AN ENVIRONMENTAL AUDIT OF FINANCIAL-ECONOMIC ACTIVITY OF THE ENTERPRISE

The article is devoted to the environmental audit as a form of financial control (supervision). For Kazakhstan the very urgent task is the development of this form of financial supervision as an environmental audit of ecological and economic activities of enterprises. It becomes an important tool to ensure environmental security and sustainable development of enterprises.

The article substantiates the necessity of using environmental auditing in the financial-economic activity of enterprises. Reveals foreign experience of application of the environmental auditing procedure and the specificities of its development in Kazakhstan. Compares the financial and environmental audit, showing goals, objectives and types of environmental audit in relation to the Kazakhstan enterprises. It is noted that in many respects the problems of the implementation procedure of environmental audit in the financial-economic activity of enterprises and organizations related to the lack of a full understanding of the adverse ecological situation in Kazakhstan and the world, lack of experience with this type of activity, imperfect regulatory framework.

The article also considers the question of environmental audits in financial economic activity of the enterprise. Environmental auditing can be useful to establish additional measures for the study of risks and security and the timely introduction of sustainable means of risk prevention.

Key words: environmental auditing, environmental monitoring activities, compliance auditing, environmental protection.
Макалада экологиялық аудитті (міндетті және бастамашылық аудитті) тапсырысқермен және аудит жұргізілетін қосіпсіздік мақұлұдың мақұлұдарына сәйкес жұргізу жоспарына сәйкес жұргізу тәртіптері қарастырылған.

Түйін сөздер: экологиялық аудит, табиғатты қорғау қызметін бақылау, сәйкестілік аудит, қоршаған ортаны қорғау.

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Проведение экологического аудита финансово-экономической деятельности предприятия

Статья посвящена экологическому аудиту как форме финансового контроля. Для Казахстана весьма актуальной задачей остается развитие такой формы финансового контроля, как экологический аудит эколого-хозяйственной деятельности предприятий. Он становится важным инструментом обеспечения экологической безопасности и устойчивого развития предприятий.

В статье обосновывается необходимость использования экологического аудита в финансово-экономической деятельности предприятий. Раскрываются зарубежный опыт применения процедуры экологического аудита и особенности его становления в РК. Сравниваются финансовый и экологический аудит, показываются цели, задачи и типы экологического аудита применительно к казахстанским предприятиям. Отмечается, что во многом проблемы внедрения процедуры экологического аудита в финансовую-экономической деятельности предприятия и организаций связаны с отсутствием полного понимания неблагоприятной экологической ситуации в Казахстане и мире, недостаточным опытом данного вида деятельности, несовершенствованием нормативной правовой базы.

В статье также рассматривается вопрос о проведении экологического аудита в финансово-экономической деятельности предприятия. Экологический аудит может быть полезен для установления дополнительных мер по изучению рисков и обеспечению безопасности, а также для своевременного внедрения обоснованных средств предупреждения риска.

Ключевые слова: экологический аудит, контроль природоохранный, аудит соответствия, охрана окружающей среды.

Introduction

Business activity of any entity that has an impact on the environment as well as conducting environmental protection activities shall be subject to an audit (Hammond, 1995:1).

Monitoring and inspection of the environmental safety by enterprises, and their economic responsibility for ecology damage are important. However, today even among the specialists there is no uniformity in the terminology of these processes (Cook, 2016: 2).

Environmental audit also improves the financial services of the enterprises as an independent audit aimed at identifying and evaluating environmental risks and auditing activities of the audited entities and improving the environmental safety of their activities (Environmental Code of the Republic of Kazakhstan 2007: 12).

Environmental audit is defined as a means of obtaining and evaluating information about an organization (or other entity) for different levels of management (from a specific enterprise to the executive authorities of the government) in order to make the necessary decisions and take corrective action measures. Wide dissemination of environmental audit is related to the tightening of environmental legislation. Failure to comply with its requirements may be the cause of severe financial risk for industrial and related credit and insurance companies, environmental audits combined with environmental-economic audit, and have been initially introduced as a means to protect the interests of business entities. Environmental audit helps reduce environmental and human health risks, and helps to improve regulatory measures in the field of environmental protection (Environmental accounting for enterprises, 1997:13).

Materials and methods

According to the definition of the International Organization for Standardization, an environmental audit is a systematic and documented verification
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process, i.e. identification of compliance with audit criteria of specific environmental measures, terms, controls or information on them, as well as obtaining and evaluating objective information for the purpose of transmitting this process to the customer.

The audit should be purposefully implemented in several ways (Ablenov, 2007: 9):

– internal (secret) audit – strict assessment of the present state and prospects of ecological safety for company’s management and production structures (pessimistic and optimistic versions);

– audit for external use – an optimistic assessment of the situation, providing public (not secret) information, that is provided within reports for public authorities for environment and resource use, investors, creditors, etc. or in forms agreed with the management of the company;

– audit for a large holding company – conducting a permanent environmental and economic audit by subsidiary companies, with involvement of independent auditors, including the regional level (including financial auditors).

For example, the Ministry of Environment Protection of the Republic of Kazakhstan calls value of impact on the environment and population health as an environmental audit. S. Saenko, V. B. Mestechkin, A. A. Popov, A. Sh. Shakhtbazov, S. V. Makarov, L. B. Shagarova, M. B. Rogachev, A. V. Shevchuk also agree with this opinion.

This type of monitoring A. S. Shilov called environmental monitoring. S. M. Shapiguzov and L. Shnaidman considers nature protection activities as an audit of the organization’s environmental information (Evans, 2015: 3).

**Literature review**

R. Adams, A. Arene, J. Bartels, K. Drury, B. Niddles, K. North, R. Anthony and other foreign scientists worked in matters with regard to development of environmental account and audit. Now we try to bring to light a research study on the concept given by J. Bartels.


Nominal environmental audit at enterprises, demotivation inaction of enterprise managers do not allow to take all the required actions according to audit results.

Michael Baram (Baram, 1994) in his (The New Environment for Protecting Corporate Information) research says that conducting environmental audit in hazardous production facilities can prevent violations of legitimacy, as well as reduces the risk of prestige.

According to Australian scientists Dennis W. Taylor, Maliah Sulaiman, Michael Sheahan, (Tayloe et al., 2001), environmental audit is of the utmost importance to the environmental management system.

US industry representatives require liberalization legislation because corporate audit results could have an impact on the company (Manewitz et al., 2011).

According to New Zealand scientists Christina Chiang, Margaret Lightbody (Chiang et al., 2004) accountants were often involved in conducting environmental audits, in the early nineties have not even been involved in environmental audit at a professional level. But in recent years, in New Zealand the number of financial auditors for conducting an environmental audit of the company’s financial and economic activities is growing.

At the same time, according to Charles Piot (Piot, 2007) French law uses a consolidated audit and quality audit methods. Those regulatory enactments limit large auditing companies and encourage competition.

The environmental accounting system is a continuation of traditional accounting. It provides a compact assessment of the environmental impact during external and internal audits. Peter Letmathe, Roger K. Doost (Letmathe et al., 2000) in their research concluded that the system will allow to take into account not environmental purposes alone, but business purposes.

Monitoring and environmental audits are a key tool to prevent environmental pollution. But in many literature, the two concepts are often compounded (Viega et al., 2013).

**Results and discussion**

J. Bartels provides the following classification of nature protection activities:

A detailed environmental audit is part of the process of purchasing controlling shares or the process of making investment decisions.
Compliance audits: compliance test of company’s business with the license and the legal requirements.

An audit of the environmental management system is the company’s ecological organizational structure and environmental performance of the company is described and tested.

Assessment of the state of the environment (Phase 1 and Phase 2) – To conduct an in-depth review of production processes and hazardous emissions into all past and present air (Gao et al., 2000: 4).

The financial statement on environmental issues is an assessment of information contained in the annual environmental report or environmental financial report (Environmental accounting for companies, 1997: 13).

Environmental accounting audit provides information on the financial results of decisions regarding reserves, investments and prioritization of actions required (Li, Xue, 2004: 5).

Each author gives his definition. In the opinion of J. Barthols, environmental audit is a way of evaluating the deviation of the actual environmental situation from the original internal and external environmental standards to determine the current and potential environmental risks that threaten the company. In a sense, environmental damage is a subjective category and often depends on the customer’s viewpoint.

The following objectives are set before the environmental audit (Zhang, 1996: 6):
- assessment of damage to the environment;
- definition of conformity to norms;
- identification of potential problems;
- Estimation of cost for recovery works;
- assessment of potential debt;
- brief management report;
- a more detailed special report.

The summary of the audit is a summary report (an instruction manual). When working intensely, the aggregate part and the conclusion should be prepared in a few days or weeks, unless there is a shortage of time, such as detailed soil exploration was impossible. The longer the deadline allows for detailed monitoring and measurement of contaminated air. The depth of conclusion, as well as specific areas that are subject to research depend on the purpose of the audit (Watson, 2004: 7).

In most cases, an environmental audit is competent assess beyond the power, analyze, and make appropriate suggestions and recommendations on the actual results of any environmental impact. Consequently, the environmental audit is not merely an audit of the operation and reporting of enterprises and organizations with regard to the current environmental legislation (which is an integral part of any environmental audit program), a large set of additional audit services, including consultative services (Zutshi, 2003: 8). The main objective of providing such services is to improve the efficiency of the internal environmental control system and management of the audited entity, to develop the system of environmental management, as a result to get an additional benefits (Bartolomeo, 1997: 11).

The main objective of providing such services is to improve the efficiency of the internal control system and environmental monitoring of the audited entity, to develop an environmental management system, and, ultimately, to generate additional benefits. In recent years, such services have been prioritized in the activities of many audit firms (Yerzhano, 2005: 14).

According to the definition of the International Chamber of Commerce, the term «environmental auditing» is understood as a means for a systematic, documented, periodic and objective assessment of conformity of organizational systems, environmental management and operation of equipment to environmental objectives. This implies enhancing managerial control over practical environmental activities, as well as evaluating the compliance of production with the environmental policy and compliance with the standards.

According to our definition environmental audit is a systematic process of data acquisition and assessment, which identifies compliance of organizational systems, environmental management, as well as operation of equipment with environmental objectives, determines their conformity to the specific criteria, and defines compliance with environmental targets recommending results for concerned users (Zhumabekova, 2017: 15).

The term «audit» is derived from the financial lexicon. However, there is a fundamental difference between the financial audit and the environmental audit on the meaning (subject) of the audit. The meaning of the environmental audit is not only the economic entity’s reporting on the environment and the use of natural resources, but also its specific environmental performance in many aspects of its appearance and in all its aspects. In the following aspects:
- development of environmental policy;
- establishment of goals and objectives of environment protection;
- monitoring, regulation and minimization of pollutant emissions;
monitoring, regulation and minimization of waste generation, deployment and storage;
- rational use of natural resources, raw materials, materials and reagents as well as end products;
- environmental safety of workers and the population (including the assessment of the risks of environmental hazards and emergencies and their prevention);
- environmental awareness, education and training of the employee;
- Interaction with the public and population;
- environmental-economic and environmental-legal (including criminal liability) liability assessment and reducing its risk for environmental legislation violations;
- Interaction with state environmental control and management bodies (including environmental licensing, insurance, certification, etc.).

In fact, the mentioned directions and types of ecological activity are not registered.

Peculiarity of the Environmental Audit Program implementation is that almost all the environmental reports produced by economic entities (unlike financial reporting) are insufficient and abstract, that is, not true. For example, in the statistical report on environmental impact assessment, only about 15-25% of pollutants emitted into the air are recorded. It is noticeable that the official data provided by any enterprises show lessened emissions of pollutants in the environment. In the work of Russian and Kazakh enterprises, in fact, unfortunately, concealment of environmental information is allowed. In this case, during the environmental audit, we believe that the first place should be not only to assess the compliance of the economic entity with the environmental legislation, but also to provide additional audit services. In particular:
- reasonability of the company’s environmental strategy and policy;
- defining and planning the prerequisites of environmental protection activities of the economic entity and identifying additional opportunities for its implementation;
- preparing recommendations on reduction of emergency ecological situation threats and exacerbation of emergency ecological situations;
- services related to enhancing the effectiveness of environmental regulation, minimizing impact, and rational utilization of natural resources;
- services related to development of industrial environmental monitoring and management systems;
- preparing recommendations for the development of relations with the state environmental control and management bodies, the public and the population;
- development of recommendations and proposals on environmental education for the staff (employee);
- advice on environmental legislation, information services and other services.

All of this defines the main objectives and tasks that are different from the financial audit, other forms of auditor’s opinion, and the requirements to it. The most complex value of the environmental audit does not allow for strict regulation and registration of the methods and procedures used in the audit program implementation.

The similarity of environmental audit and financial audit is as follows:
- independence, objectivity, high professional level of auditors;
- confidentiality of the data obtained;
- entrepreneurial (market) character of the service;
- ability to provide a large set of consulting services to the customer;
- priority of voluntary audit forms from mandatory forms;
- providing the customer with important additional information that will greatly enhance the management effectiveness;
- identification of unused opportunities for auditing;
- ability to obtain direct and indirect economic benefits;
- mandatory assessment of compliance of audited activities with current legislation (Bartolomeo, 1997: 11).

Technical aspects of environmental control may be called as an analysis of ecological impacts for the environment and human health, in order to clearly define objectives, goals and functions of control(Yerzhanov, 2005: 14). And the financial side of the environmental control should be called the impact of environmental problems on the financial position of the client.

As a recommendation for the analysis of the economic impact on the environment, we can recommend:
- environmental impact analysis should be considered as a mechanism for identifying, analyzing and evaluating open and secretive destruction of natural conditions of natural environment components. It leads to deterioration or decline of living conditions of the population, as well as the general environmental threat associated with the functioning of the enterprise and its functional units;
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– means of controlling the ecological consequences of the company’s activities for the purpose of prevention and elimination of the violations of environment protection norms and rules;
– organization of the company’s publicity on nature protection activities and its products;
– instrument for the future activity and direction of the enterprise in the same territory (maintaining previous work regime, reconstruction, modernization, change of business, suspension of separate shops, sites, facilities, business in general);
– managing tool for the observance of environmental and technical requirements for the environment both inside and outside the enterprise.

The environmental impact analysis should provide the following solutions:

a) responsibility of the customer and the expert for the authenticity of the information on the performed expertise;
b) availability of public information expertise;
c) responsibility of all participants for the implementation of recommendations on the conducted expertise;
d) consideration of positive and negative environmental aspects of enterprise activity;
e) predicting the future environmental condition related to the entity inspected (ecological and special prognosis);
f) development of measures to eliminate the adverse environmental impact;
g) evaluate the current impact of the audited entity on the environmental protection and compliance with the established state standards and restrictions;
h) verification of reasonability of attribution of enterprise costs to environment protection measures.
i) determining the validity of environmental reporting on compliance with environmental laws and enforcement of environmental measures (Environmental Code of the Republic of Kazakhstan, 2007: 12).

j) assessment of the effectiveness of adopted environmental measures;
k) selection of capital investments;
m) forecasting of production growth; detection of «hidden» problems that may require urgent funds;
n) preparation of data on ecological situation for obtaining targeted loans from international organizations.

Following can be used as information base:
– existing legal and regulatory acts;
– environmental passports of enterprises.

The results of the examination shall be formalized in the form of an expert opinion. It should include:

– introductory section should contain the data on the expert and the enterprise where the expert examination is conducted (name, address, requisites);
– program section should contain the purpose of the conducted expertise, features of physical and geographical and meteorological conditions of the company location, company description, the need for natural, labor and energy resources, socio-economic significance of the object;
– main part should contain a description of the environmental conditions and sources of their impacts, a complex assessment of the impact on environment of enterprise and the existing system of integrated monitoring.

– final part should include the company’s recommendations on improving the environment and improving the living conditions of the population, the program of environment protection.

Audit must be conducted in the order provided by the J. Bartels.

The sequence of actions in the process of environmental audit:

Determination of the purpose of the audit.
Determine the scope and sources of information required.
Audit tools (protocols, test results, software).
Execution of activities.
Auditor’s conclusion and report.
Decision making.

The following requirements are set for the organization of the audit:
– getting access to the company’s location;
– presence of the company’s employee to help with the location of the company;
– availability of company’s documents;
– availability of permits to employees and managers of the company;
– audit methodology using;
– method of conclusions using.

To carry out the environmental audit, the auditor must be able to enter the area in which the subject is located. With the help of employee that familiar with its service and subdivision’s location, an auditor can monitor the land and access documents and company staff. There should be access to information and to employees to get an information from them, availability of permission to obtain access to information from them and should be beset by management. Information on the level of emissions of pollutants, licenses, penalties and agreements
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The first phase of audit
Preparation:
- gathering information about company location;
- selection of regulatory documents;
- setting up a meeting.
Visiting the Company:
- collection of documents;
- inquiry;
- look over.

The second phase of audit:
Additional questions and information:
- additional collection of documents;
- communication with the authorities;
- studying the adjacent territory of the company;
- study of the results of the internal audit performed by the entity itself.

Auditor’s conclusion:
- brief conclusions;
- marking alarms;
- assessment of potential costs;
- technical conclusion.

Quality assurance – control over the achievement of the goals.

Conclusion

However, control over environment protection, from an ecological point of view, is not complete without financial performance of the enterprise. Therefore, it is necessary to audit the impact of environmental problems on the financial position of the client.

An audit of the impact of environmental problems on the financial position of the client is, in our opinion, an independent audit for costs and liabilities that arise from environmental protection and affect the financial position of the entity.

References


Li, Xue & Yang, Zhihui. Re-understanding of the definition of environmental audit // Journal of Nanjing Audit University. – 2004. – No. 1.

Zhang, Yikuang. Discuss on environmental audit // Communication of Finance and Accounting. – 2006. – No. 6.


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Жумабекова Г. Г. Учет и аудит природоохранных мероприятий на предприятии на современном этапе и пути их развития: Монография. – Астана, 2017. – 215 с.
References


Zhumabekova G. Zh. (2017) Uchet i audit prirodookhrannykh meropriatii na predpriatii na sovremennom etape i puti ikh razvitiia [Accounting and audit of environmental measures at the enterprise at the present stage and ways of their development]. Monograph, Astana, 215p.