years (1978-1995). By 1995, it had reached minus 26.62 m. Since 2006, the level of the Caspian Sea has a tendency to decrease. In 2020, its mark was –28.24 mBS, and in December 2020, the level reached –28.36 mBS. During this period, the area of the sea's water surface decreased by 23 thousand km2, and half of it falls on the Kazakh part of the Northern Caspian. In Kazakhstan's northeastern sector, the range of level fluctuations in 2020 was within the range from minus 29.28 to minus 27.24 m BS, and the average level was minus 28.13 m BS. In the first half of 2021, it was in the range from minus 29.45 to minus 27.66 m BS, and the average level was minus 28.27 m BS.

In Kazakhstan, studies of fluctuations in the water level of the Caspian are carried out on a systematic basis. To monitor the state of the level surface of the Caspian Sea and predict its fluctuations, the RSE "Kazhydromet" uses an automated method for forecasting sea level and current fields in a given area for every hour with a lead time of up to 120 hours, including overshoot phenomena. To improve the forecasting system, in October 2021, Kazhydromet purchased a version of the MIKE ZERO program. It is currently being adapted to the conditions of the Caspian Sea.

As input data for the study of the Caspian water level fluctuations, information is used from Kazakhstan sea stations and information from the European Center for Medium-Range Weather Forecasts in accordance with a license agreement that is updated every year. To calculate the level surface, a numerical forecast with a grid step of 0.250 from the European Center for Medium-Range Weather Forecasts (USMWP) (Great Britain) is used. Numerical forecasts are sent to Kazhydromet via a dedicated ftp-channel.

The level forecasts are made for eight points in the Kazakh and two points in the Russian part of the sea and, in accordance with agreements, for oil production areas. In the event of a threat of especially dangerous surging situations, storm warnings are issued. If necessary, specialized forecasts of wind currents are also made. A weekly bulletin on the Caspian Sea is published.

In the last decade, the background level of the Caspian Sea has been steadily declining. The current drop in the level of the Caspian Sea leads to a number of negative consequences, and the Kazakhstani part is the most vulnerable. Kazhydromet continues to study the impact of future climate changes on the components of the water balance and the level of the Caspian Sea. Calculations have shown that the level of the Caspian Sea has a steady downward trend. This is especially clear in the second third of the 21st century. According to our calculations, by 2030 the level of the Caspian Sea may reach -29.4 -29.6 m BS.

Environmental requirements for carrying out activities within the zone of influence of surge fluctuations in the level of the Caspian Sea are stipulated in the Environmental Code of the Republic of Kazakhstan. According to article 272, the zone of influence of surge fluctuations in the level of the Caspian Sea does not have clearly fixed boundaries and roughly extends from absolute marks of minus 29 meters within the water area to minus 26 meters on land. Within the zone of influence of surging-surge fluctuations in the level of the Caspian Sea, the following are prohibited:

- design, construction and commissioning of new and reconstructed facilities not provided with structures and devices that prevent pollution and contamination of water bodies and their water protection zones and strips;

- placement and construction outside settlements of warehouses for storing petroleum products, points of technical maintenance of equipment, mechanical workshops, car washes, organization and arrangement of waste disposal sites, as well as the placement of other facilities that negatively affect the quality of water;

- production of construction, dredging and blasting works, mining, laying cables, pipelines and other communications, performing drilling, agricultural and other works without an environmental permit.

Application procedures of environmental impact assessment of any planned activity, that are likely to cause significant adverse effect on the marine environment of the Caspian Sea

The environmental impact assessment (EIA) of a proposed activity in Kazakhstan is mainly regulated by the Environmental Code of the Republic of Kazakhstan. On January 2, 2021, a new Environmental Code of the Republic of Kazakhstan was adopted, which entered into force on July 1, 2021. The adoption of the new code was due to the low efficiency of environmental impact assessment, limited public participation in environmental control, inappropriate procedure for

economic assessment of environmental damage, etc. The new environmental code was developed based on the best international experience of the OECD countries.

According to the new code, the environmental assessment is divided into the following types:

1) strategic environmental assessment;

2) assessment of the impact on the environment;

3) assessment of transboundary impacts;

4) environmental assessment according to a simplified procedure.

The types of activities that have a significant impact on the environment are subject to mandatory EIA. They are listed in Section 1 of Appendix 1 to the Code, which includes the production of oil and natural gas for commercial purposes and relate to enterprises of the first category, including those in the field of exploration and production of hydrocarbons, and processing of hydrocarbons. The activities listed in Section 2 of Annex 1 to the Code may have significant impacts on the environment, depending on the results of screening of the intended activity.

It is prohibited to carry out the planned activities, including the issuance of an environmental permit for the implementation of the planned activities, without preliminary environmental impact assessment, if such an assessment is mandatory for the planned activity.

The intended activity in the Code means the planned activity of individuals and legal entities related to the construction and further operation of production and other facilities, with any other kind of interference in the environment, including through subsoil use operations, as well as the introduction of significant changes in such activities.

Environmental impact assessment includes the following stages:

1) consideration of an application for the planned activity;

2) defining the scope of the environmental impact assessment;

3) preparation of a report on possible impacts;

4) assessing the quality of the report on possible impacts;

5) rendering an opinion on the results of an environmental impact assessment and its accounting;

6) post-project analysis of actual impacts during the implementation of the planned activity, if the need for it is determined in accordance with the Code.

The EIA includes a scoping stage for the EIA to identify the impacts on which the research should be focused. Depending on the nature of the activity, in one case, significant impacts on groundwater are possible, in another - on flora and fauna, in the third - on atmospheric air. The

scope of the environmental impact assessment will take into account current knowledge, best research methods, existing technical capabilities in the relevant economic sector and the availability of environmental data.

After submitting an electronic application, it is posted on the Internet resource, where the interested state bodies and the public have the right to submit their comments and suggestions within thirty working days from the date the initiator submits the application.

After the completion of the preparation of the report on possible impacts, this report will be submitted for public hearings. If, after the public hearings, comments and suggestions remain that have not been removed by their authors, the initiator of the planned activity will have to organize the revision of the report and its submission to repeated public hearings. If the initiator disagrees with the comments and suggestions of interested state bodies and the public, which were not removed by their authors during the repeated public hearings, the corresponding opinion of the initiator is entered into the minutes of the repeated public hearings, after which the disagreements on controversial issues are resolved by the expert commission.

The compiler of the report on possible impacts bears civil liability to the initiator for the quality of the report on possible impacts and other results of the environmental impact assessment obtained by the compiler in accordance with the agreement concluded between them. In addition, the compiler of the report on possible impacts, the initiator are liable, provided for by the laws of the Republic of Kazakhstan, for concealing the information received about the impact on the environment and for submitting inaccurate information when conducting an environmental impact assessment.

A post-project analysis of the actual impacts during the implementation of the planned activities is carried out by the compiler of the report on possible impacts in order to confirm the compliance of the implemented planned activities with the report on possible impacts and the conclusion based on the results of the environmental impact assessment.

Post-project analysis should begin no earlier than twelve months and be completed no later than eighteen months after the start of operation of the relevant facility that has a negative impact on the environment.

Article 272 of the Environmental Code, dedicated to general environmental requirements for economic and other activities in the state protected area in the northern part of the Caspian Sea, establishes that when conducting an EIA for the exploration or production of hydrocarbons at sea in the state protected area in the northern part of the Caspian Sea, an analysis of the current state the previously studied area of the proposed activity should be based on the results of field studies carried out no earlier than four years before the submission of the environmental impact assessment

report. An obligatory element in the EIA is the analysis of alternative options, including the refusal to conduct exploration in especially vulnerable areas of the Caspian Sea and the coastal zone.

In order to implement the norms of the new Environmental Code, by order of the Minister of Environmental Protection of the Republic of Kazakhstan of July 30, 2021 No. 280, a new Instruction on the organization and conduct of environmental assessment was approved, by order of the Minister of Ecology, Geology and Natural Resources of the Republic of Kazakhstan of March 10, 2021 No. 63 - Method of determination standards of emissions into the environment.

On October 4, 2021, Kazakhstan ratified the Protocol on Environmental Impact Assessment in a Transboundary Context to the Tehran Convention. Since 2000, Kazakhstan has been a party to the Convention on Environmental Impact Assessment in a Transboundary Context (Law of the Republic of Kazakhstan of October 21, 2000 No. 86-II)

Monitoring. Assessment of the Caspian marine environment state

The need to monitor the environment of the state protected area in the northern part of the Caspian Sea is legally enshrined in Article 280 of the Environmental Code, according to which state environmental monitoring in the northern part of the Caspian Sea is carried out by the authorized body in the field of environmental protection. The same article stipulates that subsoil users carrying out economic activities in this part of the sea carry out industrial monitoring of the environment.

Industrial monitoring of the environment is carried out by industrial or independent laboratories, accredited in the manner prescribed by the legislation of the Republic of Kazakhstan. In accordance with the current legislation in Kazakhstan, there are a number of organizational structures of various forms of ownership that monitor the pollution of the marine environment in the Kazakh sector of the Caspian Sea. The organizations carrying out state monitoring of the Caspian Sea include analytical laboratories of the Ecology Departments of the Committee for Environmental Regulation and Control of the MEGPR of the Republic of Kazakhstan for the Atyrau and Mangistau regions, whose task is to carry out state control of the state of the marine environment. The same category of organizations includes territorial subdivisions of the authorized state body in the field of protection, reproduction and use of wildlife, as well as authorized state bodies in the field of forestry, specially protected natural areas, natural and man-made emergencies.

The organization that carries out state monitoring of the state of the marine environment of the Caspian Sea for the purpose of assessing and forecasting its state as a whole is the RSE "Kazhydromet". The task of the RSE "Kazhydromet" is to monitor pollution of the marine environment, including background pollution, as well as its assessment and forecast. The scope of

the organization is the entire Kazakhstani part of the Caspian Sea. Within the framework of the budget subprogram 100 "Observation of the state of the environment" RSE "Kazhydromet" in the Kazakh sector of the Caspian Sea conducts environmental monitoring of the state of atmospheric air, the quality of sea water, soil and bottom sediments, radiation background.

During the reporting period, monitoring of the quality of seawater in the Kazakh sector of the Caspian Sea was carried out at 50 coastal points.

In the Atyrau region, samples were taken from May to October at 22 coastal points in the North Caspian: a shipping channel (2), the seaside of the river. Zhaiyk (5), seaside r. Volga (5), stations of the island of Shalygi Bay (5), Zhanbai (5).

The quality of sea waters is determined by 36 indicators: visual observations, transparency, temperature, pH, suspended matter, dissolved oxygen, chlorides, sulfates, hydrocarbonates, calcium ions, magnesium ions, hardness, sodium, potassium, COD, BOD5, saline ammonium, nitrogen nitrate, nitrite nitrogen, phosphates, total iron, volatile phenols, petroleum products, the amount of ions, dry residue, synthetic surfactants, total phosphorus, copper, zinc, lead, chromium (6+), total chromium, pesticides (alpha-HCH, gamma-HCH , 4,4-DDE, 4,4-DDT).

In the Mangistau region, samples were taken from May to October at 28 coastal points in the Middle Caspian: coastal stations in Aktau at 4 control points: Aktau city, recreation area (2 points) and Aktau city, port area (2 points), Fort Shevchenko (1 point), Fetisovo (1 point), Kalamkas (1 point), Karabogaz (1 point), dam area (3 points), Kuryk settlement area (3 points), Adamtas lighthouse area (3 points), Western Buzachi (1 point), Shakpak-Ata (1 point), Kanga (1 point), Kyzylozen (1 point), Saura (1 point), Necropolis Kalyn-Arbat (1 point), Kyzylkum (1 point), North Kenderli (1 point), South Kenderli (1 point), Karazhanbas deposits (1 point), Arman (1 point).

The quality of sea waters is determined by 28 indicators: visual observations, temperature, pH, suspended solids, dissolved oxygen, chlorides, sulfates, hydrocarbons, calcium, magnesium, dry residue, biochemical oxygen demand (BOD5), saline ammonium, nitrite nitrogen, nitrate nitrogen , total phosphorus, total iron, volatile phenols, petroleum products, synthetic surfactants, phosphates, chemical oxygen demand (COD), sodium, potassium, the amount of ions, copper, zinc, lead.

Monitoring of the quality of bottom sediments was carried out at 50 coastal stations in the Middle and North Caspian Sea. Sampling was carried out 2 times a year in spring and autumn to determine the content of oil products, copper, chromium, cadmium, nickel, manganese, lead, zinc.

In addition, monitoring of the state of surface water quality in terms of hydrobiological indicators in the territory of the Atyrau region was carried out in the North Caspian Sea at 22 points. Samples are taken 5 times a year from May to September.

Water quality is determined by the state of periphyton and zoobenthos; biotesting (determination of acute water toxicity) is also carried out.

The laboratories of the RSE "Kazhydromet" are accredited for compliance with the international standard GOST ISO/IEC 17025-2019 "General requirements for the competence of testing and calibration laboratories" and are equipped with all the necessary analytical equipment.

Research and Development

- Environmental scientific research in Kazakhstan is carried out in order to scientifically support the protection of the environment, develop scientifically based measures to improve, restore, ensure the sustainable functioning of natural ecosystems, preserve biodiversity and reproduction of natural resources, study the impact of climate change, develop measures to mitigate the impact on climate and adaptation to climate change, improving the health of the population, ensuring environmental safety and social, economic and environmentally balanced development of the Republic of Kazakhstan.
- In accordance with the Environmental Code of the Republic of Kazakhstan, the tasks of scientific research are the scientific assessment and forecast of the state of the environment, the development of scientifically based environmental standards, national standards in the field of environmental protection, the development of scientific recommendations to ensure state regulation and management in the field of environmental protection, the development and introduction of environmentally efficient resource-saving technologies, as well as development of measures to mitigate climate impacts and adapt to climate change.
- To solve the problems of scientific support in the field of environmental protection, the following types of scientific research can be carried out:
- - development of complex republican, regional, local scientific substantiations of socio-economic sustainable development of territories;
- - study of the resistance of ecosystems to anthropogenic impact and the development of scientific foundations for determining environmental risks;
- - study of the state of biodiversity, development of a methodology for its conservation and protection from negative impacts, methods for assessing the damage caused to biodiversity;

- - assessment of the level of anthropogenic pressures on the environment and the degree of disturbance to ecosystems and landscapes;
- - determination of zonal levels of the threshold of anthropogenic impacts on ecosystems and landscapes;
- - development of scientifically based normative documents in the field of environmental protection;
- - identification of the influence of environmental factors on the health of the population;
- - zoning and ranking of the territory of the republic according to the degree of environmental stress;
- - research related to the development of target indicators of environmental quality;
- - development of materials, scientific support for assessing the state of the environment and predicting its changes under the influence of anthropogenic and natural factors;
- - scientific substantiation of methods for preventing or mitigating the negative consequences of the impact of anthropogenic or natural factors on the environment;
- - systematic study and generalization of the results of environmental monitoring of quantitative and qualitative indicators of the state of ecosystems and objects based on long-term observations and operational control;
- - scientific support for monitoring the state of the environment;
- - development and scientific substantiation of limits (quotas) for emissions into the environment, the use of natural resources;
- - comprehensive studies of climate change, including an assessment of its impact on the economy and natural resources of the Republic of Kazakhstan, mitigation of the impact of climate change and adaptation to climate change;
- - conducting scientific research related to the fulfillment of the obligations of the Republic of Kazakhstan under international treaties in the field of environmental protection and the use of natural resources;
- - international scientific cooperation in the field of environmental protection and the use of natural resources;
- - scientific substantiation of measures to compensate for the loss of biodiversity;
- - studies on the economic valuation of ecosystem services and biodiversity.
- Funding for fundamental and applied scientific environmental research is carried out at the expense of budgetary funds and other sources of funding not prohibited by the legislative acts of the Republic of Kazakhstan.

- In Kazakhstan, a large number of research projects are carried out annually related to the protection of the Caspian Sea and its coast.
- For example, the Akimat of Atyrau region has allocated funds from the regional budget for priority areas of problem projects for conducting research:
- - "Creation of an information and analytical system for assessing the state of the environment in the Caspian Sea" - 85.0 million tenge.
- - "Ecological state of transboundary surface water bodies of the Atyrau region and issues of water use" - 30 million tenge.
- For the design work of the main research work, the following goals were determined:
- - Carrying out fundamental and scientific and applied research aimed at ensuring effective economic activity by achieving a balance of economic, social and environmental aspects of sustainable development of the Atyrau and Mangistau regions, including ensuring the competitiveness of the regions and the safety of the population;

- Study of complex problems of the Caspian Sea, development and implementation of scientific projects and programs to improve the air basin, study of biodiversity conservation and rational use of aquatic and biological resources of the Kazakhstani sector of the Caspian Sea, study of their ecological state using laboratory analytical and monitoring data;

- Study of geopolitical aspects, international relations, issues of legal status in the context of mechanisms for ensuring the security of the Caspian region.

In the region, scientific research is carried out at the expense of enterprises. Thus, NCOC sets itself the task of conducting offshore environmental studies, including the study of marine and terrestrial flora and fauna, as well as a comprehensive study of the Caspian seal population, an assessment of the number of seals within the Kazakh and Russian sectors of the North Caspian. Spring, summer and autumn fish surveys are carried out regularly. Tissue samples of "sedentary" indicator species of fish (gobies) are subjected to selective analysis for the content of hydrocarbons and heavy metals. In addition, bird studies are carried out annually, two annual studies during seasonal migrations (spring and autumn), studies of the distribution of nesting birds in the coastal zone during the breeding season, monitoring of wintering of waterfowl and near-water birds, observations in the area of land and sea production facilities and during the period nesting in the summer.

Public accessibility to information on the environment of Caspian Sea

Ensuring transparency and accountability of the government, achieving a culture of openness is a priority for both internal political reforms and foreign policy activities of Kazakhstan. In this regard, great attention is paid to the issues of public access to information and the exercise of rights to information.

In 2016, a special Law of the Republic of Kazakhstan "On Access to Information" was adopted, which provides citizens with access to information from state bodies and institutions. The Law of the Republic of Kazakhstan of November 2, 2015 "On Public Councils" provides for public control and monitoring of the activities of state bodies, as well as the opportunity to take an active part in lawmaking activities at both the central and local levels.

Kazakhstan attaches great importance to the development and implementation of digital technologies both in the field of public administration and in various sectors of the economy. The state program "Digital Kazakhstan" is aimed at transferring more public services, licensing and notification procedures to the online format, as well as the development of the "Electronic Government" and "Open Government" portals.

The Environmental Code of the Republic of Kazakhstan includes a number of provisions guaranteeing public access to environmental information. According to Article 18 of the Code, the state provides measures for the collection and dissemination of environmental information, including by placing in the public domain the register of emissions and transfer of pollutants of the Republic of Kazakhstan, publishing the National report on the state of the environment and the use of natural resources of the Republic of Kazakhstan, maintaining the state fund of environmental information and providing free access to it, as well as regular dissemination of environmental information in the media, on Internet resources.

State bodies are obliged to provide support to the public in obtaining access to information, including by providing full information on the type and amount of environmental information held by the relevant state bodies, and on the conditions and procedure for providing such information and access to it.

The local executive body of the region, the city of republican significance, the capital annually, by May 1, posts on the official Internet resource information for the previous year on the approved target indicators of environmental quality and the actual results of all relevant indicators, on the implementation of the state environmental policy and action plan for environmental protection environment, costs of the local budget, on the total amount of payments for negative impact on the environment received by the local budget.

The Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan annually publishes on the official Internet resource information for the previous year on the

implementation of the state environmental policy, measures taken to remediate environmental damage, expenditures of the republican budget for environmental protection measures, the results of the state environmental control and the total amount of fines collected to the budget for violation of the requirements of the environmental legislation of the Republic of Kazakhstan.

In order to ensure the implementation of the public's right to access environmental information, the State Fund for Environmental Information is being maintained. Also, the Republican State Enterprise on the right of economic management "Information and Analytical Center for Environmental Protection" of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan provides the state service "Provision of environmental information".

Since 2000, Kazakhstan has been a party to the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention, Law of the Republic of Kazakhstan of October 23, 2000 N 92-II), in pursuance of which 8 Aarhus centers, including Zhaiyk - Caspian Aarhus Center in Atyrau. The center was established on the basis of a Memorandum between, at that time, the Ministry of Environmental Protection of the Republic of Kazakhstan, the Akimat of Atyrau Oblast, the OSCE Center in Astana and the Eco-Forum of NGOs of Kazakhstan. The purpose of the Center is to assist in solving environmental issues in the Zhaiyk-Caspian Basin region.

In addition, in accordance with Article 43 of the Water Code of the Republic of Kazakhstan, the Zhaiyk-Caspian Basin Council was established in 2007, which is a consultative and advisory body in the field of protection and use of water resources. The Basin Council consists of heads of local representative and executive bodies of regions, heads of territorial bodies of state bodies and representatives of water users. The basin council also includes representatives of public associations and their associations. The Council considers topical issues in the field of use and protection of water resources, water supply and sewerage, makes proposals and recommendations for the participants in the basin agreement. Mass media (mass media) of regional and republican levels are invited to meetings of the council.

In order to attract the attention of the public of Kazakhstan to the urgent problems of the environment in the Kazakhstani part of the Caspian Sea, events dedicated to the Day of the Caspian are held on an annual basis. The Tehran Convention entered into force on August 12, 2006. Taking into account the significance of the date of its entry into force, the Parties declared August 12 as Caspian Day, which has been celebrated in all five Caspian countries since 2009.

Celebrating the Day of the Caspian Sea on the shores of the Caspian Sea in Aktau has become a tradition. In 2019, the Akimat of Mangistau region, in cooperation with the Ministry of Ecology, Geology and Natural Resources, the Secretariat of the Tehran Convention, organized

various events, including a round table on the prevention of pollution of the Caspian Sea, an action to clean up the coastal area from household waste, a children's drawing competition, competition among journalists for the best article on the environmental problems of the Caspian Sea and other events.

Similar events were organized in Aktau with public participation in 2020.

Publishing a regular report on the state of the environment

In accordance with the Environmental Code of the Republic of Kazakhstan, the National Report on the State of the Environment and the Use of Natural Resources of the Republic of Kazakhstan is issued on an annual basis. The report is an analytical report on the state of the environment compiled in order to inform the population about the actual environmental situation on the territory of the Republic of Kazakhstan and measures taken to improve it.

In order to disseminate information on the state of the environment and on the use of natural resources in a form understandable by a wide range of people, and to expand public access to such information, an Interactive Report on the State of the Environment and the Use of Natural Resources of the Republic of Kazakhstan is being developed on the basis of the Report.

On December 14, 2020, the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan published the National Report on the State of the Environment and the Use of Natural Resources of the Republic of Kazakhstan for 2019. The National Report reflects information on the state of the environment for 2019, quantitative and qualitative characteristics of the environment and natural resources, information on anthropogenic impact on the environment, including the main socially significant environmental problems, on the ecological situation in the regions, on the implementation of state policy in the field environmental protection and use of natural resources.

The information and information in the report is based on official materials submitted by interested central and local, executive, state bodies and state statistics. The electronic version of the National Report can be found on the Ministry's website at: https://www.gov.kz/memleket/entities/ecogeo/documents/details/101873?lang=ru.

PART 3. GENERAL CONCLUSIONS AND RECOMMENDATIONS

Proposals on the measures to activate further implementation of the Tehran Convention and the protection of the Caspian Sea environment

The increasing exploitation of hydrocarbon deposits, the intensification of the transportation of hydrocarbons and the development of marine infrastructure negatively affect the state of the Caspian Sea and lead to a further decrease in its biological resources. In this regard, it is necessary:

- strengthening the fight against poaching in order to preserve stocks of sturgeon fish;
- increasing the scale of natural and artificial reproduction of sturgeon;
- accelerated formation of production sturgeon herds under controlled conditions;
- development of commercial sturgeon breeding.
- the introduction of bitechnologies for growing viable juvenile sturgeon breeds, corresponding to the current prevailing conditions;
- reconstruction of sturgeon fish hatcheries;
- strengthening the scientific base for the reproduction of sturgeon;
- development of a plan for specially protected areas for Caspian seals and a plan for response in case of mass mortality of seals;
- explore the possibilities of introducing alternative sources of income for fishermen.

Oil spills remain one of the most difficult environmental problems. Solving this problem requires taking comprehensive measures, including:

- creation of a marine rescue team to further stabilize the situation in the Caspian Sea;
- creation of additional bases for the elimination of large-scale accidents;
- carrying out regular monitoring of the situation at hazardous production facilities;
- introduction of an insurance and compensation mechanism for the population and the environment against emergencies from the activities of companies engaged in offshore oil operations.
- provision of training of qualified specialists-rescuers;
- Strengthening the material and technical support of territorial units for emergency situations in terms of equipping with special equipment, equipment, accessories, materials.
- improvement of the practice of technogenic safety control in the Caspian;
- Creation of a private marine rescue team, staffed with highly qualified rescue personnel, which can carry out measures for the search and rescue of people, ships, emergency rescue operations in sea transport, underwater technical (diving) and towing services.

improve state environmental monitoring of the state of the Caspian Sea;

2) determine the ecological capacity of the Caspian Sea and set time limits for all types of oil operations on the shelf of the Caspian Sea;

The current unfavorable situation in the Caspian Sea, associated with intense pollution, accelerates the process of degradation of the sea ecosystem, which requires the adoption of comprehensive measures to improve environmental monitoring, including the following:

1) determination of the background state of the marine environment at checkpoints;

2) analysis of data on controlled indicators with the results of industrial environmental control and development of consolidated analytical reports on the state of the Caspian Sea based on all laboratory studies;

- introduction of automatic measurement and transmission of data on environmental parameters in on-line mode to determine the objectivity of monitoring results at production facilities ";

- development of a methodology for calculating the dispersion of pollutants in the atmosphere for emission sources located in the sea;

- creation of a single center for the assessment and forecast of the ecological state of the marine environment of the Caspian Sea;

- creation of the Public Council for the Protection and Sustainable Development of the Caspian Sea.

PART 4. REVIEW OF DECISIONS OF THE CONFERENCE OF THE PARTIES

The Tehran Convention entered into force on August 12, 2006. In accordance with Article 22 of the Convention, the Conference of the Contracting Parties (hereinafter - the COP) was established, which is the supreme body of the Convention. Sessions of the Conference of the Parties are held in turn in the Caspian countries in the order of the English alphabet. The decisions of the Conference of the Parties are taken unanimously.

As of December 5, 2021, five sessions of the Conference of the Parties to the Tehran Convention and one extraordinary session were held.

The first session of the Conference of the Parties was held from 23 to 25 May 2007 in Baku (Azerbaijan), at which decisions were taken regarding the organizational structure of the Convention, including the following documents.

- The Rules of Procedure were approved with minor reservations regarding the number of Vice-Presidents of the Conference of the Parties and the procedure for submitting proposals to the draft agenda of the Conference of the Parties.

- Financial Rules - a document establishing the amount of annual contributions of each of the Caspian states in the amount of 72,000 US dollars (in the amount of 360,000 US dollars).

- The work program of the convention for the period from June 2007 to May 2008, including the development of an Action Plan for the Convention, the development of national action plans for the Convention, meetings on the preparation of draft protocols to the Convention and other activities.

At the end of the Conference of the Parties, a Ministerial Declaration (Appendix A) and a Decision of the Conference of the Parties were adopted.

During the First Session of the Conference of the Parties, the issue of the location of the permanent Secretariat of the Tehran Convention was not resolved. Azerbaijan and Iran have officially announced their intentions to host the Secretariat of the Convention in their countries. After lengthy discussions, it was decided that the functions of the Secretariat would be performed on an interim basis by the UNEP European Office located in Geneva (Switzerland). It should be especially noted that Kazakhstan officially supported by a letter from the Ministry of Foreign Affairs of the Republic of Kazakhstan the proposal of Azerbaijan to host the Secretariat in Baku.

The session also failed to take a decision on the draft Protocol to the Tehran Convention on the Protection and Use of Fish Resources of the Caspian Sea. It was decided to instruct the Convention Secretariat to prepare a Review on the relationship between fisheries and the protection

of the marine environment of the Caspian Sea in order to resolve the issue of the expediency of developing such a legal document within the framework of the Tehran Convention on its basis.

The second session of the Conference of the Parties was held from 10 to 12 November 2008 in Tehran (Islamic Republic of Iran). The meeting at the level of experts of the Caspian countries took place from 10 to 11 November, and the Ministerial segment - in the morning of 12 November 2008. At the second session, the following decisions and documents were adopted:

- Strategic Action Program for the Convention until 2017 - a document that provides priority areas for action under the Convention;

- The program of work and budget of the Convention for 2009 - 2010, including such activities as support for the development of draft protocols to the Convention, establishment and support of the activities of national officers on the relationship with the Convention, development of a framework for regional monitoring and assessment of the state of the Caspian Sea, etc;

- Changes to the Rules of Procedure of the Convention, providing for the holding of sessions of the Conference of the Parties not annually, but once every two years, as well as the fact that the President of the Conference of the Parties will have only one alternate;

The final document of the Second Session was the Ministerial Statement (Appendix A), according to which the parties decided to support the development of a separate relevant Agreement between the Caspian countries and not to develop a Protocol to the Tehran Convention on the Use and Protection of Fishery Resources of the Caspian Sea. This decision was taken on the basis of the conclusions of the Review on the relationship between fisheries and the protection of the marine environment of the Caspian Sea was decided, prepared by the Secretariat in accordance with the decision of the Conference of the Parties adopted at the first session.

As for the texts of the Protocols to the Tehran Convention, despite the great efforts of the experts, the session failed to finally agree on any of them.

At the Second Session, the Conference of the Parties did not come to a consensus on the location of the permanent Secretariat of the Convention, therefore, it was proposed that the European Office of UNEP continue to act as the interim Secretariat of the Convention.

The third session of the Conference of the Parties was held in Aktau (Kazakhstan) from 10 to 12 August 2011. The expert level meetings of the Caspian countries were held from 10 to 11 August, and the Ministerial segment was from 12 August 2011.

The agenda included a number of issues, among which the most important were issues related to signing the Aktau Protocol to the Tehran Convention, agreeing on a unified reporting format for the Convention, discussing the Strategy for involving civil society in the implementation of the Convention, and approving the Work Program under the Convention for 2011-2012.

The main outcome of the third session was the signing of the Protocol on Regional Preparedness, Response and Cooperation in the Event of Oil Pollution Incidents to the Tehran Convention (Appendix D). The protocol was signed by four Caspian countries, with the exception of Turkmenistan, which signed it later. This is the first legal document prepared and agreed within the framework of the Tehran Convention.

The unified reporting format under the Convention was also agreed as the recommended form for reporting by the Caspian states on the implementation of the Convention and its Protocols after their entry into force, and the Program of Work for 2011-2012 was approved.

In the final document of the session - the Ministerial Statement (Appendix A), the parties stated the need to relocate the Convention Secretariat from Switzerland to the Caspian countries, and also stressed the importance of developing national action plans for the Tehran Convention in the Caspian countries.

In general, the Third Session of the Conference of the Parties in Aktau has become one of the most fruitful meetings.

The fourth session of the Conference of the Parties was held in Moscow (Russia) from 10 to 12 December 2012. The expert level meetings of the Caspian countries were held from 10 to 11 December, and the Ministerial segment was held on 12 December 2012. The main results of the session are as follows:

- signing of the Protocol on the protection of the Caspian Sea from pollution from land sources and as a result of activities carried out on land (Appendix B.);

- Adoption of the Program for monitoring the environment of the Caspian Sea, developed within the framework of the TACIS project and the decision to develop a legal framework in the form of a Monitoring Protocol to the Tehran Convention;

- approval of the Program of Work and Budget of the Convention for 2013-2014;

- the adoption of the Ministerial Declaration (Appendix A), which contained a number of other provisions that should be considered. First of all, this is the point concerning the redeployment of the Secretariat from Switzerland to the Caspian region. Although the Ministerial Declaration has not yet decided on the location of the Convention Secretariat, it emphasizes that the Secretariat should be based in the Caspian littoral countries on a rotating basis. Information on the creation of a virtual Caspian Environmental Information Center is also welcomed in the Statement.

The fifth session of the Conference of the Parties was held in Ashgabat (Turkmenistan) from 28 to 30 May 2014. The expert level meetings of the Caspian countries took place from 28 to 29 May, and the Ministerial segment on 30 May 2014.

The agenda included a number of issues, among which the most important were issues related to the signing of the Protocol on the conservation of biological diversity of the Caspian Sea and the decision on the location and organizational structure of the Convention Secretariat. The peculiarity of this session is that its decisions are presented in two forms - in the form of a Ministerial Declaration and a Separate Decision on the location and organizational structure of the Secretariat.

At the session, the Protocol on the Conservation of the Biological Diversity of the Caspian Sea was signed (Appendix D). The document was signed by two countries - Iran and Turkmenistan. The rest of the countries continue to carry out domestic procedures for joining it.

The Ministerial Statement adopted at the end of the session provides for decisions on the formation of a working group on monitoring and information exchange, holding an event in Kazakhstan to implement the Aktau Protocol, and extending the Convention's Program of Work until 2015 (Appendix A).

On the issue of the location of the Secretariat of the Convention, a separate decision was made, according to which the Secretariat will be located in the Caspian countries on a rotational basis in accordance with the order of the English alphabet with a period of 4 years. However, the management of the Secretariat remains with UNEP. The decision also provides for the creation of a Trust Fund by agreement between the countries and UNEP and the secondment of their representatives by countries to the Secretariat. In accordance with this decision, the move of the Secretariat of the Tehran Convention from Switzerland to Azerbaijan was planned at the beginning of 2015.

An extraordinary session of the Conference of the Parties was held on 20 July 2018 in Moscow, Russian Federation. The session was convened for the purpose of signing the Protocol on Environmental Impact Assessment in a Transboundary Context to the Tehran Convention. The main result of the session was the signing of the Protocol and the adoption of the Ministerial Declaration, noting the importance of continuing work on the implementation of the Tehran Convention (Appendix A).

The sixth session of the Conference of the Parties was planned to be held from 6 to 8 November 2019 in Baku (Azerbaijan). The agenda included issues of administrative management of the Secretariat of the Convention, including consideration of the Agreement on the Secretariat of the Tehran Convention, the creation of a Working Group on monitoring, adoption of the Report on the state of the Caspian Sea, etc. In view of the inconsistency of the listed issues, the letter of the Ministry of Ecology, Geology and Natural Resources of the Republic of Kazakhstan dated October 9, 2019 No. 15-06 / 809 proposed to postpone the Sixth Session to a later date.

However, in preparation for the sixth session of the Conference of the Parties, seven meetings of the Preparatory Committee were held.

The first preparatory meeting took place from 24 to 27 November 2014 in Baku, Azerbaijan. It considered issues related to the redeployment of the Convention Secretariat from Geneva to Baku, finalizing the draft EIA Protocol, the content of national reports on the state of the environment of the Caspian Sea and planning activities under the Convention for 2014/2015.

The second preparatory meeting took place from 31 May to 3 June 2015. It was also held in Baku, Azerbaijan. At the meeting, the experts discussed the terms of reference of the Working Group of Experts on Monitoring and Assessment, the draft Protocol on Information Exchange, Monitoring and Assessment of the Environment.

The third preparatory meeting was held from 10 to 11 November 2015 in Baku, Azerbaijan. The meeting reviewed the terms of reference of the national liaison officer, the status of ratification of the protocols to the Convention, and the Convention's Program of Work for 2016-2017.

The fourth preparatory meeting was held from 7 to 10 November 2016 in Geneva, Switzerland. It was devoted to the discussion of the Host Agreement and proposals for the first session of the Conference of the Parties to the Protocol on Regional Preparedness, Response and Cooperation in the Event of Oil Pollution Incidents.

The fifth preparatory meeting was held from 13 to 14 November 2017 in Geneva, Switzerland. The meeting focused on the issues of the Statement and Ministerial Decisions at the Sixth Session of the Conference of the Parties, as well as the activities of the Working Group on Monitoring and Evaluation.

The sixth preparatory meeting was held from 24 to 28 September 2018 in Baku, Azerbaijan. At the meeting, the plenipotentiary experts discussed the administration of the Convention Secretariat, the draft Regional Cooperation Plan to Combat Oil Pollution in the Caspian Sea in Emergencies, and the draft Second Report on the State of the Environment of the Caspian Sea.

The seventh preparatory meeting was held from 16 to 20 September 2019 in Baku, Azerbaijan. It was devoted to agreeing on the text of the Protocol on Information Exchange, Environmental Monitoring and Assessment and discussing a Memorandum of Understanding (MoU) regarding the administration of the Convention Secretariat and other issues.

In preparation for the Sixth Session of the Conference of the Parties, on June 9, 2020, an unofficial Meeting of the Ministers of Environmental Protection of the Caspian States was held, organized at the initiative of the Ministry of Ecology and Natural Resources of the Republic of

Azerbaijan. During the meeting, the delegations exchanged information on measures taken in their countries to protect the environment of the Caspian Sea, discussed issues of moving the Secretariat to the region. The heads of delegations expressed their determination to resolve the remaining problems and to agree on mechanisms for its deployment as soon as possible. All Parties expressed their readiness to meet for the 6th session of the Conference of the Parties to the Tehran Convention (COP-6) by the end of 2020.

The Conference of the Parties is the body providing overall guidance to the implementation of the Convention. Since its inception, only five sessions have taken place. Since 2014, the Conference of the Parties has not been convened, with the exception of an extraordinary session to sign the Protocol on Environmental Impact Assessment in 2018. This is primarily due to the inconsistency of the positions of the parties on the issue of the administration of the Convention Secretariat. The lack of an agreed decision on this issue significantly influenced the activities of the Convention and led to a decrease in the effectiveness of its implementation, slowing down the process of developing new protocols on various aspects of the Convention.

In the event that the Sixth Session of the Conference of the Parties to the Convention takes place and the parties succeed in adopting the agreement

If the Sixth Session of the Conference of the Parties to the Convention takes place and the parties manage to take an agreed decision on the management of the Secretariat of the Convention, then the activities of the Convention will intensify and work on the protocols will be intensified.

REFERENCES

1. On the ratification of the Framework Convention for the Protection of the Marine Environment of the Caspian Sea: Law of the Republic of Kazakhstan of December 13, 2005 No. 97 // Information and legal system of regulatory legal acts of the Republic of Kazakhstan "adilet.zan.kz"

2. Environmental Code of the Republic of Kazakhstan of January 2, 2021 No. 400 - VI ZRK // Information and legal system of regulatory legal acts of the Republic of Kazakhstan "adilet.zan.kz"

3. On subsoil and subsoil use: Code of the Republic of Kazakhstan of December 27, 2017 No. 125-VI ZRK // Information and legal system of regulatory legal acts of the Republic of Kazakhstan "adilet.zan.kz"

4. On the protection, reproduction and use of wildlife: the Law of the Republic of Kazakhstan updated of November 27, 2019 No. 593-II // Information and legal system of regulatory legal acts of the Republic of Kazakhstan "adilet.zan.kz"

5. On civil protection: Law of the Republic of Kazakhstan of April 11, 2014 No. 188-V // Information and legal system of regulatory legal acts of the Republic of Kazakhstan "adilet.zan.kz"

6. On some measures to implement the Framework Convention for the Protection of the Marine Environment of the Caspian Sea: Resolution of the Government of the Republic of Kazakhstan of August 28, 2007 No. 749 // Information and legal system of regulatory legal acts of the Republic of Kazakhstan "adilet.zan.kz"

7. On approval of the National Plan for Preparedness and Action for Responding to Oil Spills at Sea, Inland Waters and in the Safety Zone of the Republic of Kazakhstan: Joint Order of the Minister of Energy of May 15, 2018 No. 182, of the Minister for Investment and Development of May 24, 2018 No. 376 and the Minister of Internal Affairs of May 19, 2018 No. 37// Information and legal system of regulatory legal acts of the Republic of Kazakhstan "adilet.zan.kz"

8. Information on the implementation of the Tehran Convention // letters of state bodies of the Republic of Kazakhstan and oil and gas companies

9. Internet resource: http://www.tehranconvention.org

10. Internet resource: https://ecogosfond.kz