

## Legal Fixation Of The Use Of The Best Available Techniques In Environmental Management As A Global Trend

*Fixação Jurídica Do Uso Das Melhores Técnicas Disponíveis Na Gestão Ambiental Como Tendência  
Global*

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## Abstract

O article provides a general view of the legal regulation of technical data available in the European Union, the United States, in Russia from the beginning of this day. Various scientific methods are generated and the methods of logical cognition are used without work: analysis and synthesis, systemic, functional and logical-formais approaches. The development of the conclusions was facilitated by the application of two legal-formal and comparative legal methods. The results will show that by using the principles of technical techniques, you have a worldwide trend that covers the legal regulation of environmental management in various countries. O grau de conformance of national legislation with this principle varies in different countries, but generally there is a tendency to converge and universalize approaches to understand the principle and its meaning. This can be seen, in particular, not active process of introduction of the principle in Russian legislation and of other countries of the region.

**Keywords:** best available techniques, BAT reference documents, BAT conclusions, directive 2010/75/EU, principle of pollution prevention.

## Resumen

O artigo fornece uma visão geral da regulamentação legal das melhores técnicas disponíveis na União Europeia, nos Estados Unidos, na Rússia desde o início até os dias atuais. Vários métodos científicos gerais e os métodos de cognição lógica são usados no trabalho: análise e síntese, abordagens sistêmicas, funcionais e lógico-formais. O desenvolvimento das conclusões foi facilitado pela aplicação dos métodos jurídico-formal e jurídico comparativo. Os resultados mostraram que a utilização do princípio das melhores técnicas disponíveis é uma tendência mundial que abrange a regulamentação legal da gestão ambiental em diversos países. O grau de conformidade da legislação nacional com este princípio varia em diferentes países, mas em geral há uma tendência de convergir e universalizar abordagens para a compreensão desse princípio e seu significado. Isso pode ser visto, em particular, no processo ativo de introdução desse princípio na legislação da Rússia e de outros países da região.

**Palabras clave:** melhores técnicas disponíveis, documentos de referência MTD, conclusões MTD, diretiva 2010/75 / UE, princípio da prevenção da poluição.



## Introduction

The analysis of general and sectoral environmental, natural resource and economic strategic documents of various states allows us to identify one universal direction of state policy of various countries in the field of environmental management, which has been repeatedly referred to in domestic legislation and international acts for several decades – the use of the best available techniques (Amy Sinden Cost-Benefit Analysis, Ben Franklin, and the Supreme Court. UC Irvine Law Review. University of California, Irvine School of Law. Retrieved 2016). The main idea of this concept is to provide a comprehensive prevention (An Act to amend the Federal Water Pollution Control Act, 1872 . An Act to improve, strengthen, and accelerate programs for the prevention and abatement of air pollution, 1963) of environmental pollution due to the implementation of various types of economic activities through the use of cost-effective technologies by subjects of such activities that have the lowest level of impact on the environment. Such a measure to ensure the rational economic use of natural resources is the main measure in most domestic legislation and in international documents.

## Methods

Various general scientific methods and the methods of logical cognition are used in the work: analysis and synthesis, systemic, functional and formal-logical approaches. The development of conclusions was facilitated by the application of formal-legal and comparative-legal methods.

## Discussion and Results

The universal trend in legal regulation of environmental management based on the use of the best available techniques was born in 1984. The principle «Best available techniques not entailing excessive costs (BATNEEC)» was first formulated in the Air Framework Directive (AFD). It referred to emissions of pollutants into the air from large industrial companies. However, over the next decade, it did not receive proper development. Interest in it was actualized only in 1996. At this time, the Council Directive 96/61/EC on integrated pollution prevention and control was adopted that provided for setting limits on the negative impact on the environment based on the best available techniques. It is in this Directive that the principle of best available techniques has been universalized and extended to the entire field of environmental management, not just to the area of emissions into the air. In the future, the Directive of 1996 was replaced by the Directive 2008/1/EC of the

European Parliament and of the Council of 15 January 2008 in which the trend of using the principle of the best available techniques as the main principle of environmental management was once again confirmed.

Currently, in the European Union and in the United States, the use of the best available techniques is proclaimed as a general principle that defines the main environmental responsibilities of the EU members and the United States itself, respectively. This principle fits into the general concept of environmental policy of European states and the United States, which includes the general idea that the prevention of harm to the environment should be concentrated in the sources of pollution. Thus, the application of standards for emissions of harmful substances to the atmosphere to control air pollution is preferable compared to standards for air quality (Decision N 1386/2013/EU of the European Parliament and of the Council of 20 November 2013).

The main document regulating this measure is Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)(Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010). The legal definition of the best available techniques and related terms is given in this act. Best available techniques means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing the basis for emission limit values and other permit conditions designed to prevent and, where that is not practicable, to reduce emissions and the impact on the environment. In this case, the terms «techniques»; «available techniques»; «best techniques» are deciphered. The main conclusion is that the available techniques are the ones can be implemented, and the best techniques are the most environmentally efficient technologies (International legal regulation of environmental management // Amazonia-investiga).. Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 «Living well, within the limits of our planet» (Makogon, et al. 2019).also includes rules about the need for continuous development and implementation of the best available techniques. In the United States, the term is used «best available control technology». It is fixed in The Clean Air Act (Makogon, et al 2019).and The Clean Water Act(Makogon, et al. 2017. Meanwhile «best technology available» should be interpreted as best technology available



commercially at an economically practicable cost. (Redkina, et al. 2019).

In international acts, the legal definition of the analyzed measure to ensure the rational economic exploitation of natural resources is contained, in particular, in the Convention on the protection and use of transboundary watercourses and international lakes (The Decree of the RF Government «About procedure of definition of technology as the best available technology, as well as the development, updating and publication of information and technical reference documents on best available techniques», 23.12.2014 N 1458). According to this act, the term «best available technology» is taken to mean the latest stage of development of processes, facilities or methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste.

In the Commonwealth of independent states the Model law on prevention and comprehensive control of environmental pollution has adopted (The model act of the CIS «About the prevention and integrated control of environmental pollution», 25.11.2008). In this act, the best available technique is defined as a technological process, technical method and method of design, construction, management, maintenance, operation and decommissioning of industrial plants based on modern achievements of science and technology, received a positive conclusion of the state environmental examination and entered in the state register of best available techniques. As you can see, the CIS members agree that one of the signs of the best available technique is the formal state recognition of it as such. However, this law is a model law until the contracting parties have brought their own legislation into line with it. In European Union documents this feature is not included in the actual definition of the best available technology, but is clearly seen in connection with the indication of the need to develop reference documents of the best available techniques («BAT reference documents»). Currently, there are such reference documents in the EU. Some of them have also been adopted in the CIS member states. For example, in Russia, these reference documents shall be adopted in accordance with the Decree of the RF Government «About procedure of definition of technology as the best available technology, as well as the development, updating and publication of information and technical reference documents on best available techniques» (The Order of the Ministry of industry and trade of Russia «About approval of guidelines for determining the technology as the best available techniques», 23.08.2019).

In Russia, the foundation for legal regulation of the transition to the use of the best available techniques was laid in 2014. Then, in the Federal law «About

environmental protection» was amended, which consolidated the concept of best available techniques, indicated on its application field, established legislative criteria for the best available techniques, provided the development of information-technical reference documents on best available techniques and their content, has secured stimulus measures for implementation of best available techniques and measures of state support activities for implementation of best available techniques. In this example, it is obvious that the domestic legislation of various states in the field of development and application of the best available techniques is gradually being harmonized and brought closer to each other and to international acts in general. However, there are certain differences in the criteria for classifying the technique as the best available. So, in the Directive N 2010/75/EC there are criteria for determining best available techniques:

1. the use of low-waste technology;
2. the use of less hazardous substances;
3. the furthering of recovery and recycling of substances generated and used in the process and of waste, where appropriate;
4. comparable processes, facilities or methods of operation which have been tried with success on an industrial scale;
5. technological advances and changes in scientific knowledge and understanding;
6. the nature, effects and volume of the emissions concerned;
7. the commissioning dates for new or existing installations;
8. the length of time needed to introduce the best available technique;
9. the consumption and nature of raw materials (including water) used in the process and energy efficiency;
10. the need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it;
11. the need to prevent accidents and to minimise the consequences for the environment;
12. information published by public international organisations.

In the Order of the Ministry of industry and trade of Russia «About approval of guidelines for determining the technology as the best available techniques» (The passport of the national project «Ecology» of Russia, 24.12.2018). criteria named: the lowest level of negative impact on the environment per unit of time or the volume of products (goods) produced, work performed, services rendered, or the level corresponding to other environmental impact indicators provided for by international treaties of the Russian Federation; the economic efficiency of the implementation and operation; use of resource-and energy-saving methods; implementation period; industrial



implementation of technological processes, equipment, technical methods and methods at 2 or more sites in the Russian Federation that have a negative impact on the environment and are related to the field of BAT application.

In the USA Federal Water Pollution Control Act contains the norm: Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the Administrator deems appropriate. However, these differences in criteria, first of all, are disposable, and secondly, for the most part, they take into account the specifics of the economic and social situation of the states that accept them. Moreover, international documents contain obligations for cooperation and exchange of information on the best available techniques.

In Russia there is a Federal project «Implementation of the best available techniques» as part of the national project «Ecology» (Winter 2004). The planned amount of funding for the project to introduce the best available techniques is more than 2 trillion rubles, and this is mainly business money.

The goal of the federal project, which runs until 2024, is to apply an environmental regulation system based on the best available techniques to all facilities that have a significant negative impact on the environment. The project has stages for achieving this goal. A detailed evaluation of the stages of Federal project «Introduction of best available techniques» is evidence that is not only active law-making activities on the adoption of the accompanying draft regulations and the corresponding mortgaged to finance charges, but are organizational, informational and other activities within the approved plan.

The national project «Ecology» and the Federal project «Introduction of the best available techniques» will be implemented until 2024. Nine more major events are planned.

In the United States, there is also a program to provide financial incentives to businesses that implement the best available techniques for wastewater discharge. Such companies are provided with subsidies from 50 to 75 percent of the cost of implementing such techniques.

### Conclusion

The use of the principle of the best available techniques is a global trend that covers the legal

regulation of environmental management in various countries. The level of compliance of domestic legislation with this principle varies in different countries, but in general there is a tendency to converge and universalize approaches to understanding this principle and its meaning. This can be seen, in particular, in the active process of introducing this principle into the legislation of Russia and other countries in the region.

### Conflict of Interest

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

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