Environmental Crimes and Bentonite Mining and Processing Companies in Slovak Republic

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Abstract: At the time when great emphasis is being placed on environmental protection as well as on the introduction of environmental safeguards, we are faced with an undesirable phenomenon—environmental crime. Environmental crime represents one of the fastest growing security issues. It is a criminal activity, and like other crimes, it has serious consequences that are costly to eliminate. This article uses systematic analysis and, through scientific methods, points out the growth of environmental crime in Slovakia. At the same time, it introduces possible prevention tools. Our aim is to specify the term ‘environmental crime’, present the legal aspects of environmental crimes by focusing on Slovak legal regulation, extend the topic to bentonite mining and processing companies, map environmental crime in the EU Member States, and clarify the nature of environmental crime as well as the legal basis for the protection of the environment in Slovakia. The findings and conclusions have the potential to introduce a new approach to mapping the topic of environmental crimes, provide recommendations for the prevention of this type of crime, and open a discussion on the actual global problem. It is evident that the effective fight with environmental crime requires a complex and multidisciplinary approach at all levels. This includes, in particular, the use of relevant national policies and instruments, as well as those of the European Union and other international organizations.
Keywords: common rules, convention, environmental crime, legal act, penalties

1. Introduction

Globalization processes are changing society in all its core areas—the economy, social and cultural relations, interfering positively with new problems and ailments. The synergistic manifestation of these processes is a change in the quality of life of society, its individual segments, in particular through structural changes in national economy, changes in the social composition of the population, the technological boom and value system (Moresova & Sedliacikova, 2018, p. 266). At a time of developing globalization processes and building a green economy as well as the transition to a circular economy, we are also faced with the undesirable phenomenon of environmental crime. The transition to circular and green economy is determined by the reduction of the consumption of natural resources, reducing the production of industrial waste and emissions. Legal regulation also plays an important role in this respect. The principles of green economy are set out in the European Green Deal (COM/2019/640 final.), the aim being to protect, conserve and enhance the EU's nature capital, and protect the health and wellbeing of citizens from environment-related risks and impacts. These environmental ambitions require synergies across several policies (in areas such as industry, production, transport, and infrastructure). Basic preconditions for building a green economy are digital transformation, innovation and regulation. The modernization and transformation of industry and production is also accompanied by violations of rules, the protection of which is required by law. Business activity is also determined by social responsibility, and entrepreneurs have to take responsibility for difficult decisions more often, in particular if they live and work in new cultural contexts (Hrehová, 2018, p. 137). In this light, the enforcement role of the state is important, including searching for responsible persons and entities for crimes against the environment.

Analysis of the connections between environmental crime and other serious crimes through cluster analyses, and the possibility to identify subtypes of organized crime groups that have diversified into the illegal trade in natural resources, have also been described by van Uhm and Nijman (2022). The majority of environmental crimes are the crimes of omission (Huisman & van Erp, 2013).
Environmental crimes tend to be interpreted by offenders as economic, rather than violent, crimes, making it easier for offenders to adopt the methods of neutralization used for white-collar crimes when discussing the social, economic, and political context in which environmental harms occur (Manirabona & Duval, 2016).

The study of Eman and Franca (2013) points out an increase in individual crimes against the environment, space and natural resources, such as cruelty to animals, poaching and destruction of forests (timber thefts) and the number of detected offenses against the environment, including illegal dumping of waste and fishing without a license. Findings show both a positive impact (i.e., the decrease of environmental crime acts) as well as a negative impact (i.e., the increase of environmental crime acts) of the economic crisis on the movements and trends in environmental crime (Eman & Franca, 2013).

Environmental pollution has reached unprecedented levels in recent years. The purpose of the study by Hurbanova et al. (2017) is to reveal the nature and causes of environmental crime in Ukraine, the socioeconomic aspects of the identified phenomenon, analyse the impact of the negative consequences of environmental crime on Ukrainian economy, as well as study the legal aspects of criminal liability for environmental crimes and international legal standards on the raised issues (Hurbanova et al., 2017).

This article analyses the development of environmental crime in Slovakia based on facts, data and significant factors, elaborates on the term ‘environmental crime’, presents the legal aspects of environmental crimes with a focus on Slovak legal regulation, associates the topic with bentonite mining and processing companies, and maps environmental crime in the EU Member States. The research is aimed at legal instruments applicable in the area of protection of the environment in Slovakia.

2. Aim and methodology

The research methods used focus on the objectives and subject of the research. The methodology of logic, research from legal acts, and sources by international organizations and authors were applied in order to clarify the concept of environmental crime. The empirical application summarizes the evidence of committed criminal activities related to environmental
issues and points out the rise of crime in this area. We used the method of systematic analysis to identify the relationships of environmental crime and formulate the key conclusions and recommendations for the improvement of preventing damage in environmental crime. Considering this aim, the following research questions were formulated:

Q1: How is environmental crime defined by international institutions and experts?
Q2: What types of environmental crime are committed in Slovakia?
Q3: How do bentonite mining and processing companies violate environmental protection rules?
Q4: What prevention measures are suitable for the fight against environmental crime?

Methods of scientific work, such as summarization, knowledge synthesis, and the analogy method, were used to find answers to the questions we examined. The analogy method, deduction and summarization of knowledge were used to examine the results and formulate conclusions.

The general methodological basis of the research focused on environmental crimes was formulated using the basic provisions of the dialectical method for researching a legal phenomenon in relation to its textual context. All the evidence suggests that among the reasons for the production of environmental crimes are the ineffectiveness of the activities of law enforcement agencies, economic determinants, and reasons in the field of legal awareness (Golubev et al., 2020).

3. Environmental crime

The term ‘crime’ is of Latin origin, *criminalis*, and its equivalent in the Slovak language is ‘criminality’ or ‘criminal activity’. It is anti-social activity, which is forbidden and performed by humans. Environmental crimes are on the rise across the globe and, as a result, the world is being dredged of its rich natural resource base (Memon & Ayappan, 2019). In essence, it represents an infringement of legal rules. Environmental crimes can generate very high profits and carry a relatively low risk of detection (EUROJUST, 2021, p. 3). The set of problems surrounding environmental crime are regulated in several documents, conventions and standards of international organizations, as well as in domestic legal orders of the Member States. The European policy
of environmental protection was integrated among European policies by the Single European Act of 1987, thus the legal basis for common European policy in the area of environment was established. With the Maastricht Treaty of 1993 the environment became an official part of the EU policies with the co-decision and the general principle of qualified majority voting in the Council. The basic framework of the environmental policy is established in Article 11, and Articles 191 to 193 of the Treaty on the Functioning of the European Union, while the proposals in the area of the environment must aim at a high level of protection. The EU Treaties have established a supranational system where European rights are applied and enforced mostly by national procedural laws and remedies (Mendez-Pinedo, 2021). The EU law became an integrated part of national legal systems and its proper implementation is safeguarded by the European Commission. “The environmental policy of the European Union is based on a number of principles, including that of precaution, prevention, diminution of pollution from its source, as well as that of the polluter's liability” (Stoican, 2020).


a) illegal emission or discharge of substances into air, water or soil;
b) illegal trade in wildlife;
c) illegal trade in ozone-depleting substances;
d) illegal shipment or dumping of waste.

This Directive was transposed into several laws in Slovakia.

It is stated in the documents of the United Nations Interregional Crime and Justice Research Institute:

Environmental crimes encompass a broad list of illicit activities, including illegal trade in wildlife; smuggling of ozone-depleting substances (ODS); illicit trade of hazardous waste; illegal, unregulated, and unreported fishing; and illegal logging and trade in timber. On one side, environmental crimes are increasingly affecting the quality of air, water and soil, threatening the survival of species and causing uncontrollable disasters. On the other, environmental crimes also impose a security and safety threat to a large number of people and have a significant negative
impact on development and the rule of law. (UNICRI, 2021)

EUROPOL defines environmental crime as “covering ‘the gamut of activities that breach environmental legislation and cause significant harm or risk to the environment, human health, or both.’”

Legal acts aimed at environmental protection are adopted not only on the level of the European Union, but also that of the United Nations Economic Commission for Europe, where conventions of international dimension are adopted. The United Nations Economic Commission for Europe adopted the Convention on access to information, public participation in decision-making and access to justice in environmental matters (which entered into force on 30 October 2001). The Aarhus Convention provides the public with a number of rights with regard to the environment, access to information and public participation and access to justice regarding environmental matters:

a) the right of every person to access environmental information that is held by public authorities,

b) the right to take part in environmental decision-making,

c) the right to review procedures to challenge public decisions that have been made without respecting the above rights or environmental law in general. (UNECE, 1998)

There are several opinions and definitions of authors on the problematic of environmental crime. We have chosen the following ones.

Zehra (2019) claims that “environmental crime is an illegal act that directly harms both humans and the environment”. According to Gore,

transnational environmental crime is a social issue closely linked to sustainable development and human security; it is an interdisciplinary phenomenon with implications far beyond plants, animals, and ecosystems. Transnational environmental crime is a social issue closely linked to sustainable development and human security; it is an interdisciplinary phenomenon with implications far beyond plants, animals, and ecosystems. (Gore, 1998)

Environmental crime also reaches a higher level of sophistication and is also carried out in an international context. Riehle (2021) claims that “environmental crime should be recognised as organised crime”. Organized crime has an international dimension and that is why the protection of environment is not a purely domestic issue.

On the basis of the above facts, it can be stated that any conduct that is in
conflict with the law in the field of environmental protection, whether it is an administrative or criminal offence, is considered an environmental crime. At the same time, the gravity of the offence and its impacts on the environment, as well as the caused economic damage, are considered. The approaches to understanding environmental crimes vary, depending on whether it is merely violation of legal codes as defined by law or whether it should also include the risks and harm to environment (Gibbs et al., 2010).

4. Slovak legal regulation

Economic and social development and environmental protection are interlinked and represent mutually reinforcing parts of sustainable development. They emphasize the benefits of cooperation on social and environmental issues related to trade as part of the global approach to trade and sustainable development (Jančíková & Pásztorová, 2021).

A favourable environment is a basic condition for the existence of life. All Member States pay due attention to the protection of the environment and also protect it through criminal law. Right to favourable environment is enshrined in the Constitution of the Slovak Republic and the Constitutional Law No. 23/1991 Coll. introducing the Charter of Fundamental Rights and Freedoms. According to Article 44, paragraph 3 of the Slovak Constitution “no one shall imperil or damage the environment, natural resources”. The rewards of this activity are society-wide, and therefore beneficial to every citizen of the Slovak Republic who has “the right to a favourable environment” under Article 44, paragraph 1. The subject of this provision is the right to a healthy environment that is ranked into the rights of third generation of fundamental rights and freedoms. Under Article 45 of the Slovak Constitution, “[e]veryone has the right to timely and complete information about the state of the environment and about the causes and consequences of its condition.” Further on this provision, we can also talk about the constitutional principle of the protection of environment. According to the Constitution of the Slovak Republik (2010, p. 186), “protection of environment ranks among new tasks undertaken by the State in order to protect natural foundations and living conditions for life of future generations.”

In the Criminal Code (Law No. 300/2005, Coll.) a separate chapter devoted to the protection of environment and its components was established, containing criminal offences against the environment. According to Slovak law, any act...
that violates environmental law and causes serious damage or poses a risk to the environment or human health is considered an environmental crime.

The following criminal offences are defined in the Criminal Code (Law No. 300/2005 Col.) in part named ‘Crimes against environment (Art. 300–310):

a) endangering and damaging the environment;
b) unauthorized waste management;
c) violation of the protection of water and air;
d) violation of the protection of plants and animals, including illegal trade in endangered species of plants and animals and illegal tree felling outside the forest land fund;
e) violation of the protection of trees and bushes growing in the forest land fund;
f) spreading of contagious animal and plant diseases;
g) escape of genetically modified organisms;
h) poaching.

In the case of a committed criminal offence, it is possible to impose financial sanctions as well as imprisonment. Environmental crimes are committed in different forms, with various intensity and consequences for the outdoor environment. In defining the criminal liability in respect to environmental crime, it is necessary to identify the damage caused to the environment (so-called environmental damage and material damage including the costs of restoring the environment). One on the features of the definition of the criminal offence is the illegal character of the activity. An obligatory feature of the subjective side of the crime is the degree of fault, which expresses the perpetrator’s relationship to the protected interest. When assessing fault, the intention from negligence is distinguished. It is evident from the practice that there are differences between the detected environmental crime and clarified (evidenced) environmental crime. Table 1 below indicates the overview of environmental crime in the EU Member States in 2012–2018.

**Table 1. Overview of environmental crime in the EU Member States, 2012–2018**

<table>
<thead>
<tr>
<th>Environmental crime</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detected</td>
<td>1,624</td>
<td>1,697</td>
<td>1,544</td>
<td>1,538</td>
<td>1,565</td>
<td>1,469</td>
<td>1,429</td>
</tr>
<tr>
<td>Undetected</td>
<td>1,135</td>
<td>1,216</td>
<td>1,036</td>
<td>1,091</td>
<td>929</td>
<td>909</td>
<td>829</td>
</tr>
</tbody>
</table>
Table 2. Overview of detected and evidenced environmental crimes in the years 2017–2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Art. 300 endangering the environment</td>
<td>12</td>
<td>2</td>
<td>17</td>
<td>1</td>
<td>30</td>
<td>3</td>
<td>28</td>
<td>3</td>
</tr>
<tr>
<td>Art. 301 endangering the environment</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>21</td>
<td>4</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>Art. 302 unauthorized waste management</td>
<td>221</td>
<td>16</td>
<td>216</td>
<td>24</td>
<td>277</td>
<td>23</td>
<td>385</td>
<td>51</td>
</tr>
<tr>
<td>Art. 303 protection of waters and air</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Art. 304 protection of waters and air</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Art. 304a protection of the ozone layer</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Art. 305 protection of plants and animals</td>
<td>67</td>
<td>34</td>
<td>80</td>
<td>43</td>
<td>118</td>
<td>78</td>
<td>134</td>
<td>156</td>
</tr>
<tr>
<td>Art. 306 protection of trees and bushes</td>
<td>113</td>
<td>42</td>
<td>99</td>
<td>20</td>
<td>128</td>
<td>33</td>
<td>154</td>
<td>34</td>
</tr>
<tr>
<td>Art. 310 poaching</td>
<td>263</td>
<td>165</td>
<td>310</td>
<td>213</td>
<td>296</td>
<td>182</td>
<td>305</td>
<td>171</td>
</tr>
<tr>
<td>Art. 378 animal abuse</td>
<td>20</td>
<td>7</td>
<td>40</td>
<td>14</td>
<td>84</td>
<td>34</td>
<td>84</td>
<td>34</td>
</tr>
<tr>
<td>Art. 378a neglect of care</td>
<td>1</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>


Police bodies are quite successful in detecting environmental crime. Within the framework of their activity, the number of detected environmental crimes exceeds 1,400; however, they are less successful in evidencing these crimes. Around one third of environmental crimes remain undetected. Practice shows that the number of undetected crimes is much lower than the

Source: Kern, 2019.
number of detected environmental crimes. In order to achieve a higher level of efficiency and effectiveness in detecting and evidencing environmental crime, verification of the objectivity, truthfulness, validity and usability of obtained evidence is required. This raises the question of the reasons for the low level of clarification of environmental crime. The tactics of clarification and evidencing of these crimes is based on evaluation and systematic work with the obtained information. Relevant information as well as experience are indicators in the process of clarification and evidencing. In this context, we are of the opinion that high demands are placed on the detection, clarification and evidencing the environmental crime, as well as the participation of several entities involved in crime.

The General Prosecutor’s Office of the Slovak Republic issues annual statistical reports on crime against the environment. A relatively large increase in the number of crimes committed occurred in the year 2019, when a total of 369 persons were prosecuted, which is a year-on-year increase of 15 persons, compared to the year 2018.

In Table 2, the numbers of detected and evidenced/clarified environmental crimes in Slovakia are included.

In terms of comparing the data published by the General Prosecutor’s Office of the Slovak Republic, it can be stated that the number of environmental crimes is increasing. The highest number of persons were prosecuted for the crime of unauthorized waste management according to Article 302 of the Criminal Code. The Slovak legal system has sufficient legal tools aiming at increasing the legality of applying the legal provisions regulating the area of environment. Committing environmental crime often coincides with other crimes, such as fraud. Nonetheless, clarification and evidencing of the crimes remains a problem. It follows from the statistical data that many environmental crimes were detected, however, their clarification and identification of the offenders responsible still remains low. For example, one type of environmental crime—endangering the environment—was detected on 28 occasions in the year 2020, but only 3 were clarified. The aim of clarifying and evidencing an environmental crime is to identify the circumstances and impose on the offenders a fair and just punishment. Identified facts or information about environmental crimes are the indicators for detecting and exposing environmental crime. The process of detecting and exposing environmental crime is thus a purposeful activity that is limited by legal norms, while at the same time applying a multidisciplinary approach. The identification and exposing of the crimes also helps to introduce prevention measures in the area of the environment.
In this context, we can state that there are problems with exposing and clarifying environmental crimes not only at national, but also at an international level.

5. Environmental crime in EU Member States

The European Union Agency for Criminal Justice Cooperation (EUROJUST) elaborated on the Report on Environmental Crime 2021. The aim of the report is to monitor environmental crime and identify recommendations on the basis of its findings. The findings of environmental crime in individual Member States are quite significant. In Table 3, we compare data based on the request for legal assistance in environmental crime cases as reported to EUROJUST in the years 2014–2018.

**Table 3.** Comparison of environmental crime (detected): cases by Member States at EUROJUST in 2014–2018

<table>
<thead>
<tr>
<th>Member states EU</th>
<th>Environ. crime</th>
<th>Member states EU</th>
<th>Environ. crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>7</td>
<td>Italy</td>
<td>11</td>
</tr>
<tr>
<td>Belgium</td>
<td>16</td>
<td>Latvia</td>
<td>7</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>6</td>
<td>Lithuania</td>
<td>6</td>
</tr>
<tr>
<td>Croatia</td>
<td>7</td>
<td>Luxembourg</td>
<td>6</td>
</tr>
<tr>
<td>Czechia</td>
<td>6</td>
<td>Malta</td>
<td>6</td>
</tr>
<tr>
<td>Cyprus</td>
<td>6</td>
<td>Netherlands</td>
<td>13</td>
</tr>
<tr>
<td>Denmark</td>
<td>8</td>
<td>Poland</td>
<td>12</td>
</tr>
<tr>
<td>Estonia</td>
<td>6</td>
<td>Portugal</td>
<td>10</td>
</tr>
<tr>
<td>Finland</td>
<td>8</td>
<td>Romania</td>
<td>9</td>
</tr>
<tr>
<td>France</td>
<td>10</td>
<td>Slovenia</td>
<td>6</td>
</tr>
<tr>
<td>Greece</td>
<td>10</td>
<td>Slovakia</td>
<td>7</td>
</tr>
<tr>
<td>Germany</td>
<td>13</td>
<td>Spain</td>
<td>10</td>
</tr>
<tr>
<td>Hungary</td>
<td>7</td>
<td>Sweden</td>
<td>8</td>
</tr>
<tr>
<td>Ireland</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Through secondary analysis of the data we concluded that there is an increase in environmental crime in the countries which are the founding states of the European Communities (now the European Union). There is no doubt that these countries have higher-level systems for clarifying and evidencing environmental crime, as well as mechanisms for preventing this type of crime, than the countries of Central and Eastern Europe.

In addition to environmental crime under the scope of the Criminal Code, the Slovak Inspectorate of the Environment (1991) performs state supervision on the basis of the law on matters of environmental care. It has the authority to impose fines for the infringement of legal rules. Its control is aimed at water protection, protection of air, waste management, biological security, etc. The results realized in the period of the years 2016 to 2019 suggest that, in many cases, the legal regulations were infringed. There were both legal and natural persons that infringed the relevant legal rules. Table 4 presents the number of performed controls, the number of detected infringements of rules as well as the level of imposed fines.

**Table 4. Overview of control activities of the Slovak Inspectorate of the Environment in the years 2016–2019**

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of inspections</td>
<td>3,397</td>
<td>2,659</td>
<td>2,806</td>
<td>3,254</td>
</tr>
<tr>
<td>performed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of inspections</td>
<td>770</td>
<td>900</td>
<td>989</td>
<td>1,146</td>
</tr>
<tr>
<td>with violations of the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>law found</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount of fine, €</td>
<td>1,042,282.86</td>
<td>1,391,611.88</td>
<td>1,208,567</td>
<td>1,790,330.15</td>
</tr>
<tr>
<td>Number of entities</td>
<td>770</td>
<td>581</td>
<td>651</td>
<td>648</td>
</tr>
</tbody>
</table>


6. Administrative offences

The results of the controls suggest that while the number of controls is being increased, the infringement of rules in the area of protection of environment by the natural and legal persons is not satisfactory. Compared to previous years, in the year 2019, the volume of imposed fines reached the amount of 1,790,330.15 euros. The imposition of fines was lawful and proportionate to
the degree of infringement of the legal norm. The imposition of fines pursues both preventative and educative functions, as well as the repressive one; however, the fact that the number of entities that we classify as polluters of the environment is growing cannot be overlooked. Most often, the rules in the area of waste management were violated. In this context, we are of the opinion that the protection of environment is the protection of us all.

7. Facts about companies that extract and process bentonite (mineral)

In our study, we focused on companies that extract and process the raw material bentonite in Slovakia. As it is a demanding process of surface mining and processing of minerals for various uses in industry, cosmetics or construction, we were convinced that the companies belonging to this group violated the legislation in this area. However, on the basis of data obtained from the Slovak Inspectorate of the Environment, which is responsible for performing monitoring and imposing fines, we found out that the companies active in mining and processing of bentonite in Slovakia in the last ten years were not imposed fines. The table lists the specific companies in Slovakia.

**Table 5. Slovak companies mining and processing bentonite**

<table>
<thead>
<tr>
<th>Company</th>
<th>Environmental crime</th>
<th>Decision on procedure for calculation of level of emissions of polluting substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENOX, s.r.o.</td>
<td>NO</td>
<td>2010, 2017</td>
</tr>
<tr>
<td>BENTOKOP s.r.o.</td>
<td>NO</td>
<td>2010</td>
</tr>
<tr>
<td>ENERGOGAZ, a.s.</td>
<td>NO</td>
<td>2009, 2010</td>
</tr>
<tr>
<td>ENVIGEO, a.s.</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>Gemerská nerudná spoločnosť, a.s. (GE.NE.S. a.s)</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>KOPEREKOMÍN, s.r.o.</td>
<td>NO</td>
<td>2010</td>
</tr>
<tr>
<td>LB MINERALS SK, s.r.o.</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>REGOS s.r.o.</td>
<td>NO</td>
<td></td>
</tr>
<tr>
<td>ROMIN SLOVAKIA, spol. s.r.o.</td>
<td>NO</td>
<td></td>
</tr>
</tbody>
</table>

Based on the facts and data obtained directly from the Slovak Inspectorate of the Environment, we found out that industrial companies with their activity aimed at mining and processing bentonite have not violated the rules and legal regulations in the area of protection of environment for the past ten years. We focused on these companies because the extraction and processing of minerals very often causes environmental pollution. The Slovak legal system protects the environment and the country, including minerals as non-renewable natural resources in the ownership of the state. Mining is only permitted with authorization granted under the approved state environmental policy of sustainable development, state mineral policy and applicable legal regulations in this area. These companies take a responsible approach to the protection of nature and the environment, and, as we have seen, social responsibility is also part of their corporate culture. Some of these companies must, depending on the production process, also respect the rules of emission of pollutants into the air. For this purpose, the Ministry of the Environment of the Slovak Republic requests companies to set a limit on the amount of pollutant emissions. Legal regulations in the area of limitation of emissions from stationary sources belongs to the competence of the Ministry of the Environment of the Slovak Republic and is based on the European legal standards. Quarries and mining belong to the group of stationary air pollutants. The decision on compliance with emission limits also includes technical requirements and conditions of production.

8. Prevention of environmental crime

One of the tools to prevent the growth of environmental crime is prevention. The dynamics of social development, the ongoing process of transformation of the economy and property relations have also led to an increase in crime in several areas. Committing environmental crime can represent significant risks not only in the area of biology, but also in the area of national security. Crimes in the areas of economy and social and cultural relations can be committed through environmental attacks (Kern, 2013).

Unlike property crime, with its motive to obtain illegal property gain by any means, including violence, environmental crime is committed mainly in sophisticated forms with a high degree of latency. It is mainly economic operators that take part in committing these crimes. These operators
should have paid increased attention to monitoring mechanisms and tools. Therefore, in companies, the system of control and controlling should be implemented, however, controlling should be understood as being an effective tool to support managerial decisions and thus to support the company management (Sedliacikova, 2018). The establishment of purposeful and effective control mechanisms is a guarantee of appropriate prevention. These crimes represent a threat to the environment and therefore require a comprehensive multidisciplinary approach at all levels.

One of the available tools is raising awareness about the prevention of crime and other anti-social activities among the Slovak population. Prevention is based on raising environmental awareness, raising awareness of activities that impact the environment. Education and providing high-quality and relevant information about the environment are essential.

It is important that educated people acquire the knowledge and skills to help the environment through simple actions. In fact, every citizen, natural person, or entrepreneur is obliged to prevent environmental crime. One of prevention tools was the establishment of the Natural Resources Police, following the Decree of the Minister of Interior no. 4/2019 of 22 February 2019, which entered into force as of 1 April 2019, with its aim to prevent, monitor, and detect offences and crimes in the area of environment.

Within the framework of environmental crime, we also deal with various forms of legal liability, such civil law liability, criminal law liability as well as ecological liability. We understand ecological liability as being responsible towards the environment. In the case of the application of ecological liability, the most common consequence is the obligation of the offender to restore the previous situation or the obligation to take compensatory measures. In the interest of achieving positive results in the area of reducing and preventing environmental crime, coordination at the level of the European Union is important. The European Environment Agency was established at the EU level in 1994 as a specialized agency in the area of environment of the EU. Its mandate is to support sustainable development in Europe. The European Union imposes, through its secondary acts, on the Member States the rights and obligations in the area of protection of environment and provides financial means from structural funds to introduce various measures.

In the interest of prevention of environmental crime, we consider the following measures as preventive ones:
Introduction of stricter measures;
- Better legal regulation;
- Raising awareness on environmental protection;
- Improved coordination;
- Increasing financial penalties;
- Regular monitoring;
- Use of modern technologies to clarify and evidence the environmental crime.

In addition to these measures, Law no. 39/2013 Coll. on integrated prevention and control of pollution of environment amending certain laws was adopted. As for its substance, it represents a set of measures aimed at prevention of pollution of environment, as well at reducing emissions to air, water and soil, at waste reduction, and waste recycling, in order to achieve an overall higher level of protection of the environment. This legal regulation also regulates the rights and obligations of the persons in the area of integrated prevention and environmental pollution control, as well as sanctions for breach of duties.

9. Conclusion

It is evident that to effectively fight environmental crime a complex and multidisciplinary approach at all levels is required. This includes, in particular, the use of relevant national policies and instruments, as well as those of the European Union and other international organizations. Knowledge presented by us in the form of this scientific study represents a summary of knowledge and recommendations on environmental crime, the acceptance of which can contribute to a higher level of environmental protection in Slovakia.

As regards our research question 1, our answer is clear. There are various instruments, conventions and other legal acts adopted at the level of international organizations, which establish the obligation of the state that acceded to them, to adopt legal acts preventing the emergence and spread of environmental crime. Only the existence of laws and effective observance of these laws represent a real guarantee of sustainable development and improvement of a current environmental status. In this context, it is up to a concrete state which measures will be implemented at the national and regional levels, as measures also have financial costs.
At the same time, we clarified the concept of environmental crime on the basis of systematic signs of compliance and on the basis of the opinions of several authors. In searching for the answer to our research question 2, we identified the types of crimes included in the category of environmental crimes based on the analysis of the applicable legislation and secondary analysis of the data. Through the systematic analysis of data, published in relation to the detection and clarification of environmental crime, we found that although there is a large number of detected environmental crimes, only a few are clarified and evidenced and only a few offenders are punished. A special category represents the findings of the Slovak Inspectorate of the Environment, which performs monitoring of proper implementation and application of legal norms in practice. The number of violations of legal regulations providing for environmental protection is increasing, and the number of identified entities to which financial fines are imposed, is also growing. In order to achieve more effective protection of the environment, we are of the opinion that it is particularly important to introduce sanctions with a deterrent effect for offences damaging the environment.

Among other issues, the study is also focused on companies mining and processing bentonite, as the extraction of mineral resources quite often results in violations of environmental protection rules. Regarding research question 3, we can state that the companies under our survey did not violate the rules on environmental protection in the past ten years and no fines were imposed on them. We evaluate this fact positively because, in addition to the facts we have found, we classify these companies among those that emphasize social responsibility.

As the legislation and its correct application in practice are a real guarantee of maintaining and improving the current state of the environment, there is a clear answer to our research question 4: legislation establishing integrated prevention and control of pollution were adopted in Slovakia and a special authority for detecting environmental offences and crimes in the field was established. In this context, we consider the system of so-called integrated prevention and control of pollution as absolutely correct, whereby the measures are adopted at the national level with the aim of achieving an overall high level of protection of the environment.
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