After take-off, as the aircraft climbs to cruising altitude, exposure to cosmic radiation increases. At typical cruising altitude (>10,000 m), the dose rate can reach 7 mSv h1 (more than 150 times the level of exposure to cosmic radiation at sea level). Future use of new ultra-long-range jets that fly at higher altitudes and for longer durations is estimated to increase total doses by 30–50 % compared with current flight practices. The personnel involved in the operation of commercial jet aircraft be treated as occupationally exposed. As doses are not likely to exceed a pre-defined value because of the limitations of flight duration, the use of dosimeters for individual monitoring was not considered to be necessary. Attention should also be paid to groups such as frequent flyers and couriers who fly more often than other passengers. The only group occupationally exposed to elevated levels of cosmic radiation was aircraft crew. The annual effective doses to aircraft crew should be derived from the flying time and typical effective dose rates for the relevant routes and that the control of exposure is mainly ensured by restrictions on flying time and route selection.

ENVIRONMENTAL MANAGEMENT AS A KEY ISSUE IN SUSTAINABLE DEVELOPMENT AND AS THE HIGHEST PRIORITY OF INDUSTRIAL ACTIVITIES AND ENTREPRENEURSHIP

I. Razhnova

Belarusian State University, ISEI BSU, Minsk, Republic of Belarus rozhnova.75@mail.ru

One of the modern trends of ecologization of production is a way of improving the system of administrative control through the introduction of standards of series ISO 14000. Environmental management is used as a tool to help enterprises achieve and demonstrate consistent improvement in all environmental aspects of the activities where it is practically achievable.

Keywords: industry, environmental management system, environmental management.

Modern industrial production in the Republic of Belarus is characterized by a high level of impact on the environment, the assessment of which is the relationship between production and environmental factors. Namely, when output growth by 1 % and permanent technical level the growth of emissions of polluting substances in atmosphere is more than 1,3 %, discharges to water bodies 0,9 %, waste generation of 1,7 %. The calculations show that the need for cost recovery and environmental protection are constantly increasing. Currently, the main source of environmental financing is the payment for the use of natural resources and negative impacts on the environment. Despite the steady growth of these payments, the costs of environmental activities in the Republic of Belarus are clearly insufficient to constitute about 1,1 % of GDP, according to the National statistical Committee of the Republic of Belarus for 2016, whereas in developed countries it is 3–4 %.

In the opinion of heads of enterprises in the period of development of the industry, it is highly competitive. Taking into account the increasing interest in the high level of ecological safety, more and more enterprises are adopting and developing environmental management. Primarily, it considers those companies whose activities are having negative impact on the environment. Managing the environmental protection and rational use of natural resources contributes to the formation of a favorable image of the organization, improves relations with the state bodies, and strengthens the positions on internal and external markets. However, to maintain and increase benefits and thus ensure the efficiency and sustainability of industrial enterprises constant improvement of the management of their environmental activities is needed.

The solution to the environmental problems associated with industrial activity is impossible without ecologization of the economy and production. Only in this case the expert is able to organize the production activities and the work of his unit, taking into account environmental requirements and restrictions. The knowledge and use of economic instruments, legal entities can solve not only technical problems of nature, but also of economic effect. It can also improve the environmental situation in the zone of influence of the enterprise.

One of the modern trends of ecologization of production is a way of improving the system of administrative control through the introduction of standards of series ISO 14000 (Environmental Management System) [1]. Environmental management is used as a tool to help enterprises achieve and demonstrate consistent improvement in all environmental aspects of the activities where it is practically achievable, i.e., the use of environmental management systems to improve economic efficiency of production activities, demonstrating interest in ensuring the protection of the environment in the impact zone of production.

BIBLIOGRAPHY

1. ISO 14000 Environmental management system.