Вищий навчальний заклад Укоопспілки «ПОЛТАВСЬКИЙ УНІВЕРСИТЕТ ЕКОНОМІКИ І ТОРГІВЛІ» (ПУЕТ)

Кафедра технологічного обладнання харчових виробництв і торгівлі

ПРЕВЕНТИВНА БЕЗПЕКА ЛЮДИНИ В СУЧАСНИХ УМОВАХ

МАТЕРІАЛИ Міжвузівського круглого столу, присвяченого Всесвітньому дню охорони праці

(м. Полтава, 28 квітня 2017 року)

Полтава ПУЕТ 2017 УДК 331.45 П71 Розповсюдження та тиражування без офіційного дозволу Вищого навчального закладу Укоопспілки «Полтавський університет економіки і торгівлі» заборонено

Науковий керівник семінару та відповідальна за випуск:

Л. І. Маніна, к. т. н., доцент кафедри технологічного обладнання харчових виробництв і торгівлі Вищого навчального закладу Укоопспілки «Полтавський університет економіки і торгівлі».

Превентивна безпека людини в сучасних умовах : матеріали П71 Міжвузівського круглого столу, присвяченого Всесвітньому дню охорони праці (м. Полтава, 28 квітня 2017 року). — Полтава : ПУЕТ, 2017. — 86 с. — 1 електрон. опт. диск (DVD-ROM). — Текст укр., рос., англ. мовами.

ISBN 978-966-184-277-8

У збірнику представлено тези доповідей, заслуханих та обговорених на засіданні Міжвузівського круглого столу, присвяченого Всесвітньому дню охорони праці 28 квітня 2017 року.

УДК 331.45

Матеріали друкуються в авторській редакції мовами оригіналів. За виклад, зміст і достовірність матеріалів відповідають автори.

- 18. *Gayvoronska Z. M.*, *Manina L. I.*, *Stetsenko V. V.* Problems of environment hazard in Ukraine and abroad.
- 19. *Маніна Л. І., Єльніков А. С.* Безпека людини показник єфективності роботи підприємства.
- 20. *Пазич І. О.* Державна політика України з питань охорони праці в умовах євроінтеграції.
- 21. *Маніна Л. І., Бондар-Підгурська О. В.* Феномен «вартість життя людини» в контексті сталого соціально орієнтованого розвитку економіки.
- 22. Овчаренко О. М. Мониторинг эмоционального здоровья персонала как способ повышения эффективности современных предприятий.
- 23. *Смирнова В. Г.* Оцінка стану пожежної безпеки Полтавської області.
- 24. *Manina L.*, *Stetsenko V.*, *Salov A.* Psychological aspects of safety for enterprise activity.
- 25. Герман Н. В., Манина Л. И., Апостолова А. С. Психологическая адаптация человека к условиям труда.

- © **ПУЕТ** - 5

В умовах ринкової економіки підгрунтям захисту населения від існуючих небезпек може стати система соціальних нормативів, які одночасно відображають особливості соціальної системи та виступають інструментом регулювання тих чи інших процесів у суспільстві.

Розробка та впровадження державних стандартів безпеки має бути спрямована на фінансове забезпечення основних конституцтних прав громадян, зміцнення фінансової бази безпеки та збереження единого соцільного простору у всіх регіонах країни, тобто державні стандарти безпеки повинні знайти свое відображення в державному та місцевих бюджетах.

PROBLEMS OF ENVIRONMENT HAZARD IN THE WORLD AND IN UKRAINE

Z. M. Gaivoronska, Head of Department, associate professor,

L. I. Manina, associate professor,

V. V. Stetsenko, associate professor

«Treat the Earls well. It was not given to you by your parents, it was loaned to you by your children». (Kenyon Proverb)

The environmental situation in the world and in many parts of the country continues to deteriorate in the beginning of the XXI century. Increased greenhouse effect, acid rains, the ozone layer thinning, hydrosphere pollution, deforestation and destruction of soil, biodiversity loss are the signs of human civilization negative impact on the environment.

The main cause of increased pressure on the environment is the demographic «explosion» - sharp increase of population in the world in the twentieth century, increased needs of man.

Today there is an urgent problem of changing humanity outlook: the resources of nature are close to exhaustion. We must cherish all living things, nature and man, save natural resources and recycle the wastes.

The idea of the noosphere as the responsibility for the fate of the biosphere, and hence for the future of humanity, formulated by our

54 - © nyet -

compatriot V. I. Vernadsky was born as an alternative to the view of the world as the infinite storehouse of resources.

Today it is necessary to understand that the principle of consumerism in society led to an increase in the surface temperature of the Earth, global pollution of water, air and soil, desertification of the planet, pollution of the oceans, destruction of the ozone layer. Global security object, which is based on keeping 11 other safety systems, every person on the Earth is the biosphere, which the operation and preservation make possible the existence on the Earth of all life forms, including human beings. The human society proclaims the human being - the most valuable and vulnerable, but also the most dangerous to himself and all surrounding things – as main object and subject of security. Security is the state of protection of individuals, society and the environment from excessive risk. Security is an essential human need along with its physiological, social and spiritual needs. The main criterion for security is insecurity or inability to determine the social and natural phenomena that can cause harm in the present and the future.

Health is the state of complete physical, mental and social wellbeing and not merely the absence of disease.

It is proposed to use the indicators of human health and environment as security measurement units. The main indicator of health is the average life expectancy. For Caucasians this standard is 89±5 years. Life expectancy in different countries depends not only on the level of medicine, but also on the level of socio-economic development of society and on the environment.

As the purpose of security is to protect not only human health but also the environment, there is a need to define metrics that quantitatively assess its condition and quality. These indicators include the degree of ecosystem closeness to the limit of its sustainability.

In addition to natural environmental classification of fading nature, a medical-social scale is used, which is classified according to the following gradation:

 safe zone where life expectancy is growing and morbidity is decreasing;

- © **ПУЕТ** - 55

- zone of strained environmental conditions the area where there is a transition of the environment from crisis to the critical state;
 - zone of critical situation;
 - zone of ecological emergency;
 - zone of ecological disaster.

In the recent past in our country there was no concept of environmental security (evidenced planned environmental disasters like turning Siberian and northern rivers and destruction of the Aral Sea, creating a cascade of power stations and reservoirs on the Dnieper and creation and accumulation of nuclear, chemical and bacteriological weapons). The situation with the development of the concept of ecological security began to change only the end of 1991.

The core concept of environmental security in the world is the theory of environmental risk and determining the level of acceptable risk.

The concept of sustainable development also provides a system of measures to ensure environmental safety. Environmental safety, as mentioned above – the state of protection of the biosphere and human society, and at the state level – the state against threats arising from man-made and natural impacts on the environment. The concept of environmental security includes system of management and control to predict, prevent, and eliminate the development of emergency. Environmental security is implemented at the global, regional and local levels. Global level of ecological safety management involves forecasting and tracking process in the state of the biosphere as a whole and its constituent areas. The essence of the global control and management is in preservation and restoration of the natural mechanism of environment and biosphere reproduction, which is sent to a set belonging to the biosphere of living organisms.

Managing the global environmental safety is the prerogative of international relations at the United Nations, UNESCO, UNEP and other international organizations. Management practices at this level include the adoption of international instruments for the protection of the environment on the scale of the biosphere, the implementation of international environmental programs, inter-forces to eliminate the environmental disasters that are natural or anthropogenic nature.

.© **nyet** -

At the global level, it was decided a number of environmental problems of international scale. Great success of the international community was the prohibition of nuclear testing in all environments except so far underground tests. The agreement of global whaling ban and legal regulation of interstate fishing and other seafood. Customary international Red Book in order to preserve biodiversity. The international community forces conducted the study Arctic and Antarctic as a natural biosphere areas not affected by human intervention, by comparison with the development of areas transformed by human activity. The international community adopted the Declaration on banning the production of refrigerants, CFCs contribute to the destruction of the ozone layer (Montreal, 1972). Regional level includes a large geographic or economic zones, and sometimes territory of several states. Control and management are carried out at the state government. Control and management are carried out at the state government level and in international relations (united Europe, CIS, African Union, etc.)

At this level of environmental safety management system includes:

- greening the economy;
- new environmentally friendly technologies;
- maintaining the pace of economic development, not impede the restoration of environmental quality and promote the rational use of natural resources.

The local level includes cities, districts, metallurgy, chemical, petroleum, mining and defense industry, and control of emissions, effluents, etc. Management of ecological safety is maintained between the administrations of individual cities, regions, businesses involving relevant services responsible for sanitary conditions and environmental activities. The decision of specific local problems determines the possibility of achieving the goal of environmental safety regional and global levels. The purpose of control is achieved while respecting the principle of the transfer of information about the environment from local to regional and global levels. Regardless of the level of environmental safety management facilities must have the environment that is complex natural ecosystems and socio-

-© ПУЕТ - 57

natural ecosystems. That is why environmental safety management scheme at any level is necessarily present an analysis of the economy, finance, resources, legal issues, administrative measures, education and culture.

Socio-economic hazards – due to reasons of social, economic and psychological (insufficient food, health, education, material things, impaired social relationships, underdeveloped social structures).

Man-made hazards – due to economic activities of people (excessive emissions and discharges of waste into the environment of economic activity; unfounded exclusion areas for economic activities, excessive involvement in the economy of natural resources, etc.)

Military hazards are due to the work of the military industry (transportation of military supplies and equipment, test specimens and destruction of weapons, functioning whole complex of military means in case of hostilities).

Man-made crisis. With the entry of humanity in an era of scientific progress, the rapid growth of the technosphere frequency and extent of damage from technological disasters were comparable with those of natural disasters. Potentially the most dangerous considered nuclear facilities, chemical and petrochemical industry, pipelines, transportation. Every day there and «quiet» technological disasters generated emissions into the atmosphere and water bodies, land disposal in hazardous waste. Their deceit is gradual and imperceptible accumulation of pollutants that inevitably threaten the human nature and in the future.

About devastating impact of man-made pollution on human health, scientists have repeatedly warned. Assumptions about the influence of mutagenic factors such as radiation and chemicals on human genetic information was confirmed by the fact that over the last 30 years in developed countries has increased dramatically the number of children with congenital abnormalities.

The disease risk for the nervous system in the areas of ecological trouble is exceeding 60 %. Adults are suffering from diseases of liver, kidneys and lungs. Contaminated water causes diseases of the urinary system and digestive system. Food contaminated with heavy metals and pesticides, leading to asthma, tuberculosis, digestive diseases, brain dysfunction. Studies have shown that about

58 - © πyet -

100 substances to which a person faces in terms of production, is carcinogenic. All this poses a threat to the gene pool of the country. The consequence of military confrontation and technological progress, the development of military technology and basic industries was the creation of a new class of military and industrial projects – environmentally hazard threat of technological disasters need speedy organization of technological security. But above all necessary qualitative changes in the production, which would make it environmentally safe nature and man. Technology creates environmental crisis.

The ecology crisis. This crisis is a tense state of relations between society and nature, characterized by a mismatch of the productive forces and production relations in society, resource and environmental features of the biosphere. As a result, the biosphere itself begins to threaten life on Earth. The solution is in restoring the balance that is a complex, global problem. The sooner humanity realizes it, the more likely it will survive on Earth.

Ukraine is going through hard times in terms of public safety and the environment. On the one hand, the country has a large number of large enterprises, potentially dangerous for people and nature, the other - the level of technology, control and discipline they fell to a critical point. Because of the confusion, disorder, corruption in the process of stealing natural resources, predatory destruction of nature, the result of which – the depletion of natural resources.

Environmental hazard prevents Ukraine's restoration from economic and social crisis, its recovery, generating growth of social tension. The main areas improve the environment and protection of environmental rights within these areas:

- 1) greening business. In the area of environmental disaster cease activities that adversely affect the environment, work stops enterprises, institutions, organizations and facilities adverse effects on human health, genetic fund and its environment are limited to certain types of natural resources;
 - 2) social support zone of ecological disaster;
- 3) Compensation for damage caused to the health of citizens living within the zone of ecological disaster.

- © ПУЕТ - 59

The elimination of environmental emergencies and carried out by means of organizations, local governments, governmental agencies whose territory there was an emergency. With the failure of the above mentioned capabilities we involve strengths and resources of federal executive bodies.

Guide unified state system of prevention and elimination of environmental emergencies implemented by the Government of Ukraine, which defines the objectives, functions, operational procedure, rights and obligations governing territories bodies from emergency situations.

Local authorities prepare yourself and keeping in readiness and necessary means of protecting the population and territories from emergency situations and funding activities in the area of population and territories from emergency environmental situations. If insufficient own capabilities turn to the executive authorities of Ukraine.

The state system of population and territories from emergency situations, including environmental emergencies, is based on the principle of priority of preventive measures aimed at preventing emergency situations and the maximum possible reduction of the amount of damages and losses which may arise.

Conclusion. Every year acute ecological situation in the world are beginning to look more and more people. More people are beginning to care about nature, ceases to look for resources as something clear and consumer concerns to them. The environmental safety depends on people's mentality and outlook. The main organizer of environmental safety measures must serve the state to consolidate legislative measures and rules of conduct regarding the nature and natural resources, areas affected by human impacts and implementing sanctions to those causing considerable environmental damage.

List of used information sources

- 1. Krivoshein D. A., Muraha L. A., Royovyi I. I. and the others. ed. by Muraha L. A. «Ecology safety». M.: UNITY-DANA, 2000.
- Ignatov V. G., Kokin A. V. «Environmental Management». Rostov n/D: JSC Rostov Book Publishers, 1997. http://ua-referat.com.

60 - © **nyet** -

Кондель В. М., Лобода Д. О. Дослідження стійкості елементів конструкцій для запобігання надзвичайним ситуаціям	42
Дикань С. А. Прекаріат і прекаріальні умови праці в Україні	
Вахтін С. Р., Маніна Л. І. Правове забезпечення безпеки праці людини на виробництві	49
Бичков Я. М., Молчанова Н. Ю. Аспекти превентивної безпеки людини в Україні	52
Gaivoronska Z. M., Manina L. I., Stetsenko V. V. Problems of environment hazard in the world and in Ukraine	54
Маніна Л. І., Єльніков А. С. Безпека людини – показник єфективності роботи підприємства	61
Пазич І. О., Рябко І. П. Державна політика України з питань охорони праці в умовах євроінтеграції	63
Маніна Л. І., Бондар-Підгурська О. В. Феномен «вартість життя людини» в контексті сталого соціально орієнтованого розвитку економіки	66
Овчаренко О. М. Мониторинг эмоционального здоровья персонала как способ повышения эффективности современных предприятий	68
Смирнова В. Г. Оцінка стану пожежної безпеки Полтавської області	71
Manina L., Stetsenko V., Salov A. Psychological aspects of safety for enterprise activity	73
Герман Н. В., Манина Л. И., Апостолова А. С. Психологическая адаптация человека к условиям труда	

Наукове видання

ПРЕВЕНТИВНА БЕЗПЕКА ЛЮДИНИ В СУЧАСНИХ УМОВАХ

МАТЕРІАЛИ

Міжвузівського круглого столу, присвяченого Всесвітньому дню охорони праці

Головний редактор *М. П. Гречук* Комп'ютерне верстання *Г. А. Бжікян*

Формат 60×84/16. Ум. друк. арк. 5,0. Зам. № 087/1042.

Видавець і виготовлювач Вищий навчальний заклад Укоопспілки «Полтавський університет економіки і торгівлі», к. 115, вул. Коваля, 3, м. Полтава, 36014; ☎ (0532) 50-24-81

Свідоцтво про внесення до Державного реєстру видавців, виготівників і розповсюджувачів видавничої продукції ДК № 3827 від 08.07.2010 р.