

CZU 343.98:504.4.054

DOI: <https://doi.org/10.5281/zenodo.20845008>

**CRIMINALIZATION OF AIR POLLUTION: THE ROLE OF ARTICLE 230
OF THE CRIMINAL CODE OF THE REPUBLIC OF MOLDOVA
IN PREVENTING ENVIRONMENTAL CRIME**

Marcel BOȘCANEANU,
PhD, Associate Professor,
Head of the Studies and Quality Management Department,
“Ștefan cel Mare” Academy of Ministry of Internal Affairs,
Republic of Moldova
ORCID: 0000-0002-4776-9349

Abstract

This scientific study analyzes current issues regarding the legal framework for the criminalization of atmospheric air pollution through the lens of Article 230 of the Criminal Code of the Republic of Moldova and its role in preventing environmental crime. Atmospheric air is necessary for human survival and environmental conservation. The scientific community is concerned about the rapid and continuous growth of the population, which uses resources faster, and thus the accumulation of an enormous amount of waste will gradually worsen the quality of atmospheric air. The change in pollutants released into the atmosphere has become more complex throughout human history, as they are released in huge quantities. Sources of air pollution vary greatly - from fuel combustion, household, agricultural or mining activities, to natural disasters, significant industrial accidents or, more recently, the wars in Ukraine and the Middle East.

At the current stage, new techniques are being developed that monitor air composition to ensure air quality control. The population exposed to these harmful compounds is prone to various health problems, including skin, cardiovascular, brain, blood and lung diseases. The substances also contribute to global warming, acid rain and ozone depletion, which in turn lead to water and soil pollution and damage to flora and fauna. During the COVID-19 pandemic, it was observed that the reduction of human activities that cause pollution led to an improvement in the quality of atmospheric air, which shows that long-term solutions can also be found. Among the reasons for such an unfavorable environmental situation are, among others, violations of criminal environmental legislation, which establishes rules for the protection of atmospheric air.

Thus, in the content of the study we will refer more to atmospheric air as the object of the crime under Article 230 of the Criminal Code of the Republic of Moldova, because atmospheric pollution is one of the factors that shape the Earth's climate.

Keywords: atmospheric air pollution, atmospheric air, environmental crime, prevention of environmental crime, Article 230 Criminal Code of the Republic of Moldova.

**INCRIMINAREA POLUĂRII AERULUI ATMOSFERIC:
ROLUL ARTICOLULUI 230 DIN CODUL PENAL AL REPUBLICII MOLDOVA
ÎN PREVENIREA CRIMINALITĂȚII DE MEDIU**

Abstract

În prezentul studiu științific se analizează aspecte de actualitate privind cadrul legal al incriminării poluării aerului atmosferic prin prisma articolului 230 din Codul penal al Republicii Moldova și rolul acestuia în prevenirea criminalității de mediu. Aerul atmosferic este necesar pentru supraviețuirea umană și conservarea mediului. Comunitatea științifică este îngrijorată de creșterea rapidă și continuă a populației, care utilizează resursele mai rapid, iar astfel acumularea unei cantități enorme de deșeuri va înrăutăți treptat calitatea aerului atmosferic. Schimbarea poluanților eliberați în atmosferă a devenit mai complexă de-a lungul istoriei omenirii, aceștia fiind eliberați în cantități uriașe. Sursele de poluare a aerului variază foarte mult - de la arde-

rea combustibilului, activitățile casnice, agricole sau miniere, până la dezastre naturale, accidente industriale semnificative sau mai actual războaiele din Ucraina și Orientul mijlociu.

La etapa actuală se dezvoltă noi tehnici care monitorizează compoziția aerului pentru a asigura controlul calității aerului. Populația expusă la acești compuşii nocivi este predispusă la diverse probleme de sănătate, inclusiv boli de piele, cardiovasculare, cerebrale, sanguine și pulmonare. Substanțele contribuie, de asemenea, la încălzirea globală, ploile acide și epuizarea stratului de ozon, care la rândul lor duc la poluarea apei și a solului și la daune aduse florei și faunei. În timpul pandemiei de COVID-19, s-a observat că reducerea activităților umane care cauzează poluarea a dus la îmbunătățirea calității aerului atmosferic, ceea ce arată că se pot găsi și soluții pe termen lung. Printre motivele unei astfel de situații de mediu nefavorabile se numără, printre altele, încălcările legislației de mediu cu caracter penal, care stabilește reguli pentru protecția aerului atmosferic.

Astfel, în conținutul studiului ne vom referi mai mult la aerul atmosferic ca obiect al infracțiunii de la articolul 230 din Codul penal al Republicii Moldova, deoarece poluarea atmosferică este unul dintre factorii care modelează clima Pământului.

Cuvintele-cheie: poluarea aerului atmosferic, aer atmosferic, criminalitate de mediu, prevenirea criminalității de mediu, articolul 230 Cod penal al Republicii Moldova.

Introduction. Atmospheric air pollution has a direct impact on public health. A clear correlation has been established between air pollution and respiratory diseases: bronchitis, tracheitis, asthma, pneumonia and lung cancer. Noise pollution has a negative effect on the nervous system, visual and vestibular systems and reduces reflex activity. Atmospheric air pollution also causes significant economic damage. The greatest losses occur in the housing and utilities, agriculture and forestry sectors. A correlation has been found between the cost of repairing urban residential buildings and the concentration of harmful substances in the air.

Air pollution is a global problem and poses a risk to human health and the environment. In the Republic of Moldova, atmospheric air quality is influenced by emissions from three types of polluting sources [9]:

➤ *Stationary fixed sources*, which include electrothermal power plants (CEPs) and boiler houses, operating industrial enterprises;

➤ *Mobile sources*, which include road, rail, air, river transport and agricultural machinery;

➤ *Transboundary transfer of pollutants*. Air pollutants emitted in one country can be transported through the movement of air masses in the atmosphere, contributing to or leading to poor air quality in other areas.

In fact, these circumstances determined the relevance and importance of the problem of legal and criminal protection of atmospheric air, as well as the choice of the topic of this research. One of the reasons for the rare practical application of the provision of criminal law establishing criminal liability for atmospheric air pollution is the imperfection of criminal and environmental legislation.

Criminal liability for air pollution is established by Article 230 of the Criminal Code of the Republic of Moldova (hereinafter – CC RM), which describes the elements of one of the main offenses and two qualified offenses (aggravating circumstances). The lack of clear elements characterizing the elements of the offense provided for in Art. 230 CC RM, distinguishing it from other offenses and misdemeanors, as well as insufficient methodological support for law enforcement officers pose certain difficulties in classifying such acts. Environmental damage, harm to human health and other losses to society caused by these offenses are difficult to assess. More precisely, the imperfection of criminal and environmental legislation also determines the imperfection of law enforcement practices.

The protection of atmospheric air is one of the essential dimensions of contemporary environmental policies, being closely linked to the guarantee of the fundamental

right to a healthy and ecologically balanced environment. In the Republic of Moldova, this protection is achieved including through criminal law, which intervenes as a last resort instrument in combating acts with a high degree of social danger. In this context, a central role is played by the provisions of Art. 230 of the Criminal Code of the Republic of Moldova, which criminalizes atmospheric air pollution.

Article 230 of the Criminal Code of the Republic of Moldova falls under the category of crimes against the environment, aiming to protect social relations regarding the quality of atmospheric air, public health and ecological balance. From a doctrinal perspective, the criminalization of this act reflects the evolution of criminal law towards the protection of collective, diffuse values, which go beyond the sphere of individual interests.

The specific content of the violated obligations is established by non-criminal normative acts, such as legislation on environmental protection and air quality. This legislative technique allows the adaptation of the criminal norm to continuously evolving technical standards, but also generates difficulties in implementation, requiring interdisciplinary interpretations.

Methods and materials applied. In order to carry out this study, several methods were used, including: analysis, deduction, comparative, logical-legal, synthesis and systematic. At the same time, the research undertaken is based on studying the national and international legislation in force, existing in the given field.

Discussions and results obtained. Article 37 of the Constitution of the Republic of Moldova provides for the right of every person to an environment that is ecologically safe for life and health, as well as to harmless food products and household items [3].

In accordance with Article 1 of Law No.1515 of 16.06.1993 on Environmental Protection, the relations of man and society with the environment are regulated by the Constitution, this Law and the provisions of other laws and legislative acts that take into account the issues of environmental protection and rational use of natural resources. Accordingly, Art 4 para. (1) of the same Law specifies that: "Natural resources are understood as the soil, subsoil, waters, flora and fauna, located on the territory of the Republic, as well as the air in the space above this territory, constituting the national heritage of the Republic of Moldova".

In order to strengthen institutional capacities for monitoring and assessing air quality in order to identify and implement effective measures to reduce air pollutant emissions to levels that minimize harmful effects on human health and the environment as a whole, there is a special law on air quality at the national level, namely Law No.98 of 14.04.2022 [5]. Article 43 of this law expressly states that failure to comply with the provisions of this law and the normative acts approved under this law shall entail, as the case may be, civil or *criminal liability*, in accordance with the legislation.

Atmospheric air is a vital element of nature, an integral part of the habitat of people, plants and animals. The main useful function of atmospheric air is that it serves as an irreplaceable source of oxygen, necessary for the existence of all life on Earth.

In addition, atmospheric resources also play a significant role in human economic activity. The atmosphere is intensively exploited as a means of transport. Air is an integral component of industrial processes, thermal energy production and other human economic activities. At the same time, the atmosphere acts as a medium for the emission and dispersion of many types of pollutants generated as a result of the operation of various industries.

All the above-mentioned functions of atmospheric air, which it performs in relation to the plant and animal world, to people and society, represent the most important pre-

requisite for the state to ensure its rational use and protection.

The same circumstances predetermine the need for legal regulation of public relations regarding the use of atmospheric air and its protection from pollution and other harmful effects through environmental, civil, administrative, criminal and other branches of law.

The legal definition of atmospheric air is established by Law No.98 of 14.04.2022 on Atmospheric Air Quality [5], which is the main regulatory legal act establishing the legal framework for the protection of atmospheric air. According to Art. 3 of the aforementioned law, atmospheric air is a mixture of gases that make up the lower layer of the Earth's atmosphere (for the purposes of this law – the troposphere).

If we analyze this concept, we can identify several criteria established by law to define atmospheric air:

1) *Environmental criterion*:

a) Atmospheric air is a component of the environment as a whole;
b) It is a natural mixture of atmospheric gases (not created by man under artificial conditions);

2) *Spatial criterion*. That is, only air located outside residential, industrial and other premises will be considered atmospheric air.

It should be noted that both criteria generally characterize atmospheric air as a component of the environment, an element of nature, which appears as a result of natural processes occurring within it and not as a result of economic or other human activity.

If we refer to various aspects of the concept of “environment”, we can highlight the most important ones, in particular: the environment is the operational basis for various human activities, the totality of natural elements – that is, those created by nature, but to a greater or lesser extent transformed by people – which constitute the living conditions of people in a certain place and time; it is the entire material world, external to human society, which surrounds society. The environment exists as a whole, taken at different scales and in various combinations, and not just as a totality of individual elements, natural resources and natural objects. It is emphasized that the environment serves as a condition and means of human life, the territory in which it lives, the spatial limit of state power and the location of industrial, agricultural, cultural and other facilities.

From the specialized literature we know that atmospheric air is made up of a mixture of gases that form the gaseous envelope of the Earth (terrestrial atmosphere). The main composition of atmospheric air is: mainly nitrogen (about 78%), oxygen (about 21%), argon (about 0.93%), carbon dioxide (about 0.04%). In addition, atmospheric air contains in small quantities: water vapor (variable: 0–4%), rare gases: neon, helium, krypton, xenon, ozone (important for protection against UV radiation – the ozone layer). Depending on the area, the air may also contain dust and particles (PM10, PM2.5), smoke, polluting gases (SO₂, NO₂, carbon monoxide). This percentage ratio of gases constitutes the atmospheric air that is typical for the soil layer of the atmosphere.

Thus, atmospheric air can be defined as a vital component of the environment, representing a natural mixture of gases outside any room and, in interaction with other components, providing favorable conditions for life on Earth. Atmospheric air pollution or other changes in its natural properties pose a threat to the life and health of humans, animals and plants.

To cement its legal protection, atmospheric air is legally recognized as the object of several crimes, including crimes against the environment, as provided for in Chapter IX of the Criminal Code of the Republic of Moldova, in particular, the crime of atmospheric

air pollution that we are analyzing (Article 230 of the Criminal Code of the Republic of Moldova).

The commission of a crime from an objective point of view, as a rule, is associated with the impact of the perpetrator on the material objects of the external world. The object of a crime can be discussed in cases where the harm caused to the object of the crime is necessarily related to the damage to a material good within the scope of that good. In the case of crimes against the environment, such goods are components of the environment.

The object of a crime plays an important role in both legislative and law enforcement practice when describing the elements and classifications of crimes. Therefore, together with the object of the crime, it is necessary to establish the other elements of its composition.

In this sense, the object of the crime in conjunction with the other elements of the crime composition (the objective side, the subject and the subjective side) constitutes the legal basis for criminal liability. The notion of the object of the crime is not defined in the legislation, but from the content of Article 15 of the Criminal Code of the Republic of Moldova [2] its significance in determining the harmful degree of a crime is clear. The more important the social value and social relationship achieved by the criminal act, the higher the degree of social danger of the respective act. At the same time, the definition of the notion of the object of the crime is found in the legal doctrine. Thus, according to an opinion, to which we subscribe, the object of the crime is represented by “social values and social relationships, which require criminal defense, in whose consolidation and development society is interested and which, through the antisocial behavior of a person, are or may be significantly harmed” [1, p.35]. The social values protected by the criminal law are listed enumeratively in paragraph (1) of Article 2 of the Criminal Code: “the person, his rights and freedoms, property, environment, constitutional order, sovereignty, independence and territorial integrity of the Republic of Moldova, peace and security of mankind, as well as the entire legal order”. In this context, we specify that not only social values are protected by the criminal law, but also the social relations related to these values. Regarding the correlation between social relations and social values, S. Brînza rightly argues that “social relations are realities external to social value, they pre-exist social value and serve as a factor for evaluating and attributing the attribute of value to certain entities that correspond to the interests of society” [1, p.31]. In other words, social relations are built and developed around social values with which they are in a relationship of interdependence.

Thus, we can confidently state that the object of a crime in the theory of criminal law must be understood as the things in relation to or in connection with which a crime is committed.

Next, after this brief account of some general notions regarding the object of the crime, we will focus our attention on the actual analysis of the object of the crime provided for in Article 230 of the Criminal Code of the Republic of Moldova. If we refer to the definition of atmospheric air as the object of atmospheric pollution, we must first consider the concept of the subject of a crime.

The problem of defining the subject of an environmental crime is directly related to the issue of understanding the object of an environmental crime. Since the subject and object of the crime are related as part and whole, it is impossible to determine the part of the whole without taking into account the whole. E.N. Jevlakov rightly writes that: “in environmental crimes, the subject of the crime must always be considered in connection

with and alongside the object. An isolated analysis of the subject does not allow clarifying the relationship to which the harm is caused, which leads to errors and confusion in the classification of the crime" [8, p.57].

The social danger posed by environmental crimes stems from the fact that they attack the stability of the environment and the potential of natural resources, as well as everyone's right to a healthy environment, guaranteed by Article 37 of the Constitution of the Republic of Moldova. The degree of social danger of these crimes depends on the social significance of the object of the attack and is determined by the extent of the damage caused by the crime.

The object of a crime is what the crime attacks, that is, what it targets, what it violates, and what it causes or may cause damage to.

The problem of the social value protected by law that is affected or endangered by the crime is one of the most controversial in the theory of criminal law. In the science of criminal law, there are four main approaches to the object of the crime: 1) social relations; 2) social relations and legal norms; 3) social relations and the productive forces of society, that is, people, tools and means of use; 4) the actual object of the crime. In this case, when determining the object of a crime in accordance with the prevailing concept, the starting point is the recognition of social relations as such.

In our opinion, the theory of "object of crime – social relations" seems to be the most accurate. Of course, the problem of defining the object of crime deserves a detailed analysis, but it goes beyond the scope of this work. We will approach the concept of object of crime only in relation to crimes against the environment in general and atmospheric air pollution in particular.

Understanding the object of environmental crimes has long been one of the most controversial issues in the national criminal law literature. Approaches to understanding its resolution have evolved as environmental and criminal legislation have developed and improved.

A broad understanding of the object of environmental crimes was formulated in the works of X. Ulianovschi. According to him, the object of environmental crimes is complex social relations, protected by the norms of criminal law, regarding the rational use of natural resources, the preservation of a qualitative environment for living beings and ensuring the ecological security of the population, an opinion that is similar to our position regarding the generic legal object of environmental crimes. The special legal object of environmental crimes is social relations regarding the protection and rational use of certain types and forms of natural resources and ensuring the ecological security of the population. Each environmental crime has a special legal object [6, p.45].

In our opinion, the generic object of the crime is the normal relationship between people regarding the environment as the basis of the existence and vital functions of human society. These relationships mediate the functioning of the "man-environment" system, including both the use of natural resources and the deliberate impact of man on nature for the purpose of its preservation and improvement. The direct objects of individual crimes are social values determined by the functions of the environment in human life.

Based on the prevailing opinion in the domestic criminal law doctrine regarding the object of the crime as the social relations protected by criminal law, which the offender violates, the object of environmental crimes is recognized as a complex, integral set of concrete social relations. This complex includes social relations regarding the environment as a whole and its individual components, regulated and protected by legal norms, which, by their content, concern the ownership of natural resources, nature manage-

ment, protection of the environment from harmful impacts, as well as the protection of environmental rights and legitimate interests of individuals and citizens.

Contemporary russian literature also supports a different approach to understanding the object of environmental crimes. A.E. Jalinskii emphasizes that the first meaning of this concept reveals it as a fundamental socio-legal value (a legal benefit) protected by criminal law, while the second – as an element of the composition of the crime [7, p.359].

Considering all of the above, in this research, we will understand as the main object of environmental crimes the social relations regarding ensuring environmental safety and ecological order. However, we must take into account the data on the classification of the objects of the crime in relation to the atmospheric air pollution we are studying.

The common object of all crimes provided for by the Criminal Code of the Republic of Moldova, including atmospheric air pollution, is the totality of all social relations protected by criminal law against criminal attacks.

The list of social relations protected by criminal law is provided for in Article 2 of the Criminal Code of the Republic of Moldova [2]. These include the person, his rights and freedoms, property, the environment, the constitutional order, the sovereignty, independence and territorial integrity of the Republic of Moldova, peace and security of mankind, as well as the entire legal order. As we can see, the general object of the crime, formulated in Art. 2 CC RM, among other things, also provides for the protection of the environment as one of the main objectives of criminal law.

The title of the chapter of the Criminal Code of the Republic of Moldova corresponds to the group of social relations that are protected by its norms from the crimes specified therein and characterizes their generic subject matter. Despite the fact that the environment is specifically mentioned in Article 2 of the Criminal Code of the Republic of Moldova, structural environmental crimes are provided for in Chapter IX called “Environmental Crimes”.

As we know, in the criminal law literature, a specific object is understood as the object that is targeted by a certain type of crime. As mentioned earlier, public relations regarding environmental safety act as a specific object of all environmental crimes, including atmospheric air pollution, which correlates with the generic object of the crime, both as specific and as general. Environmental safety is an integral part of public safety.

This point is also mentioned in the new National Security Strategy of the Republic of Moldova approved by Government Decision No.391/2023 [4], namely in Article 8 it is mentioned that one of the national security objectives of the Republic of Moldova is the protection of the environment.

Environmental laws and order represent the state of compliance by all persons with all established standards and rules of ecological conduct.

As for the direct object of air pollution, it is represented by social relations related to ensuring environmental safety, protection and rational use of atmospheric air. The main direct object of the investigated crime is, as previously mentioned, public relations related to ensuring environmental safety, protection and rational use of atmospheric air.

The need to identify the additional direct targets of crime is primarily due to the fact that, ultimately, any negative impact on nature, including atmospheric air, can affect human health.

In addition, an optional object of air pollution may be, for example, public relations regarding property protection in case of property damage, animal death, depopulation and/or contamination of flora, fauna, biodiversity, damage to the health of the population.

It should be noted that personal safety, health of the population (safety of life, health and property) is an element of environmental safety and, therefore, is subject to criminal protection under Article 230 of the Criminal Code of the Republic of Moldova, not in itself, but only in conjunction with public relations to ensure environmental safety, protection and rational use of atmospheric air.

Therefore, a part of public safety is environmental safety, which represents the state of protection of two interconnected components: human life and health from threats to the environment and the natural environment from the negative impact of human activity. Thus, social relations aimed at ensuring the safety of human life, health and property are objects of air pollution only in the context of their protection from the negative impact of the atmosphere, which, in turn, has been subjected to pollution and other negative changes as a result of exceeding the permissible emissions limits and/or maximum permissible concentrations, as a result of the emission or discharge into the atmosphere of pollutants or violation of operating rules or as a result of non-use of equipment, apparatus, purification and control installations for emissions into the atmosphere, if there was a danger of causing damage to the environment or health of the population.

That is, the existence of the danger of causing damage to the environment or the health of the population, socially dangerous consequences in the form of damage in particularly large proportions, the death of a person due to imprudence, etc., are conditioned by the deterioration of the environment, atmospheric air pollution.

On the other hand, causing material damage in large or especially large proportions or harm to the health of the population as a result of, or during, economic or other activities that do not pollute the atmosphere does not constitute a crime against the environment and constitutes a general crime against human life and health, property and public health. In this case, the personal safety of a person is an independent object of protection of criminal law under other chapters of the Special Part of the Criminal Code of the Republic of Moldova.

This provision has an important practical significance, as it allows us to distinguish atmospheric air pollution from other crimes provided for by other chapters of the Criminal Code of the Republic of Moldova.

In our opinion, environmental crimes target components of the environment and natural objects. Ecologically harmful anthropogenic objects should not be considered as the object of environmental crimes, since their existence may, in fact, be a means of introducing negative changes in the environment or its components. For example, emissions of harmful substances pollute the air or dumping of waste into water bodies harms a water body.

The object of the crime provided for in Article 230 of the Criminal Code of the Republic of Moldova is a vital component of the environment, an integral part of the habitat of people, plants and animals, such as atmospheric air. The object of the violation of the crimes includes the atmosphere, atmospheric air and its natural properties, taken together. We believe that the existence of such notions is primarily due to the fact that the current environmental legislation does not make a clear distinction between concepts such as "atmosphere" and "atmospheric air". Thus, the concepts of "atmosphere" and "atmospheric air" in their natural scientific interpretation are linked as a whole and a part.

Indeed, based on a literal interpretation of Art. 230 of the Criminal Code of the Republic of Moldova, it must be concluded that the object of the crime is precisely the atmospheric air, since the atmosphere is not mentioned in the criminal law. In addition, causing damage to the atmospheric air does not exclude damage to the atmosphere as a

whole.

A broad understanding of the object of environmental crimes was formulated in the works of X. Ulianovschi. According to him, the generic legal object of the crime of air pollution is the social relations protected by criminal law regarding the rational use of natural resources, the protection of a healthy environment for people and other living beings, ensuring ecological discipline and the security of the population. The special legal object of the crime is the group of homogeneous social relations related to the protection of natural resources. The secondary special legal object of this crime is the social relations related to the health and bodily integrity of people and the national economy [6, p.84].

At the same time, it is absolutely clear that there is a need for clarification and harmonization of the terms used in modern natural sciences, criminal law and environmental legislation.

In this regard, it is necessary to clarify that in this article, the term “atmospheric air pollution” will be used in the meaning given to it by the Criminal Code of the Republic of Moldova, for the purpose of designating the title and content of Article 230.

It should also be noted that the concept of “air pollution” reflects the most widespread type of negative human impact on this component of the environment and the most frequent socially dangerous consequence of the acts specified in para. (1) of Art. 230 of the Criminal Code of the Republic of Moldova, a fact confirmed by the analysis of judicial practice. Therefore, we believe that the title of Art. 230 of the Criminal Code of the Republic of Moldova – “Atmospheric Air Pollution” – fully reflects the content of this article of the current criminal law.

Atmospheric air, like any other natural gas, has certain natural properties. Clarification of the list of natural properties of air has not only scientific, but also criminal-legal significance for the classification of a crime, since their pollution is specified in the provisions of Art. 230 of the Criminal Code as one of the socially dangerous consequences of the committed act.

The significance of the object of atmospheric air pollution that we have examined lies in the fact that they allow us to understand the social and legal nature of this offense, its impact on other components of the environment and natural objects, and serve as a criterion for distinguishing this offense from other offenses provided for in Chapter IX and other chapters of the Criminal Code of the Republic of Moldova, and therefore play an important role in the classification of offenses.

For example, air pollution may occur during the commission of other crimes, such as Failure to fulfill or improper fulfillment of duties to comply with legislation on environmental protection (Article 223¹ of the Criminal Code), Violation of the rules for the management of chemical substances and products, waste, including hazardous and radioactive waste (Article 224 of the Criminal Code).

Therefore, when distinguishing between these types of crimes, it is necessary to consider the question of what specific object the perpetrator attacks or what object is directly harmed as a result of the socially dangerous act. Thus, when committing intentional crimes against life and health, the main direct object of the crime will be social relations that ensure the safety of human life and health, rather than social relations that ensure environmental safety, protection and rational use of atmospheric air.

Regarding the object of the crime, a distinction must be made between air pollution and acts of terrorism, sabotage and ecocide, the direct objects of which are, respectively, social relations aimed at ensuring public safety, economic security and the country's defense capacity, as well as safe environmental conditions for the existence of humanity.

It should be noted that, while the object of the crime is the main criterion for distinguishing between the elements of the crimes provided for in different chapters of the Criminal Code of the Republic of Moldova, determining the object of the crime – the component of the environment or the natural object that the perpetrator violates – is the simplest criterion for distinguishing between the elements of environmental crimes.

In particular, by means of the object of the crime, a distinction can be made between the crime of atmospheric air pollution Art. 230 and the other crimes in the same chapter, such as those provided for in Art. 223 – Violation of environmental safety requirements; Art. 223¹ – Failure to fulfill or improper fulfillment of duties to comply with legislation on environmental protection; Art. 224 – Violation of the rules for the management of chemical substances and products, waste, including hazardous and radioactive waste; Art. 227 – Soil pollution; Art. 229 – Water pollution.

The main objective of the analysis of criminal law sources establishing criminal liability for violations of public relations in the field of environmental protection was a comprehensive study and critical understanding of the development of norms on criminal liability for atmospheric air pollution.

Conclusion. The preventive function of the criminal norm is essential in the field of environmental protection. Article 230 of the Criminal Code of the Republic of Moldova contributes to the prevention of environmental crime through several mechanisms. First, through the deterrent effect, the criminal norm imposes on economic agents the obligation to comply with environmental standards, under penalty of severe penalties. Second, the norm has an educational and symbolic role, affirming the importance of protecting atmospheric air as a fundamental social value. This dimension is particularly relevant in the context of increasing environmental awareness. Third, Article 230 CC stimulates voluntary compliance, causing economic operators to invest in non-polluting technologies and emission control systems.

However, there are also some shortcomings in the criminalization of this illegality. One obstacle is the evidentiary difficulties, in particular: establishing the level of pollution in the existence of the danger of causing damage to the environment or the health of the population; identifying the exact source, etc. Also, the character of the blank norm implies a strong dependence on extra-criminal, environmental-specific regulations, which can generate legal uncertainty.

But one thing is encouraging, that contemporary doctrine is taking shape on the tendency to strengthen the preventive role of environmental criminal law by: expanding the incriminations of danger; reducing the threshold of criminal intervention; strengthening the liability of legal entities; harmonizing with European standards in environmental protection. All of this has also been achieved in the criminal legal framework on the crime of atmospheric air pollution from Article 230 of the Criminal Code of the Republic of Moldova.

Thus, in order to increase the efficiency of environmental crime prevention, it was necessary to reconfigure criminalization in the sense of capitalizing on the model of dangerous crimes, which would allow for the sanctioning of polluting behavior before serious consequences occur.

The dependence of Article 230 on extra-criminal regulations allows for adaptation to the evolution of technical standards, but creates difficulties in interpretation and application. In practice, this determines an increase in the role of expertise and a relative unpredictability of the criminal norm.

Therefore, Article 230 of the Criminal Code of the Republic of Moldova represents an

essential legal instrument in combating air pollution in the Republic of Moldova. Although its effectiveness is limited by certain normative and practical constraints, its preventive role cannot be ignored, contributing to discouraging polluting behaviors and strengthening environmental protection.

The criminalization provided for in Art. 230 CC confirm the tendency of modern criminal law to protect collective values, such as the environment, independently of the existence of direct individual harm. Thus, atmospheric air is elevated to the rank of a distinct legal object, which reflects the conceptual evolution of criminal law towards the field of diffuse interests.

Since the main sources of pollution are industrial activities, the effectiveness of Article 230 CC directly depends on the effective application of criminal liability of legal persons. This constitutes an essential tool for the prevention of large-scale environmental crime.

The evolution of national norms is influenced by European standards, which promote a firmer approach to environmental crime. In this context, Article 230 is susceptible to modernization, in order to align it with contemporary requirements regarding the prevention and sanctioning of pollution.

In the future, making this criminalization more efficient requires an integrated approach, combining criminal instruments with administrative, environmental and economic ones, in order to ensure a high level of protection of atmospheric air.

Article 230 of the Criminal Code of the Republic of Moldova constitutes an important pillar of the criminal protection of atmospheric air in the Republic of Moldova, but its preventive efficiency is conditioned by overcoming the current limits of the regulation. A reform oriented towards criminalization of danger, normative clarity and systemic integration would allow transforming this norm into a genuine instrument for combating environmental crime.

Bibliographical references

1. Brînză S. Obiectul infracțiunilor contra patrimoniului. Chișinău, Editura: USM, 2005. 675 p.
2. Codul penal al Republicii Moldova nr.985 din 18.04.2002. În: Monitorul Oficial al Republicii Moldova, 14.04.2009, nr.72-74.
3. Constituția Republicii Moldova nr.1 din 29 iulie 1994. În: Monitorul Oficial al Republicii Moldova, 13.11.2024, nr.466.
4. Hotărârea Guvernului al Republicii Moldova nr.391 din 15.12.2023 privind aprobarea Strategiei securității naționale a Republicii Moldova. În Monitorul Oficial al Republicii Moldova, 17.01.2024, nr.17-19.
5. Legea Republicii Moldova nr.98 din 14.04.2022 privind calitatea aerului atmosferic. În Monitorul Oficial al Republicii Moldova, 13.05.2022, nr.141-150.
6. Ulianovschi X. Infracțiuni Ecologice. Ghid medotic. Editura: USM, Chișinău, 2024. 177 p.
7. Жалинский А.Э. Уголовное право в ожидании перемен: теоретико-инструментальный анализ. 2-е изд., перераб. и доп. – М.: Проспект, 2009. 400 с.
8. Жевлаков Э.Н. Уголовно-правовая охрана природной среды в Российской Федерации. М.: ЗАО «Бизнес-школа «Интел-Синтез», 1997. 184 с.
9. https://am.gov.md/ro/content/sursele-de-poluare-aerului?utm_source=chatgpt.com (accesat 14.04.2026).