

# Legal Support of Industrial Accident Prevention

Viktoria Strelnyk  
Sumy National Agrarian University<sup>1</sup>, Ukraine  
viktoriastrelnyk@gmail.com

Tetiana Churilova  
Sumy State University<sup>2</sup>, Ukraine  
t.churilova@yur.sumdu.edu.ua  
[churilova1971@gmail.com](mailto:churilova1971@gmail.com)

Natalia Hres  
Sumy National Agrarian University, Ukraine  
E-mail: [gress\\_n@ukr.net](mailto:gress_n@ukr.net)

Tetiana Myronenko  
Sumy National Agrarian University, Ukraine  
tanyanesterova@ukr.net

## Suggested Citation:

Strelnyk, V., Churilova, T., Hres, N., Myronenko, T., 2019. Legal support of industrial accident. *Journal of Advanced Research in Law and Economics*, Volume IX, Issue 7(45), Winter

## Article's History:

Received; Received in revised form; Accepted

Published

Copyright © 2019, by ASERS® Publishing. All rights reserved.

## Abstract:

The article analyzes the need to recognize and enshrine in legislation the general principles of prevention from and control over industrial hazardous events. The finding of the most effective integrated interstate approach to the solution of environmental safety and compliance matters remains an urgent challenge. The global environmental disaster may be avoided only if all members of the global community implement unified approaches and standards, regardless of the level of their economic development. The preservation of the latter takes on particular significance on a global scale and depends on the level and quality of development and implementation of political, economic and organizational mechanisms of the European environmental integration in the country. In general, the authors' team deepens and develops the methodology of the functional approach to the study of legal phenomena.

Practical application of the research results is possible provided to the availability of a mechanism for action coordination, incident response, prompt information exchange in the event of an emergency and state responsibility.

In the study, the authors substantiated the need to develop uniform requirements to the industrial facility inspection system aimed at reducing harm, improving the use of natural resources with the greatest environmental protection at minimum cost is justified.

**Keywords:** ecological safety; ecological management; prevention of industrial accidents; public environmental monitoring.

**JEL Classification:** K32; L59; Q57

## Introduction

The groundwork for the ecological operation of the safety control system should be laid, first and foremost, at the objective level and completed at the national one. The complex of economic mechanisms of regulation should provide an optimal balance of economic costs and the level of technogenic and environmental safety under the limitation of natural resources of the state. The solution of the problems of improving the ecological state of the territories of Ukraine should be commenced, first and foremost, with the implementation of a reliable system of environmental control measures in the regions, where the environmental situation is the most challenging today and which have a significant

---

<sup>1</sup> 160 Gerasim Kondratieva Street, Sumy, 40000

<sup>2</sup> 57 Petropavlivska St, Sumy, Ukraine, 40030

socio-economic importance for Ukraine. The relevance of the study is determined by the need to find an effective integrated interstate approach to solving environmental safety issues. It is possible to avoid a global environmental catastrophe only if all members of the world community implement standardized approaches, regardless of their level of economic development. The natural potential of Ukraine is an integral component of the pan-European ecological system, which preservation is of general importance and depends on the level and quality of elaboration and introduction of political, economic and organizational mechanisms of European environmental integration in the country. This goal requires the development and implementation of a mechanism for coordinating actions, responding to accidents, prompt exchange of information in case of emergency, and state responsibility.

## **1. Research Background**

The problems of sustainable development of socio-ecological systems are deeply related to the safety of the society's functioning, which depends on many factors and requires a systematic evaluation and special approaches to determine all their aspects (Rossinskaya, 2018)

Amid the global environmental crisis, which is one of the most real and perceived threats to the existence of mankind nowadays, the protection and improvement of the quality of the environment are recognized as a planet-scale task of paramount importance and indispensable prerequisite for the preservation of health, well-being and economic prosperity of the present and future generations of people (Tymoshenko, 1986).

Successful fight against the existing negative trends in the field of environmental protection and preventing a global environmental catastrophe is possible only if all members of the world community implement unambiguous approaches and standards regardless of their economic development level. Scientific, technical, informational and technological leap of the humankind over the past half century has changed its capabilities and individual societies, and adjusted ideas about the future (Hetman, 2014).

The awareness of a global nature of environmental issues by the scientific and political elites of leading countries of the world and their associations gives rise to a hand-in-glove work and enhanced cooperation at the international level in order to adjust the existing and develop new approaches to the environmental protection, to create effective mechanisms for the implementation of the latest environmental policies. The above factors contribute to the formation of a new philosophy and practice of the European economic cooperation, based on the need for assistance from stronger participants in the global economy to weak ones in their solving interconnected challenges of economy and environment (Brynychuk, 1996).

Undoubtedly, it is beyond argument that the successful overcoming of negative tendencies in the sphere of environmental protection and, eventually, the avoidance of global environmental catastrophe are contingent upon the implementation of uniform approaches and standards by all members of the world community, regardless of the level of their economic development. The setting of environmental standards is a prerequisite for establishing the basic principles of collective management of the planet's environmental protection, formulating rules and defining powers, permits or prohibitions (Lozo, 2008).

Any activity shall be environmentally sound. Humanity is in an attempt to exercise control over risk and uncertainty. There is a need for a complex, internally organized, functional system of legal rules and regulations on a global scale, capable of ensuring environmental law and order in the life of generations, in cooperation between states and peoples (Kolbasov, 1982).

**2. Methodology.** The authors used the structural and systemic methods, comparative and legal, historical and retrospective, as well as formal and dogmatic methods.

## **3. Case studies**

### **3.1 Cross-border cooperation as one of the means of recovery of environmental processes**

The practices of the EU countries, which have already gained considerable experience in the implementation of the rules of international law at the national level in order to protect the environment, natural objects and to minimize the impact of human economic activities on them, are utterly illustrative. The study of the experience of the EU countries in the creation of common legislation in the field of environmental protection is of particular importance for Ukraine due to its European integration aspirations and intention to overcome the dependence of the national economy condition on the extraction and use of available raw materials (coal, ore, oil and gas), the operation of a significant number of large enterprises – the environment pollutants and energy-intensive industries.

Geographically, Ukraine is part of Europe and, therefore, its natural potential is an integral part of the European ecological system as well. The preservation of the latter takes on particular significance on a global scale and depends on the level and quality of development and implementation of political, economic and organizational mechanisms of the European environmental integration in the country (the National Report on Harmonization of Society's Activities in Natural Environment).

The development of the EU environmental legislation is indicative of European legislators' being gradually aware of the need to make consolidated efforts by all EU members, subject to the involvement of relevant initiatives and neighboring countries. Therefore, the European environmental law in the course of its evolution has become one of the effective instruments of environmental protection. The human and environment protection from industrial accidents requires the enhanced cooperation of states by enhancing the coordination of reciprocal actions at all levels.

Cross-border cooperation as one of the means of recovery of environmental processes, solution of environmental problems and prevention of their occurrence (especially in border areas) requires the application of an integrated approach, taking into consideration the European and global best practices adapted to the regional characteristics of Ukraine. Cross-border cooperation is an integral part of the state policy and European integration of Ukraine. 19 of 25 regions of Ukraine are borderline, and the external border is the longest in Europe amounting to 1,390 km of a land border with the EU countries (Ukraine has a land border with seven states). A significant part of the Ukrainian border areas is part of the European Regions as a promising form of cross-border cooperation. Our state is a party to almost 100 international bilateral and multilateral agreements in the field of rational use of natural resources and environmental protection. To ensure more effective prevention from large-scale emergencies and new types of threats, effective international cooperation in the field of environmental risk control with the use of environmental economics methodologies is a key propriety area.

Only 6% of its territory is considered to be environmentally friendly in Ukraine. The Law of Ukraine "On the Basic Principles (Strategy) of the State Environmental Policy of Ukraine for the Period until 2030" states that the anthropogenic and technogenic load on the environment in Ukraine is several times higher than the corresponding indicators in the developed countries of the world. Threats to the national security of Ukraine in the environmental field include a significant anthropogenic disruption of life-supporting systems and technogenic overloading of the territory of Ukraine, the growth of risks of ecological and technogenic nature, the irrational use of natural resources that leads to the depletion and deterioration of their quality, imperfections in the existing system of environmentally hazardous waste disposal. Environmental safety, as a component of national security, is an indispensable condition for sustainable development and is the basis for the preservation of natural systems and the maintenance of appropriate environmental quality (Koshkinbaeva, 2019).

The ecological state in Ukraine is significantly influenced by its geographical features. The underestimation of the territorial (regional) factor, from our point of view, is the most significant cause of an ecological crisis. A problem of great concern is the uneven territorial concentration of production. For example, the presence of the lower course of the Danube, Dnieper and other rivers on its territory has contributed to the placement of a significant number of powerful, especially environmentally hazardous industrial enterprises of chemical and metallurgical industries with incomplete technological cycle along their courses.

The structure and scale of regional production determine the nature and volume of pollution. There is a direct relationship between the scale and structure of regional production, on the one hand, and environmental pollution, on the other. Some highly urbanized regions (Dniepro, Donetsk, Zaporizhzhia, Kharkiv) are characterized by significant concentration of industrial production, other regions (Vinnytsa, Kirovograd, Cherkasy, Poltava) have high concentration of agricultural production that leads to significant anthropogenic changes in the environment, pollution, destruction, degradation of all components of nature. About 15 % of the territory of Ukraine with a population of more than 10 million people are in a critical environmental condition, which is, de facto, unfavorable for living (Concept of reforming the system of state supervision in environmental protection sector)<sup>3</sup>.

Ukraine belongs to the countries with a high level of negative environmental effects of production activities. This situation is explained by a significant part of potentially hazardous industries in the structure of industrial potential, low level of production modernization, widespread use of obsolete technologies and equipment that raises the risk of man-made disasters. Every year more than 6 million tons of pollutants enter the atmosphere. Approximately 62% of them are accounted for by stationary pollution sources of industrial enterprises.

There was an increase in greenhouse gas emissions in 2018 by 6.5% compared to the previous year, which is explained by an increase in production in the chemical industry by 17.4%, in the cement industry by 7.5% and in the metallurgical industry by 0.6%. The growth in production volumes was accompanied by an increase in the consumption of fuel and raw materials at enterprises. Greenhouse gas emissions in 2018 amounted to 226.3 million tons of CO<sub>2</sub>eq. Their share in total greenhouse gas emissions is 66%. Most greenhouse gas emissions are from fuel combustion in the production of electricity and heat.<sup>4</sup>

The amount of emissions from stationary pollution sources is, on average, 6.8 tons of hazardous substances per one square kilometer of the territory of Ukraine, and 90.1 kg per one person. At present, no risk control mechanisms,

<sup>3</sup> Ministry of energy and environment protection of Ukraine – <https://menr.gov.ua/content/koncepciya-reformuvannya-sistemi-derzhavnogo-naglyadu-kontrolyu-u-sferi-ohoroni-navkolishnogo-seredovishcha-v-ukraini.html>

<sup>4</sup> Ministry of energy and environment protection of Ukraine // <https://menr.gov.ua/news/34928.html>

aimed at reducing risk impact, are practised on a wide scale. Thus, the quantitative risk assessment is used only in certain areas, namely during the analysis of the safety of nuclear power plants, the declaration of the safety of high-risk facilities. At the same time, the imperfection of legal regulation and the organizational and technical control over risks do not create conditions for achieving the levels of risks corresponding to the economically developed countries. The regulation of risk levels will ensure the unity of methodological approaches to the assessment of risks that exist throughout Ukraine, the sources of danger beyond its borders, which may have a transboundary impact. The basis of the state system of management in the field of technogenic and environmental safety and, accordingly, risk control should be economic mechanisms. The groundwork for the ecological operation of the safety control system should be laid, first and foremost, at the objective level and completed at the national one. The complex of economic mechanisms of regulation should provide an optimal balance of economic costs and the level of technogenic and environmental safety under the limitation of natural resources of the state.

The regions, where extractive industry companies are concentrated, are, as a rule, environmental hazardous facilities. Therefore, the lack of the existing system of environmental inspection standards in such regions creates conditions for the pollution of their territories by uncontrolled economic activities, increases the likelihood of environmental emergencies. Managerial decisions in the regions should be adopted not only for the purpose of addressing economic or other problems, but for considering how one or another decision can affect the natural components of a particular territory.

The creation of the conditions required for reduction in the anthropogenic impact on the environment to an environmentally acceptable level, the maintenance of functions of the biosphere sustenance, the protection and renewal of natural resources are the main goal of environmental control. The analysis of statistical data shows that the anthropogenic load of some border regions of Ukraine is much higher compared to other regions that requires countervailing measures. This control is designed to coordinate environment-related activities to ensure that the actions of environmental users meet the requirements of environmental safety at the territorial level. Therefore, the solution of the problems of improving the ecological state of the territories of Ukraine should be commenced, first and foremost, with the implementation of a reliable system of environmental control measures in the regions, where the environmental situation is the most challenging today and which have a significant socio-economic importance for Ukraine.

In order to prevent major industrial accidents, in the early 1980s the EU countries adopted a number of documents, which introduced preventive, preparatory measures to promote the rational, economic and efficient use of natural resources to ensure the environmentally acceptable and sustainable economic development.

The industrial accident that occurred at the chemical manufacturing plant producing trichlorophenol, owned by the Swiss-Italian company JCMESA in Seveso (Italy) in 1976, resulted in the release of dioxin leading to severe poisoning of 2,000 people and environmental damage to the territory of 18 km<sup>2</sup>. After such industrial disaster, the first EU Directive on the prevention of major industrial accidents was adopted and became the foundation of modern environmental legislation in the field of industrial safety ("Seveso-I-Directive"). The Seveso-I-Directive has introduced a list of hazardous industrial actions, the implementation of which shall be preceded by notification of the measures taken to prevent accidents, their effects on man and the environment.

The Council Directive 82/501/EEC is intended to be implemented on enterprises where hazardous substances are used; to prevent industrial accidents and reduce their effects on man and the environment; to apply new management and organizational methods; to improve inspection control; to consider transboundary effects of emergencies on industrial facilities; to increase control over land utilization when placing hazardous facilities.

The new requirements for the population and environment protection have led to the emergence of the Council Directive 96/82/EC of December 09, 1996 "On the Control of Major-accident Hazards Involving Dangerous Substances" ("Seveso II Directive"). A complicated control mechanism, aimed at reducing damage to nature, improving the use of natural resources with the high level of environmental protection at minimum cost, has been developed in order to find and apply an effective approach to solving significant environmental problems.

The provisions of the Seveso-II-Directive are aimed at preventing accidents, eliminating their negative environmental effects, enshrining the conditions of transboundary cooperation. The objective of the Seveso-II-Directive is the Community's setting the general principles of the prevention and control system, as well as uniform requirements to the system of inspection of facilities of the member states. Thus, the Council Directive 96/82/EC has played an important role in reducing the likelihood of industrial accidents and contributed to an increase in the level of protection in the EU.

The analysis of accidents at enterprises shows that in most cases they have been occurred as a result of organizational shortcomings. The need to improve the provisions is due to the adoption of additional Directive 2003/105/EC "On the Control of Major-accident Hazards Involving Dangerous Substances" amending the Seveso-II-Directives and expanding its scope, by the European Parliament and the Council of Europe. In addition, this document has stressed the need to create a system of response to possible man-made accidents, to maintain a high level of readiness at all times, since the costs of prevention and preparation of measures of response to severe radiation

accidents will in any case be less than those associated with overcoming their consequences. The Seveso-II-Directive has obliged competent authorities of the EU member states to determine the likelihood and probability of consequences of major accidents on the basis of information provided to them by the operators of a particular enterprise or group of enterprises. This has resulted in the consideration of the interaction between sources of pollution in the environment management. Control over one source of pollution is considered appropriate in the absence of other significant pollutants.

On July 04, 2012, the Directive 2012/18/EU “On the Control of Major-accident Hazards Involving Dangerous Substances” (“Seveso-III-Directive”) was adopted in order to ensure that the existing level of environmental protection and human health is maintained and further improved, by reducing unnecessary administrative burdens through the streamlining and simplification of procedures.

The United Nations Economic Commission for Europe (UNECE) Convention “On the Transboundary Effects of Industrial Accidents”, adopted on behalf of the Union by the Council Decision 98/685/EC dated March 23, 1998 to implement the Convention “On the Transboundary Effects of Industrial Accidents”, provides for measures to prevent, prepare for and respond to industrial accidents that may have transboundary effects. Furthermore, the Convention provides for the international cooperation in this regard. Major accidents can have consequences beyond frontiers, and the ecological and economic costs of an accident are borne not only by the establishment affected, but also by the Member States concerned. Therefore, it is essential to establish and apply safety and risk-reduction measures to prevent possible and emergent accidents, as well as to minimize the consequences in case of their occurrence that makes it possible to ensure a high level of protection throughout the Union.

The prevention of environmental damage and elimination of its consequences should be carried out through the compliance with the “polluter pays” principle. Article 1 of the EU Seveso-III-Directive provides for the establishment of rules for the prevention of major-accident hazards involving dangerous substances, the limitation of their effects on human health and the environment in order to consistently and effectively ensure a high level of protection throughout the Union.

The provisions of Directive 2012/18/EC are aimed at:

- preventing major accidents, limiting their effects on human health and the environment;
- enhancing coordination between competent authorities;
- providing public access to information, public consultations in decision-making, access to justice;
- improving information management, legal level of regulation, major accident prevention policy and emergency plans;
- introducing stricter standards for inspections;
- imposing on the operator the obligation to take all necessary measures;
- ensuring access to information in electronic format.

The Directive defines the establishments, to which its requirements shall not apply:

- (1) military establishments, installations or storage facilities;
- (2) hazards created by ionising radiation originating from substances;
- (3) transport of dangerous substances by road/rail, internal waterways, sea or air;
- (4) transport of dangerous substances in pipelines, including pumping stations, outside establishments covered by this Directive;
- (5) exploitation, namely the exploration, extraction and processing, of minerals in mines and quarries, including by means of boreholes;
- (6) offshore exploration and exploitation of minerals, including hydrocarbons;
- (7) storage of gas at underground offshore sites including both dedicated storage sites;
- (8) waste land-fill sites, including underground waste storage.

It is important that the preamble to the Directive 2012/18/EC provides for the possibility for any member state to take or introduce stricter precautions that are an exception to the scope of this Directive. The difference between Directive 2012/18/EC and the previous one (96/82/EC) is the adaptation of Annex I on classification, packaging, labeling of hazardous substances and mixtures to Regulation (EC) No. 1272/2008 of the European Parliament and of the Council dated December 16, 2008. The Regulation has implemented the Globally Harmonized System of Classification and Labeling of Chemicals (GHS) within the EU and introduced new hazard classes and categories.

The scope of definitions of the Directive has also been expanded, the definition of different types of establishments (upper-tier and lower-tier establishments) that are subject to the Directive and inspection has been added, as well as the concepts “the public” and “the public concerned” have been defined (according to the Aarhus Convention).

The Directive 2012/18/EC pays more attention to the so-called “domino effects principle”- the definition of a number of events that result in an undesirable sequence of accidents for establishments due to their being sited in such a way or so close together as to increase the likelihood of major accidents, or aggravate their consequences, or the

properties of substances used in production processes. The operation of a small establishment with hazardous substances in the production cycle, which formally does not fall under the scope of the Directive, but poses a real threat to houses or public buildings in a certain radius is determined as a negative factor of such a chain of consequences in case of accident. This requires the local authorities to make a complete list of all harmful establishments in the region and the development of emergency plans and response measures in all possible cases.

The Directive has established a clear rule according to which the member states of the Community shall be entitled to require upper-tier establishments to draw up a document in writing setting out the major-accident prevention policy (MAPP) and to ensure that it is properly implemented. The MAPP shall be designed to ensure a high level of protection of human health and the environment. The major-accident prevention policy shall include the overall aims and principles of establishment's action, the role and responsibility of management, as well as the commitment towards continuously improving the control of major-accident hazards, and ensuring a high level of protection.

Such a policy shall be updated every five years, implemented by appropriate means, structures and safety management system in accordance with Annex III of the Directive. An increased focus is put on inspections, namely: their frequency for upper-tier establishments shall not exceed one year, and for lower-tier establishments – three years. The findings of inspections shall be sent to the operator within 4 months after each inspection. In case of a serious violation of rules, an additional inspection shall be carried out within 6 months. Non-routine inspections shall be carried out to investigate serious complaints, serious accidents and “near misses”, incidents and occurrences of non-compliance in the shortest possible time.

### **3.2 State of industrial safety in Ukraine**

As of today, according to the hazardous facility register, in Ukraine there are more than 24 facilities, which could at any time turn into the epicenter of small and large man-made disasters. Of these, more than 6 thousand are hazardous facilities, including 1.2 thousand of particular concern. These are mainly industrial facilities where hazardous chemicals are stored or used in production activities. From 10 million to 20 million Ukrainians live in the areas of possible accident threat.

The situation is aggravated by the underestimation of environmental threats in the area of joint force operations (JFO) (A set of military and special organizational and legal measures of Ukrainian defense and law enforcement agencies aimed at countering the activities of illegal Russian and pro-Russian armed groups in the war in Eastern Ukraine ). The lack of proper environmental control over the environment in the uncontrolled territories of Donetsk and Luhansk regions in the near-term prospect for Ukraine can become an environmental disaster. The military conflict on the territory of JFO takes place in Europe's largest coal mining area with a large number of potentially hazardous facilities. 25% of enterprises of the Ukrainian industry are located in Donbas. 80% of these enterprises are environmentally hazardous mines, chemical and metallurgical plants. A large number of chemical plants are located directly in the firing line. Armed hostilities in Donetsk and Luhansk regions have resulted in damage to a number of environmentally hazardous facilities (Yasynivsk, Avdiivk and Yenakiievsk coking plants, Toretsk ferroalloy plant, Alchevsk metallurgical plant, Lysychansk refinery plant, Donetsk state-owned plant of chemical materials, Azot in Severodonetsk, Stirol in Horlivka, Sloviansk, Luhansk, Vuhlehirskiyi and Myronivskiyi power stations).

Damages to equipment and emergency shutdowns of enterprises lead to a significant increase in risks of negative impact on the environment of the region. As far as 2013, more than 4.5 thousand enterprises were identified as environmentally dangerous in the territories, which are occupied nowadays. Prior to the beginning of a military conflict in Donbas, there have been 4,240 potentially hazardous facilities (PHF), including 227 mines, 174 hydraulic technical facilities, 784 gas stations, 15 pits, 13 railway stations, 128 bridges and overpasses, 18 mainline pipelines, 4 oil fields. 2,160 facilities had the status of explosion-hazardous, 24 – radiation-hazardous, 1320 – fire-hazardous, 176 – hydrodynamically-hazardous, 34 – biologically-hazardous and 334 – chemically-hazardous. As of today, experts have identified 176 PHF, 99 of which are located in the uncontrolled territory (according to the State Hazardous Facility Register).

A low level of innovative activities of enterprises is attributed to the shortage of funds, insufficient volume of capital investments in technical re-equipment and modernization of enterprises, high economic risk, imperfection of legislation, inadequate training of managerial personnel for the system organization of innovative activities. A significant reduction in the volume of financing for industry research organizations has led to the curtailment of entire research areas, the outflow of scientists.

### **3.3 Participation of the public in environmental management**

It is legislatively important to ensure transparency of processes and the provision of the public with information and the public participation in decision-making. The environmental safety monitoring, legal compliance and public participation play an important role in all aspects of the environmental legislation of the European Union. The Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ratified by

Ukraine has enshrined the right of citizens to participate in environmental management and established the procedure for its implementation.

For most European developed countries, the accession of “green” parties into national parliaments, governments, local authorities, as well as a supranational body – the European Parliament, where the European green party is represented, is traditional. There is no such practice in Ukraine since any powerful political and party structures that would be competent and consistently engaged in addressing environmental issues, actively participate in the political process and elections, the formation of public authorities, are not established. This “isolation” of the state’s environmental policy from society leads to an increased focus of the public sector on environmental issues. Thus, 93% of Ukrainians consider environmental protection to be an important issue, and 87% believe that they can personally play a role in its protection.

Environmental protection is sensitive to the rapid dissemination of information by the media, individual members of the public. Therefore, the unprofessional coverage of unverified or distorted information may lead to panic and other negative moods in the society, as well as to any problems that require immediate response (the construction or placement of facilities that pose a danger).

The public involvement in the planning of accident prevention activities is a good incentive for the population in the development of environmental culture, public activity for exercising an appropriate control, as well as for the practical participation of the inhabitants of the region in the implementation of environmental measures. The role of citizens in ecological monitoring should be increased.

The public environmental control in the field of environmental protection is a tool that under certain conditions is able to effectively solve environmental problems, prevent the emergence of new ones, including all types of activity of citizens and public environmental organizations in terms of the exercise of constitutional and other legal rights to a favorable environment, the compensation for harm or damage caused to health and property of the population.

The system of state control over compliance with the legislation, the implementation of measures by responsible bodies of state power does not ensure an acceptable level of environmental safety. Most of the problems are concentrated around the issues of mass construction in green areas, construction of facilities that pose a threat to health, destruction of or damage to environmental facilities. Unresolved conflicts of interests of citizens with business entities and local authorities that make decisions (provide, in particular, relevant permits) to the detriment of the society’s interests and/or contrary to the warnings of the environmental expert community sometimes escalate into open confrontation with the environmental legislation, as well as initiate legal proceedings, are occasional. It is non-systematic for public authorities to fulfill their obligation to hold public hearings on issues of public interest, the interest of a community in a certain area to ensure its environmental rights that can be explained by the unclear legislative requirements to the procedure for holding public hearings during the environmental impact assessment and in making decisions on environmental issues. The assessment of public control is carried out according to the extent of solution to environmental issues. Its specificity is, in fact, conditioned by its purpose: to ensure transparency and publicity of the activities of government bodies and local self-government authorities, to provide citizens with the opportunity to adjust these activities in case of deviations from the legislative requirements, or disregard of the legitimate interests of residents of certain settlements and regions, when adopting certain managerial decisions on nature conservation (Komarnytskyi, 2007). Taking into account the possibility of obtaining information and using the means of influence on offenders, the public environmental control lags behind the government environmental control, whilst having a serious advantage, which involves the independence from state bodies and departmental interests. It should be emphasized that the issues of safe environment, quality environmental living conditions are of concern to the vast majority of citizens of Ukraine. According to the results of surveys conducted in November—December 2018 by the organization Environment-People-Law, the vast majority of respondents agree with the statement that environmental problems directly affect their health and daily lives.<sup>5</sup>

The public environmental control to a greater extent reflects the general public interests in the field of use and protection of the environment, acting as a means of ensuring legitimacy by checking the compliance of actions or

---

<sup>5</sup> Official site of the state non-governmental organization Environment-People-Law // <http://epl.org.ua/>

omissions (Fedorovska, 2010) of entities-natural resource users with the rules of environmental legislation, serves as a counter-balance to the government activities, supplements and even to some extent monitors the latter (Shemshuchenko, 2008). The establishment of interaction between an enterprise-natural resource user and the public affects the prestige of the latter. The influence of non-governmental environmental organizations on the opinion of the community creates a negative reputation of the company-pollutant, which would affect its profits, the value of shares. The prevailing principle of significant reduction in anthropogenic and technogenic load on the environment is the change of the existing practice of conducting industrial environmental activities. In order to increase the participation of producers in solving environmental problems, it would be advisable to enshrine a mechanism to stimulate business entities in the implementation of environmental programs and projects at the legislative level (Churilova, Hres, Strelnyk, 2018).

### Conclusions and Further Research

The complexity of solving global problems in modern conditions is that humanity continues ignoring the issues of environmental safety. The finding of the most effective integrated interstate approach to the solution of environmental safety issue remains an urgent challenge. There is an objective need to increase the responsibility of states, to improve the mechanism of response to accidents, to coordinate actions between states, and to promptly exchange information in the event of an emergency. The considered requirements for solving environmental problems in Ukraine are essential for the implementation of reforms in the field of environmental protection, aimed at improving the tools of environmental policy.

In our opinion, certain provisions of consequences should apply in Ukraine as well:

- (a) introduction and updating of a major industrial accident prevention and mitigation strategy;
- (b) development of plans of internal actions in extreme conditions; reports on environmental safety measures;
- (c) provision of environmental information on actions taken by competent authorities and cooperation with other stakeholders;
- (d) reporting of large-scale environmental accidents and means to eliminate them.

The member states should oblige competent authorities to organize a system of inspections or other controls according to the type of enterprise. These inspections or controls should not be dependent on a report on safety measures or any other report. Such inspections or other controls should be sufficient to provide a planned and systematic review of the systems of technical, organizational or managerial nature implemented by an establishment.

In order to push the Ukrainian legislation closer to the requirements of the Directive 2012/18/EC, it is expedient to improve the procedures for ensuring public access to information, ongoing public consultations in decision-making (in particular with regard to planning the location of high-risk facilities in settlements).

### References

- [1] Brinchuk Mikhail. 1996. Introduction to environmental law. Moscow: Academic Law University.
- [2] Churilova Tetiana, Hres Natalia, Strelnyk Viktoria. 2018. Environmental Audit of Subsurface Use. Environmental Policy and Law 48.2:144-152
- [3] EU Council Directive 2012/18/EC dated July 4, 2012, On the Control of Major-accident Hazards Involving Dangerous Substances. [http://www.dsns.gov.ua/files/2018/6/12/DIR\\_2012\\_18\\_UA.pdf](http://www.dsns.gov.ua/files/2018/6/12/DIR_2012_18_UA.pdf)
- [4] EU Council Directive 82/501/EEC dated June 24, 1982, On the Prevention of Major Industrial Accidents. <http://www.safeprom.ru/counter/comment.php?dlid>
- [5] EU Council Directive 96/82/EC dated December 09, 1996, On the Control of Major-accident Hazards Involving Dangerous Substances. <http://www.safeprom.ru/counter/comment.php?dlid=1089&ENGINEsessID=08d494d6132a4b08d509ce217da19bf6>
- [6] Fedorovska Olha. 2010. Public environmental control as an institution of environmental law: concepts and features. State and Law: Collection of scientific works: Legal and Political Sciences 48: 435 – 439.



- [7] Hetman Anatoliiy. Doctrine of Environmental Law Science: Genesis of Theoretical Studies of Environmental and Legal Issues in the XX Century. Law of Ukraine12 (2014):143–154.
- [8] Kolbasov Oleg. 1982. International legal protection of the environment. Moscow: International Relations.
- [9] Komarnytskyi Volodymyr. 2007. Issues of legal support for public control in the field of environmental protection. Bulletin of Luhansk State University of Internal Affairs named after E. O. Didorenko 4: 75 – 81.
- [10] Koshkinbaeva, Aliya S. et al. Environmental Safety of Modern Kazakhstan: General Legal Analysis. Journal of Environmental Management and Tourism, [S.I.], v. 10, n. 1, p. 22-31, may 2019. ISSN 2068-7729. Available at: &lt;https://journals.aserspublishing.eu/jemt/article/view/3187&gt;. Date accessed: 15 apr. 2020. doi: [https://doi.org/10.14505/jemt.v10.1\(33\).03](https://doi.org/10.14505/jemt.v10.1(33).03).
- [11] Law of Ukraine No. 2697-VIII dated of February of 28, 2019 , About the Basic principles (strategy) of the state environmental policy of Ukraine for the period till 2030. <https://zakon.rada.gov.ua/laws/show/2697-19>
- [12] Lozo Vladimir. 2008. Legal basis of the environmental strategy of the European Union (concept, software, systematization and commentary of the current EU legislation). Kharkiv: Law
- [13] National Report of Ukraine on the Harmonization of Society’s Activities in Natural Environment. 2003. Environment for Europe: special edition for the 5th All-European Conference of Environment Ministers. Kyiv: Science
- [14] Shemshuchenko Yurii. 2008. Methodological bases of the development of ecological, land, agrarian and economic law. Legal system of Ukraine: history, state and prospects [in 5 volumes -Vol. 4 :] Kharkiv: Law State.
- [15] Rossinskaya, Marina V. et al. Statistical Methods in the Analysis of Pollution Impacts on Human Health. Journal of Advanced Research in Law and Economics, [S.I.], v. 9, n. 4, p. 1451-1460, june 2018. ISSN 2068-696X. Available at: &lt;https://journals.aserspublishing.eu/jarle/article/view/2854&gt;. i. Date accessed: 15 apr. 2020. doi: [https://doi.org/10.14505/jarle.v9.4\(34\).32](https://doi.org/10.14505/jarle.v9.4(34).32).
- [16] Statistical information provided by the State Statistics Committee of Ukraine. 2009. [http://ukrstat.gov.ua/control/uk/localfiles/display/Noviny/new\\_u.html/](http://ukrstat.gov.ua/control/uk/localfiles/display/Noviny/new_u.html/)
- [17] State Archival Service of Ukraine. Hazardous Facility Register. <http://sfd.archives.gov.ua/page4.html>
- [18] Tymoshenko Aleksei. 1986. Formation and development of international environmental law. Moscow: Science
- [19] UN Convention dated June 25, 1998, On Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters : the Aarhus Convention. [http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=994\\_015/](http://zakon.rada.gov.ua/cgi-bin/laws/main.cgi?nreg=994_015/) [In Ukrainian]