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UDC 336.2:33

DOI: 10.37128/2411-4413-2019-8-16

ORGANIZATIONAL AND METHODICAL FUNDAMENTALS OF AN ENTERPRISE ENVIRONMENTAL COSTS ACCOUNTING ©

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A rational organization of accounting for environmental costs is a system of elements and means of optimal construction of the accounting process in order to obtain and provide reliable, operational, analytical and qualitative information for the management of environmental costs and control of the resources used in the field of environmental protection. Due to the rational organization of accounting of environmental costs, an information base is formed for a comprehensive analysis of environmental costs, effective management of environmental costs and environmental activities, reliable statistical indicators of the activities of enterprises in the field of environmental protection.

The article deals with the economic concept of "environmental costs", and its interpretation by various domestic and foreign scientists. The nature of the origin of environmental costs has been investigated. The cost of environmental protection in the total volume and at the own funds of enterprises, organizations and institutions is analyzed. The environmental costs of sources of funding in 2017 are examined. The problems of image in accounting and reporting of environmental costs are considered.

Key words: environmental activities, environmental costs, environmental accounting. **Fig. 3. Tab. 2. Lit. 13.**

ОРГАНІЗАЦІЙНО-МЕТОДИЧНІ ЗАСАДИ БУХГАЛТЕРСЬКОГО ОБЛІКУ ЕКОЛОГІЧНИХ ВИТРАТ ПІДПРИЄМСТВА

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Раціональна організація обліку екологічних витрат є системою елементів і засобів оптимальної побудови облікового процесу з метою отримання і надання достовірної, оперативної, аналітичної і якісної інформації для управління екологічними витратами й контролю за

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використаними ресурсами у сфері охорони навколишнього середовища. Завдяки раціональній організації обліку екологічних витрат формується інформаційна база для комплексного аналізу екологічних витрат, ефективного управління екологічними витратами і природоохоронною діяльністю, достовірні статистичні показники діяльності підприємств у сфері охорони навколишнього природного середовища.

У статті розглянуто економічне поняття «екологічні витрати», трактування його різними вітчизняними та закордонними науковцями. Досліджено природу походження екологічних витрат. Проведено аналіз витрат на охорону навколишнього природного середовища у загальному обсязі та за власні кошти підприємств, організацій, установ. Досліджено екологічні витрати за джерелами фінансування в 2017 році. Розглянуто проблеми зображення в бухгалтерському обліку та звітності екологічних витрат.

Ключові слова: екологічна діяльність, екологічні витрати, екологічний облік

Рис.: 3. Табл.: 2. Літ.: 13.

ОРГАНИЗАЦИОННО-МЕТОДИЧЕСКИЕ ОСНОВЫ БУХГАЛТЕРСКОГО УЧЕТА ЭКОЛОГИЧЕСКИХ ЗАТРАТ ПРЕДПРИЯТИЯ

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Рациональная организация учета экологических затрат является системой элементов и средств оптимального построения учетного процесса с целью получения и предоставления достоверной, оперативной, аналитической и качественной информации для управления экологическими затратами и контроля за использованными ресурсами в сфере охраны окружающей среды. Благодаря рациональной организации учета экологических затрат формируется информационная база для комплексного анализа экологических затрат, эффективного управления экологическими затратами и природоохранной деятельностью, достоверные статистические показатели деятельности предприятий в сфере охраны окружающей природной среды.

В статье рассмотрены экономическое понятие «экологические затраты», трактовка его различными отечественными и зарубежными учеными. Исследована природа происхождения экологических издержек. Проведен анализ затрат на охрану окружающей среды в общем объеме и за собственные средства предприятий, организаций, учреждений. Исследованы экологические расходы по источникам финансирования в 2017 году. Рассмотрены проблемы изображения в бухгалтерском учете и отчетности экологических издержек.

Ключевые слова: экологическая деятельность, экологические затраты, экологический учет. **Рис.: 3. Табл.: 2. Лит.: 13.**

Problem statement. Enterprises intending to be open to the outside world and seeking stability in a changing market environment should meet domestic and international requirements in manufacturing quality eco-friendly products. One of the main problems in the development and implementation of effective policies in this direction is the lack of comprehensive, reliable and timely information on environmental activities, which must be provided by the management of the company. Environmental polluters must suggest information about their environmental activities, as its absence could pose serious risks to the investors and the owners: having invested in production today, they may already face significant losses tomorrow in the form of fines, costs for liquidation the consequences of environmental disasters, etc. The main tool to solve this task at an enterprise level is environmental accounting or accounting for environmental activities.

Analysis of the recent research and publications. A number of domestic and foreign economists devoted their works to consideration of the problems related to accounting of enterprises environmental activity, among them are: Brylev A.N. [1], Zamula I.V. [11, 12], Kondratyuk O.M. [4], Len V.S. [5], Makara S.V. [6], Pelinho L.M. [7], Savchenko O.F. [8] and others. However, the theoretical, organizational, methodological, regulatory and analytical aspects of book-keeping and management accounting for environmental costs remain poorly developed.

Formulation of the aim of the article. The purpose of the work is to reveal the nature of environmental costs and to introduce organizational and methodological principles of accounting for environmental costs of an enterprise into accounting and analytical practice of domestic enterprises.



Presentation of the main research material. An important component of promoting ecologically balanced nature management and guaranteeing environmental security at all levels of management is an adequate accounting system that provides all members of the society with reliable, timely and useful information about economic activities of enterprises and organizations, their asset condition, liabilities and equity. Accounting allows obtaining numerical description of factors thus becoming a source of information, and therefore stimulating environmental measures [12, p. 258].

At present, in Ukraine economic accounting is used, which includes: operational accounting, business accounting, statistical accounting, financial accounting, tax and management accounting. As we can see, economic accounting does not include environmental accounting. But it is environmental accounting that can become the principal method for the accounting of environmental costs and determines the approach to consideration the phenomena of economic activity of enterprises, of all means and processes in their direct movement and development, unity, interconnection and mutual harmonization [7, p. 74].

Environmental accounting at an enterprise is the process of recognizing, evaluating and transmitting environmental information that enables users of such information to make competent decisions and formulate judgments. This category covers the formation of accounting and non-accounting information about the state and dynamics of the external natural environment and the impact of natural factors and human activity at the global, national and regional levels on it [11, p. 212]. For business entities, environmental accounting is an accounting subsystem that generates and communicates to users information about economic operations related to the use of the environment and the impact of economic activity on it. Environmental accounting is not only a subsystem of the accounting system, but also a part of environmental management system, as well as the information basis for conducting environmental audit, insuring and evaluating investment projects [4, p. 23]. In the last three decades, most of the developed countries have been experiencing significant increases in environmental spending. Their total now amounts to tens and hundreds billion dollars, and they are largely reimbursed.

Lack of environmental information creates a barrier for the users in planning further economic activities of the business entity. As a result, accounting costs do not take into consideration the environmental costs of operations, related to depletion of natural resources and environmental degradation. It is also quite difficult to estimate environmental costs connected with changes in the quality of the environment, ecosystems, loss of biodiversity, etc.

In accordance with the new approaches, accounting should integrate the process of identifying, measuring and communicating environmental information. This will allow the internal users to make management decisions that will ensure prevention of environmental risks; the external users – to get information about the activity of the enterprise in the field of nature protection [2, p. 124]. Rational organization of environmental costs accounting is a system of elements and means of optimal construction of the accounting process in order to obtain and provide reliable, operational, analytical and qualitative information for the environmental costs management and control of the resources in the sphere of environmental protection.

In the early twentieth century, under the influence of economic theory, accounting stood apart from environmental issues. Accounting information threatened the process of formation the industrial society. Industrialization policy has led to a significant growth in the number of heavy industry enterprises, what has increased the burden on the environment. Depletion of natural resources caused their scarcity. At this stage market regulation of the impact made by enterprises on the natural environment was impossible [3]. Under the influence of globalization processes, in the early 1980s, the world community felt the need in working out the principles for environmental accounting. In 1991, the Intergovernmental Working Group of Experts developed the first recommendations for accountants for disclosing information about the environmental impact of the enterprise, and in 1998 – for reflecting environmental activities in accounting [13, p. 212].

Therefore, with the adoption of the concept of sustainable development and with the purpose of formation an internal mechanism of economic security, each enterprise is obliged to make contribution into its implementation.

First of all, it is necessary to regulate the accounting of natural resources potential. In addition to amending existing regulations, it is advisable to approve a new accounting standard (provision) for acquisition, lease and protection of land, water, forest resources, atmospheric air (more precisely the right to its pollution), bowels of the earth, mining areas and biological diversity, as they are considered to be the property of the people of Ukraine and are not properly reflected in accounting.

Accordingly, their loss, exhaustion as a result of economic activity is not recorded as well. This demonstrates the inadequacy of accounting for natural resources at the macro level, which automatically



updates the need to improve the display of these resources in the system of national accounts, and, accordingly, to develop methodology for accounting of natural resources at the micro level. It is proposed to include natural resources potential into the list of environmental accounting objects, namely ecological assets.

Rational organization of accounting for environmental costs is a system of elements and means of the accounting process optimal construction in order to obtain and provide reliable, operative, analytical and qualitative information for the management of environmental costs and control of the resources used in the field of environmental protection. Due to the rational organization of accounting of environmental costs, an information base is formed for the complex analysis of environmental costs, effective management of environmental costs and environmental activities, reliable statistical indicators of enterprises activities in the sphere of environmental protection.

Environmental costs arise in the course of the enterprise activity (operating, investment) and are related to the use of natural resources and their protection. A thorough study showed that in the domestic scientists' works concerning the costs associated with environmental activities there exist their various formulations: "environmental costs", "costs for environmental protection", "natural environment protection costs", "ecological costs".

Scientists such as V. Len, O. Koliveshko [5] in addition to interpreting the term "environmental costs", interpret "environmental losses" and "environmental damages". "Environmental losses" for accounting purposes, in the view of the scientists, should be understood as the reduction of value of the assets of the enterprise without transferring it to the product of the enterprise and without their disposal outside the enterprise by the owner's decision, which occurs due to adverse natural phenomena and negative anthropogenic impact on the environment. The concept of "environmental losses" includes information about business operations and other information about the negative changes in the environment and the impact of these changes on the industrial and social spheres.

Thus, environmental costs, according to S.V. Makar [6, P. 12] are socially necessary expenditures for maintaining the quality of the environment, for all forms and types of economic activity or for the general support of the natural resource potential, in particular maintaining ecological balance at all levels – from local to global. Costs for environmental protection, according to the A.N. Bryliev [1, P. 7] are the costs for eliminating the negative impact of modern production on the environment and human activity and for restoration of previously damaged natural objects.

Natural environment protection costs are the actual costs for environmental protection aimed at preventing or minimizing the damage to the quality of the environment, as well as the necessary costs for eliminating or compensating for the negative effects (damage) on the quality of the environment.

By the normative definition, natural environment protection costs include all types of expenditures aimed at preventing, reducing or eliminating pollution, other harmful effects of economic and other activities on the environment, providing services or using products, as well as conserving biodiversity and the habitat. In our opinion, ecological costs can be understood as all costs associated with implementation of environmental activities: costs for all natural resources utilization, costs for environmental protection, costs for elimination the negative effects, costs for research and renewal of natural resources.

So the category of ecological costs includes many aspects:

- costs for air protection and climate change:
- costs for wastewater treatment;
- costs of waste management, including particular areas;
- costs for protection and rehabilitation of soil, ground water and surface water;
- costs for reducing noise and vibration effects (excluding occupational safety measures);
- costs for biodiversity and habitat conservation;
- costs for radiation safety (except for the measures for preventing accidents and catastrophes);
- costs for research work on environmental protection, including particular areas;
- other costs for environmental protection.

Seemed to be interesting the opinion of the authors [8] on attribution to the separate ecological costs the purchase of environmentally friendly raw materials; remuneration for the work performed in connection with environmental protection; depreciation costs of environmental protection equipment; fines, penalties paid to the state for the excess emission of pollutants; fines for overdue loans given for environmental purposes; losses from sale, disposal of the objects of fixed assets related to environmental activity; other environmental costs.

Environmental protection, rational use of natural resources, ensuring the ecological safety of human life is an indispensable condition for sustainable economic and social development of Ukraine, and environmental measures of the enterprise and effective mode of operation have, in its turn, a positive effect on the environment and minimize the harmful effects.



Results of the research on the costs for environmental protection at the expense of own funds of enterprises, organizations, institutions upon the types of environmental measures in 2018 at actual prices is presented in table 1.

Table 1
Costs for environmental protection at the expense of the own funds of enterprises, organizations, institutions upon the nature protection measures in 2018 at actual prices, million UAH

Index		Speci fic	Including		
			Capital investments		Cu rre nt
Total	29869,5	100	6844,2	892,1	23025,3
Air protection and climate change problems	6367,1	21,3	3495,8	452,7	2871,3
Waste water treatment	10420,6	34,9	905,7	367,6	9514,9
Waste management	9318,4	31,2	846,0	47,7	8472,4
Protection and rehabilitation of soil, ground and surface water		7,6	1080,6	20,5	1194,7
Reducing noise and vibration effects		0,1	1,5	1,3	21,6
Conservation of biodiversity and the habitat		1,8	15,2	1,9	515,6
Radiation safety		1,7	442,0	0,2	62,6
Research works on nature protection		0,2	5,0	-	47,4
Other environmental activities		1,2	52,4	0,2	324,8

Based on the source [10]

Based on the need for adequate, complete and comprehensive reflection of the totality of nature conservation works, it is advisable to take the grouping by the type and direction of costs as a basis.

During 2018, costs for natural environment protection spent by enterprises, organizations and institutions of Ukraine made up 29869.5 million UAH. The largest share of them was the costs for wastewater treatment - 34.9 % and waste management - 31.2 %. The main directions of the use of environmental funds indicate the major environmental problems of the state - protection and improvement of water resources and rational waste management.

In the course of analysis of capital investments in natural environment protection in 2010-2018 (Fig. 1), it was found that investments of own funds of enterprises and organizations in environmental protection in 2018 increased three times in comparison with 2010.

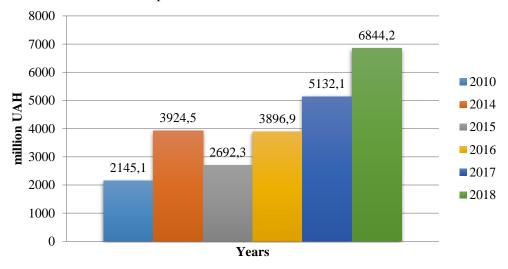


Fig. 1. Capital investments in natural environment protection at the expense of own funds of enterprises, organizations and institutions, million UAH

Based on the source [10]

According to the State Statistics of Ukraine, current expenditures for environmental protection in Ukraine at the expense of own funds of enterprises, organizations and institutions increase annually. The share of such expenditures in the total amount of current environmental expenditures for all the years studied equals to more than 93% (Fig. 2).

Increasing the exploitation of natural resources and intensification of destructive changes in the environment, the introduction of environmental measures conditions the need for proportional increase in spending funds and material resources for environmental purposes.



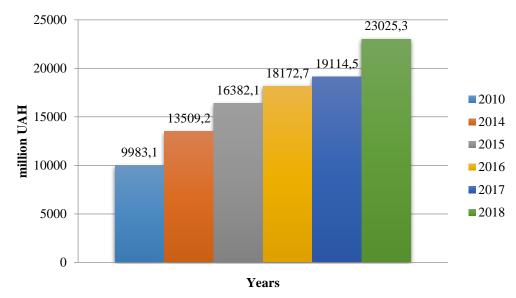


Fig. 2. Current expenditures for environmental protection at the expense of own funds of enterprises, organizations and institutions, million UAH

Based on the source [10]

A significant positive role in informational and analytical support of managerial decisions in the field of environmental protection and rational use of natural resources is played by the environmental costs structuring upon the sources of financing (Fig. 3).

A study of environmental spending upon the sources of financing in 2018 showed that only 6.7 % of those expenditures were financed by the local budgets. The largest share of expenditures for environmental protection was accounted for the own funds of enterprises and organizations -86.9 %, other sources of financing amounted to 6.4 %.

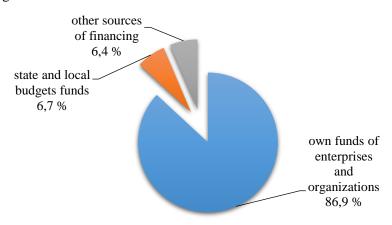


Fig. 3. Structure of environmental expenditures upon the sources of financing in 2018 Based on the source [10]

According to the study, the largest share of environmental costs is generated by the own funds of enterprises, organizations and institutions in the regions. Therefore, it is expedient to report for such costs separately in the accounting and reporting of enterprises.

Accounting today is not able to take into account ecological impact of enterprises, institutions, organizations on the environment and to provide information support for environmental management at a proper level.

There exist a number of obstacles for organizing environmental accounting and reporting on environment protection measures:

- there is no incentive to account for the liabilities due to the need to deduct expenses from the taxable income after they have been incurred;
 - too much complexity in separating costs for environmental activities from total amount of costs;



- lack of specific recommendations regarding the provision of information on environmental protection activities and organization of environmental accounting at enterprises;
 - lack of decision-making methodology for reducing and preventing environmental risks;
- insufficient legal regulation of issues related to information support for environmental protection management, rational utilization of natural resources and ecological safety of business entities;
- accounting and debiting environmental costs is carried out unsystematically, according to the general methodology without taking into account their peculiarities;
 - environmental costs are not recorded separately, but are entirely related to the cost of production;
- lack of information on environmental costs, environmental income and liabilities in financial statements;
 - lack of specific recommendations on organization of environmental accounting at enterprises.

To solve the problems of regional environmental policy, coordinated actions should be undertaken in the following areas:

- approval of the additional system of accounts and registers of analytical accounting plan for environmental expenditures, environmental revenues and liabilities;
- amendments to national accounting provisions (standards) for environmental costs, environmental income and liabilities;
- taking into account in the accounting policy of the enterprises related to environmental activities specific features of their business activities in determining environmental costs;
 - on the state level improvement of the regulatory framework based on international standards, etc.

Thus, ecological costs of an enterprise are all the costs associated with the implementation of environmental activities. On the assumption of the large number of heterogeneous, but to some extent identical classifications, we propose to group environmental costs by such features: kinds of activities and nature of the environmental impact.

By types of activity they could be divided into: operating and investment.

Operating environmental expenditures arise in the course of regular activity of the enterprise and are associated with the use of natural resources and/or their protection.

Investment environmental costs are associated with creation, acquisition, reconstruction, modernization, technical re-equipment, major overhaul of environmental facilities.

By the nature of the environmental impact, we propose to divide ecological costs into operational (related to the provision of production with natural resources, their exploitation and renewal) and environmental (related to the measures of protection the environment from pollution).

Environmental expenditures cannot be evaluated in terms of generally accepted positions, because you can't save on them, so controlling the level of environmental expenditures should help not only to find ways of their reduction, but also to determine the adequacy of the amount of the funds invested in environmental protection.

The given above classification of environmental costs can be applied by enterprises of different ownership and organizational and legal forms, what will allow to organize the accounting of environmental activities and to develop methods for environmental costs of the business entity accounting.

To manage environmental costs, to ensure their regulation, information about the needs for such costs, as well as their actual amount is necessary, which is provided by the accounting. However, there is a number of problems involved in reflecting environmental costs in entity's accounting system.

There is another global question that arises from the principle of compliance: should or should not such costs be capitalized? If capitalized, that is, reflected in the balance sheet as the costs for the future years, the profit for the reporting period would increase and the company would have to pay higher dividends and taxes. If not, this will violate one of the fundamental principles of accounting – compliance. In this case, there may be three approaches:

- separate, parallel to the traditional, which reflect the costs of environmental measures, financial statements are made;
 - in traditional accounting, an article is distinguished in which those costs are accumulated;
 - all such expenses are divided into separate items in the financial statements.

Even today, accountants are advised to draw up eco-balances, that is, reporting that reflects the impact of costs associated with environment protection measures. Given the conditions existing in Ukraine, the most rational for application is the second approach of the three proposed, namely: to separate environmental costs from other costs and account for them separately.

In this regard, it is necessary to define the tasks of accounting for environmental costs. Performing these tasks will provide external and internal users with information about the enterprise's activity and its impact on the environment.



To organize the accounting of environmental costs, it is necessary to develop the accounting policy of the enterprise and regulatory legal support for accounting.

The tasks of accounting for environmental costs include:

- formation and provision of complete, timely and reliable information on environmental costs for effective management of the environmental activity of the enterprise, making decisions on cooperation and investing in the business entity;
 - ensuring conservation of natural resources for the society and raw materials for the production;
 - ensuring control over the environmental spending of the enterprise;
 - evaluation of the impact of environmental factors on financial results of the enterprise.

The elements of organization of accounting for environmental costs are as follows:

- 1. In the accounting technique:
- primary documents, accounting registers, document flow;
- work plan of accounts with analytical accounts distinguishing;
- accounting software;
- terms and users of internal reporting.
- 2. Regarding to methodological support of accounting:
- the procedure for recognizing, assessing and including environmental expenditures to the cost price;
 - the order of distribution of general environmental costs.

Keeping synthetic accounting of environmental costs should be based on the industry peculiarities and specificity of the particular enterprise. This requires:

- generation of reliable information for national environmental statistics;
- monitoring the condition of the environment.

In current management practices, environmental costs are accounted for, and therefore, distributed and debited according to common methods, without taking into account their specific features. Thus, distribution of environmental costs, which by their economic nature are general production variables, is carried out in proportion to the wages of workers of the main production. It is advisable to use this method for environmental costs accounting, since those costs depend on the amount and the complexity of restoration of the damaged environment, but not on the labor consumption of the enterprise's operation processes. Therefore, it is considered to be expedient to distribute variable general production environmental costs in proportion to the cost of restoration of the damaged environment, what will have a positive impact on the pricing process of the enterprise products.

In accounting for environmental costs, the formation and processing of primary documents is of great importance for error-free and transparent accounting.

Documents confirming carrying out business operations on the occurrence of environmental costs can be divided into types, depending on the classification of environmental costs.

Thus, by Sovyk M. the following types of documents can be distinguished to confirm environmental costs [9]:

- a) upon the socio-economic criteria:
- documents confirming payment of tax, rent and environmental charges, as well as fines and penalties for non-payment or late payment of the above mentioned payments;
 - documents confirming the costs of preventing the harmful effects on the environment;
- documents confirming the extraordinary costs of eliminating the effects of the environmental disaster;
 - documents confirming the operational costs for providing environmental services;
 - b) upon reflecting in financial accounting:
 - documents confirming current (operational) environmental costs;
 - documents confirming capital (investment) costs;
 - c) upon the types of economic activity of the enterprise:
- documents confirming the cost of maintaining the fixed environmental assets: semi-finished products, materials, fuel, power, current and major repairs, etc.;
- documents confirming the costs of wages and labor protection (including the deduction of a single social contribution) to employees engaged in environmental activities;



- documents confirming the costs associated with the enterprises and organizations of the region sharing of environmental protection objects;
 - d) upon the objects of protection:
 - documents confirming the cost of protecting the purity of the atmosphere;
 - documents confirming the cost of rational use of land resources;
 - documents confirming the cost of rational use of mineral resources;
 - documents confirming the cost of rational use of water resources;
 - documents confirming the costs of protection of flora and fauna;
 - documents confirming the costs of waste treatment and disposal.

Thus, based on the research carried out at Ukrainian enterprises, it is possible to draw up a summary table that contains information on documenting the environmental costs (Table 2).

Table 2

Documentation of environmental costs

No.	Kind of environmental costs	Document confirming environmental costs
1	Environmental	declaration on environmental tax
	taxation costs	- Bank account statement
		- payment order
		- requirement of the SFS decision on payment of a fine and / or a penalty
		from the environmental tax
2	Costs for permissive	- permission for emissions of harmful substances into the ambient air
	documentation	- permission for special water use
3	Costs for prevention of harmful	- agreement on the environmental audit services provision
	effects	- act of the provided environmental audit services
	on the environment	- payment order
4	Operational environmental	- expenditure invoices for materials used for
	costs	operating process environmentalization
		- acts of the provided services for utilization of harmful material stock
5	Costs of wages for the	- staff list
	employees involved into	- time sheet
	ecological activity	- payment statement
6	Investment environmental	- defective act
	costs	- agreement on repair (modernization) of fixed assets
		- act of acceptance-transfer of works on modernization of fixed assets
7	Environmental costs	- act of acceptance-transfer of the provided services on the personnel
	for employees training	training
		- payment order

Based on the source [9]

In accordance with the accrual principle, environmental costs are reflected in accounting and financial statements at the time they are incurred, regardless of the date of payment. Therefore, environmental tax expenses are attributable to the period over which they are charged. As a rule, they are charged on the last day of the reporting period, even though the payment will be made in the next period. To display taxes, fees and compulsory payments at Ukrainian enterprises, account 64 "Taxes and payments" is used. According to Instruction No. 291, this account is used to display information about the payments made by the enterprise on all types of payments to the budget. The credit of account 64 shows the charges, the debit – their payment. This account has two subaccounts: 641 "Taxes payments" and 642 "Mandatory Payments".

To account for operational environmental costs, enterprises can use accounts 20, 22, 23 depending on the purpose and the unit the environmental costs were incurred. Accounts 66, 65 are used for the costs of remuneration of the personnel involved in the environmental activity of the enterprise.

Account 15 is used for accounting for environmental investment costs. Accounting policy of the enterprise provides debiting the amount of environmental costs to account 92 "Administrative expenses", 91 "General production costs", which in turn are distributed between accounts 23 "Production" and 90 "Cost of sales". That is, accounting of general production costs consists of the order in which they are distributed, under which the main part of these costs (distributed general production costs) is included in the price cost of a particular type of produce, but retained general production costs increase the cost of sales of the period in which such costs arose.



Sometimes environmental costs are also debited to the account 93 "Sales Costs".

Based on the above mentioned, it can be stated that a significant lapse of accounting for environmental costs at enterprises is that the accounting system does not contain such category as "environmental costs". But in fact, enterprises do have environmental costs. In the course of the study of enterprise accounting system, seven types of environmental costs were identified: costs on environmental taxation, costs on permitting documentation, costs on preventing harmful effects on the environment, operational environmental costs, costs of remuneration for employees related to the environment protection, investment environmental costs, environmental costs for employees training. Businesses incur environmental costs in the course of their operating activities during each reporting period.

However, of all these costs, only environmental tax costs are recognized as environmental costs. All other types of environmental costs (permitting costs, costs for preventing harmful environmental effects, operational environmental costs, costs of remuneration for employees related to the environment protection, environmental investment costs, employees training costs) are reflected on account 91 "General production costs" without distinguishing a separate subaccount, 92 "Administrative expenses" and sometimes 93 "Sales cost".

This situation makes it impossible to identify the exact amount of environmental costs incurred by the enterprise and as a consequence leads to unreliable reporting of environmental costs in the enterprise's accounts. In financial statements environmental costs are reflected as a part of other reporting items since even at the stage of accounting, the amounts of environmental costs are scattered in the amounts of other costs of enterprise's activity.

However, even if environmental costs information was separated at the accounting stage, there is still no line in the existing financial statements to reflect the amount of environmental expenditures. Therefore, a major drawback of existing reporting forms is the lack of separate sections or articles to reflect the environmental showings of enterprises.

Information on production and sale of environmental goods and services, introduction of environmentally friendly technologies, reduction and prevention of environmental pollution by harmful substances, generation and disposal of wastes, the fulfillment of environmental obligations to the society is contained only in financial statements among other indicators or not disclosed at all. This lowers the level of public confidence in environmentally friendly entrepreneurship in Ukraine and reduces the level of ecological awareness of entrepreneurs.

For the rational organization of accounting of environmental costs at the enterprises of Ukraine we suggest to introduce the following measures:

- 1. Include into the annex of the Order "On the Enterprise Accounting Policy" a number of issues related to environmental costs, namely:
 - types of environmental costs generated at the enterprise, sources of their formation, amounts;
 - documents under which environmental costs are generated;
 - main types of operations related to environmental costs;
 - procedure for formation and use of funds for environmental expenditures for the reporting period;
- documents substantiating the formation and spending environmental costs during the reporting period;
 - the list of persons responsible for providing accounting for environmental costs;
- the list of persons who have the authority to make decisions on the formation of certain environmental costs;
 - procedures for current control over the formation and use of environmental funds;
 - the procedure for waste and environmental commitments inventory;
 - the composition and content of internal reporting on environmental costs.

Accordingly, we support the propositions of Sovyk M. to distinguish the following elements of accounting policy [9]: a list of environmental costs that can be formed by the enterprise; the order of their formation; purposeful use and elimination of environmental costs; documentation; inventory; responsibility for correct formation and use; internal reporting on environmental costs.

- 2. To develop the accounts of expenditures for environmental activities according to the specified distribution, and to make the necessary details in the primary documents.
- 3. To create the system of documentation and document flow of operations on environmental costs accounting.



- 4. To provide guidance on job descriptions for each officer involved in the process of accounting and analysis of the aggregate environmental costs. The job descriptions of accounting staff developed by the chief accountant should include the amount of work that accountants of the environmental cost accounting sector should perform.
 - 5. To implement legislative acts that will regulate environmental accounting.

Thus, rational organization of accounting for environmental costs will give enterprises the opportunity to fully and objectively take into account environmental aspects of their activities, which in turn, will allow timeous recognition of the risks of unreasonable anthropogenic impact on the environment, timely taking of preventive measures and hence determining the ecological path of the enterprise's development.

The overall purpose of environmental accounting is to reflect the environmental impacts of each enterprise and to compare them with ecological standards.

Adequate consideration of the environmental aspects of the enterprise and its reflection in the accounts will provide users with information necessary to make optimal management decisions, will allow to some extent take into account the risks and realize the opportunities of environmentally conscious enterprise management.

Conclusions. Thus, environmental accounting at an enterprise is an indicator of rationality of management, fair redistribution of natural resources, production of environmentally friendly produce, identification of the problems of environmental risks, inflow of investments into the enterprise and control over the negative impact on the environment. That is why it significantly affects the competitiveness of the business entity. Based on this, a promising direction for improving an enterprise accounting system is to supplement its components with environment-centered accounting, which means separation of environmental costs and obligations of the enterprise in the accounting system, which in turn will lead to the formation of a strong information base of accounting and analytical support of Ukrainian market competitiveness and attraction of foreign investments into economy of Ukraine.

The adequate consideration of the environmental aspects of the enterprise and its presentation in the reports will provide users with the information that is necessary to make optimal management decisions, will allow considering the risks and realizing the chances of environmentally conscious enterprise management.

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