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## ENSURING ENVIRONMENTAL SAFETY IN JOINT USE OF NATURAL RESOURCES: FORMATION OF A LEGAL POSITION

**Purpose.** To develop a new legal position on the regulation of environmental safety in the process of mining on land plots occupied by water bodies, the need for which is due to the complex negative impact on both the environmental objects surrounding the mining site and the mutual influence of natural resources involved in mining operations.

**Methodology.** The study used the dialectical method to establish the need to change the legal position on the use of water fund lands (WFL) for the mineral mining (MM). The hermeneutic method was used to reveal the peculiarities of legal regulation of relations of environmental impact of the processes of joint use of subsoil, land and water bodies. The formal legal method was used to provide a general characterization of the legal relations arising from the use of WFL for MM. The systemic-structural method was used to formulate proposals for improving the legislation of Ukraine in the field of environmental safety in the use of WFL for MM. The method of analysis and synthesis was used in the process of reviewing the judicial practice on the use of subsoil on WFL.

**Findings.** The authors propose the priority of land legislation over water legislation in regulating intersectoral legal relations regarding the use of WFL for MM, differentiation of environmental safety relations by the level of specificity, legal grounds for differentiating the object composition of integrated natural resource legal relations, and amendments to current legislation. The authors identify the problematic issues of the subject composition involved in the regulation, control and use of the WFL for MM. The limitations of the integrated legal framework for environmental safety are argued. The national legislation and judicial practice of its application are analyzed.

**Originality.** The authors' legal position for resolving controversial issues related to the WFL in the process of using WFL for MM is formed, based, unlike the existing one, on the priority of the requirements of land legislation.

**Practical values.** The practical value of the results obtained is that they can be used in the following areas: research and educational activities of scientists and higher education students, lawmaking and law enforcement activities of the parliament and executive authorities, as well as judicial practice in amending legislative and by-laws, investigating and considering cases related to violations of environmental safety requirements when using WFL for MM.

**Keywords:** *environmental safety, legal support, water fund lands, mineral extraction*

**Introduction.** The natural connection of subsoil, land and water necessitates appropriate legal regulation of social relations arising from the use of these objects. In the vast majority of cases of subsoil use for the purpose of mining mineral resources (hereinafter referred to as the "MM"), this process is associated with the need to use a specific land plot. If we consider the legal regimes for the use of land plots and subsoil plots separately, then in legal terms they will indeed act as relatively independent natural objects. This is established by land and subsoil legislation, respectively. However,

when they are used together, there is a need for a coordinated correlation of sectoral legal provisions.

The legal regulation of the relations in the field of MM becomes even more relevant when water bodies are involved in this process. This refers to the use of land plots belonging to the category of water fund lands (hereinafter referred to as WFL) for the purposes of MM. Under such conditions, the issue of compliance with environmental safety requirements is particularly important, since this type of economic activity directly affects three components of the geological environment at once – subsoil, land and water.

Based on the legislative definition of the concept of "geological environment" given in Article 1 of the Law

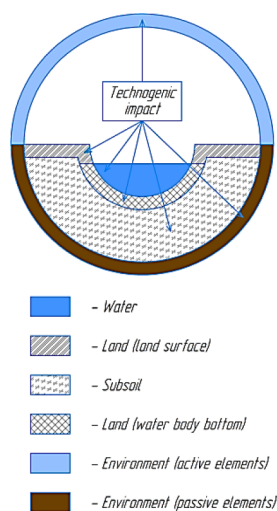


Fig. 1. Signs of interrelationships of geological environment elements

of Ukraine “On the State Geological Service of Ukraine”, it can be justifiably stated that it has three main features, the nature of the relationship between which is shown in Fig. 1.

Therefore, it is obvious that the MM process, as one of the hazardous types of anthropogenic activities, has a corresponding impact on the state of environmental safety of active (involved) and passive (surrounding) human and natural resources. Therefore, the problems of their legal protection are becoming extremely relevant, especially in conditions when the current national legislation on this type of relations is characterized by gaps and conflicts, and the positions of supervisory, controlling and judicial authorities are fundamentally different.

**Literature review.** The current Subsoil Code of Ukraine (hereinafter referred to as the SCU) requires subsoil users to use environmentally friendly mining technologies in the development of mineral deposits (hereinafter referred to as the MD). In addition, if we take into account the goal of regulating mining relations declared by the SCU, such requirements include the need to ensure: a) safety of subsoil use; b) protection of subsoil during its use; c) safety of people, property and the environment (hereinafter referred to as ES); d) protection of the rights and legitimate interests of subsoil users.

Therefore, environmental safety issues at MM, due to the urgency of achieving the set goals, attracted scientists from many fields of knowledge from both Ukraine and leading foreign mining countries.

In particular, American scientists have assessed the potential impact on surface and groundwater bodies as a result of the MM using an open method [1].

Scientists from the Netherlands, E. Rentier and L. Kamaat, have studied the impact of river sand mining on the ES. In their opinion, the effects identified are widespread and often cumulative. At the same time, the authors classify the effects of mining operations in the following areas [2]: a) physical environment; b) biological environment; c) chemical environment; d) anthropogenic environment.

Indian scientists have critically reviewed and assessed the impacts on water quality and biodiversity of riverbed development [3]. Another team of researchers

from India’s Gurukul Kangri University presented an overview of the impact of MM on the ES [4].

Probably, due to the sufficient complexity of the legal aspects of the combined use of natural resources in the process of MM, domestic researchers did not pay attention to them too often, preferring to work on individual groups of minerals. In particular, it is worth highlighting publications on sediments in water bodies. Thus, the collective recommendations, among other things, analyze certain legislative acts and propose projects for the management of sediments for land restoration [5].

The study is devoted to a comprehensive analysis of the state of water resources and the aquatic ecosystem of the Huanghe River Delta, which is significantly affected by anthropogenic factors and climate change. The paper summarizes current scientific data on the quantitative and qualitative characteristics of water resources, as well as their geographical distribution. Particular attention is paid to assessing the impact of economic development and population growth on the region’s water security. The authors analyze the risks and vulnerabilities of the delta ecosystem, proposing strategic measures for sustainable water use and public health. The results are proposed to be used to improve water management and environmental policy in the region.

The study [6] is devoted to the assessment of water and environmental risks in the Huang He River Delta, taking into account the legal aspects of the protection of the ES and public health. The paper summarizes current scientific data on the state of water resources, their quality, geographic distribution, and the impact of anthropogenic factors and climate change. The authors analyze the vulnerability of the delta ecosystem and risks to regional water security, emphasizing the need to improve legal regulation in this area. The measures proposed in the study are aimed at developing effective legal mechanisms for the sustainable use of water resources, environmental protection and public health, which can become the basis for the formation of environmental policy in the region.

The review of the following three studies reveals the legal aspects of environmental safety and water supply in Ukraine in the context of the Russian-Ukrainian war.

The environmental and legal aspects of criminal offenses during martial law, emphasizing the increased risk of man-made accidents and environmental disasters due to the targeted actions of the aggressor, are analyzed in [7]. The paper emphasizes the need to improve criminal legislation, in particular the provisions on ecocide and violations of the laws of war, as well as the inclusion of environmental safety in state recovery programs.

Study [8] considers ecocide as a crime against humanity in the light of international humanitarian law. The authors emphasize Ukraine’s efforts to prove Russia’s responsibility for the systematic destruction of natural objects, water and air pollution. The paper proposes mechanisms for bringing to justice those responsible for crimes against the environment through international judicial bodies, which is of global importance for the preservation of the planet.

The issue of the destruction of Ukraine’s water infrastructure as a method of warfare, which caused a large-scale loss of water resources and left millions of people without drinking water, is explored in article [9]. The pa-

per substantiates the prospects for alternative water supply during the war and post-war recovery, which is critical for the observance of human rights to access to clean water.

These three papers emphasize the need to improve legal mechanisms for environmental protection at the national and international levels, in particular in the context of recording environmental violations and ensuring environmental justice in the context of armed conflict.

The problems of ensuring environmental safety (hereinafter referred to as ES) in various types of subsoil use, as well as legal and organizational aspects of compliance with environmental safety requirements by subsoil users were the subject of consideration in [10].

**Unsolved aspects of the problem.** Consideration and analysis of the above studies showed that the latest research has not yet received sufficient and comprehensive coverage of the problematic issues of legal FEA when using foreign exchange for the ES.

Therefore, the **purpose of the article** is to develop a new legal position on the regulation of environmental safety in the process of mining and quarrying on land plots occupied by water bodies, the need for which is due to the complex negative impact on both the environmental objects surrounding the mining and quarrying site and the mutual influence of natural resources involved in mining operations.

In order to reveal the specifics of legal regulation of environmental safety in the course of MM on the land plots of the bottom of rivers, lakes, reservoirs and other water bodies, and to achieve the goal set out in the article, the following tasks are envisaged:

- to provide a general description of the legal relations arising from the use of the WFL for the MM;
- to reveal the peculiarities of legal regulation of relations related to the environmental impact of the processes of joint use of subsoil, land and water bodies;
- to review the court practice on subsoil use in the gold mining sector;
- to formulate proposals for improving the legislation in the area of establishing environmental safety requirements for the use of WFL for the MM.

The sequence of the study is determined by the logic of the above tasks, the structure and content of the provisions of the current subsoil, environmental, water and land legislation, as well as the court practice of applying their provisions.

**Summary of the main material.** *This section provides a general overview of the legal relations associated with the use of water fund lands (WFL) for extraction of minerals (EM).* The main focus is on analyzing the legal framework governing relations regarding the joint use of subsoil, land, and water objects. The main emphasis is on assessing the degree of consistency and hierarchy between these legal spheres. For greater clarity and ease of structuring, the relevant provisions of Ukrainian legislation, namely the Land Code of Ukraine (LCU), the Water Code of Ukraine (WCU), and the Tax Code of Ukraine (TCU), are systematized in tabular form (Table).

As can be seen from the data in the table, the provisions of the legislation on subsoil (Article 3 of the LCU) give priority to land legislation in relations concerning the provision of land plots for activities related to the use of subsoil. A similar rule is established in water legislation (Article 85 of the WCU), which states that the pro-

cedure for granting or terminating the right to use subsoil resources is determined in accordance with land legislation. At the same time, this priority, together with the joint form of regulation, is directly enshrined in the content of the LCU. Its essence is that, first, land relations arising in connection with the use of subsoil and water are regulated by its provisions. Second, these relations may also be regulated by the rules on subsoil and water, if they do not contradict the Land Code (Article 3).

Thus, it should be noted that in the regulation of inter-sectoral legal relations arising from the use of WFL for MM, land legislation has priority. The caveat is that this priority is related exclusively to the procedure for granting land plots, including the WFL, for the needs of subsoil use. When regulating the latter, the subsoil legislation definitely has priority. Instead, based on the current water legislation, it is obvious that it is taking over the leadership in regulating the use of WFL for water supply and sewage treatment plants. However, such a state of legal regulation of these relations can hardly be recognized as consistent with the real natural interconnection of these environmental components.

In addition, the analysis of the content of intersectoral regulation of legal relations in the field of WFL use for MM made it possible to identify different legislative approaches to the formation of the relevant areas, namely: 1) legislation on subsoil: a) blanket approach to land and water relations; b) the need to exchange cadastral information; c) conditions for granting a special permit; d) conditions of encumbrance in the use of subsoil; 2) land legislation: a) seeming blanket approach to subsoil and water relations; b) concept and composition of WFL; c) conditions for granting and terminating land use for MM; d) ownership of WFL; 3) water legislation: a) blanket approach to mining (subsoil) and land relations; b) delineation of relations on special water and subsoil use; c) delineation of relations on WFL use and works on WFL.

It should also be noted that the current version of the Procedure for Granting Permits for Works on Lands of this Category (Resolution of the Cabinet of Ministers of Ukraine (CMU) No. 557 dated 12.07.2005) does not provide for granting permits for MM within the WFL.

This state of inter-sectoral regulation cannot be recognized as theoretically justified and practically convenient. This conclusion is based, first of all, on the problems and needs that arise among the entities involved in the regulation, control and implementation of the process of using the WFL for the MM. The most relevant for bringing to a coordinated state are the relations regarding: a) the sequence (priority) and conditions for the provision of certain natural resources (objects) in their joint use; b) the correlation and delimitation of the MM and related land plots and water bodies by their significance (national (hereinafter referred to as NS) and local significance (hereinafter referred to as LS)) and form of ownership (state and municipal ownership of the respective territorial communities); c) the establishment of a clear list and content of permitting and contractual mechanisms for the provision of MM with respect to the use of natural resources.

It is also worth paying attention to the inter-sectoral terminological inconsistency. In particular, we are talking about the need for a coordinated approach to the definition of such concepts as: a) "extraction opera-

tions” (TC) and “mining operations” (TC, LCU, LC, WC); b) “reservoirs” (LCU) and “water bodies” (WC, LC, TC); c) “land plot” (TC and LC), and others.

*Features of legal regulation of environmental safety and environmental impact of joint use of subsoil, land, and water objects.* Given the lack of clear legal regulation regarding the joint use of minerals, special attention should be paid to the consequences of such activities. First of all, it is necessary to analyze the regulatory level of environmental safety and the proper assessment of environmental impact (EIA) during the joint use of natural resources. These issues are of great environmental importance. As emphasized by the authors of a collective monograph [11], one of the fundamental prerequisites for achieving strategic progress in the field of environmental protection and environmental safety is the rational use of minerals.

A schematic representation of the geological environment (Fig. 1) shows that the environmental consequences of using WFL in the process of EMR are generally irregular, variable, and predominantly cumulative. They vary depending on the volume and conditions of mineral extraction. Moreover, according to the definition of environmental impact given in the Law of Ukraine “On Environmental Impact Assessment” (hereinafter referred to as the EIA Law), any impact resulting from mining activities, including impact on subsoil, land, and water, is classified as a negative environmental impact.

Indeed, the impact of the MM may have consequences for the safety of such environmental components as: a) human life and health; b) flora; c) fauna; d) biodiversity; e) soil; f) air; g) climate; h) landscape; i) natural areas and objects; j) cultural heritage sites and historical monuments; k) other material objects; l) the combination of these factors; and m) socio-economic conditions resulting from changes in these factors.

For example, such type of MM as sand mining on the WFL may, in practice, have a negative impact on hydrobionts, bottom biocenoses, phytoplankton, water photoaeration, fish fauna, etc.

Therefore, in addition to the physical, biological, chemical and anthropogenic environment, the impact of which was studied in [2], the natural, man-made, climatic, historical, cultural and socio-economic environment should also be considered as objects of influence of the MM process.

EIA is an integral part of decision-making in the field of mineral extraction. According to the provisions of the EIA Law, the EIA procedure is a mandatory stage in the decision-making process related to ME. In particular, paragraph 15 of Part 2 of Article 3 of this law classifies quarries and surface mining as the first category of activities and facilities in terms of their impact on the environment. In addition, paragraph 11 of Part 3 of Article 3 of the EIA Law defines the extraction of sand and gravel within the WFL as a separate type of activity belonging to the second category of operations that affect the environment.

It is worth noting that the WC regulates relations with EIA in a specific formulary way (Article 22), stipulating that EIA is carried out for the ES objects related to water use in accordance with the procedure determined by law. At the same time, neither the regulations on the use of the WFL (Article 85) nor the regulations on the MM on the WFL (Article 86) mention such a permit document as an EIA conclusion. However, the same law

on EIA (Part 6 of Article 3) prohibits MM, if the entity cannot ensure compliance with the environmental conditions stipulated in the EIA conclusion and the decision to conduct MM activities. Moreover, failure to comply with these conditions during the MM is an EIA offense under Article 15 of the EIA Law and Article 91-5 of the Code of Administrative Offenses of Ukraine. The unauthorized use of subsoil, which has already been the subject of a study [12], is currently interpreted by this code as a violation of the right of state ownership of subsoil (Article 47), although according to the Constitution of Ukraine, subsoil is the object of ownership of the Ukrainian people (Article 13). The assessment of the legal framework regulating land ownership in Ukraine was the subject of a separate study [13].

It is difficult to find logical grounds for recognizing massive illegal sand mining, even if MM minerals are less socially dangerous than similar encroachments on WFL minerals. In this case, environmental justice should be reinvented through the prism of mining conflicts [14].

Scientists have faced similar problems related to both the overall impact of mining on the ES and health [15] and the impact of the MM on land cover change and water quality [16] when studying these processes in West Africa. Instead, the water sustainability of individual mining companies was analyzed in South Africa [17], the connection between MM and extensive deforestation was shown in the Brazilian Amazon [18], and the impact of intensive MM on terrestrial and aquatic ecosystems, including sediment pollution, was considered by Australian scientists [19].

As for the regulation of environmental safety relations in the MM, the analysis of national legislation has shown that they are differentiated into: 1) general environmental – defined in the environmental legislation and related to all types of economic activity; 2) natural resource – defined in the natural resource branches of legislation and related to the types of activities on the use of relevant natural resources; 3) subsoil – defined in the subsoil legislation and related to the types of activities on the use of subsoil resources; 4) general mineral resources – defined in the subsoil legislation, mining legislation and relate to the extraction of all types of minerals; 5) special mineral resources – defined in separate regulatory legal acts of the subsoil legislation and relate to the extraction of certain types of minerals.

In particular, we should also talk about water and resource security, because, as the analysis of life safety in technologically overloaded regions has shown, the availability of fresh groundwater resources is rightly considered a strategic factor in their sustainable development [20]. Therefore, it is quite logical to conclude that environmental security at the state level in the context of modern global challenges and threats has its own specifics and therefore requires an adequate state and legal policy [21]. Sustainable MM should be aimed at maximizing the efficient use of resources and minimizing the impact on the ES [22]. For Ukraine, this requirement is growing not only due to the choice of the European integration vector [23], but also due to the need to form an innovative investment paradigm for acquiring subsoil use rights in the context of post-war economic reconstruction.

Therefore, in the case of joint use of natural resources, in particular, when using WFL for MM, an integrat-

The content of intersectoral regulation of legal relations in the field of use of WFL for the MM

No	Type of relationship	Content of legal regulation
Subsoil legislation (LCU)		
1	Scope of regulation of subsoil legislation (LCU)	The LSS does not regulate land and water relations
2	Geoinformation system of subsoil use	Includes information on restrictions on the use of land plots in the use of subsoil
3	Granting a special permit without an auction	when obtaining a special permit, the entity must submit cadastral numbers of land plots under which the subsoil plot for which the special permit is granted is located
4	Provision of a land plot for subsoil use	conditions for granting a land plot for the use of a subsoil plot: a) granted in accordance with the land legislation; b) granted after the entity obtains a special permit; c) granted if it is formed as an object of civil rights; d) granted if it is on the approved list of land plots located within the subsoil plot provided for use for MM - a land plot for subsoil use is granted in accordance with the land legislation; - a land plot for subsoil use is granted after the entity obtains a special permit; - a land plot of state or municipal ownership for the MM is provided if it is formed as an object of civil rights; - a land plot for the MM is provided if it is on the approved list of land plots located within the subsoil area provided for use by the MM
5	State accounting of mineral resources, reserves and occurrences	information of the State Cadastre of the MM should be reflected taking into account the information of the State Land Cadastre
6	Temporary prohibition (suspension) of the use of subsoil	the entity's right to MM may be temporarily prohibited (suspended) in the absence of documents certifying the ownership or right to use the land plot for the use of the subsoil area, including on the terms of a land easement
Land legislation (LL)		
7	The scope of land legislation regulation	land relations in the use of subsoil and water are regulated by the LL, regulations of the LCU, and water legislation, provided that they do not contradict the LL
8	Composition of the land of Ukraine	the lands of Ukraine include all lands within its state border, including land plots occupied by water bodies
9	Composition of the WFL	the WFL includes land occupied by water bodies
10	Industrial land	granting the holder of a special permit for the WFL of the NS and/or LS a land plot for use under the terms of a land easement
11	The concept of a land plot as an object of property rights	a land plot has the following characteristics: a) natural – it is a part of the earth's surface that may have a surface (soil) layer or be covered by a water body; b) spatial – it has established boundaries and a certain location; c) legal – it has certain rights; ownership may extend within its boundaries to related natural resources
12	Sale of a land plot on a competitive basis	if a land plot is used for the use of a subsoil site in accordance with a special permit, such state or municipal land plot is not subject to sale or transfer for use on a competitive basis
13	Use of the land plot for the MM	termination of the right to use a subsoil plot upon expiration of the period of use of this plot established by the special permit entails termination of the use of the provided land plot
14	Withdrawal of a land plot from permanent use	for the purposes of the UCC LUL, the withdrawal of a land plot, except for the categories of land defined by the Land Code, is carried out on the basis of a decision of the relevant authorized body by transferring it for use to the entity that has been granted a special permit
15	Compensation for damages	damages caused as a result of the use of a land plot for the WCC of ASW and MH shall be reimbursed to the owner of the land plot and/or land user by the subsoil user
16	Ownership for the WFL	All WFLs occupied by water bodies of the NS belong to state-owned lands
Water legislation (WL)		
17	The scope of water legislation regulation	land relations and relations in the field of MM related to the need to use a water body are regulated by the relevant legislation of Ukraine
18	Composition of the WFL	the WFL includes land occupied by water bodies
19	State water cadastre	information of the State Water Cadastre includes data on water resources available for use
20	Special water use	do not belong to the use of a water body: a) withdrawal of water from a subsoil site together with MM; b) MM (except for groundwater)
21	Use of the WFL	when granting the WFL for use, as well as when terminating this right, the norms of land legislation take precedence
22	Carrying out works at the WFL	works with MM on the WFL (except for sand, pebbles and gravel in the beds of small and mountain rivers) may be carried out in accordance with the projects approved by the authorized bodies
Tax legislation (TL)		
23	The concept of MM	The process of mining MM on the WFL consists of the following stages: a) mining – implementation of a set of technological operations for the extraction of minerals on WFL; b) economic – transportation of extracted minerals to the surface and their temporary storage; c) special – carrying out certain types of mining and quarrying operations, including the development of placer MM, hydraulic transportation from WFLs

ed approach should be taken to the formation of the relevant legal framework with respect to foreign economic activity. In our opinion, in general, the latter can be presented as follows:

1) environmental legislation: 1.1) the law on the protection of natural resources: a) priority of environmental safety standards in the implementation of MM activities; b) compliance with environmental requirements when using subsoil, land, and water; c) measures for environmental safety; d) liability for violation of environmental safety standards; 1.2) the law on EIA: a) conditions for environmental protection and environmental safety during PEC; b) liability for failure to comply with environmental conditions stipulated in the EIA conclusion during EIA;

2) subsoil legislation: 2.1) Subsoil Code: a) recognition of the agreement on subsoil use conditions, which should contain the procedure for MM to prevent negative environmental impacts, as an integral part of the special permit; b) design of mining facilities with due regard to environmental safety requirements; c) establishment of quotas for MM to prevent negative environmental impacts; d) application of environmentally friendly MM technologies; 2.2) Instruction of the State Commission of Ukraine for Mineral Resources (hereinafter – SCU) on sand and gravel deposits (hereinafter – SGD): a) compliance with environmental safety requirements and the established sequence of geological exploration works for the study of SGD; b) identification and assessment of hazardous environmental factors that affect or may affect the state of the environment during the development of SGD; c) ensuring the possibility of determining the environmental and other conditions of the MM of open SGD; d) geological exploration of waterlogged gravel and sand deposits mainly by large diameter wells [24, 25];

3) land legislation: 3.1) Land Code: a) based on the principle of priority of environmental safety requirements; b) regulation of land protection for the purpose of citizens' ES; c) adoption of regulations that define requirements for the permissible anthropogenic load on certain territories; d) monitoring of land for decision-making on compliance with environmental safety requirements; 3.2) Procedure for the use of the WFL (Resolution of the Cabinet of Ministers of Ukraine No. 502 of May 13, 1996, as amended by Resolution No. 80 of January 23, 2024): a) state control over the use and protection of the WFL by the State Service of Ukraine for Geodesy, Cartography and Cadastre (hereinafter referred to as the StateGeoCadastre) and its territorial bodies, as well as executive bodies of local councils;

4) water legislation: 4.1) WC: a) conducting EIA for the WEC when siting facilities related to the use of water; b) establishing environmental safety standards for the use and protection of water and the reproduction of water resources; c) establishing sectoral technological standards for assessing the environmental safety of production; d) mandatory notification by local councils of cases of possible violation of environmental safety requirements and measures taken to eliminate the consequences; 4.2) Law No. 1054-IX of December 03, 2020 – the procedure for resolving disputes arising from the use of ships and other floating means for the MM.

Thus, it can be summarized that the existing integrated legal framework on foreign economic activity in

the use of foreign exchange for MM is extremely limited due to the cumulative impact of such activities on the ES. The scope of its regulation includes certain groups of relations that in a fragmented format and mostly indirectly affect the chosen subject of research, such as:

1) general provisions on the environment: a) establishment of measures for environmental protection; b) priority of environmental safety requirements and compliance with environmental requirements; c) liability for violation of environmental safety standards; d) state control; e) EIA; dispute resolution;

2) special provisions on the MM: a) environmental safety requirements; b) liability for non-compliance with environmental conditions; c) environmentally friendly technologies; d) production quotas; e) identification and assessment of hazardous environmental factors; f) regulation of anthropogenic load; g) industry-specific technological standards.

*Review of the court practice on subsoil use at the gold mining sites.* Certain court decisions that directly or indirectly related to disputes over subsoil use at the gold mining sites were made by the Kyiv District Administrative Court (No. 84894762 of 11.10.2019 in case No. 320/2433/19), the District Administrative Court of Kyiv (No. 97063022 of 19.05.2021 in case No. 640/5040/20), and the Supreme Court as part of the panel of judges of the Cassation Administrative Court of Kyiv in case No. 640/5040/20), as well as the Supreme Court as part of the panel of judges of the Administrative Court of Cassation (Resolution No. K/9901/2345/19 of 11.05.2023 in case No. 136/1461/17; Resolution No. K/9901/15463/19 of 29.06.2021 in case No. 826/4647/17; Resolution No. K/9901/3908/20 of 03.11.2021 in case No. 360/3527/19).

The analysis showed that cases on disputes over the use of subsoil on the WFL have so far been considered only at the level of district administrative courts. Based on their content, the courts believe that there is currently no need to issue title documents for the use of the WFL (the area of the reservoir bottom) for the needs of the MM (sand mining). In a slightly different aspect, certain components of this issue were also considered at the cassation level.

In particular, a review of the case law of the Administrative Court of Cassation (hereinafter referred to as the “CAC”) within the Supreme Court in cases concerning the protection of the right to use subsoil in Ukraine (decisions entered into the USRCD for 2019 – June 2024) showed that disputes in this area concerning PGDs relate to the following types of powers:

- of local councils on the use of the MM minerals (Resolution of 11.05.2023, case No. 136/1461/17);

- the organizer of the auction for the sale of special permits (resolution of 29.06.2021, case No. 826/4647/17);

- of the Military-Civilian Administration on the provision of MM minerals (Resolution of 03.11.2021, case No. 360/3527/19);

- on amending the special permit and obtaining a separate special permit for each type of subsoil use (Resolution of 21.12.2022, case No. 826/3486/18);

- on the termination of the right to use subsoil in connection with the revocation of a special permit (resolution of on September 19, 2019 in case No. 826/12293/15);

- regarding the court's verification of the fact that the subsoil user violated the requirements of the special permit (decision of 21.12.2023 in case No. 820/3416/17).

During the operation of SGDs, as a rule, various components of the ES are affected – the atmosphere, geological and aquatic environment, soils, etc. [26]. At the same time, as the practice of artisanal and small-scale MM, including sand, shows, the vast majority of people around us are indifferent to this, which is in no way consistent with the Sustainable Development Goals [27]. Under these conditions, the management of natural resources, and especially water resources, should include signs of a joint partnership between mining companies and communities [28]. It is only necessary to support the principle of moral ecology of sand mining, formulated by I.-M. Hougaard as follows: “when we exploit a river, we have to give something back” [29].

It should also be noted that in paragraph 19 of its resolution No. K/9901/3908/20 of 03.11.2021 in case No. 360/3527/19, the Supreme Court as part of the panel of judges of the Administrative Court of Ukraine, in our opinion, did not fully cite the provisions of the Lists of Mineral Resources (Resolution of the Cabinet of Ministers of Ukraine No. 827 of 12.12.1994), noting that according to this resolution, sand is a mineral resource of the MM.

It seems that the court, in rendering its decision, should have emphasized that sand, as a mineral, can be used in various ways. With regard to sand deposits that are of national importance, their use is determined by a decision of the *State Commission of Ukraine on Mineral Resources (hereinafter referred to as the SCMR)*.

Thus, among the minerals of the NS, sand is classified as two types of raw materials, namely: 1) refractory raw materials; 2) molding raw materials and raw materials for lumping iron ore concentrates. Instead, quartz sand, as a mineral resource of NS, is classified as a raw material for glass and porcelain and faience. And only sand, which belongs to the raw materials of sand and gravel, is classified as a mineral resource of the LS (Resolution of the Cabinet of Ministers of Ukraine No. 827 dated 12.12.1994, as amended by Resolution of the Cabinet of Ministers of Ukraine No. 1370 dated 28.12.2011). At the same time, it should be borne in mind that such type of sand and gravel raw material as gravel (as well as sand and pebble material and pebbles) belongs exclusively to the group of minerals of the LDC. At the same time, sand does not belong to the type of sand and gravel raw materials of the NS.

Thus, the status of sand as a mineral resource of the NS should be determined by the SCU in accordance with the direction of use of the sand deposit, and the status of sand as a mineral resource of the LS – by its belonging to the sand and gravel raw materials of the LS and the direction of its use. Gravel, on the other hand, does not have the status of an LS mineral.

According to the SCU Instruction on SGDs (Order of the SCU of 25.06.2007 No. 198), sand and gravel rock is a loose rock with a gravel component of more than 30 %. Deposits of this type of rock are formed by gravel, sand and clay material and can be represented by different fraction ratios. However, their distribution is limited (Carpathian region, partially Crimea and other regions of Ukraine).

Therefore, it is reasonable to propose to add the item “sand” to the List of minerals of the NS in the section “Non-metallic minerals”, subsection “Raw materials of sand and gravel”. This position is based, firstly, on the fact that the activity of “extraction of sand and gravel at WFL” is classified as an activity and object that may have a significant impact on the environment and is subject to EIA. Secondly, the SCU Instruction on SGD (Order of the SCU of 25.06.2007 No. 198) was developed in accordance with the Regulation on the Pilot Development of NS MM (Order of the Ministry of Ecology and Natural Resources of Ukraine of 03.03.2003 No. 34/m, hereinafter – the Ministry of Ecology).

In the above court decisions, when resolving disputed legal relations on establishing the need to issue title documents for the use of a land plot for the purposes of subsoil use (sand mining), the following regulatory, legal and advisory provisions were relied upon:

1. The Land Code of Ukraine (hereinafter referred to as the LC), the Water Code of Ukraine (hereinafter referred to as the WC), the Procedure for issuing permits for work on the WFL (CMU Resolution No. 557 of 12.07.2005).

2. Letter of the State Committee of Ukraine for Land Resources (hereinafter referred to as Derzhkomzem, since 2014 – Derzhgeokadastr) dated August 20, 2010, No. 16119/23/4-10.

3. Letter of the State Committee of Land Resources of Ukraine dated September 10, 2010, No. 17183/13/4-10.

4. Letter of the Ministry of Ecology and Natural Resources of October 13, 2010, No. 20540/11/10-10.

It is also worth noting that the Procedure approved by the CMU Resolution No. 557 of 12.07.2005 determined the mechanism for granting permits for sand and gravel extraction using WFL. However, this mechanism remained in force only until the adoption of Resolution of the Cabinet of Ministers of Ukraine (CMU) No. 214 of February 15, 2012, which removed the phrase “sand and gravel extraction” from the text of the Procedure. As a result, the regulations governing the use of WFL underwent corresponding changes (CMU Resolution No. 502 of 13.05.1996 as amended by Resolution No. 80 of 23.01.2024), which actually duplicated the provisions of Articles 85 and 86 of the WC.

Thus, the court practice has now formed a legal position according to which, in resolving this category of disputes, the priority of the provisions of Article 86 of the WC should be based on the requirements of Article 86 of the WC regarding the conduct of works on the WFL related to the MM, as well as drilling and exploration works. At the same time, the places and procedure for conducting these works should be determined in accordance with the projects, that are agreed with the authorized executive and local authorities.

This position is indeed based on the current water legislation, but only partially. After all, the question arises as to whether such regulation of legal relations corresponds to the actual event of joint use of water, land and subsoil objects. Is a water body used in the course of using the WFL and is the WFL used in the course of using subsoil? Obviously, the question is rhetorical, so the answer should be “yes”, but the above court opinion does not lead to such a conclusion. The fact that the water legislation itself (Article 85 of the Water Code) gives priority to

land legislation in the issue of providing the WFL for use adds to the ambiguity of this problem. The same prescription is contained in the subsoil legislation (Article 18 of the LC), according to which the provision of a land plot for MM is carried out in accordance with the LC.

It should be emphasized that the domestic legislation governing the area of environmental relations chosen for the study is currently characterized by discrepancies and ambiguous provisions that complicate the process of legal understanding not only for ordinary citizens, but also for law enforcement and lawmaking professionals. For example, previously, the lease of a water body was certified by one agreement, and the lease of a land plot on the bottom of that body was certified by another. Moreover, different authorities had the relevant leasing powers. At the same time, the issue of the real possibility of using the land plot of the water body bottom without using the water body was left unaddressed.

A similar situation occurred in national legislation regarding the joint use of water and land. The Law of 04.11.2020 No. 963-IX was aimed at solving this problem, which clarified the procedure for transferring a water body and a land plot into a joint lease. Its main novelty was to amend Article 51 of the Water Code, according to which: a) priority in the relations of complex lease of a water body and a land plot is given to land legislation; b) in the case of lease of a land plot under a water body, the lease right extends to it; c) a standard agreement for complex lease of a land plot and a water body is approved by the government (CMU Resolution No. 572 of 02.06.2021 as amended by Resolution No. 344 of 29.03.2024).

Thus, given that the WFL (Article 58 of the Land Code) includes lands occupied by water bodies, it can be argued that the MM on the WFL should be carried out under a land lease agreement in conjunction with the water body located on it. Thus, from an environmental perspective, subsoil is the main natural resource, i.e. the resource that determines the purpose of economic activity. Water and land, on the other hand, are related natural resources in this process.

If we consider the object composition of this type of natural resource legal relations from a legal point of view, the subsoil area located under the bottom of a water body and provided for the MM should be considered the main direct object, i.e. the object for the use of which the relevant entity enters into these legal relations. Additional direct objects of the mandatory (required) type in these relations are the land plot from the WFL (the bottom of the reservoir) and the actual reservoir located on this land plot. Without their use, the process of MM from the provided subsoil plot is impossible.

At the same time, an analysis of the ratio of the areas of use of the WFL under the land (Part 4, Article 59 of the LC) and water legislation (Part 1, Article 86 of the WC) showed that their lists lack fundamentally important types of differentiation.

Firstly, it is the use of WFL by the type of their components: 1) WFL located under the bottom of water bodies (occupied by water bodies); 2) WFL located around water bodies. This is the title of Chapter 12 of the Land Code of Ukraine “The Land Code and Restrictions on the Use of Land Under and Around Water Bodies”, as amended by Law No. 3993-IX of 08.10.2024.

Secondly, the regulation of the use of WFL under land legislation does not take into account the division of water use into general and special water use established by water legislation (Articles 46–48 of the Water Code), as well as the exclusion of certain types of joint water, land and subsoil use from belonging to special water use.

Thirdly, there is no correlation between water and land legislation in terms of separation of such concepts as “use of the WFL” (permanent and lease, Article 85 of the LC) and “conducting works on the WFL” (Article 86 of the LC).

*Proposals for improvement of national legislation on the issues of the ES when using WFL for the MM.* The analysis of the provisions of the subsoil, land and water legislation, as well as the practice of its application, allowed us to state the existence of inter-sectoral legal conflicts and inconsistencies between regulatory requirements and the real environmental links of subsoil, land and water resources in their integrated use. Such a state of legal regulation in no way contributes to the preservation of these elements of the geological environment, but also to ensuring a standardized level of environmental safety in and around the MM facility.

Therefore, it is no coincidence that scientists emphasize that water resources policy and the MM sector must be taken into account in international documents and have appropriate certification schemes [30].

At the same time, the study has shown that the existing national regulatory framework for the integrated use of subsoil, land and water is not sustainable, unambiguous and effective. These shortcomings are manifested in the presence of certain questions that are not directly answered in the current legislation, such as: 1) whether it is possible to provide a water body and the WFL area located under it for use by the MM; 2) which legislation – water or land – is prioritized in resolving the issue of the legality of using the bottom of water bodies for the MM; 3) which LC provisions are prioritized in applying when resolving the issue of the legality of using the WFL with water bodies located on them for the MM; 4) what type of land use should be used in such cases – lease or land easement. The above problematic issues are not exhaustive, because this area of legal relations, as already noted, has not only an insufficient level of theoretical research, but is also characterized by different legal positions of supervisory, controlling and judicial authorities.

It seems that in the process of resolving disputes related to ES when using WFL for MM, the following should be taken into account:

1. The current legislation provides for the provision of the WFL (land under the surface of a water body) for use by the MM, however, only if the designated purpose of such land is changed.

2. Since the MM on the WFL is not a type of special water use, this gives priority to the norms of land legislation in regulating this type of subsoil use, but only if the basin principle of water management provided for by the Water Code is taken into account.

3. When deciding on the legality of the use of WFL with water bodies located on them for the purposes of the MM, the priority is given to the provisions of Part 4 of Article 59; paragraph c-3) of Part 1 of Article 99; Part 3 of Article 149; Part 4 of Article 20 and paragraph e) of Part 1 of Article 156 of the Land Code.

4. If the intended use of the land plot is changed for the MM, both its lease and land easement are allowed, which are granted on the basis of the relevant special permit held by the MM entity.

5. Sand and gravel extraction is a legally regulated activity that can have a significant impact on the environment and is subject to EIA, so the reliability of the information provided in the EIA report should be given special attention.

The latter aspect of the MM on the WFL, due to the specifics of the integrated use of the relevant types of natural resources, combined with the cumulative impact on environmental safety, requires the existence of a relevant regulatory legal act of a subordinate nature (safety rules, development rules, inter-sectoral instructions, etc.). It is in this document that the entirety of the peculiarities of this type of economic activity should be disclosed. Such an approach has proven to be effective in establishing safety and health requirements for the extraction of certain non-metallic minerals (Order of the State Labor Service of Ukraine No. 74 of 15.05.2024).

This act should be harmonized with the Methodological Recommendations for the preparation of an EIA report for activities in the field of MM (approved by the Order of the Ministry of Ecology of 28.12.2021 No. 884). In particular, it should regulate the relations related to the MM at the WFL, as shown in Fig. 2.

In addition, at the level of the WC and the LCU, it is proposed to: 1) to adopt amendments to Article 86 of the WC that would exclude a conflict with Article 85 of the WC regarding the priority of land legislation in regulating the provision of WFL for MM; 2) to supplement Article 51 of the WC regarding the approval by the CMU of Model Land Lease and/or Land Easement Agreements in combination with a water body for MM; 3) to supplement Article 18 of the LC with Part 4 regarding the powers of local councils to provide integrated land, subsoil and water body for the development of the LS MM.

It is also proposed to add the item “sand” to the List of Mineral Resources of the NS (Resolution of the Cabinet of Ministers of Ukraine No. 827 dated 12.12.1994 as amended by Resolution No. 1370 dated 28.12.2011) in the section “Non-metallic Mineral Resources” in the subsection “Raw materials of sand and gravel”.

**Conclusions.** The study of the specific environmental and legal conditions of the MM in the WFL gave grounds for the following generalizations.

1. It is found that in the regulation of inter-sectoral legal relations arising from the use of WFL for the MM, the priority is given to land legislation. This priority is declared in the legislation both in the sphere of subsoil and water-land relations. Instead, based on the current water legislation, it is obvious that it dominates in the use of WFL for the MM. This state of legal regulation of relations involving the subsoil-land-water natural resource link not only does not correspond to the real natural connection and impact of these environmental components, but is theoretically unreasonable and practically dangerous.

2. The authors analyze the content of intersectoral regulation of legal relations in the field of use of WFL for the MM, which made it possible to establish the existence of different approaches to the formation of integrated spheres in subsoil, land and water legislation. The general requirements include multi-resource formality and delimitation, as well as mono-resource conditions for the provision of use. Special provisions are inherent mainly in land legislation, which provides for separate regulation of land and subsoil and land and water relations.

3. The most urgent problems and needs of the actors involved in the regulation, control and implementation of the process of using the WFL for the MM are identified. It is recommended to harmonize relations regarding: a) the sequence (priority) and conditions for the provision of certain natural resources (objects) in their joint use; b) the correlation and delimitation of the MM and related land plots and water bodies by their significance (national and local) and form of ownership (state and municipal ownership of the respective territorial communities); c) an exhaustive list and content of permitting and contractual mechanisms for the provision of WFL for the MM.

4. The authors propose to differentiate the relations of environmental security in the MM by the level of their specification: 1) general environmental – defined in environmental legislation and related to all types of economic activity; 2) natural resource – defined in natural resource branches of legislation and related to activities on the use of relevant natural resources; 3) subsoil – defined in subsoil legislation and related to activities on the use of subsoil resources; 4) general mineral resource – defined in subsoil legislation, mining legislation and related to activities on the extraction of all types of minerals; 5) special mineral resources – defined in separate regulatory acts of

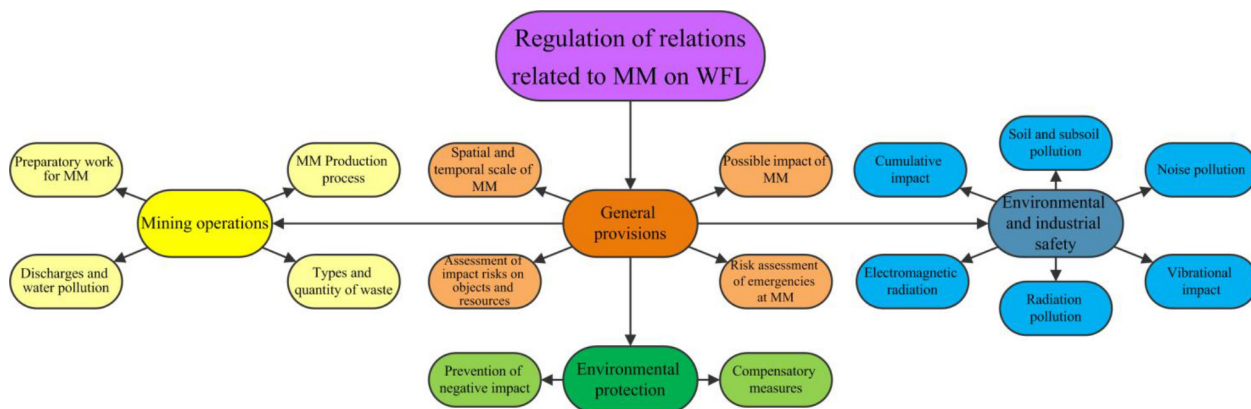


Fig. 2. Proposals for the content of bylaws regulating relations related to the MM on the WFL

legislation on subsoil and relate to activities involving certain types of MM.

5. It is proposed that in the case of joint use of natural resources, in particular, when using WFL for the MM, an integrated approach to the formation of the relevant legal framework with the ES is required. In general, it includes the following: a) environmental legislation (laws on the protection of the environment, on EIA); b) subsoil legislation (the Land Code, the SCU Instruction to the EIA); c) land legislation (the Land Code, the Procedure for the use of ASF); d) water legislation (the Water Code, the Law on Inland Water Transport).

6. It is argued that the existing integrated legal framework on foreign economic activity in the use of WFL for the MM is extremely limited, given the specific impact of such activities on the ES. Its regulation includes certain groups of relations that in a fragmented format and mostly indirectly affect the chosen subject of research, such as: a) general provisions on the environment; b) special provisions on the MM. Therefore, this state of legal support does not correspond to the real environmental impact of the use of WFL for the MM, which is unambiguous, complex and mostly cumulative, depending on the volume and conditions of extraction. The practice of WFL for the MM indicates the possibility of its real and potential impact on the following types of environments: physical, biological, chemical, anthropogenic, geogenic (natural), man-made, climatic, historical, cultural and socio-economic.

7. The authors analyze the provisions of national legislation regulating relations in the field of use of WFL for the MM, as well as the judicial practice of its application, which allowed stating the existence of inter-sectoral legal conflicts and inconsistencies between regulatory requirements and real environmental links of subsoil, land and water resources in their integrated use. The lack of correlation between the content of mono-resource legal regulation does not contribute to the preservation of these elements of the geological environment, as well as to ensuring a standardized level of environmental safety in and around the MM facility. It is substantiated that the legal position formed by the court practice is based on the priority of water legislation in the case of WFL for the MM and comes into conflict not only with its own, but also with the provisions of land legislation.

8. The authors consider the object composition of the integrated type of natural resource legal relations and show that in legal terms, the subsoil area located under the water body and provided for MM should be considered the main direct object, i.e. the object for the use of which the relevant entity enters into these legal relations. Additional direct objects of the mandatory (required) type in these relations are the land plot from the WFL (the bottom of the water body) and the water body itself located on this land plot. At the same time, the WFL for the MM should be carried out on the terms of an easement or a comprehensive lease of the land plot and the water body. From an environmental perspective, the main natural resource, i.e. the resource that determines the purpose of economic activity, is subsoil. At the same time, water and land in this process act as related natural resources, without the use of which the process of extractive extraction from the provided subsoil plot is impossible.

9. The authors establish that sand and gravel raw materials, which are mainly the object of extraction when using iron ore extraction facilities, have a dual legal status, which is manifested in the variable possibility of classifying them as both WFL for the MM raw materials. At the same time, sand, as a type of sand and gravel raw material, has the status of an LS mineral, while gravel is an NS. If sand is extracted as a refractory or molding raw material and for clumping iron ore concentrates, it has the status of an NS mineral. The authors reveal the absence of fundamentally important types of differentiation in the areas of use of WFL under land and water legislation: a) use of WFL by the type of their components; b) use of WFL by the type of joint use; c) use of WFL and carrying out works on WFL.

10. The authors' legal position, unlike the existing one, is based on the recognition of the priority of land legislation in the process of resolving disputes related to the ES when using WFL for MM: 1) the current legislation provides for the provision of land plots under the surface of water bodies for use by the MM under the conditions of changing the designated purpose of the land plot; 2) priority in regulating MM on the WFL should be given to the norms of land legislation subject to the basin principle of water body management; 3) when resolving issues of legality of the use of WFL with water bodies located on them for the needs related to MM, the priority is given to the norms of Part 4 of Article 59; Clause c-3) Part 1 Article 99; Article 149(3); Article 20(4) and Article 156(1)(e) of the Land Code; 4) if the designated use of the WFL site for MM is changed, both its lease and land easement are allowed, which are granted on the basis of a special permit for the use of subsoil held by the WFL entity; 5) sand and gravel extraction on the WFL is subject to an EIA, the reliability of which must be confirmed.

11. It is recommended at the legislative level: 1) to adopt amendments to Article 86 of the EC that would exclude a conflict with Article 85 of the WC regarding the priority of land legislation in regulating the provision of WFL for the MM; 2) to supplement Article 51 of the WC regarding the approval by the CMU of Model Land Lease Agreements and/or Land Easement Agreements in combination with a water body for the MM; 3) to supplement Article 18 of the LC with Part 4 regarding the powers of local councils to provide integrated land, subsoil and water body for the development of the MM. It is proposed to add the item "sand" to the List of minerals of the NS in the section "Non-metallic minerals" in the subsection "Raw materials of sand and gravel". It is recommended to eliminate the intersectoral terminological inconsistency in the definition of such concepts as: a) "extraction" and "production"; b) "reservoirs" and "water bodies"; c) "land plot". In order to resolve terminological inconsistencies in the intersectoral regulation of joint nature use relations, the authors propose to give priority to the concepts disclosed in special legislation.

It is proposed to focus further research in this area on the distinction between the legal basis and content of "use of the WFL" and "work on the WFL" in order to prevent the impact of illegal use of the WFL on natural resources and environmental safety.

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## Забезпечення екологічної безпеки при спільному природокористуванні: формування правової позиції

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**Мета.** Розробити нову правову позицію щодо регулювання екологічної безпеки у процесі видобування корисних копалин (ВКК) на земельних ділянках, зайнятих водними об'єктами, необхідність якої обумовлена комплексним негативним впливом як на об'єкти довкілля, що оточують ділянку

ВКК, так і взаємним впливом природних ресурсів, що залучені до гірничих робіт.

**Методика.** При проведенні дослідження був використаний діалектичний метод для встановлення необхідності змінити правову позицію щодо використання земель водного фонду (ЗВФ) для ВКК. За допомогою герменевтичного методу розкриті особливості правового регулювання відносин впливу на довкілля процесів спільного використання надр, землі й водних об'єктів. Формально-юридичний метод був використаний для надання загальної характеристики правових відносин, що виникають із приводу використання ЗВФ для ВКК. Для формулювання пропозицій до вдосконалення законодавства України у сфері екологічної безпеки при використанні ЗВФ для ВКК був використаний системно-структурний метод. Метод аналізу й синтезу – у процесі огляду судової практики з питань користування надрами на ЗВФ.

**Результати.** Запропоновано пріоритет земельного законодавства над водним у регулюванні міжгалузевих правовідносин щодо використання ЗВФ для ВКК, диференціацію відносин екологічної безпеки за рівнем конкретизації, правові підстави розмежування об'єктного складу інтегрованих природоресурсних правовідносин, а також зміни до чинного законодавства. Визначені проблемні

питання суб'єктного складу, причетного до регулювання, контролю й користування ЗВФ для ВКК. Аргументована обмеженість інтегрованої правової бази екологічної безпеки. Проаналізовані національне законодавство й судова практика його застосування.

**Наукова новизна.** Сформована авторська правова позиція для вирішення спірних питань, пов'язаних із ЗВФ у процесі використання для ВКК, заснована, на відміну від існуючої, на пріоритеті приписів земельного законодавства.

**Практична значимість.** Значення отриманих результатів у практичній площині полягає в тому, що напругами їх використання можуть виступати: науково-дослідна й освітня діяльність учених і здобувачів вищої освіти; правотворча й правозастосовча діяльність парламенту та органів виконавчої влади, а також судова практика під час внесення змін і доповнень у законодавчі й підзаконні акти; розслідування й розгляду справ, пов'язаних із порушенням вимог екологічної безпеки при використанні ЗВФ для ВКК.

**Ключові слова:** екологічна безпека, правове забезпечення, землі водного фонду, видобування корисних копалин

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