

Using Internal Audit in Assessing Environmental Performance

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ABSTRACT

This paper studies conceptual framework of internal control elements of environmental indicators and provides the characteristic and implementation of internal control at the enterprise. The paper points out that during the last decade the world has seen positive trends aimed at solving the problems of conservation of natural resources and ecosystems to ensure the continued environmentally sustainable socio-economic development of regions.

Therefore, it is particularly important task in the period of market reforms for sustainable economic and environmental development for many territories facing urgent problems of protection of natural resources and ecosystems depending on production activities. This paper has revealed that the development of domestic environmental audit in investment activity is only possible for the understanding of the role of environmental audit as a driver to increase the competitiveness of enterprises. This requires some additions to existing regulation of legislative and regulatory acts, elimination of gaps in dissemination of environmental audit procedures in the practice of investment decision-making. Implementation of the proposed model of introducing environmental audit in investment support system requires joint efforts of enterprises towards improvement of efficiency and rational use of natural resources for domestic production of competitive products.

KEYWORDS – Environmental Indicators, Internal Control, Environmental Audit, Environmental Security, Environmental Management.

1.INTRODUCTION

The relevance of the issue of the need to improve the economic mechanism of environmental protection at enterprises carrying out man-made dangerous activity is currently dictated by a number of circumstances. Firstly, in connection with the growth of harmful production, as well as its influence on the natural environment, and secondly, in connection with waste production and recycling. Moreover, it must be borne in mind that when the need arises, the cost of eliminating the negative effects of production on the environment exceed the cost of support and timely monitoring (or control) and situation assessment. Analysis of the subject area. In conditions of market economy and diversity of business entities, the level of efficiency of the management mechanism is determined by its ability to harmonize the objectives of formation and development of the two main parts of territorial and production complex – the enterprise and the region [1, 2]. Development of a mechanism that boosts environmental activities in enterprises-pollutants and contributes to the accumulation of financial and material resources in the region, needed to ensure its socio-economic and environmental advancement, involves two tasks.

A. The first task is to form its framework, i.e. to allocate key elements and their interrelationship and to define the list of rights and obligations of enterprises and the regional system of management.

B. The second task is to assess the most rational levels of environmental regulations, payments, penalties, rewards, determining the exact content of such a mechanism.

During the last decade world has seen positive tendencies aimed at solving the problems of conservation of natural resources and ecosystems to ensure continuous environmentally sustainable socio-economic development of regions. Therefore, it is particularly important task in the period of market reforms for sustainable economic and environmental development for many territories facing urgent problems of protection of natural resources and ecosystems depending on production activities. For their successful practical solution, it is necessary to expand the means and mechanisms of environmental monitoring and control through the development and introduction of new elements and tools, including environmental management. One of the most effective tools for environmental assessment and monitoring of the development of market economy should be an environmental audit. The objective of the research is to conduct an analysis of the use of elements of internal control in the assessment of environmental performance.

Tasks of the research are as follows:

- i. To review conceptual frameworks of internal control elements of environmental indicators
- ii. To describe and implement internal control at the enterprise.

2. CONCEPTUAL FRAMEWORK FOR INTERNAL CONTROL ELEMENTS OF ENVIRONMENTAL INDICATORS

2.1 Legal Aspect of Internal Control of Environmental Indicators

After having reviewed the definition of “environmental audit” adopted in legal acts of Ukraine and international practice, it may be noted that an environmental audit is a systematic and objective process for assessing the activity of an object of environmental audit that affects the state of environment, including the analysis of the effectiveness of environmental protection measures and their verification for compliance with environmental requirements. That is, definitions of the concept of environmental audit explicitly contain identification of environmental audit with environmental assessment. However, it is necessary to stress the difference between these notions, which lies in the fact that the implementation of environmental audit provides an assessment of the impact on the environment at the current moment, as well as environmental consequences of economic activity in the preceding period. At the same time, environmental assessment is aimed at the future; it describes potential impact of the proposed project if implemented.

Considered definitions of environmental audit are narrowed and reveal its essence as merely a means of implementing the public policy in the sphere of ensuring environmental security and rational environmental management. Given the legal approaches to the definition of environmental audit, authors note that, from a legal point of view, it is the most appropriate to consider an environmental audit as a kind of entrepreneurial activities carried out by certified environmental auditors to verify conformity of environmental activities of business entities with the requirements of environmental legislation.

2.2 Environmental and Economic Aspect of Internal Control of Environmental Indicators.

Environmentalists and economists believe that an environmental audit is an autonomous activity, which allows, in conditions of market economy, to find a balance between economic interests of certain business entities and environmental interests of the society. Common among scientists and managers is the definition of an environmental audit as a management tool. Thus, a group of scholars, including Galushkina T.P. [5], Dayman S.Yu. [18], Nezhentsev S.V. [13], Shevchuk V.Ya., Satalkova Yu.M., Navrotsky V.M. [20], study an environmental audit as an environment management tool. Besides, scientists distinguish functions of an environmental audit in its definitions. Thus, Bartels J. [1], Mekh Ya. Kulik G. [12] emphasize the evaluation function; Broyde S.S., Makarov E.A., Rozhdov I.I. and Broyde G.S. [19] highlight the analytical function of an environmental audit. Borisova V.A. [3], Makarov S.V. and Agarova L.B. [4] describing the environmental audit extend its functionality by adding analysis to assessment.

However, in our opinion, apart from the analytical and evaluation function, the environmental audit functions should include the following:

1. Controlling function refers to the control of environmental performance, compliance with the requirements of applicable legislation on environmental protection.
2. Social function refers to providing environmental-targeted company management and improvement of environmental awareness of managerial personnel.
3. Information function refers to provision of information to the management of enterprise for making timely and relevant decisions in the area of environmental protection and resource conservation, informing of all employees about the results of an environmental audit of the enterprise with a view to approving future environmental programmers.
4. Preventive function refers to timely identification by the management of potential environmental risks associated with production activities and the adoption of measures for their elimination.
5. Motivational function refers to motivation of the management to improve the level of environmental safety, ecological image of the enterprise, its competitiveness, as well as access to global markets and raising additional investments.

Basantov I.V. [2], Dyachenko L.I. [8], Maximov L.I. [11] link an environmental audit to environmental control. In our opinion, it is necessary to differentiate an environmental audit from environmental control. Difference between environmental audit and environmental control is that environmental audit is a professional business. The legal consequence of environmental control is the adoption of managerial and other decisions, whereas an environmental audit plays a supporting role in decision-making, and not only by executive bodies or local self-government, but also by legal entities or individuals, primarily business entities that order an environmental audit. While the results of environmental monitoring should be mainly open to the public, findings of an environmental audit are the property of its customer (as a general rule, these are confidential).

MekhYa., Kulik G. [12], Petrik O.A. [16] in scientific publications on the essence and problems of methodology and organization of environmental audit in Ukraine consider ecological audit as a kind of audit activities and justify the appropriateness of combining an environmental audit with an audit of financial statements. At the same time, authors stress the need for verification and certification of reliability of financial accounting subject to examination during a financial audit, the control by auditor of proper description by a business entity of environmental issues in financial reporting. In general, we agree that an environmental audit is a kind of audit activity. However, the issue of combination of an environmental audit with an audit of financial statements remains disputable, as they are significantly different in respect to the object and criteria of an audit and the objective of use of obtained outcome. To eliminate contradictions regarding the objectives of an environmental audit and an audit of financial statements, the author of the article proposes to introduce an additional financial reporting form, which will display the financial indicators characterizing activities of business entities in the environmental area.

In the process of formation and development of an environmental audit as an independent type of advisory services, scientists and auditors increasingly often note the desirability of identifying it as an entrepreneurial activity. The same view is supported by Borisova V.A. [3], Veshkurtseva E.A. [4], Galushkina T.P. [5], Danilishin B.M. [7], Kantaeva A.V. [10], Melnik L.G., Shapochka M.K. [15], Shestakov A.S. [6], whodetermine in the definition of an environmental audit its objective, which is the systematic verification of the environmental potential of the company, past or current problems and potential environmental risks and noncompliance of activity with requirements of environmental legislation. Authors believe that an environmental audit is carried out in order to ensure control of the use of natural resources, pollution of ecosystems and to verify compliance with legal requirements for environmental protection when carrying out economic activity of the enterprise. The study of theoretical approaches to explanation of the notion of an environmental audit enabled us to compile our own definition of an environmental audit. An environmental audit is an independent environment-oriented organizational and legal form of an audit, which involves checking business entities in their own interests relating to environmental protection, rational use and reproduction of natural resources, the protection and competitiveness of an audited entity and its investment attractiveness.

2.3 Environmental Audit in the System of Investment Support of Enterprises

The need to disseminate investment environmental audit procedures has been proved by foreign experience, recognized by state environmental authorities and public organizations. Recently, the interest in an environmental audit, including that at the level of sectors of the economy, has increased. This indicates the growing awareness of the role of environmental management and assessment of its impact on the success of investment, both on domestic and foreign markets. The task of auditing investment activity is to determine the appropriateness of project investment, efficiency of investment resources and validity feasibility of the use of resources [1]. For proper understanding of the role of an environmental audit in the enterprise investment support system, it is necessary to understand the notions contained in the definition of environmental auditing.

The law "On environmental audit" defines an environmental audits as a "documented systematic independent process for assessing an environmental audit object, which includes collection and objective assessment of evidence to establish the conformity of certain activities, events, conditions, environmental management systems and information relating to these issues, with the requirements of the legislation of the Russian Federation on environmental protection, and other criteria of environmental audit" [5].

In our opinion, this definition is very cumbersome and difficult for perception. We offer a more concise definition that essentially has no difference from one proposed in the Law: an environmental audit is a process of assessment of object's conformity with requirements and ecological regulations of environmental legislation.

The main purpose of implementation of the law "On environmental audit" is "to ensure the implementation of legislation on the protection of environment in the process of economic and other activities" [5]. In our opinion, this goal can only be achieved if an environmental audit is compulsory for all companies and organizations whose activity causes or may cause adverse effects on the environment, and is carried out at regular intervals, e.g. every three years. Only then an environmental audit will provide a mechanism that can actually lead to improvement of the environmental situation.

A decisive prerequisite for the effective implementation of environmental audit is its integrity with environmental management at all levels (enterprise, industry, region, state). The system of environmental management and audit integrity is one of principles of sustainable development, which is implemented in the EU in the form of European regulation EMAS of environmental management and audit system. EMAS is based on the "polluter-and-user-pays" principle, i.e., compensation for economic damage caused to the natural environment at the expense of those who caused such damage [10].

Enterprises voluntarily assume responsibility for protecting and restoring the natural environment and striving for continuous improvement of such activities. Accession of organizations and enterprises to EMAS is, indeed, the start of a cleaner production process, i.e. the transition from unsustainable patterns of production and consumption to environmentally balanced and clean models. The level of balance, ecological purity and effectiveness of technology, production, allocation of responsibility for damage caused to the natural environment are established by using an environmental audit [2].

We believe that in today's conditions, an environmental audit should be considered as an important component of investment support for production or other activities. It can be argued that environmental and economic criteria of investment attractiveness of a particular entity, which, to date, have not yet been defined legally, are the requirements of national or international environmental law and the current state of environmental safety. Along with this, in our view, it is appropriate to distinguish an investment environmental audit as an independent research subject, which is carried out at the micro-level with a view to determining investment attractiveness of an entity and identify potential environmental risks, whereas at the macro level, its goal is to decrease man-caused load on the environment and socio-economic results.

The main aim of an environmental audit is to identify possible reserves of environmentally safe use of investment resources, development of measures to improve the profitability of an investment project, optimization of costs and revenues for investment, and analysis of correctness of taxes. Development of methodological aspects of an eco-audit of investment activity justifies forming tasks, domain definition and composition of audit procedures of such check, as well as correct and consistent planning of an audit [7]. Tasks of an environmental audit should be formed on the basis of, and result from.

The goal and purpose of verification and these include:

- A. Establishing the reliability of reported information on investment companies and conformity of carried out financial or economic transactions with environmental legislation.
- B. Verification of correctness of drawing up of accounting registers, authenticity of records of investment operations with entries in the General Ledger.
- C. Timely identification of potential technological and environmental risk of an investment project.
- D. Assessment of internal economic control of investment activity of an enterprise, and this assessment is particularly important for the planning of an entire audit of investments of enterprises at all stages.
- E. Study of financial and economic activity of the enterprise-customer to evaluate its investment.
- F. Establishing the legality of the ownership of the investment, availability of reliable information on investments in accounting, tax and management accounts.
- G. Verification of accuracy of classifications of investment and their accounting.
- H. Checking correctness of determination of income and losses (including environmental) of investment undertaken.
- I. Summary analysis of the implementation of a business plan of an investment project [3].

In domestic practice, unlike other environmental audit objects, the operations associated with investing, may be few by number, but in monetary terms, they may represent a significant part of economic and financial activity of an enterprise. Therefore, today, when conducting an investment environmental audit at the initial stage, determining the reliability of accounting and internal control systems is very important. The auditor must examine and explore customer's accounting and internal control system to understand how accounting information is prepared and have certain understanding of the reliability of these systems, as these data are used in the management of investment projects of enterprises [8].

The process of introducing environmental audit system provides for investment support measures system (legal, regulatory, institutional, organizational, and economic) to integrate environmental factors into the investment decision-making process. Introduction of investment environmental audits, in particular at the level of the enterprise, will:

- i. Raise significant amounts of investment and improve investment attractiveness of individual entities that will manifest in the receipt of additional environmental and economic effects resulting from environmental audit procedures.
- ii. reduce the possibility of compensation for harm caused, as well as environmental charges and penalties;

- iii. expand markets for environmentally-friendly goods and obtain certificates of green products;
- iv. provide resource saving processes through the effective use of all resources;
- v. reduce production costs by using the best technologies and improve the environmental and economic efficiency of technological process;
- vi. Improve communication with authorities and the public, and ensure an adequate image of the company.

The development process of an environmental audit in an enterprise investment support system, which is a clearly defined program of action on the establishment of environmental audit procedures in the process of making investment decisions with a view to ensuring their effectiveness by minimizing the ecological-economic risk, should be aimed at:

- 1) The development and implementation of sectoral and corporate standards of cleaner production.
- 2) Inventory of existing industrial base of environmentally-sound technologies, assessment of needs of its development and investment opportunities, maintenance of such development.
- 3) development on the basis of the law "On environmental audit," taking into account harmonization with European requirements, national and state standards of series ISO 19011 and 14000, national regulations – environmental management systems and auditing EMAS [11].
- 4) Introduction of investment obligations of privatized enterprises to implement their environmental modernization using modern methodology.
- 5) increased export capacity and expansion of markets through the introduction of an environmental audit in the system of investment security;
- 6) optimization of organization and management of investment support at various levels of production through the use of modern economic and mathematical methods and computer tools;
- 7) Introduction of an effective system to stimulate the process of dissemination of environmental audit procedures.

3.PRACTICAL PART IN IMPLEMENTATION OF INTERNAL CONTROL

3.1Sequence of an Environmental Audit at the Enterprise

An environmental audit is carried out under established procedure, which is logically sequential execution of phases of audit activity, in which the performers (environmental auditors) attain tasks of expert analysis of the territories and the enterprise (which includes an integrated geo-environmental assessment) and produce a reasonable and objective audit opinion [3].It is, in fact, a research process. The organization is influenced by such circumstances as the presumption of the potential dangers of geo-environmental situation in the region, providing an integrated approach and rationale for the project, studying of means of stabilization and sustainable development of the region. When conducting an environmental audit at the enterprise, focus on main points of its implementation is assumed. Carrying out of environmental audit of the enterprise is based on international standards [4].Practical experience in conducting an environmental audit on the local level (enterprise) is outlined in manuals on an environmental audit and environmental management, recommendations and other sources [1, 2].However, as such, the procedure of an environmental audit of the enterprise generally has not been determined in full so far. Therefore, we will consider the existing procedural part.

Which consists of several stages [1, 2]: A.Pre-audit stage in.

- 1) Adoption of a decision on the need for an environmental audit.
- 2) Appointment of the audit commission and organization of its work.
- 3) Definition of the objective of an environmental audit, range of issues that will be addressed during an audit.
- 4) Development of an audit protocol (order of its introduction based on earlier determined goals, scope of issues and outgoing information), which includes a list of requirements, approaches, procedures to be followed by auditors.
- 5) Preparation of a plan of environmental auditing, which includes three items. Determination of membership of the group with the distribution of functions among its members; audit schedule; plan of organizational and technical activities for the audit.
- 6) Kick-off meeting of auditors (approval of an audit team, distribution of responsibilities, etc.).

7) Collection of information and establishment of common provisions concerning the object of environmental auditing.

B. An environmental audit (analytical stage) as a scientific and practical activity that involves an integrated geo-environmental assessment of territory with elements of analysis of territorial organization, with a view to elaborating measures for its stabilization and sustainable development of the region. The findings of the audit activity are to be reflected in the audit report.

C. Audit reporting stage. Summing up the results of the work carried out and their joint discussion:

- 1- List of previous results.
- 2- Final meeting.
- 3- Preparation and submission of audit report.
- 4- Submission of report to the audit customer.

An audit commission may address its proposals to the parent organizations and land users (landowners) of the territory in case of the consent of the customer (in addition to the results of mandatory external audits). The audit process begins with the adoption of a decision on the need for the environmental audit. It derives from its importance as one of the mechanisms for implementing the concept of sustainable development. This is what defines its purpose and objectives. The decision shall be made by the customer. Formation of the members of the audit committee is carried out by selection of leading specialists with appropriate qualifications and professional knowledge, mastering the methodology of environmental appraisal, practical experience in the respective area for not less than a certain period, as well as certified to conduct environmental audits. The commission's work is based on the following principles: competence, experience, objectivity, independence, openness, honesty, knowledge of the object and its geoenvironmental problems not only through documents, but also in field studies. Organization of work of an audit commission should be guided by the principle of collective action [1-3].

Thus, specialists must have a higher education degree or expertise in conducting an environmental audit of an object and its geo-environmental characteristics not only through documentary information, but also through experimental data. A specific feature of an environmental audit is that in case of need it is possible to attract highly qualified specialists as consultants from other areas of activity. The leading method pursued by auditors is an expert view, which is now interdisciplinary one. Its core is the study and solution of problem situations by professionals who possess specialized knowledge, by choosing the most reasonable decisions. **It is used when:**

- a) Based on the known laws, it is impossible to predict the behavior of the system in the future.
- b) It is impossible to carry out pilot test of expected progress.
- c) There are factors of uncertainty that cannot be controlled.
- d) Solution of the problem has a lot of options.
- e) Information proceeding from which the decision is made is insufficient. In addition, in the course of an audit specifically scientific methods of research are also used. In the course of carrying out environmental audit of the enterprise, required materials are to be collected, including:
 - Results of field research.
 - Schemes of master plan of development and functional zoning of the territory.
 - Landscape map.
 - Existing empirical and cartographic material, characterizing the soil, air, and water.
 - Data for the integrated assessment of geo-environmental situation of the enterprise in the region.
 - Etc.

Detailed (large scale) information on production and its economic territory. An audit for postproduction phase is carried out in favour of the customer. Final conclusions, which are recorded in the audit report, are accepted during the preliminary discussion of audit results and passed to the customer. Along with this, an environmental audit raises issues of strategic development, both businesses and the territory of the region: development of target programmers to address specific problems of territorial development schemes and plans, land-use schemes, etc., so the results of the audit work in coordination with the customer may be transferred to the relevant higher authorities. Since the customer is interested in an audit, the issue of enforced implementation of conclusions is automatically removed. The customer has the right to dispose freely of the reporting documentation. Consequently, an audit commission may submit recommendations on the organization of the co-adaptation mechanism within the region and address its proposals to the parent organizations within the framework of the direct interests of the customer. Implementation methodology of an environmental audit scheme forms an integral system based, on the one hand, on the main provisions of the methodology proposed

by E.A.Pozachenyuk [2], and on the other hand, on other elements of environmental audit techniques [1]. It is based on evaluation of economic adaptability and environmental subsystems. Geo-environmental work conducted indicates that the analysis should be based on the morphological structure of the landscape in terms of landscape units and land (co-adaptation mechanism element), and analysis of distribution of contaminants requires basin, position dynamic or par genetic approaches. A bio-centric network structure underlies territory organization for environmental purposes, in particular, it makes it possible to analyze the network of bio-centers and bio-borders. Organization of environment is important in terms of establishing zonal affiliation, type of landscape differentiation of geo-environmental state of agroecosystem, which include the region under study. It is important to point out areas that have value (aesthetic, cultural, historical, scientific, educational, etc.). The conclusion should be clear, specific, and structured. One of the prospective directions of the solution of tasks of an environmental audit [5], as well as operational evaluation and environmental monitoring is the ability to use geo-information systems. The use of geo-information systems allows to quickly obtain information on request and display it on map basis, to evaluate ecosystem conditions and to predict its development. Also, geo-information systems are capable of providing for:

- 1- Input, accumulation, storage and processing of digital mapping and environmental information.
- 2- Building maps of man-caused changes of natural environment through the use of space imagery.
- 3- Building thematic maps on the basis of the received data that reflect the current state of the ecosystem.
- 4- Study of the dynamics of changes of environment situation in space and time, creating charts, tables, diagrams.
- 5- Modeling and forecasting the development of environmental situation in different environments and study of ecosystem dependencies from meteorological conditions, characteristics of the sources of contamination, the values of the background concentrations.
- 6- Obtaining integrated assessments of the state of objects in the environment on the basis of heterogeneous data.

3.2 Analysis of Efficiency of Environmental Aspects at the Enterprise

As part of the American-Russian project of the United States International Development Agency "Samara regional initiative" held in Samara region four enterprises presented below were evaluated for reducing environmental impacts and economic benefits achieved during the cost free and low-cost measures and actions. Samara Cable Company." Environmental effects: A. improving the quality of the air in the working area.

- B. Reduction of pollution of water, discharged from industrial site.
- C. Exclusion of location of waste outside of the enterprise.
- D. Possible recycling or total exclusion of their generation.

Savings: about \$ 480,000 annually. "Samara Bearing Plant." Environmental effects:

- A. Reducing risks to the health of the personnel.
- B. Improvement of labor productivity.
- C. Reduction of absenteeism.
- D. Improvement of properties of fluids for lubrication and cooling, use of cheaper materials.
- E. Reducing water consumption.
- F. Reducing discharge of wastewater.

Savings: about \$ 384,000 annually. "Novokuybyshevsk Oil Refinery" of YUKOS oil company. Environmental effects:

- A. reducing dependency on environmental indicators of the quality of fuel used to produce electricity.

Savings: about \$ 160,000 annually. "Rodnik." Environmental effects:

- A. Reducing fines for pollution,
- B. Improving the productivity of water recycle,
- C. Material savings by reducing the use of water.

Savings: about \$ 480,000 annually. The city of Saratov is a large industrial center of the Volga region. OJSC "Saratov Refinery" is the oldest enterprise in the city, built in the 1930s.

Having defined environmental protection as one of the critical success factors of stable work of the enterprise, since 1996 the management of the refinery has considered environmental issues as priority. Implementation of EMS ISO 14001 was preceded by solution of problems such as: A. waste.

- B. Groundwater pollution.
- C. Wastewater treatment.

All slurry waste having been stored for nearly 70 years were recycled. During 2012-2013, three oil-storage pits with the total area of 62,000 square meters were liquidated, the area of the fourth oil-storage pit was reduced by almost 1,500 square meters in 2014. For cleaning of sites with contaminated soil at the plant, a unique bio-recultivation technology was used. It was developed by SRC "Bionika" and successfully passed environmental expertise in GUPR for Saratov Region. Cleaning and restoration of lands in such large volumes as the Saratov Refinery have been carried out for the first time in Russia.

Saratov Refinery is located on the bank of the Volga River, the river Nazarovka flows in its territory. Therefore, special attention is paid to the condition of groundwater: 1.2 km of covered interceptor drainage with the return of contaminated groundwater to the sewage treatment plant was built; key issues of environmental security faced in shipment of petroleum products at the railroad filling overpass and at the Volga pierce were resolved.

Since 2013, the Refinery completely renounced the use of chlorine for disinfection of wastewater and uses ultraviolet disinfection (UVD). As a result, the Volga waters are not poisoned with chlorine, and UVD became more efficient. The plant did not wait for state investment and mastered the new technology two years earlier, by investing its own funds.

All these achievements preceded the implementation of environmental management system according to ISO 14001 at the Saratov Refinery.

4. CONCLUSION

The following results were obtained during the research when we determine that legal regulatory acts and scientific works have no single, generally accepted definition of the concept, objectives, tasks and functions of an environmental audit. Monographic analysis of research of scientists enabled the authors of the paper to define the concept, objectives, tasks and functions of an environmental audit. However, an environmental audit requires further development of conceptual frameworks, methodological and organizational forms, integral system of scientific and methodological approaches to its implementation, which should be the subject of further research. And in this paper we found that the development of a domestic environmental audit in investment activity is only possible for understanding of the role of an environmental audit as a factor in increasing the competitiveness of enterprises. This requires some additions to existing regulations and legislation, elimination of gaps with regard to environmental audit procedures in making investment decisions. Implementation of the proposed model of introducing an environmental audit in investment support system requires joint efforts of enterprises towards improving the efficiency and the rational use of natural resources for the production of domestic competitive products. The institutional support for the development of environmental audit, in our opinion, should include:

- 1) Improvement of legislative and regulatory initiatives through the introduction of relevant regulations.
- 2) Formation of a network of entrepreneurial structures in the dimension of environmental audit, insurance and consulting.
- 3) Dissemination and intensification of awareness-raising of the excellence in environmental auditing.
- 4) Establishing information databases on environmental audit, in particular at sectoral level.
- 5) Introduction of environmental audit training programmers' with a view to disseminating these procedures at sectoral level.
- 6) Intensification of training of specialists in accordance with internationally recognized requirements.
- 7) Securing funding for applied research on the development of environmental audit in the context of the industry.

When conducting an environmental audit of the enterprise, it is necessary to implement new techniques based on modern geo-information technologies. Today, geo-information systems enable examining the enterprise's territory in more detail and tracking the effects of its impact on the environment. The use of geo-information systems gives the possibility to simulate and predict the consequences and to build a dynamic map of environmental changes at the enterprise.

REFERENCES

1. Aganbegyan, V.A., Anikeev, A.F., Klyshnev, E.V., Minayev et al. Problems of environment and natural resources. Materials of the Interdepartmental Scientific-Technical Council on integrated issues of environmental protection and rational use of natural resources. M., 2013.
2. Akimova T.A., Haskin V.V. Basics of eco-development. Training manual. M., Publishing House of the Plekhanov Russian Economic Academy, 2012.
3. Analysis of project compliance with the requirements of applicable legislation and documents in the field of environmental safety (Arch. # A-64138). Nizhny Novgorod, NAEP, 2013.
4. Burtsev V.V. Internal controls in the organization: methodological and practical aspects [electronic resource] / V.V. Burtsev // Audit newsletter. 2002. No. 8. Access from reference legal system "Konsultantplus" Zharylgasova B.T. International audit standards [Text]: Training manual / B.T. Zharylgasova, A.E. Suglobov, M., KNORUS, 2006. 400 p.
5. Bystrakov Yu.I., Kolosov A.V. Economy and ecology. M., Infra-M, 2012.
6. Golub A.A., Strukov, E.B. Economic instruments for environmental management. M. Nauka, 2013.
7. Gorshkov S.P. Exodynamic processes of developed territories. M. Nedra, 2013.
8. Goskomekologiya RF. Draft guidelines on the assessment of the effects of planned economic and other activity on the environment in the Russian Federation. M., 2002.
9. Grishin N. The public and the environment. Russian-European public environmental initiative. M., 2012.
10. Yerofeyev B.V. Environmental law of Russia. Training manual. Second Edition, revised and expanded. M. Yurist. 2013.
11. UN EEC. Consolidated draft Convention on access to environmental information and public participation in environmental decisions. Geneva, 1997.
12. Zhelvakov E.N. Environmental offences and responsibility. M., Business School "Intel-Sintez." 2013.
13. Law of the RSFSR "On environmental protection" dated December 19, 1991. // Statements of the RF Congress of People's Deputies and the Supreme Council of the Russian Federation. 1992. No. 10.
14. Ziring K.E., Lyakhin Yu.I. Scientific and technological progress and the environment. Fundamentals of ecology. SPb, 2013.
15. Zubareva E.P. Planning an audit of financial statements [electronic resource] / E.P. Zubareva (II) IFRS and ISA in a credit institution. 2008. No. 2. Access from reference legal system "Konsultantplus."
16. Izrael Yu.A. Ecology and control of natural environment. M. Gidrometeoizdat, 2012.
17. Instruction on environmental substantiation of economic and other activity. Ministry of Natural Resources of the Russian Federation, Annex to the Order dated 20.12.95 No. 539.
18. Komyagin V.M. Ecology and industry. M., Infra-M, 2013.
19. Convention on environmental impact assessment in a transboundary context of the United Nations. Economic and Social Council. Economic Commission for Europe. Finland. 25.02.-01.03.91. Signed by the Government of the USSR on 06.07.91. Confirmed by the Government of the Russian Federation on 13.01.92 No. H-N1, GP MFA RF.
20. Korobkin V.I., Peredelskiy L.V. Ecology [Text] / V.I. Korobkin, L.V. Peredelskiy. Rostov on Don, Phoenix, 2004. 576 p.
21. Kotsubinskiy A.O. Environmental management. M., Infra-M, 2013.
22. Li N. Environmental expertise. Training manual. / Translated from English. Ed. By S.M. Govorushko. M., Ekopros, 2014.
23. Livchak I.F., Voronov Yu.V. Protection of the environment. M. Mir, 2013.
24. Neverov A.V. Environmental economics. Handbook for universities. M., Vysshaya Shkola, 2012.
25. Regulation on environmental impact assessment. Approved by Decree of the Ministry of Natural Resources of the Russian Federation No. 222 dated July 18, 1994. Registered by the Ministry of Justice of the Russian Federation on 22 Sept. 1994. No. 695.
26. Radzevich N.N., Pashkang K.V. Protection and transformation of nature. M., Obrazovaniye, 2003.
27. Regulations of the state environmental expertise dated 17.06.1997.
28. Guidelines for environmental management system of OAO Udmurtneft. Izhevsk, 2013.
29. Environmental management: Inform. newsletter. No. 6. RPOI Component. M., NUMC of Goskomekologiya of Russia, 2003.
30. Federal Law of the Russian Federation "On environmental expertise" dated 23.11.1995. N 174-FZ.
31. Federal Law X 68-FZ "On protection of population and territories from natural and human-caused emergencies". SZ RF. 1994. No. 35. Art. 3648.
32. Chegasov G.S. Sequence of decision-making on deployment and construction of industrial and other objects

- Environmental appraisal and environmental impact assessment, 2002, No. 3-4.
33. Chernova N.M., Bylova A.M., Ecology.M., Infra-M, 2004.
 34. Sheremet A.D., Suyts V.P. Audit [Text]: Stud. / A.D.Sheremet, V.P. Suyts.M., INFRA-M, 2001. 448 p.
 35. Environmental auditing of industrial enterprises./ Ed. by A.F.Poryadina.M., NUMC of Goskomekologiya of Russia, 2003.
 36. Environmental law of Russia. Manual.Ed. by Ermakova V.D., Sukhareva A.Ya.M., Institute of International Law and Economics. Pub. House "Triada, LTD." 2013.