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## **Issues of Forensic Inquiries and Preliminaries in Investigating Ecological Crimes**

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**Abstract:**

*The article touches upon current theoretical and practical issues of forensic inquiries and preliminaries' proceedings in the process of ecological crimes' investigation.*

*Moreover, the authors highlight the peculiarities of investigations' classifications, their role, place and comprehensiveness.*

**Keywords:** *Ecological crimes, forensic inquiries, preliminary investigations, crime investigation and exposure, environmental assessment, environmental assessing.*

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## 1. Introduction

In Russia, special attention is given to the problems of environmental protection. According to the Decree of the President of the Russian Federation of December 31, 2015 № 683 "On the Strategy of National Security of the Russian Federation", the ecology of living systems and rational nature management are constituted as one of the key national priorities. Substantial criminalization and the existence of a shadow market in the field of nature management are constituted as internal challenges of environmental safety by Presidential Decree No. 176 of April 19, 2017 "On the Strategy for Ecological Safety of the Russian Federation for the period until 2025".

Environmental crimes cause heavy damage to the economy, reduce the quality of life, compromise the authority of law enforcement bodies. According to official statistics, over 123 thousand environmental crimes have been committed in Russia over the past five years, including more than 24 thousand in 2017 (the 2.9% more than in 2016). At the same time, the exposure rate of environmental is far from perfect: no more than half of them are exposed each year. In addition, the latency of environmental crimes is very high, more details could be found in the authors' studies.

According to our study, forensic inquiry is one of the most effective forms of applying special knowledge and skills in relevant proceedings. However, the analysis and collation of studies and developments, as well as practices of investigating ecological crimes provide the conclusion that the issues of the commission and investigation of inquiries and preliminaries on ecological cases, as applied to modern Russian conditions, are clearly insufficient (Vasin *et al.*, 2017; Akopova *et al.*, 2016).

## 2. Literature review

In the 1960s - 1970s major studies of well-known experts on forensic inquiries (Shlyakhov, 1979; Belkin, 1961; Selivanov, 1967) were published, later on others were presented (Averyanova, 2017; Rossinskaya, 2017) and numerous manuals and guides on forensic proceedings were published. Environmental assessments were considered mainly in the framework of environmental crimes' investigation techniques. We highlight the thesis on the investigation of illegal hunting of Pindyur (1984), Shalimov (1991) and Egoshin (2002), on the investigation of illegal fish production of Shurov (2008), the ones on the investigation of illegal logging by Unzhakova (2013) and Vasilyeva (2014), as well as the manual of Bessonov (2015) on the peculiarities of the initial stage of the illegal fishing investigations.

The very concept of 'environmental assessment' was fairly presented in the monograph of Shlyakhov "*Forensic inquiry: organization and proceedings*" in 1979 with an indication of the object, subject and its place in the forensic investigations' framework. In this monograph, the forensic environmental investigation was not

only included in the list of forensic investigation classes (No 8 of 9 most common at the time according to the author's submission). The author presented its types and issues to be resolved by environmental experts.

However, even the very relevant guide for that time of Vinogradov, Kocharov and Selivanov *"Assessings in the preliminary investigation"* in 1967, a short reference book *"Assessings in the preliminary investigation"* edited by Mozyakova (2002) presented by a team of forensic and criminalistic institutions' employees of the Ministry of Internal Affairs, the Ministry of Justice, the Ministry of Health and the Ministry of Defense of the Russian Federation, and even the Order No. 511 of the Ministry of Internal Affairs of Russia dated June 29, 2005 (revised January 18, 2017) *"The issues of organizing the forensic investigations in expert and criminalistic subdivisions of the internal affairs bodies of the Russian Federation"* has no highlights on the environmental assessings.

### **3. Methods of the research**

The research proceeds from general scientific methods, methods of logical and historical approaches, analysis and synthesis, methods of comparative, structural analysis using methods of collecting the data needed.

### **4. Results**

Specific issues raised by investigators and inquiry officers in the proceedings of illegal logging, fishing, hunting, environmental pollution, etc., and requiring the application of special knowledge and skills in the field of nature protection, were resolved in the contexts of commissioning and proceedings of forensic, biological, pedological, botanical, agricultural and other assessments included in the lists established by the departments noted above.

However, the life and the investigative practice claimed the rights. Therefore, forensic and environmental assessments, both in theory and in practical application, have been developing. To a large extent, significant changes in socio-political and economic foundations of Russian society and accordingly, in criminal, criminal procedural, administrative, civil and civil procedural legislation of the Russian Federation, contributed to the formation of an environmental assessments' class in the last two decades.

Numerous articles and other studies of well-known scientists and practitioners like Averyanova (2017), Bychkova (2005), Volchetskaya (2004), Korukhov (1998), Mayorova (1996), Mailis (2015), Moiseeva (2016), Bekzhanov (2015), Gulevskaya (2015), Kutuzova (2006) and others significantly affected the formation of the theory and practice of environmental impact assessment. Well-known Russian forensic scientists of the second half of the twentieth century like Vinberg (1978), Belkin (1961), Shlyakhov (1979), Selivanov *et al.* (1967), Krylov (1969) and some

others devoted their studies to the issues of forensic investigation including the classification of expert studies. Even a term like forensic expertology was introduced into the scientific intercourse.

Notable that the most of the above-mentioned authors have never highlighted the ecological assessing among the classifications. The study of Alexander Romanovich Shlyakhov (1979), the long-term leader of the All-Union Scientific Research Institute of Forensic Inquiry of the Ministry of Justice of the USSR, was an important exception. For the criminalistics and the methodology of investigating environmental crimes is the issue of correlation of assessments and preliminaries of the investigations' objects, in other words, of objects typical for assessments of a certain type, but investigated using specialized knowledge and skills not only in the form of assessments but also in various forms of preliminary investigations.

These forms are available in scientific intercourse and some of them are fixed in the Criminal Procedure Code of the Russian Federation and departmental legal acts. This is primarily the taking of conclusion and evidence of a specialist (Articles 58, 80, 144 of the Code of Criminal Procedure), the participation of a specialist in investigative actions; inquiry of objects by forensic and other records, consulting of a specialist, etc. Since the objects (environmental crime scenes, material evidence including traces of environmental crimes, samples recovered throughout the investigation, weapons and other crime instruments, etc.) both for expert assessments and for preliminary investigations are very specific, working with them has significant issues. Meanwhile, scientific recommendations for the preparation, carrying out the research and utilization of findings are not easily found in the criminalistic literature. Moreover, they are presented only with reference to individual, more or less developed methods of investigating certain types of crimes.

Special monographic studies devoted to the peculiarities of preliminary environmental crimes' investigations were not encountered at all. By the way, the problem of preliminary investigation has a direct relation to not less (and perhaps more) important problem of crime exposure for all law enforcement agencies.

We have already noted that about half of the environmental crime proceedings are suspended pursuant to Art. 208 of the Criminal Procedure Code. And this is the reason for considering these crimes unexposed and most of them after December 31 of this year passes into the category of unexposed crimes of past years. A long-term study of the practice shows that effective way of working on suspended cases of unexposed crimes of any categories is to conduct preliminary studies of objects, both on previously available and obtained after the suspension of proceedings.

A monographic study of this issue regarding the disclosure and investigation of environmental crimes would help to develop the basic methodology for their investigation. The need to create such methods, although with reference to the investigation of other groups of crimes, is indicated, for example, by Pavlichenko

and Ivanov (2017): *"Forensic scientists create mainly special forensic methods devoted to the investigation of certain groups and components of crimes ... The development of generic, basic, comprehensive forensic methods (a greater degree of generality) is still of a unique character."*

Taking into account all of the above, we tried to compile a list of forensic ecological assessments' types that are most frequently encountered in the literature as follows: hunting; carcasses, skins, bones and other animal remains' investigations; ichthyological; dendrological (or dendrochronological); ornithological; forestry; agricultural; investigation of phytogenic objects; ecological-biological; forensic investigation of material evidence of an environmental nature; veterinary-ecological; hydrological; ecological-geological; entomological ones.

It is glaringly obvious that the list provided cannot serve as at least the simplest form of environmental assessments' classification as a class (or kind?) of forensic investigations if only because it lacks a systemic approach. This is typical for most of the authors mentioned above who studied the ecological investigations. However, it could serve as a help in the future justified distribution of environmental assessments according to their types and varieties in accordance with the requirements (principles) of the systemic approach in science and in criminalistic taxonomy in particular.

When creating a classification of environmental assessments in the future, we should take into account that in the current Order of the Ministry of Justice of Russia No. 237 of December 27, 2012 *"On approving the list of forensic investigations conducted in the federal budget forensic institutions of the Ministry of Justice of Russia, and the List expert specialties authorized for independent forensic proceedings in federal budget forensic institutions of the Ministry of Justice of Russia is represented"* the following are presented and separated from each other:

- 1) forensic environmental investigation divided into:
  - assessing of ecological state of objects of soil-geological origin;
  - assessing of the ecological state of natural and artificial biocenoses;
  - assessing of the ecological state of environmental objects to determine the cost of restoration;
  - assessing of the ecological state of objects of the urban environment;
  - assessing of the ecological state of water bodies;
- 2) investigation of objects of wild flora and fauna, subdivided into the study of wild flora and the study of wild fauna objects.

## **5. Discussion**

The position of some well-known scientists and practitioners advancing further than the presented classification is of great interest. Thus, the senior state expert of the Laboratory of Forensic Ecological Assessing of the Russian Federal Forensic

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Inquiry Centre under the Ministry of Justice of Russia Gulevskaya (2015), pointing out the complex nature of environmental expertise, divides the forensic inquiry of wild flora and fauna into the following types: inquiry of wild flora, inquiry of wild fauna, forensic genotypic inquiry of wild flora and fauna, forensic inquiry of circumstances of the natural state of objects of wild flora and fauna.

There is one more important theoretical problem in the classification of environmental assessments i.e. the problem of the complexity of applying specialized knowledge in most of proceedings of this class.

Many Russian, Belarusian and Kazakh criminologists point out this feature in their studies. A well-known expert in the field of the forensic theory, a Honored Scientist of the Russian Federation, Doctor in Law, Averyanova (2017) fairly, in our opinion, classifies ecological inquiry as a number of forensic inquiries studying the interaction reflected in the human mind, in particular, the process of violation of the environmental law. It allows determining the source of pollution, the ways of spreading the harmful consequences, etc.

Thus, almost none of the authors of environmental inquiries' studies who noted the "complex nature" of the knowledge used in the production of most of the investigations of this class (type?) does not explicitly call such proceedings as comprehensive ones. Meanwhile, this definition is highlighted in the Criminal Procedure Code of the Russian Federation and in the effective law "On state forensic expert activity".

According to Art. 201 of the Code of Criminal Procedure of the Russian Federation, forensic inquiry is comprehensive, when experts of *different specialties* take part in its proceedings. Analysis of numerous issues the experts face in environmental crimes' investigations, clearly shows that their solution needs in a number of cases, appointing not just a forensic-ecological, but a complex forensic inquiry (for example, environmental-chemical, environmental-accounting, environmental-biological, environmental-soil, etc.).

For example, in a case investigated by the Syktyvkar City Court in 2017, the court commissioned a comprehensive environmental and accounting inquiry to determine the amount of waste and the amount of damage caused to soils as an environmental object, resulting from an unauthorized disposal of liquid and solid domestic waste on the land. The type of the assessing, finally, is determined depending on the subject matter of specific issues to be resolved by the official and the court utilizing special knowledge and skills in a specific criminal case. For example, the ichthyological investigation could be called simply ichthyological, and could be a complex ecological-ichthyological (in some cases environmental-chemical, etc.).

One of the most important and even complex tasks in the environmental crimes' investigation is the assistance of an expert and specialist to the officials in utilizing

special knowledge to determine and prove the damage caused by the crime. However, this is a quite complex issue requiring a special monographic study both in terms of formulating general provisions for investigating environmental crimes of any kind and the specific application of them in certain methods.

## **6. Conclusion**

1. Now, we can consider that the environmental inquiry in criminal matters has taken a worthy place in the forensic inquiries' framework;
2. The inquiry is actively formed as a new class or at least a kind, integrating into the existing classification of forensic inquiries;
3. Environmental inquiry could be commissioned and conducted either as a comprehensive assessing (according to the requirements of Article 201 of the Code of Criminal Procedure) or as the one conducted with the participation of a certain specialist (s), leading to a different procedure for the proceedings;
4. Issues of the correlation between environmental inquiries and preliminaries of the same objects in this field; adjustment of the classification of environmental inquiries by types (varieties); the organization of their commissioning considering the possibilities for improving the system should be the subject of deep discussion in the preparation of a new draft law on state forensic expert activity long awaited by scientific and practical law enforcement personnel and bodies;
5. The solution of the issues highlighted above is possible only in well-coordinated interaction of the agencies incorporating forensic institutions as follows: the Ministry of Justice, the Ministry of Internal Affairs, FSS, the Ministry of Defense, the Ministry of Health of the Russian Federation, etc.

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