

## Artículo de investigación

## International legal regulation of environmental management

Reglamento jurídico internacional de la gestión ambiental  
Regulamento legal internacional de gestão ambiental

Recibido: 1 de abril de 2019. Aceptado: 30 de abril de 2019

Written by:

Nadezhda M. Mityakina, (Corresponding Author)<sup>155</sup>

Marina A. Sorokoletova<sup>155</sup>

Aleksey S. Fedoryaschenko<sup>155</sup>

Yuliya S. Gusakova<sup>155</sup>

Anastasiya A. Beletskaja<sup>155</sup>

**Abstract**

The article provides an overview of the main international documents regulating environmental management measures. Identified three areas of modern international legal regulation of rational economic environmental management. Especially analyzed the fundamental principle in this area - the use of the best available technology. The conclusion is made about the feasibility of developing a single universal international treaty on the issues under consideration.

**Keywords:** environmental management, economic management, international regulation, best available technology.

**Resumen**

El artículo proporciona una visión general de los principales protocolos internacionales de gestión de la gestión. Identificados tres áreas de la modernización de la legislación internacional de regulación de la racionalización de los sistemas de gestión. En particular, el principio fundamental de este ámbito es el uso de la tecnología más avanzada. La conclusión se ha hecho sobre la viabilidad de la actuación a un único universal internacional tratada sobre los temas en cuestión.

**Palabras claves:** gestión de la gestión, gestión de la economía, internacional regulación, mejor tecnología disponible.

**Resumo**

O artigo fornece uma visão geral dos principais documentos internacionais que regulam as medidas de gestão ambiental. Identificou três áreas de regulação legal internacional moderna de gestão ambiental econômica racional. Especialmente analisado o princípio fundamental nesta área - o uso da melhor tecnologia disponível. A conclusão é feita sobre a viabilidade do desenvolvimento de um tratado universal sobre as questões em consideração.

**Palavras-chave:** gestão ambiental, gestão econômica, regulação internacional, melhor tecnologia disponível.

**Introduction**

Since the beginning of human history, the issue of the environment has been of interest to generations, and man has first discovered its nature and its strategies. Human beings developed the environmental knowledge to regulate the consumption of community

resources, prohibitions and superstitions, and respect for common law and laws for monitoring, and national environmental resources were counted. Rational use of natural sources is one of the main paradigms of the modern view on environmental relations. This installation is in

---

<sup>155</sup> Belgorod State University, 85 Pobedy Street, Belgorod, the Belgorod region, 308015, Russia

demand not only at the national, but also at the international state, the majority of states and the international community share it.

The environmental program for Europe has been proposed in (UNECE, 1995). This demonstrates the importance and practical relevance of research on the issue of rational environmental management in supranational law.

### Methods

This was an analytical-logical research that was used to obtain data from logical cognitive techniques. Data were analyzed by content analysis method and the results were analyzed analytically. First, the goal was identified and based on goals, questions and hypotheses. Then the research unit was selected and the sub categories were defined. After defining a comprehensive theory of variables, the statistical population was identified and the selected samples were analyzed and coded according to the unit of research and analyzed in encoded units.

### Findings

Legal science contains many doctrinal definitions of environmental management (Khodjaev, 2017). Summarizing the given definitions, it can be stated that the absolute majority of scientists agree that rationality in the use of natural resources includes at least two sides: economic (this is the possibility of exploiting nature, its consumption, ensuring sustainable economic growth) and the actual ecological (preservation of natural objects, their reproduction, prevention of environmental damage).

The legal regulation of environmental management is no less important than the economic, political or social basis for the consumption of natural resources. The main challenges and threats to environmental safety are global problems. This is a consequence of the fact that the totality of natural objects is a global system with its own internal relationships and interdependencies. Therefore, the leading role in ensuring environmental management, no doubt, should belong to the international legal regulation of these legal relations (Tambunan, 2019). This is especially true of the industrial and agricultural sectors of consumption of natural resources.

Modern international legal regulation in the field of environmental management is quite extensive, but scattered, and in general consists of three

complementary areas. The first direction is a universal coordinated impact on the activities of economic users of natural resources in order to create an environmentally oriented economic environment. The second is regional cooperation in the framework of ensuring the rational use of natural resources, for example, Europe, Africa, the Caspian region, the Black Sea region, the Arctic, etc. The third direction is interstate relations of specific adjacent (and not necessarily contiguous) states, taking into account the environmental features of the region, the level of economic development of the contracting parties, the specifics of the extraction and exploitation of natural resources.

1. One of the challenges of recent years in the world is the environment. It is not possible to confront such a challenge alone by governments. Extreme costs of environmental projects, the need for advisers, experts and expert advisers, and the necessity to pass international binding rules, are among the key factors that have led governments to act within the framework of international environmental protection organizations. It is very clear that in the first direction of the United Nations Conference, the human environment has been emphasized (1972). One of the most important principles in this document is the following: «The conventional resources which are not green ones of the earth had to be used in a method as to guard against the danger of their next exhaustion and to assure that benefits from such employment are linked by all human kind ones».

The twentieth century witnessed the evolution of international law; in this century, by concluding contracts and conventions, international cooperation was sought in many respects. As the transformations and major changes in the structure of power in the international system, as well as the development of revolutionary movements and movements, led to the emergence of the first and second generations of human rights, the aftermath created the birth of a new generation of human rights. In the name of environmental rights. Human rights advocates recognize the right to an independent human right to a quality environment. Since all aspects of environmental protection have international dimensions, it is desirable to be considered as one of the most important international issues.

2. Regional international documents are also important, and often more significant, for tuning the application of natural resources in a specific geographic region. About forty years ago, natural resource management has largely given way to

environmental management. In this management perspective, continuous and long-term exploitation of natural resources is carried out following environmental assessments, and supervision has replaced non-systematic exploitation. The environmental management approach has created or will provide a more appropriate, flexible, and more sensitive approach to natural resource management. To this end, regional decision making is important in environmental management and regional cooperation.

The Arctic region is a geographic area of eight countries, of which seven have seaside ocean shipping. The main concerns surrounding the Arctic are the following: climate change, thinness of ice sheets and glaciers, increasing human activities in the Arctic and other issues such as ecosystem services. This has led to the emergence of clear rules and regulations on salmon, certain species of beasts and polar bear, which countries are required to implement.

Directives of the European Parliament and the Council of the European Union are of great importance within the EU. EU environmental acts occupy a significant part of all European legislation.

3. The United Nations Convention on the Law of the Sea provides general rules that can govern the northern region, including the rights and responsibilities of coastal states and non-coastal states, as well as their national competencies. Under the convention, coastal states have full autonomy over their territorial sea (12 nautical miles from the coastline) and have less than 200 nautical miles of their coastline (the exclusive economic zone). The convention stipulates that all countries, while respecting coastal rights, have the right to transport freely in an exclusive economic area. Other countries also have the right to pipe and cable at the bottom of the sea. At the same time, under Article 234 of the Convention on the Law of the Sea, the coastal states of the Arctic Ocean have the right, in certain cases, to impose further restrictions on their marine areas, such as the existence of massive ice chips or special weather conditions.

The above-mentioned and other international acts in the field of regulation of environmental management contain basic measures aimed at achieving environmental objectives.

The need for a level approach to legal regulation has already been noted in the scientific literature (Sinenko et al, 2016).

Using the best available technology is one of the fundamental principles in this area. Such a measure to ensure the rational economic use of natural resources is fundamental both in most domestic legislation and in international documents.

In the European Union, the use of the best available technology has been proclaimed as a general principle defining the main environmental obligations of EU member states.

The main document regulating this measure is Directive 2010/75/EU on industrial emissions. This act provides a legal definition of the best available technology and related terms. Thus, the "best accessible technology" is the most efficient and advanced stage in the process of actions and methods for their implementation, which indicates the practical suitability of certain technologies to meet emission thresholds and other conditions of permits aimed at preventing, or if this is not feasible, to reduce emissions and environmental impact in general (Safdari & Asadi, 2013). At the same time the concept of «technology» is deciphered; "Affordable technology"; «The best technology.» The general conclusion is that available technologies are technologies that can be implemented, and the best are the most environmentally-efficient technologies.

The legal definition of this measure to ensure the rational economic exploitation of natural resources is also contained in international instruments. According to this act, "best available technology" means recent advances in the development of processes, installations, or operational methods that have proven practical suitability as a specific measure for limiting discharges, emissions and waste.

The model law on the prevention and integrated control of environmental pollution was adopted within the CIS countries (The model law on the prevention and integrated control of environmental pollution, 2019). In this document, the best available technology is defined as a technological process, a technical method and technique, a method of designing, building, managing, maintaining, operating and decommissioning industrial plants based on modern scientific and technological achievements, having received a positive conclusion from the state environmental impact assessment and State Register of Best Available Technologies. As can be seen, the CIS member states agree that one of the hallmarks of the best available technology is its formal state

recognition as such. However, this law is a model, the contracting parties have not yet led their own legislation in accordance with it.

In the documents of the European Union, this attribute is not included in the actual definition of the best available technology, but is clearly seen in connection with the need to develop reference books of the best techniques. Currently, there are such directories in the EU. They are partially accepted in the CIS countries. For example, in Russia, these directories are accepted in accordance with the Decree of the Government of the Russian Federation.

On this example, it is obvious that the domestic laws of various countries in the area of developing and applying the best available technologies are gradually harmonizing and moving closer to each other and with international acts in general. There are certain differences in the criteria for classifying technology as the best available. Thus, Directive №2010/75 / EC names the following criteria:

- the usage of less-waste technologies; use of the least dangerous technologies;
- the subsequent extraction or recycling of substances produced and employed in the processes, as well as waste, if applicable;
- comparable system, installations or methods of carrying out activities that are successfully applied on an industrial scale;
- technical progress or changes in scientific knowledge and consciousness;
- the nature, impact, and amount of relevant emissions;
- the date of commissioning of new or existing installations;
- the length of time required to use the best technologies; the usage and nature of the raw materials employed in the processes, and energy efficient;
- the need to stop or minimize the overall effect of emissions on the environment and environmental risks;
- the need to avoid accidents and reduce the consequences for the environmental issues;
- information produced by public international organizations.
- The environmental issues regarding lakes and energy consumption and wastes, provides such criteria as:
- comparable processes, installations, or operational methods recently successfully tested;
- the possibility of using such technology from an economic point of view;

- timeframes for installation of equipment in both new and existing enterprises;
- the nature and extent of relevant discharges and effluents;
- low-waste and non-waste technology.

However, the above criteria differences, firstly, are removable, and secondly, for the most part they take into account the specifics of the economic and social situation of the states that host them. Moreover, international documents contain commitments to cooperate and exchange information on the best available technologies.

Of course, international environmental management measures are not limited to introducing the best available technologies. The above-mentioned international and interstate acts regulate, in addition to this, such measures as: payment for a negative impact on the environment; determination of emission limits for emissions of harmful substances, waste disposal; issuing permits for certain environmental impacts; various economic incentives for environmentally oriented economic activities and others.

### Conclusion

The rational use of natural resources by economic entities is a pressing international and domestic problem. Modern international environmental law contains an entire institution that ensures environmental management. However, the norms of this institution are scattered, are contained in various international treaties of different levels, often fragmented. Currently, a single universal international document is fundamentally, but at the same time regulating in detail rational economic use of natural resources, based on the idea of preventing negative environmental impacts, is absent. The development of such a document that would bring together the positions of various states in this field represents a promising area of international environmental cooperation.

### Conflict of Interest

The authors confirm that the information provided in the article does not contain a conflict of interest.

### Reference

Declaration by the Ministers of Environment of the region of the United Nations Economic Commission for Europe (UNECE) 25 October 1995 //

- <https://www.unece.org/fileadmin/DAM/env/efe/history%20of%20efe/Sofia.E.pdf> (accessed 28 February 2019)
- Khodjaev, A. A. (2017). Comparative legal analysis of the legislative foundations of environmental management in the CIS countries. *Journal of foreign legislation and comparative law*, 2, 140-145.
- Tambunan, H. (2019). The Effectiveness of the Problem Solving Strategy and the Scientific Approach to Students' Mathematical Capabilities in High Order Thinking Skills. *International Electronic Journal of Mathematics Education*, 14(2), 293-302.
- Declaration of the United Nations Conference on the Human Environment (1972) // <http://www.un-documents.net/unchedec.htm> (accessed 28 February 2019)
- World Charter For Nature (1982) // <https://medium.com/@timboucher/world-charter-for-nature-1982-93cc3d41ff79> (accessed 28 February 2019)
- The Rio Declaration on Environment and Development // [http://www.unesco.org/education/pdf/RIO\\_E.PDF](http://www.unesco.org/education/pdf/RIO_E.PDF) (accessed 28 February 2019)
- United Nations Framework Convention on Climate Change // <https://unfccc.int/resource/docs/convkp/conveng.pdf> (accessed 28 February 2019)
- Kyoto Protocol to the United Nations Framework Convention on Climate Change // <https://unfccc.int/resource/docs/convkp/kpeng.pdf> (accessed 28 February 2019)
- Vienna Convention for the Protection of the Ozone Layer // [https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg\\_no=XXVII-2&chapter=27&clang=\\_en](https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-2&chapter=27&clang=_en) (accessed 28 February 2019)
- Convention on Biological Diversity (1992) // [https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg\\_no=XXVII-8&chapter=27&clang=\\_en](https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-8&chapter=27&clang=_en) (accessed 28 February 2019)
- The Final Act of the Conference on Security and Cooperation in Europe // <https://www.cvce.eu/en/> (accessed 28 February 2019)
- Nuuk Declaration On Environment And Development In The Arctic // <https://iea.uoregon.edu/treaty-text/1993-nuukdeclarationenvironmentdevelopmentarcticentxt> (accessed 28 February 2019)
- Convention for the Conservation of Salmon in the North Atlantic // <https://www.ecolex.org/details/treaty/convention-for-the-conservation-of-salmon-in-the-north-atlantic-ocean-tre-000732/> (accessed 28 February 2019)
- North-East Atlantic Fisheries Commission // <https://www.neafc.org/>
- Sinenko, V. S., Turanin, V. Yu., Mityakina, N. M., & Kozyar, N. V. (2016). Tiered approach to the legal regulation of international environmental safety. *International Business Management* 10(16), 3338-3340.
- Safdari, M., & Asadi, Z. (2013). Privatization to serve economic development. *UCT Journal of Social Sciences and Humanities Research*, 1(4), 16-21.
- The model law on the prevention and integrated control of environmental pollution // <http://www.cawater-info.net/library/rus/088.pdf> (accessed 28 February 2019)