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ENVIRONMENTAL EXPENDITURES IN UKRAINE (ACCOUNTING AND LEGAL ASPECTS)

Abstract: The article provides the propositions as well as scientific and practical justification of the total expenditure and losses in the sphere of industrial influence on the environment and natural resources management. Environmental expenditures are interpreted as one of the functional concepts of the economic ecology which scientifically implements the principle of sustainable development of economic and ecological systems generally accepted in the world practice. The current state and development of the economy needs the elaboration and application of the managing methods that would reflect the natural balance towards the minimal adverse effects or would lead to the improvement of the nature's potential. It, in turn, requires the economic entities' assessment of environmental impacts and implementation of environmental protection measures. The main instrument and the chief source of information in the scientific work that would solve these assignments at the enterprise level is bookkeeping or accounting of nature resources management. Apart from organizational aspects of accounting, the research pays special attention to the question of auditing, reporting as well as forming of the legal basis. Therefore, the present study is a compact synthesis in terms of forming legal, organizational, methodological, economic foundations of establishing and developing accounting in industrial enterprises of Ukraine in the direction of creating its new object - ecological expenditures.

Keywords: ecology, ecological accounting, principles of ecological accounting, ecological expenditures, environmental management account-

ting, environmental management, ecological auditing, law, manufacturing, enterprise.

JEL Classification: Q20, Q28

EKOLOGICKÉ VÝDAVKY NA UKRAJINE (ÚČTOVNÍCTVO A PRÁVNE ASPEKTY)

Abstrakt: Článok ponúka vedecké a praktické odôvodnenia komplexných výdavkov a strát na oblasť priemyselnej výroby a jeho vplyv na životné prostredie a prírodné zdroje. Výdavky na ekológiu sú považované za jednu z funkčných koncepcií ekonomickej ekológie, ktoré vedci implementujú na princípe trvalého ekonomického rastu a ekologických systémoch všeobecne akceptovaných vo svetovej praxi. Súčasný stav a rozvoj ekonomiky potrebuje vypracovanie a aplikáciu manažérskych metód, ktoré reflektujú prirodzenú vyváženosť medzi minimálnymi nežiaducimi účinkami, alebo vedú ku zlepšeniu prírodného potenciálu. To vyžaduje od ekonomických subjektov účtovanie environmentálnych dopadov a implementáciu nástrojov ekologickej ochrany. Hlavným nástrojom a zdrojom informácií vedeckej práce, ktoré by tieto problémy riešili na úrovni podnikov je účtovníctvo alebo manažment účtovníctva prírodných zdrojov. Okrem organizačných aspektov účtovníctva sme sa zamerali sa na otázky auditu, podávanie správ, ako aj formovania normatívno-právneho rámca. Preto predkladaná štúdia predstavuje kompaktný útvar právnych, organizačných, metodických, ekonomických základov pre zavedenie a rozvoj účtovníctva v priemyselných podnikoch Ukrajiny priamo k vytvoreniu nového objektu - výdavkov na ochranu životného prostredia.

Kľúčové slová: ekológia, ekologické účtovníctvo, princípy ekologického účtovníctva, náklady na ochranu životného prostredia, ekologické manažérske účtovníctvo, ochrana životného prostredia, audit ochrany životného prostredia, právo, výroba, podniky.

Introduction

The results of any enterprise functioning, competitiveness in the current economic conditions depends on its efficiency, quality, environmental friendliness and the extent of incurred expenses.

Nowadays, the data of the research and practical activities demonstrate that the costs and liabilities determined by environment protection activities are becoming so significant that the lack of attention to them increases the risk of objective financial assessment of economic activities of industrial enterprises formed in accounting and reporting. And it emerges as a problem that does not allow making managerial decisions

objectively and effectively, and negatively affects the investment attractiveness, competitiveness and the overall reputation of the company.

In the conditions of Ukraine's integration into the European and world market and the transition to international standards of accounting and reporting, countries timidly begin to practice the development of ecological policy. However, there have not been elaborated the standards and regulations that would legally embrace all the components of the enterprises' environmental protection accounting: accounting of ecological expenditures, sources and other liabilities, results and display of ecological activities in reporting.

In different periods of time, home and foreign scientists and practitioners made a significant contribution to the study and formation of the legal, organizational, methodological, and economic bases, establishment and development of cost accounting for environmental protection and other ecological expenses, formation of reporting. These researchers include: Dzhyherey V., Storozhuk V., Yatsiuk R, Klymenko M., Pryshchepa A., Vozniuk N., Berenda I., Sukharev S., Chundak S., Sukhareva O., Dankiv Y., Zhuk V., Ivakhiv Y., Luchko M., Ostapiuk M., etc. The authors of the article endeavor to prove that there exists a necessity to unite the efforts of scientists and to develop new approaches to the accounting of industrial enterprises' expenditure on ecology and the protection of the environment and improvement of techno-ecological situation.

However, the economic, organizational-methodological and regulatory-analytical aspects of expenses, their accounting and reporting is a superficially elaborated area of accounting and analytical work at all levels of financial, economic and managerial activities.

The authors pursue the aim to arrange the system of accounting and reporting at industrial enterprises regarding expenses on ecology, environmental protection and the improvement of techno-ecological situation at the local level concerning practical technical ecology, which directly studies technogenic factors of environmental pollution. The paper also offers to disclose the relationship of accounting policies regarding ecological expenses with reporting according to the elaborated environmental policy at the enterprise.

Research methods. The theoretical and methodological bases of research are the dialectical method of cognition, according to which the historical aspects of the study of expenses on environmental activities are reflected, the methodology of accounting, analysis and auditing of environmental costs, the current regulatory and legislative framework. In the study of the theory and practice of accounting and auditing of environmental costs, the following methods of scientific cognition have been used: observation, comparison, analysis and synthesis, induction and deduction, analogy and specification. The methods of grouping and detail-

ing have been applied to determine the accounting principles of environmental costs. The methods of comparison and prediction have been applied to justify the need to improve the accounting and reporting concerning costs on the environment, implementation of environmental audit in the system of environmental management.

Practical significance of the obtained results consists in developing the recommendations aimed at improving the methodology of accounting and analysis of environmental costs. Their implementation in the economic activity of industrial enterprises will contribute to a better reflection of environmental costs in the accounting records, increasing efficiency of analytical work that will ensure making sound management decisions aimed at prevention and reduction of environmental pollution.

1. Principles of ecological expenses accounting

Market relations in the system of economic activities have always been primary compared to ecological issues, constantly forcing them to the second place. Thus, the formation and development of effective system of ecological management and ecological audit at the manufacturing is necessary, and the creation of the latter is impossible without the formation of appropriate informative basis. It is evidently constituted by the organized system of accounting at the enterprise, which has a list of internal and external users.

Ecologization of production is impossible without the implementation of ecological management at the key level of the enterprise's economics (Dankiv, Y. - Ostapiuk, M. - Dankiv, V. 2013). One of the main problems of development and implementation of effective environmental policy is the failure to provide the company management with reliable and timely information on the costs associated with environmental protection management. Accounting should reflect the ecological costs of the enterprise in monetary terms. Within the accounting of production costs there must be allocated the so-called supporting ecological expenses, such as expenses on training employees in the sphere of environmental management, depreciation of the main environmental production assets, bank credit interest on ecological loans, ecological payments, etc.

Taking into consideration scientific research and experts' practical advice, the authors offer the following general principles of accounting ecological expenses:

- accounts must reflect the relation of ecological expenses to the environment and their impact on the environmental situation;

- to make investment decisions investors should have available information on environmental measures and expenditures related to environmental protection activities;

- since environmental protection measures are also the subject of management, managers need to identify and reallocate environmental protection costs so that the product has been objectively evaluated, and investment solutions have been based on real costs and benefits;

- accounting ecological expenditure should ensure the enterprise's stable development on the basis of the effectiveness principle;

- involved legal and physical entities (banks, financial authorities, investors, creditors and the public) stimulate provision of reporting on environmental activities, their effectiveness and ecological compatibility.

Having analyzed the above-mentioned principles of ecological expenditure, obligations and accountability, we can conclude that it is a system of the integral object of accounting, as a part, it is characterized by the same objectives and requirements (Maksymiv L. I., 2004). To the latter, the authors include the identification, measurement, collection, processing and manifestation of primary data on the state of the company in terms of environmental protection, with the aim to provide the users with the necessary data, to monitor the implementation of the environmental problems and making the necessary decisions. In its turn, accounting of environmental protection expenses should include three main components: accounting of ecological expenditure, accounting of ecological liabilities, reporting on the environment protection.

2. Legal basis of ecological accounting and control of the enterprise's environmental activities and analysis of its effectiveness

The control and audit of completeness and efficiency of the enterprise's environmental protection activities are impossible without the appropriate meaningful accounting. On the other hand, the lack of complete information about the processes of natural resources exploitation by business entities creates a large range of problems for various groups of users of ecological and economic information, increases the totality of social, industrial and financial risks. The global trend for competitive activity demonstrates the priority of environmentally friendly products, kinds of work and services, creation of ecologically clean technologies.

As it has been noted above, in recent decades there has been a significant increase in expenditure on environmental initiatives in many countries, primarily highly developed ones. The magnitude of these expenditures amounts to billions of dollars and euros, but they are largely reimbursed by enterprises and manufacturers. The attempts to reflect these expenses in accounting and reporting took place in the 70 -s of the

20th century. However, at the level of the object, - ecological costs, rightly deserving attention, became fully meaningful and rightful only in the 90-s of the 20th century (European Union where.1993).

At that time, large industrial enterprises had to take into account the growing extent of legal rules and regulations, government resolutions on environmental protection. According to the established regulatory basis, many companies have adopted environmental policies that ensure the appropriate level of environmental protection activity and implementation of appropriate measures. At first, the audit was not perceived as a means of environmental protection management. Many companies did not want to define the scope and level of their environment pollution and the ecological expenses on their removal since this would affect the share price.

Nowadays traditional instruments and methods of economic analysis do not enable efficient determination of performed strategic measures for the environment protection. In particular, environmental costs to be compensated in connection with the restoration of the ecological state, are not reflected in the accounting and analysis. According to enterprise managers, environmentalists, and economists there are a number of obstacles that prevent them from taking environmental protection measures and providing reporting on them:

- in many countries the expenses on environmental protection are deductible from the sum of taxable income only after they are implemented. As a result, there is no stimulus to take into account liabilities;
- due to the fact that investors closely monitor the size of income per share, the company postpones taking measures concerning environmental protection, which could lead to the reduction in income;
- excessive complexity in singling out expenditures on environmental protection out of the general economic expenses;
- the absence of specific recommendations regarding the provision of information on environmental activities and organization of accounting of environmental expenditure in enterprises.

In such circumstances, it is extremely important to provide the necessary details in the presentation of certain types of expenditures in order to increase transparency and facilitation of management related to environmental aspects of operations.

3. Ecological audit in the system of ecological management

The quantitative and qualitative data obtained by expenditure accounting may be applied in other blocks of the environmental information system of the enterprise, including reporting. They can also be used in the organization planning as a component of ecological management, including analysis, control, and audit (Zhuk, V. M., 2012).

Ecological management reaffirms the relationship between ecology and economy. Accounting of environmental expenditure as a part of management is the basis for environmental audit.

Environmental audit in the system of ecological management is the method used to gradually introduce the ecological requirements into the business strategy and the basic parameters of the production process. Environmental audit as a part of the management system, provides users with constant control and analytical information about the state of the intra-productive potential, environmental risks and the prospects of the business entity.

The main objectives of environmental audit are as follows:

- providing objective information about the enterprise's environmental aspects and its compliance with established standards, regulations and requirements of the users as the initiators of control measures;
- development of proposals and providing recommendations that would ensure further improvement of the ecological management, eco-controlling, etc;
- ensuring the effectiveness of environmental protection measures implemented by the enterprise.

With the accumulation of experience, enterprises adopt a more comprehensive approach to environmental audit and its interpretation as a means of implementing the process of continuous improvement of environmental management quality. Researchers widely use the analysis of the parties of the organizational production process and the product movement in terms of the environmental life cycle conception, creating conditions for strengthening and expanding environmental liability of the company and the formation of ecologically sustainable business entities.

Considerable attention is paid to the issues of environmental audit in the countries of the European Union where “The Eco-Management and Audit Scheme (EMAS)” was adopted on the 29 of June 1993 which came into effect in April 1995. The document requires industrial companies of EU countries to regularly perform eco-audit and publish the results on the company's impact on the environment.

An important step taken to draw attention to ecology in Ukraine was the adoption of the Law "On environmental audit" by the Supreme Council of Ukraine on June 24, 2004. This law imposes functions of organization and methodological provision of environmental audit on a separate, special, legal body in tending the environment protection. The law also provides: the feasibility of establishing additional structures, which could be assigned with functions of certifying ecological auditors; creation of the register of auditors and entities entitled to auditing; consideration of disputes arising during audit activities. The relevant structure could assist the Ministry of Ecology and Natural Resources of Ukraine in

this sphere, taking over the audit functions. The relevant functions could be also assigned to public authorities and environmental auditors (unions, guilds, etc.). It is also expedient to create the Ecological Audit Chamber of the Ministry of Environment, which would work under the Ministry's methodical guidance with full rights of the legal entity. Each of the above mentioned forms has its advantages and disadvantages.

The authors believe that the most appropriate form presupposes establishing of the Ecological Audit Office, which would operate on the principles of sustainability, delegated representation, member rotation, controllability and accountability to the specially authorized state body in the field of providing environmental and economic auditing. It is offered to include the following to the Chamber's competence: certification of auditors; keeping the register of auditors and entities eligible for environmental and economic audit; the organization of developing and submitting the regulations on the organization of environmental and economic auditing activities for their consideration and approval by the authorized body; adoption of methodological documents for the audit; consideration of protests, complaints and disputes of the members being the objects of ecological and economic audit.

The enactment of the Law of Ukraine "On environmental audit" has manifested its ineffectiveness. It is explained by the fact is that it has chosen purely environmental activities of the company as its object. However, the authors believe that there is no purely ecological accounting, and no purely ecological audit. Both of these notions are inextricably linked with economic activity of the enterprise. In its turn, the enterprise's activity - is the economic activity that is controlled by means of the informative basis, which provides accounting. The expenses on environmental activities related to environmental protection are one of the important objects of accounting. The authors constantly emphasize that the audit is not just ecological, but rather the ecological-economic notion. Only the interconnection of technology and economy gives the possibility to successfully solve environmental problems, improve the state of our environment. The authors do not reveal anything new, their opinion is supported by the international practice.

The International Accounting Standards Committee has adopted the International Auditing Practice Statement (IAPS) 1010 "The Consideration of Environmental Matters in the Audit of Financial Statements".

This international legal document reveals the need to audit environmental issues that are important means to prevent the risk of significant distortion of the current financial statements. Thus, the law of Ukraine on environmental audit needs radical improvement and compatibility with the economy and, primarily with accounting and auditing.

Conclusion

The present scientific work justifies the need to develop ecology as a science and a field of activity in close connection and interrelation with economic disciplines and economy. Environmental protection measures are one of the areas of enterprises' business activity, which, being an object of accounting, cannot dispense with it and the derivatives of its analysis, control and audit. To summarize, we can draw the following conclusions:

1) The enterprise's environmental activities, its expenses on environmental protection are an integral part of the overall economic activity, which requires appropriate, objective, and balanced management of this activity, as well as of the whole enterprise.

2) Accounting as main information system of the enterprise should provide the management with the information necessary for decision-making concerning the reduction and prevention of environmental risks.

3) The differentiation of accounting with the allocation of environmental expenses due to the place of their emergence and types gives an opportunity to make these costs more manageable.

4) The application of modern instruments of accounting, the display of environmental indicators in the financial statements will enhance the effectiveness of management, including audit and control.

5) Enterprises that are guided by the principles of ecological and accounting policies in their activities require more detailed information on the impact of their activities and manufacturing processes on the environment, which contributes to the development of accounting, analysis, control and audit.

6) Specialist training in the frame of the specialty "Accounting and Taxation" should be adjusted and focused on the development of ecological thinking and mastering accounting of environmental expenditures in order to obtain long-term information necessary for appropriate effective management decisions.

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