UDC 504.06

SOME ISSUES OF ENVIRONMENTAL EFFECTIVENESS AND MONITORING IN THE FIELD OF ATMOSPHERIC PROTECTION IN UKRAINIAN LEGISLATION

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Abstract: The paper deals with the problem of ambiguity in the legislation of Ukraine of the terms «environmental effectiveness», «environmental monitoring», «atmospheric air monitoring», «environmental monitoring during the implementation of the planned activity», «post-project monitoring», «monitoring the effects of the implementation of the state planning document in the environment, numbers for public health», etc.

Keywords: environmental pollution, management decisions, environmental effectiveness, monitoring.

All over the world, and in Ukraine in particular, the problem of environmental pollution is very acute. Thus, in 2017, the World Health Organization recognized that Ukraine has the highest death rate from polluted air in the world, and the report of the European Environment Agency and the EU Health Agency of 16 October 2019 stated that «Air pollution is currently the most important environmental risk to human health».

To remedy this situation, various measures are being taken in the world to reduce environmental pollution, prevent climate change by reducing anthropogenic emissions and increasing greenhouse gas absorption, ensuring a gradual transition to low carbon development. In particular, the UN Framework Convention on Climate Change, the Kyoto Protocol, the Paris Agreement and others were adopted.

Thus, when making management decisions, it is necessary to take into account their environmental impacts, which leads to the need to calculate the environmental effectiveness of management decisions [1].

Determining efficiency is one of the important problems in human and social life. Adequately assessed performance against relevant indicators allows you to develop and make the right decisions about the rationality of their activities. Today, efficiency is determined by comparing the cost-effectiveness ratio to achieve it. But the effect in an open economic system is a relative term since it objectively has some contradictions between its structural elements. When it comes to environmental performance, there are even more questions, the main one of which is to adequately and unequivocally determine the environmental effect.

There are many publications on environmental performance assessment for different types of production, but most information on this subject can be found in ISO 14031:2013 «Environmental management — Environmental performance evaluation — Guidelines», but there is no clear algorithm or mathematical support for it, software based on it is impossible.

The legislation of Ukraine does not define the term *«environmental effectiveness»*. In addition, most authors even differently approach the term «environmental effectiveness». However, there are many publications in which the term

«environmental effectiveness» is not explained at all, but is perceived as something intuitive, which often leads to strange formulations, such as «environmental effectiveness coal boiler».

However, in order to determine environmental effectiveness, it is necessary, first of all, to have the necessary information, including air pollution. However, there is almost no information on specific quantitative indicators of atmospheric air pollution, as the system of environmental monitoring of the surface layer of the atmosphere of Ukraine, which was put in place to ensure environmental safety, create a favorable environment, prevent the harmful effects of polluted air on human health and the environment in Ukraine, unfortunately, is currently poorly performing, has significant problems and disadvantages [2].

To remedy this situation in support of existing regulations (Law of Ukraine (LOU) «On the protection of the atmospheric air» [3], «On the protection of the environment» [4], etc.), a number of new ones have been adopted: the LOU «On Environmental Impact Assessment» Dated May 23, 2017 No. 2059-VIII [5], «On Strategic Environmental Assessment» dated March 20, 2018, No. 2354-VIII [6], CMU Resolution «Some Issues of State Monitoring in the Field of Atmospheric Air Protection» from 08.08.2019, No. 827 [7] and others.

In the above mentioned normative acts the leading place is given to different types of monitoring, in particular, obviously, and in the field of atmospheric air protection: 1) *monitoring of environmental impact during the implementation of the planned activity* (articles 6, 9 and 13 of the LOU [5]); 2) *post-project monitoring* (articles 6, 9 and 13 of the LOU [5]); 3) *monitoring the effects of the implementation of the state planning document on the environment, including the health of the population* (articles 5, 9, 11 and 17 of the LOU [6])

However, the legislation does not actually specify when, by whom and how post-project monitoring should be carried out. There are similar questions regarding the other types of monitoring mentioned above.

And when these issues can still be somehow remedied by adopting other by-laws, there is a more general question: there are 20 definitions of the term *«monitoring»* in

the Legislation Terminology section (dated October 15, 2019), which are often cardinally are different, for example: 1) *monitoring* - a system of observations and control over the state of the object (object, process, phenomenon); 2) *monitoring* - collection of primary information (measurement of the power absorbed in the air dose, determination of the content of radionuclides in environmental objects, food, water, etc.) to further use this information to control radiation and dosimetric control; 3) *monitoring* - systematic activities to analyze the information received during the verification process and the results of the verification.

How, then, to interpret (in the context of, for example, the first definition, where *monitoring* is a *system*) «*post-project monitoring*» and «*impact monitoring ...*» as «*post-project system*» and «*impact system ...*»?

In addition, terminologically defined other types of monitoring also contain significant confusion, such as "State monitoring of atmospheric air (hereinafter referred to as" atmospheric air monitoring) "to ensure the collection, processing, storage and analysis of atmospheric air quality information, evaluation and forecasting its changes and the degree of danger, developing scientifically sound recommendations for management decisions in the field of atmospheric air protection, in the field of environmental protection yshnoho environment and informing the public about air quality, the impact of pollution on the health and livelihoods of the population.

On the basis of data and information obtained as a result of atmospheric air monitoring, the level of atmospheric air pollution in a certain territory for a certain period of time is determined; monitoring and assessment of the impact on air quality of measures aimed at limiting pollutant emissions into the air, assessment of the impact of air pollution on the environment, health and life of the population.

Atmospheric air monitoring is an integral part of the state's environmental monitoring system.

This definition from the CMU Resolution [7] was actually taken from the LOU [3] and is somewhat amended, but it is not a fact as it points to the purpose of its implementation.

More general terms, such as «*environmental monitoring*», are not defined by the legal terminology available, such as «*environmental monitoring*» means the measurement of ambient radiation dose rates or radionuclide concentrations in environmental objects. Thus, it is necessary to amend the LOU [5, 6] and a number of other regulations, and eliminate the existing confusion of terms: «*monitoring*», «*environmental monitoring*», etc., and, if necessary, determine when, by whom and how each of these monitoring types should be conducted.

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