

International legal regulation of environmental safety: In focus – Kazakhstan

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Abstract

Kazakhstan supports the principles of sustainable development, and at the Millennium Summit, like all UN member states, reaffirmed its commitment to achieving the Millennium Development Goals, which predetermines the need to review the environmental policy. One of the priorities should be to ensure the sustainable development of the country. Ecological safety, as an integral part of the national security of the country, is a prerequisite for sustainable development and is the basis for the preservation of natural systems and the maintenance of appropriate environmental quality. The article provides an overview of international environmental obligations of Kazakhstan. According to the results of the review of international treaties and some national reports on their execution, as well as taking into account the law enforcement practice and the recent regulatory legal acts, the following trends are obvious, taking into account the international obligations of Kazakhstan: improvement of national environmental legislation, including with a view to transition to a green economy; strengthening of a number of positions of national environmental requirements; strengthening of state environmental control in the field of emissions to the environment.

Key words: environmental regulation, environmental legislation, international obligations, green economy, interstate cooperation mechanism, Kazakhstan

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Introduction

Ecological safety is one of the substantial elements and, at the same time, the object of realization of the ecological function of the state. The most dangerous defects of the organizational and legal provision of environmental security in modern Kazakhstan are: political populism of the state's activities to ensure environmental security, formalism and inadequacy of the facilities used; the weakening of management and control functions of the state in the field of environmental management; lack of a legal theory of ensuring the environmental safety; unsystematic state methods of ensuring the environmental safety; contradictions and fragmentation of the regulatory legal framework; the absence of legally established law enforcement procedures to ensure environmental safety.

Among the ways to improve the legal support of environmental safety, priority is given to: systematization of legislation in the field of ensuring environmental safety; scientific and methodological development of the concept of environmental safety; optimization of the system of state environmental management and environmental protection agencies; development of a system of ecological education and raising the level of environmental legal conscience; state support of public environmental movements in the ensuring environmental safety; strengthening of international cooperation in the field of environmental safety.

In order to improve the legislation in the country, a course was set for rapprochement with the legislation of developed OECD countries and the implementation of international standards. The Republic of Kazakhstan has signed 19 international conventions and developed national action plans for their implementation. A system of environmental assessment, licensing and control and inspection work is adjusted.

As a result of the above tasks, the rate of environmental pollution has been significantly reduced compared to the beginning of the 1990s, when Kazakhstan became an independent state, by strengthening state control in the field of environmental protection and introducing compulsory environmental impact assessment. However, the status of a state with an environmentally sensitive area and unresolved environmental problems still remains.

It should be borne in mind that in Kazakhstan society there is a steady request for solving environmental problems, this trend has traditionally been sharply raised by representatives of non-governmental organizations, public activists, and popular Internet bloggers. The universal driving force of the demand for improving of environmental security is: population and

education level, as well as an increase in the size of GDP per capita (Wen et al., 2017).

Kazakhstan is a member and active participant in various international commissions and processes aimed at developing and implementing international agreements on environmental protection and sustainable development at the global and regional levels. Among them is the UN Commission on Sustainable Development; Interstate Commission for Sustainable Development in Central Asia; the regional Eurasian network of the World Business Council for Sustainable Development; Interstate Council on Hydrometeorology of the CIS; the «Environment for Europe» and «Environment and Sustainable Development for Asia» processes. Cooperation is developing with the United Nations Development Program, the World Wildlife Fund (WWF) and other international organizations.

One of the global international initiatives of Kazakhstan in the field of environmental protection is the Green Bridge Partnership Program. The program was supported by members of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Economic Commission for Europe (ECE).

Literature review

Deepening international cooperation in the field of protection environment and nature management with the protection of national interests is a priority in the field of environmental safety. The environmental crisis has led to the emergence of international environmental law as a new branch of international public law. This is the most dynamically developing part of international law, which is understood as a set of international legal principles and norms that constitute a special branch of international law and regulate relations between its subjects regarding environmental protection from harmful effects and the rational use of its individual elements in order to ensure the best living conditions. present and future generation of people.

Legal environmental science (Waelde, Kolo, 2001; Wiener, 1998) emphasizes the significant role of international law in creating comprehensive international security, since such security is a certain system of interstate relations that will be observed only if they begin to express the obligatory rules of behavior of states, that is, the principles and norms of international law. Thus, comprehensive international security will be most effective only when agreements are reached on all of its points, and they will be enshrined in the principles and norms of international law. The

principles and norms of international law that are included in the system of comprehensive international security may indicate the limits of conduct of states beyond which the actions of some states may harm the security of others.

Environmental security law can be described as a system of legal norms regulating relations between subjects of international law in the field of environmental security. Does environmental security law have signs inherent in the main division of the international law system – the industry? It appears that no. In the system of international relations, there is a process of separation of relations connected with the solution of the problem of environmental danger, which are based on a specific object – the environmental safety of states. However, these relations are covered by relations, which are based on a more capacious object – international security. Ensuring environmental security is one of the ways to achieve the broader task of ensuring international security, international relations in which are governed by a set of legal norms that form the law of international security. If we consider the law of international security as a branch of public international law (and it meets all the characteristics characteristic of the industry), then the law of environmental security can be attributed to the subsector or institution of international security law.

Ecological safety is an essential part of national security of the state, a significant element of its participation in the system of international security (Glinskiy *et al.*, 2015; Boyko *et al.*, 2016). However, the system concept of state management of environmental safety still does not exist.

In the law-making sphere, the inconsistency of environmental legislation, the inconsistency of the organizational and financial capabilities of state, regional and municipal agencies remain intact, which is noted in special studies (Ebbesson, 2010; Ruhl, 2011; Ebbesson *et al.*, 2013; Garmestani *et al.*, 2013). The steady trend of increasing the number of legal acts in the field of environmental management is accompanied by a no less steady trend of falling public interest in the environmental situation of a particular territorial entity, of the entire state.

Environmental practice and objective indicators of the state of the environment show that administrative methods in the field of environmental safety management are not sufficiently effective, and there are practically no economic market regulators in the legislation.

Formally, Kazakhstan's environmental legislation in a number of areas is especially strict in comparison with the regulations of many developed countries. However, the complex of subordinate legal acts is rather cumbersome and contradictory; the legislation lacks an integrated approach to solving environmental problems, enforcement practice is imperfect; high

level of corruption make it difficult to effectively monitor the proper implementation of legislative measures. The situation is complicated by the fact that at present there is no flexible system of methods for ensuring environmental safety in the country, despite the accumulated experience of scientific research on the definition of methods for measuring environmental safety, its parameters. (Hongwei *et al.*, 2011; Glinskiy *et al.*, 2018; Lyubarsky *et al.*, 2012).

Research has identified organizational and legal measures that can ensure environmental safety: the creation of an effective system of environmental monitoring; strengthening the activities of control and licensing bodies; introduction of economic and legal mechanisms that encourage owners of industrial enterprises modernize technological equipment; legislative prohibition of practice “Temporarily allowed emissions of pollutants” (Vorontsova *et al.*, 2017).

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Methodology

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The materials for the study were the statistical data of international and state organizations, scientific publications, official statements of state leaders, regulations, as well as the authors’ own empirical materials. The conceptual position of the authors is that the problem of environmental safety is complex and includes aspects of various branches of knowledge: technological, legal, philosophical, economic, etc. This requires an interdisciplinary approach to its study, which allows us to consider environmental safety and the environment as a single global system with a lot of relationships.

The main methods based on the interdisciplinary nature of scientific research were applied: – statistical method used to process data on the state of the environment; – a systematic method used as a basis for studying the complex interrelations between industrial activity and environmental background indicators; – the formal legal method used in the analysis of legal acts; – futurological (prognostic) method, which made it possible to

assess the prospects of organizational, legal and technological measures aimed at ensuring environmental safety.

1. National environmental problems

Currently, in areas adjacent to the former Semipalatinsk test site (85 inhabited localities with a population of 81.9 thousand people), there is a high level of cancer morbidity and mortality, diseases of the circulatory system, malformations among newborns and the effects of premature ageing.

A host of legal scholarship addresses various issues stemming from toxic environmental damage created by the former Soviet Union. Legal analysts have paid scant attention, however, to the human dimension that inevitably exists when environmental damage occurs. Kazakhstan is just one of the many states now home to both environmental disaster and personal injury caused by Soviet nuclear testing from 1949 to 1989. A subset of Kazakhstan population has been afflicted with a wide range of diseases and malformation due to nuclear testing and its residue (Kammer, 2004).

A high level of gastrointestinal diseases and anemia, especially among women and children, infant mortality and congenital pathology are observed in the environmental disaster zone of the Aral Sea region (178 settlements with a population of 196.3 thousand people).

Kazakhstan is classified as a country with a large water resource deficit. At present, water bodies are intensively polluted by enterprises of the mining, metallurgical and chemical industries, municipal services of cities and represent a real environmental threat. The most polluted rivers are the Irtysh, Nura, Syrdarya, Ili, Lake Balkhash. Groundwater, which is the main source of drinking water supply to the population, is also subject to pollution. The major water demand sectors are agriculture, industry and the energy sector, with agriculture accounting for almost 70% of total water demand. Future population growth and urbanization together with fast GDP growth is likely to result in increased demand for energy, food and water. This notwithstanding, efficiency in the water sector is very low, with losses accounting for 45% of total water use (Karatajev et al., 2017).

The imbalance between the anthropogenic load on water bodies and their ability to restore led to the fact that environmental distress has become characteristic of almost all large river basins, and insufficient funding for the needs of water management has caused extremely unsatisfactory

(sometimes emergency) technical condition of water facilities and serious exacerbation of drinking water supply problems.

In early 2003, Kazakhstan acceded to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which made it possible to establish new customs regulations on the declaration of hazardous wastes and prevent their subsequent entry into the republic under the guise of secondary raw materials and products.

Kazakhstan has acceded to the Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes, which makes it possible to form common legal approaches to solving problems of rational use and protection of transboundary rivers. However, the rest of the countries of the Central Asian region did not accede to this Convention and therefore did not take measures to ensure the use of transboundary watercourses in a reasonable and equitable way, prevent possible transboundary effects of leaking hazardous substances, and implement the polluter pays principle.

At present, there are four military testing grounds and the Baikonur complex on the territory of the Republic of Kazakhstan. Fallen and falling to the earth fragments of rockets, spills of highly toxic fuel and other factors that have a negative impact on the environment and the population living in close proximity represent a real environmental threat.

Launches of carrier rockets from the Baikonur Cosmodrome are provided by the presence of falling areas of detachable parts with a total area of 12.24 million hectares. Under these conditions, the assessment of the state of the environment occupies an important position in solving the problem of preventing and eliminating anthropogenic impact in places of production, testing, storage and operation of space vehicles, military equipment and military facilities, as well as in the locations of industrial organizations, the deployment of military units and formations carrying out rocket and space activity.

Since there is no alternative in solving a number of tasks for space facilities, reducing the impact of rocket and space activities on the environment and public health, ensuring the environmental safety of rocket and space complexes is becoming increasingly important.

Air pollution. The main air pollution is associated with emissions from non-ferrous metallurgy, heat and power, ferrous metallurgy, oil and gas complex and transport. The reality of threats from air pollution affects the deterioration of public health and environmental degradation.

A real serious threat to the environmental safety of Kazakhstan is nuclear pollution the sources of which are divided into four main groups:

- wastes from non-operating enterprises of the uranium mining and processing industries (uranium mine dumps, self flowing boreholes, tailings, dismantled equipment of technological lines);
- territories contaminated by nuclear weapons tests;
- wastes of oil industry and oil equipment;
- waste resulting from the operation of nuclear reactors and radio nuclear products (expended sources of ionizing radiation).

In Kazakhstan, there are six large uranium-bearing geological provinces, many small deposits and uranium ore occurrences which cause an increased level of natural radioactivity, accumulated in uranium mining enterprises and in places of nuclear explosions. In 30% of the territory of Kazakhstan there is the potential for increased release of natural nuclear gas - radon, which represents a real threat to human health. The use of water contaminated with radionuclides is dangerous for drinking and household needs. At the enterprises of Kazakhstan there are more than 50 thousand expended sources of ionizing radiation, and during the radiation survey more than 700 uncontrolled sources were detected and eliminated, 16 of which are deadly for humans.

To prevent the threat of radioactive contamination of the population and environmental pollution, it is necessary to: complete the inventory of radioactive sources of pollution, adopt a program that includes studying the negative impact of natural radioactivity on public health, and take restrictive measures while choosing sites for construction and using natural constructional materials; monitor the radioactive contamination of natural sources of drinking water; develop measures for timely informing the public about the danger of increased irradiation.

Industrial and household waste. There is no state waste management system in the republic, including monitoring, storage, recycling and disposal of industrial and household waste. More than 20 billion tons of industrial and consumer wastes have been accumulated in Kazakhstan, including 6.7 billion tons of toxic wastes, furthermore they tend to increase. The bulk of consumer solid waste without being separated into components is exported and stored in open dump sites, 97% of which do not meet the requirements of environmental and conservancy legislation of the Republic of Kazakhstan. Their placement and arrangement were carried out without projects and environmental impact assessment. Only about 5% of household solid waste in the country is recycled or incinerated.

2. Directions and mechanisms for legislative support of environmental safety

For legislation to ‘work’ it must not only be well designed but also effectively implemented and enforced. For the regulator, the latter involves two main tasks. First there is the question of where it is best to allocate resources and which sectors and organisations to target for inspection – often viewed in terms of ‘how to get the biggest bang for the regulatory buck’. Second, strategies must be developed as to how inspectors should go about the task of intervening in the affairs of regulated organisations. Should they for example, seek stringent enforcement or negotiate outcomes through advice and persuasion? In short, the two main challenges for regulators are determining where to intervene and how to intervene in the affairs of regulated organisations (Gunningham, 2011). We propose the following strategies applicable to ensuring environmental safety in the national circumstances of Kazakhstan.

Enhancing the system of state control in the field of environmental protection and environmental management. Improving the effectiveness of state control in the field of environmental protection and natural resource management suggests the strengthening of state control bodies by eliminating duplication in the implementation of control and law enforcement functions and the creation of a mechanism to protect the rights of citizens and organizations in the course of such activities. State control bodies in the field of environmental protection and environmental management should have full authority to make independent and objective decisions regarding any issues related to inspections or law enforcement actions.

The development of the state control system in the area of environmental protection and environmental management should be aimed at:

- creating a model that would help government agencies to identify the key characteristics of an effective law enforcement system and promote compliance with the legislation of Kazakhstan and contribute to the institutional reform of state bodies of control in the area of environmental protection and environmental management in the long term;
- facilitating cooperation and information sharing among all the participants involved in ensuring compliance with environmental legislation, including government agencies, industrial enterprises, non-governmental organizations and the general public;

- mandatory implementation of production control as an important tool of the environmental management system;
- a clear definition of responsibility at all levels of activity for the implementation of environmental protection measures;
- provision of legal and social guarantees to the public officials exercising control in the area of environmental protection and natural resource management.

In addition, it is relevant for Kazakhstan to accurately distribute responsibility of public authorities for compliance with environmental legislation. In this direction, we are in solidarity with the authors, who come to conclusion that the establishment of the governmental environmental responsibility for various levels of governments should be divided on the basis of different structures of governmental capacity, whereas the establishment of the governmental environmental responsibility for various levels of authorities should be emphasized to concentration of authorities responsible for environmental administration and expansion of authorities not responsible for environmental administration (Jianwei, 2008).

The successful solution of environmental problems is determined by the presence of a certain potential, primarily in the legislative and institutional spheres. The institutional support of government and civil society must be adapted to the ever-changing political, social, economic and other conditions at the international and national level (Boas, Biermann, Kanie, 2016).

The ongoing reforms and the social-economic situation of the republic have led to the reduction of the political weight of the environmental authority, and in the course of the state budget reduction, the resources allocated to environmental authorities were also reduced. In general, environmental issues were not a priority in development programs. Only with the adoption of new strategic documents for the development of the country at the beginning of this decade by the efforts of the environmental authority, NGO and the international community, environmental safety issues were included in the development priorities of Kazakhstan.

The intersectoral and interdepartmental interaction in the environmental sphere remains a weak link in government. There is a demand for reforming the national system of natural resources management by environmental protection activity in the context of decentralization and democratization of management decision making, imposing primary responsibility for the practical implementation of these decisions on local governments and environmental entities.

Optimization of licensing system for environmental management and environmental impact assessment. In developed countries, the issuance of permits for environmental pollution is carried out comprehensively on the basis of a mandatory environmental impact assessment. One of the legal embodiments of this principle is the procedure for environmental impact assessment, introduced in the environmental legislation of many countries around the world. These countries include the Republic of Kazakhstan.

In Kazakhstan, it is legislated to carry out a public environmental expert review which in the new market conditions should be an effective mechanism to involve the public in the process of regulating environmental management. To do this, it is necessary to make changes and additions to the Law of the Republic of Kazakhstan "On Ecological Expertise", providing conditions and procedure for conducting mandatory public environmental expertise. To this end, it is necessary to more actively involve non-governmental organizations in environmental protection activities, use their scientific and creative potential, the capabilities and resources of non-governmental organizations in carrying out public environmental expertise, including in the development of legislation, the formation of environmental projects, and research and monitoring environmental situation.

Enhancing the environmental monitoring system. At present, the level of the environmental monitoring development in the Republic of Kazakhstan does not meet modern requirements. The state network of observation points makes up only 20% of their optimal number, where the ones equipped with measuring instruments make up from 40 to 80% of the required level. Lack of technical means of observation and measurement leads to a decrease in the volume and reliability of the information received.

The lack of interdepartmental coordination of monitoring systems of various ministries and departments does not allow implement an objective assessment of the state of the environment and to receive timely the latest information. Immediate measures are required to create a unified state system of ecological monitoring of the environment and natural resources based on geographic information systems, including all enterprises and institutions of departmental monitoring, as well as production monitoring systems.

Environmentalization of legislation is taking into account the ecosystem principle in the legal regulation of social relations and is achieved by improving and systematizing the legislation of the Republic of Kazakhstan.

Kazakhstan has developed environmental legislation which includes about 10 laws and more than 200 subordinate regulatory legal documents.

Environmental laws are the tools which help manage the conservation of natural resources across the country.

In the area of improving the environmental legislation of the Republic of Kazakhstan, first of all, took a step for rapprochement with the environmental legislation of developed countries and the introduction of international standards. At the first stage, it is necessary to introduce environmental standards in all other legislative acts, which may affect the state of the environment.

The development and ramification of the legislation of the Republic of Kazakhstan creates certain difficulties in its use. Most environmental laws are interconnected, and changing one requires changing others, which, along with considerable labor costs, often breaks the general system of environmental legislation, giving rise to contradictions between laws and regulations. In addition, the implementation of these laws requires a large number of subordinate regulatory documents. In this regard, further reform of the legislation should be directed not at increasing environmental legislation, but at their systematization and efficiency. This very problem can be solved by codification of the environmental legislation of the Republic of Kazakhstan, i.e. generalization, systematization and specification of standards on conservation of the environment and natural resources.

Extension of international cooperation. As a full member of the UN, Kazakhstan, on the basis of a global partnership, should use international cooperation as the key to the effective implementation of state environmental policy (Kopylov, 2001). The right to development and environmental safety of developing countries: (international legal issues).

The ultimate goal of the efforts of the world community and of each individual state is to protect the human right to a favorable natural environment and ecological safety (Kopylov, 2001). The principles of sustainable development, laid down in 1992 in Rio de Janeiro and reaffirmed at the World Summit in Johannesburg in 2002, should become the basis of the policy of cooperation and partnership in international relations, given that Kazakhstan is increasingly recognized in the world community.

The main directions of this policy:

- practical implementation of the provisions of international agreements;
- development of common approaches, methodologies, criteria and procedures for assessing the quality and control of the state of the environment;
- conducting coordinated basic and applied environmental studies;

- use of international experience in solving problems of environmental safety;
- the intensification of attracting funds from international organizations to solve specific programs and projects in the field of environmental protection and sustainable development of the country.

In order to ensure the wider participation of the republic in the most important international environmental conventions and in environmental protection activities at the international level, all developed programs in the field of environmental protection should establish priorities for international cooperation and plan appropriate measures for their implementation.

3. Participation of Kazakhstan in international treaties

It should be emphasized that Kazakhstan is a party to a significant number of international environmental conventions. In addition, cooperation agreements and other international treaties on environmental issues have been concluded with a number of countries.

In total, over 19 international treaties of Kazakhstan directly or indirectly affect the sphere of environmental protection (including issues of emissions to the environment, protection of the ozone layer from greenhouse gas emissions, prevention of pollution from ships, trade and transportation of hazardous chemicals, industrial safety at hazardous production facilities and prevention of accidents, transboundary effects).

Code dated January 9, 2007 «Environmental Code of the Kazakhstan» (hereinafter referred to as the «Environmental Code» or «EC») establishes the priority of international treaties ratified by the Kazakhstan over the provisions of the Code (clause 2 of Article 2 EC).

The mechanism of interstate cooperation in the field of environmental protection and environmental management is fixed by Art. 192 of the Environmental Code. It provides for the participation of Kazakhstan in accordance with the obligations under international treaties in a number of international and transboundary procedures on the exchange of environmental information; conducting joint environmental monitoring and rationing of environmental impacts; application of measures of responsibility for causing damage to the environment of other states or areas outside of Kazakhstan and on other issues.

4. Classification of international treaties of the Republic of Kazakhstan

According to the criterion of the object of legal regulation, all environmental international treaties of Kazakhstan can be systematized into three groups:

- 1) Environmental international treaties regulating the protection of the environment as a whole. For this group of contracts, the negative impact of economic and other activities affects the state of the entire natural environment without isolating negative consequences for individual natural objects.

To this group we can, for example, include the Convention on Environmental Impact Assessment in a Transboundary Context (Finland, February 25, 1991, Law dated October 21, 2000); The Stockholm Convention on Persistent Organic Pollutants (Stockholm, May 22, 2001; the Convention was ratified by the Law dated June 7, 2007); Energy Charter Treaty (Lisbon, December 17, 1994; Treaty ratified on October 18, 1995); Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel, March 22, 1989; Kazakhstan acceded to the Law dated February 10, 2003).

- 2) Resource-protecting international treaties regulating the protection of certain natural objects (resources), the negative change of which is of international importance.

Among the considered group of contracts, international treaties for the protection of certain types of natural resources can be singled out.

On the protection of atmospheric air, climate and the ozone layer – for example, the Convention on Long-range Transboundary Air Pollution (Geneva, November 13, 1979; Kazakhstan acceded to the Law dated October 23, 2000); Vienna Convention for the Protection of the Ozone Layer (Vienna, March 22, 1985; Kazakhstan acceded to the Law dated October 30, 1997); Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto, December 11, 1997; Protocol ratified by the Law dated March 26, 2009).

On the protection of living resources – for example, the Convention on Biological Diversity (Rio de Janeiro, 5 June 1992; the Convention was approved by the Kazakhstan on 19 August 1994); Framework Convention for the Protection of the Marine Environment of the Caspian Sea (Tehran, November 4, 2003; The Agreement was ratified by the Law dated December 13, 2005).

On the protection of land resources and subsoil – for example, the Mountain Charter of the States members of the Commonwealth of Independent States, Moscow, March 27, 1997.

On the protection of water resources – for example, the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, March 17, 1992; The Convention was ratified by the Law dated October 23, 2000); Tehran Convention on the Caspian Sea.

- 3) Human rights conventions governing the rights of various persons in the field of environmental protection. This group includes the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, June 25, 1998; ratified by the Law on October 23, 2000).

5. Classification of Kazakhstan's obligations under international treaties

According to the analysis of international treaties of Kazakhstan, we identified the following categories of Kazakhstan's main obligations under international treaties:

General obligations to protect the environment or a specific resource. As part of these obligations, Kazakhstan should:

- a) constantly strive to achieve certain goals in the field of ecology, including: prevention of environmental damage – the 1992 Convention on Biological Diversity; prevention of significant adverse effects – the 1991 Convention on Environmental Impact Assessment in a Transboundary Context; minimizing the harmful effects on the environment;
- b) take appropriate measures to achieve the stated goals, including:
 - develop and execute programs and policies;
 - apply the best or more efficient technologies;
 - take measures to prevent environmental disasters and accidents – Agreement on cooperation in the field of ecology and environmental protection;
 - take all necessary measures to prevent, reduce and control pollution of the Caspian Sea.

Specific commitments to eliminate production, exports and imports, to reduce or prevent emissions of certain pollutants.

Such obligations are provided by the 2001 Stockholm Convention on Persistent Organic Pollutants, the Basel Convention on the Control of the Transboundary Movement of Hazardous Wastes and their Disposal of 1989, the Kyoto Protocol to the 1997 United Nations Framework Convention on Climate Change.

Obligations to assess the environmental impact of certain types of activities, to establish a permitting system (for environmental pollution, for export and import of certain polluting substances).

Obligation to collect environmental information and provide public access to it.

Obligations to eliminate environmental damage.

Obligation to cooperate with other countries and exchange information.

6. Reflection of international treaties in national (Kazakhstan) legislation: a general description of the issue

The international obligations accepted by the Kazakhstan have a significant impact on the national environmental legislation, one of the principles of which is the harmonization of the environmental legislation with the principles and norms of international law (subsection 14 of the Art. 5 EK), as well as honest fulfillment of international obligations EC).

Some principles of international law are incorporated in national legislation, such as the principles of preventing damage to the environment of other states, precautions and preventive measures, the peaceful settlement of international disputes, the liability of a polluter for costs, etc. (Article 189 EC) provided for by the Environmental Declaration and Development (Rio de Janeiro 1992).

The Environmental Code was developed taking into account the international obligations of Kazakhstan and provides for a significant number of provisions aimed at the implementation of accepted international obligations, including: environmental regulation (chapter 4); environmental impact assessment (chapter 6); environmental impact assessment (chapter 7); environmental permits (chapter 8); environmental control (Section 4); environmental monitoring and inventories (Section 5), including environmental information (chapter 21); environmental education and awareness, research and international cooperation in the field of environmental protection (Section 7); environmental requirements in the implementation of economic and other activities in the state reserve zone in the northern part of the Caspian Sea (Chapter 38); environmental

requirements for the treatment of production and consumption waste (chapter 42).

7. Examples of measures to implement international obligations

Private examples of specific measures for the implementation of international obligations in the environmental legislation of Kazakhstan, in our opinion, may be the following:

- 1) a ban on the production and use of pesticides (toxic chemicals), which include persistent organic pollutants, as provided for by international treaties of Kazakhstan (clause 4-1 of Art. 239 EC), following the Stockholm Convention on Persistent Organic Pollutants of 2001;
- 2) environmental requirements in the production and use of potentially hazardous chemicals (Art. 280 EC, as amended by the Law of December 03, 2011 to implement the 2001 Stockholm Convention on Persistent Organic Pollutants), the Rules for the Treatment of Persistent Organic Pollutants and Waste containing, approved by the Order of the Minister of Environmental Protection of Kazakhstan dated February 24, 2012 No. 40-p;
- 3) a permitting system for emissions into the environment, which over time tightens the requirements for natural resource users in accordance with accepted international obligations. In particular, the Law of December 3, 2011 introduced the requirement that from January 1, 2013, when issuing permits for disposal of production and consumption waste, indicators of the waste management program are included, reflecting a decrease in the accumulated volumes of waste and reducing their harmful environmental impact over the period permission actions. The terms of environmental management in issuing permits for emissions into the environment in terms of sulfur placement include indicators of the program to reduce the accumulated volumes of sulfur and reduce its harmful effects on the environment during the period of validity of the permit (clause 1-1 of article 70 EC);
- 4) a ban on incineration of waste on drilling platforms (barges), as well as other environmental requirements in the implementation of economic and other activities in the state conservation zone in the northern part of the Caspian Sea (Art. 262 EC), aimed at implementing the Tehran Convention on the Caspian Sea;
- 5) the establishment of three hazard levels of waste, taking into account the Basel Convention on the Control of the Transboundary Movement of

Hazardous Wastes and their Disposal of 1989 (clause 2 of article 287EC);

- 6) the introduction of a procedure for mandatory public hearings on projects whose implementation can directly affect the environment and the health of citizens, including environmental protection action plans developed for objects of categories I and II for obtaining permits for emissions into the environment (Section 3, Article 57 EC);
- 7) the obligation to assess the impact on the environment for any types of business and other activities that may have a direct or indirect impact on the environment and public health (clause 1 of article 36 of the EC);
- 8) the right of free access to publicly available state information resources of environmental information in accordance with the Aarhus Convention (clause 1 of Art. 164 EC);
- 9) a number of regulations on the use of renewable energy sources, potentially aimed at reducing the energy intensity of the economy and the negative impact on the environment of the electricity and heat production sector, which, in general, is consistent with the Energy Charter Protocol on energy efficiency and relevant environmental aspects ;
- 10) the adoption of programs, plans and strategies affecting environmental issues, including the implementation of the international obligations of the Kazakhstan.

Listed as an illustration, only a small part of the provisions of the legislation, reflecting the adoption by the Kazakhstan of specific measures to develop the implementation of international obligations.

Kazakhstan is monitoring the implementation of environmental international treaties, for which there is a separate Department of International Environmental Agreements of the Ministry of Environmental Protection. State cadastres are being kept, as well as reports on the implementation of relevant conventions and national reports on the state of environmental protection.

As we see from the proposed classification of Kazakhstan's obligations under international treaties, Kazakhstan has assumed a number of specific and general obligations in the field of environmental protection, including obligations to protect the environment from harmful effects and reduce pollution.

These obligations are consistent with the Constitution, according to which Kazakhstan aims to protect the environment conducive to human life and health (Article 31).

The Environmental Code establishes that the achievement by the state of a goal to provide a favorable environment for human life and health is one

of the ecological bases for the sustainable development (Subclause 1, Article 4 of the EC).

The legislation of Kazakhstan in the field of environmental protection and its individual objects is extensive and quite detailed. At the same time, law enforcement practice reveals gaps and imperfections in certain issues of legal regulation.

Conclusion

The study shows that environmental safety is a highly significant element of national security. At the same time, it is a relatively autonomous segment of the general state of a country, which can be both effective and ineffective (under certain conditions ineffective) link in social relations. Ecologically safe development of the state is based on the following principles:

- the subordination of regional and local tasks of environmental safety to global and national goals of preventing environmental crisis;
- obligatory compensation for damage to the environment and human health (paid by users of natural resources and polluters);
- compulsory assessment of the impact of economic and other activities on the environment, followed by environmental impact expertise;
- partnership in international cooperation and compliance with international law;
- public awareness and participation in solving environmental problems through their access to environmental information, decision-making and justice in the field of environmental protection, the penetration of environmental approaches and factors into social activities.

Kazakhstan society needs to create an open information space for the realization of the individual's right to reliable information about the state of the environment, ecological situation. The modern civil society exercises the following functions: assistance in the process of state decision making; supporting freedom of speech; strengthening of mass media independence; and ensuring information space openness. In turn, the open state management involves an initiative on the part of state bodies and officials, i.e. their willingness to express their operation by means of legal and efficient measures at different levels of state authority. The further progressive promotion of the process of building a democratic and rule-of-law state, establishing civil society in Kazakhstan involves ensuring the citizens' legal access to information on the operation of state administration bodies (Apakhayev *et al.*, 2017).

The deep potential in the research aspect is that perhaps the most fundamental substantive right required is to a healthy and ecologically sound environment. Such a right exists in various forms in an increasing number of jurisdictions and instruments. It is arguably a precondition for all other rights, including the rights to life, food and water. Although such a right has not yet been formally recognized in international law, it is increasingly urgent that it should be. Scientists often notice, there are signs of a turning juridical tide motivated by a deeper understanding of the implications of the impacts of climate change on human rights. Climate change is emphatically more than a technical or scientific problem. It represents a profound crisis of human hierarchies, fraught with uneven distributions of vulnerability. It is therefore unsurprising that so many recent initiatives point in the direction of seeing human rights as intrinsically threatened by climate change. Indeed, it is vital that respect for human rights should now be understood as an indispensable element of any adequate approach to climate change (Davies *et al.*, 2017).

Among the promising areas of scientific and practical research in the sphere of environmental safety should be the definition of the hierarchical subordination of legal sources of environmental safety. At the same time, it is necessary to develop procedural nuances of challenging unreasonable methods of ensuring environmental safety, methods of suspension and renewal of acts of authorities and local governments in this area, problems of harmonization of environmental legislation in the international legal aspect.

Practical interest is the problem of determining and possibly changing the ratio of state methods of ensuring environmental safety. Attention of the legal community should be paid to positive coercion, which involves determining the future development of society and the state, and helps prevent deviations in achieving the goals set. Positive coercion implies (as an option) an impact in such areas where there is no target orientation of the person's will or it is not formed yet, when there is no motivational subjective setting. This allows you to change the focus of state environmental policy due to the transfer of the regulatory impact center from one segment to another. The state changes the existing trend, selects and sets a new priority course for environmental development. Thus, coercion is no longer a means of overcoming the volitional mood of the subject, but is its corrective factor. In this direction the interest in so-called voluntary approaches to supplement or replace formal environmental or occupational health and safety regulation has taken on new importance in both Europe and the United States. These approaches fall into two sharp divisions: (1) industry-initiated codes of good practice focusing on

environmental management systems or performance goals, and (2) negotiated agreements between government and individual firms or industry sector trade associations focusing on regulation or compliance (Ashford *et al.*, 2001).

The analysis shows that the international obligations of Kazakhstan have a significant impact on the national environmental legislation of the Kazakhstan, including the issues of regulating emissions of pollutants into the environment. We believe that this influence will be further developed.

In this regard, it is relevant to conduct further system studies in this area in order to develop proposals for improving Kazakhstan's environmental legislation and taking into account Kazakhstan's international obligations in law enforcement, including judicial practice.

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