

## Analysis of ways of improving the conditions of labor protection at the enterprise

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### Abstract

Studying and solving the problems associated with providing a healthy and safe human labor environment are two of the most important tasks in the development of new technologies and production systems including railroad transport. The ways and means of improving the labor protection conditions by enterprise managers and also methods and implementation of such improvements are investigated in the article. The assessment of incentive system of labor protection at the enterprise was carried out in the work, as well as the economic and social aspects of the improvement of conditions and labor protection were studied.

The study has substantiated that the right approach to the organization of labor protection at the enterprise and the clever use of a variety of ways of non-financial incentive the employees give the latter the necessary sense of security, stability and the interest of managers in its employees. In addition, due to an established labor protection, the staff turnover is reduced which in turn positively affects the stability of the whole enterprise.

Key words: LABOR PROTECTION, SAFE WORKING CONDITIONS, IMPROVEMENT OF CONDITIONS OF LABOR PROTECTION

### Problem statement

Studying and solving the problems associated with providing the healthy and safe environment in which human labor takes place are two of the most important tasks in the development of new technologies and production systems including railway transport [1-4]. Researching and identifying of possible causes of occupational accidents, occupational diseases, accidents, explosions, fires and the development of measures and requirements aimed at eliminating these causes make it possible to create safe and favorable conditions of human labor. Comfortable and safe working conditions are one of the main factors that affect the performance and safety, workers' health.

To determine the correct approach to the organiza-

tion of labor protection system at the enterprise and to analyze the possible ways and means of improving the labor protection conditions by the manager are **objectives of the study.**

### The presentation of the main material

The importance of systematic solution of issues in the sphere of labor protection is objectively determined by the overall low level of occupational safety in Ukraine. An effective integrated management of labor protection and industrial safety is a necessary condition for the solution of these issues.

In recent years, labor protection is in the process of fundamental changes. Many enterprises show their interest in the use of labor protection management model, which provides the mutual social and economic

responsibility of managers and workers in ensuring safe working conditions in order to increase the role of social partnership in the creation of a healthy psychological climate in the enterprise and maximize the well-being of both the individual worker and the organization in general.

According to the article 1 of the Law of Ukraine "On Labor Protection" dated October 14, 1992 No 2694-XII as amended on January 1, 2015, labor protection is a system of legal, socio-economic, organizational and technical, sanitary-hygienic, prophylactic measures and means aimed at the preservation of life, health and human performance during the labor activity.

State, regional and sectoral management of labor protection, numerous supervisory and control inspections do not ensure the safe conduct of work, if it does not become a major daily tasks and moral duty for all without exception - employers, managers, engineers and technical workers, each worker. In order to solve all problems in the field of labor protection a systematic approach to create an effective labor protection management system (LPMS) at each enterprise, institution, organization regardless of ownership and size is needed [5].

Labor protection management at the enterprise is a set actions of officials carried out on the basis of ongoing analysis of information on the state of labor protection in all workplaces to improve and maintain it at a certain level in accordance with the laws and regulations [6].

Studies show that at the enterprises much more cost falls on the benefits and compensation related to hazardous and harmful working conditions than to occupational safety, measures to prevent occupational injuries and diseases, and the normalization of working conditions. The ratio between the costs on improving the conditions and labor protection and the cost of additional payments for unfavorable working conditions, preferential pensions and additional leaves is 1:10 and sometimes even more [7].

The unsatisfactory state of labor protection at the enterprise leads to inhibition of the economic and social progress of the country in general. According to the estimates of the International Labor Organization, the losses due to accidents at work and occupational diseases accounted for 4% of global gross domestic product (GDP). Thus, the improvement of labor protection system is one of the most urgent issues at the level of both the State and the individual enterprise.

The manager should provide financing at his own expense and organize the preliminary (at employment) and periodic (in the course of work activity) me-

dical examinations of workers engaged in heavy work or work under harmful or hazardous conditions or those where there is a need for professional selection, the annual compulsory medical examination of persons under the age of 21 years.

As a result of the periodic medical examination, if necessary, the employer should ensure carrying out of the appropriate health precautions. Medical examinations are carried out by the relevant health institutions, which employees are respond for the law for the compliance of the medical report to the actual state of health of the worker. The procedure for conducting medical examinations is determined by the specially authorized central executive authority in the field of health care.

Compliance with safety regulations and industrial sanitation depends on not only the performance by the manager of his duties, but also on how each employee knows and executes these rules during operation. Therefore, all employees at employment and during work time are briefed for labor protection, first medical aid to victims of accidents, rules of behavior in case of accidents in accordance with the Standard Regulations on training on labor protection issuers.

Stimulation of labor protection is an indispensable condition for the prevention of occupational accidents and occupational diseases. At the state level stimulation of labor protection is regulated by legislative acts and especially by the law on Labor Protection, in which Section IV is devoted to this issue, and by the Law of Ukraine "On compulsory state social insurance against accidents at work and occupational diseases that caused disability" [8]. These laws determine that a discount can be made when calculating the amount of insurance payment for each enterprise under condition of achievement of proper labor protection, reducing the level or lack of accidents and occupational diseases due to the employer's appropriate preventive measures. An increase in the quantity of an insurance payment is established when a high level of accidents and occupational diseases, and improper labor protection.

One of the main tasks of economic feasibility of measures for improving conditions and labor protection is the determination of costs for the implementation of activities, including capital investment and operating costs [6].

*The capital costs* include expendable and stage-wise costs:

- creating or updating of labor protection capital funds;
- improvement of technic and technology of pro-

duction in order to improve working conditions and labor protection.

Current (operating) expenses for the maintenance and servicing of equipment, which is used for labor protection, ensure its operation in the desired mode [1, 7].

In order to ensure safe operation in the workplaces the qualified personnel and the responsible ones, interested attitude to the realization of the constitutional rights of workers from both employers and managers side at all levels of administration are needed. Low quality of workplaces has a negative impact on the labor market functioning and leads to a high turnover of human resources on the places that involve heavy physical work, harmful and hazardous working conditions and to a loss of human resources due to industrial accidents and occupational diseases. In connection with considerable social and economic losses that are caused by occupational injuries and diseases, the importance of advanced research, evaluation and development of new management mechanisms and methods of influence on working conditions and occupational risks is increased [3].

Economic mechanism of labor safety management system should provide incentives system for those employees, who conscientiously observe the requirements of labor protection do not allow violations and breaches of personal and collective safety, take an active creative part in the implementation of measures to improve the level of labor protection at the enterprise.

The collective agreement should fix the various kinds of moral and material incentives of employees such as salaries, bonuses (including special incentive bonuses for the achievement of a high level of labor protection), remuneration for inventions and rationalization of proposals on labor protection. The bonuses to workers crews, sites, shops for a long work without violations of occupational safety rules, without injuries and accidents give a great advantage. It is recommended to pay a premium for extra caution in case of dangerous and harmful production factors, which constantly threaten to the employee's health. In addition to material incentives, the moral incentives that at one time have been used in our country and are successfully applied by foreign firms are also important. Forms of moral incentives can be very diverse: from expression of gratitude to the organization of leisure evenings, picnics, excursions for groups that have achieved the best results on labor protection.

The manager should strengthen the control over the condition of production and technological discipline and organize labor protection services at the

enterprise.

Today, the employees should organize their work, so that it will be aimed at:

- implementation of the main directions of state policy in the sphere of improvement of conditions and labor protection;
- prevention and reduction of professional accidents and occupational diseases at enterprises and organizations;
- coordination and methodological support of the regional centers of labor protection which instruct the organizations;
- distribution of domestic and foreign information on measures taken to improve the system of labor protection.

The important issues of labor economics are the following: improving the socio-economic and productive work environment, enhancing its creative nature, reduction of manual, unskilled and heavy physical labor, more complete combination of material and moral incentives, strengthening their impact on the efficiency of production [9].

Considering the labor protection in the market economy, special attention should be paid to the economic aspects of labor protection. Implementation of measures to improve conditions and labor protection has a stimulating effect on both the economic and social results of production.

The positive economic impact of the working conditions results on a person include increased productivity, efficient use of main production funds. The favorable conditions provide the increasing of productivity through the intensive changes (reduction of working time costs per unit of production) and extensive (increase in the efficiency of the use of time by reducing whole day losses due to temporary disability and occupational injuries).

It should be noted that positive economic results are closely related to both personal factors (active capacity, operability) and to the social consequences. Labor productivity growth is associated with a reduction of whole day losses of working time due to temporary incapacity for work, an increase in the use of working time and an extension of the active work period.

Adverse conditions lead to the opposite results: the various forms and degrees of workers weariness, functional stress of organism. The shortfall of an additional product, the delay in the introduction of new funds, the unproductive consumption of manpower and reducing productivity belong to the negative economic results.

In addition, the attention should be paid to the so-

cial results of impact of the working conditions on workers. The positive social outcomes include the degree of the beneficial effects of the labor process on human health and the development of its personality, health status, attitude to work, social activity; maximum satisfaction of one of the most important human needs, i. e. the need for favorable conditions of work and directly related need for substantial, creative, highly productive labor; health promotion.

To evaluate the results of the measures to improve conditions and labor protection in accordance with techniques, four groups of indicators are proposed:

- changing the state of conditions and labor protection;
- social;
- socio-economic;
- economic.

The change in state of conditions and labor protection is characterized by increased levels of safety, improved sanitation and hygiene, psychophysiological, aesthetic indicators.

Improving of health indicators is characterized by decrease of harmful substances in the air, improving the microclimate, reduction of noise and vibration, increased illumination.

The growth of psychophysiological indicators is determined by the reduction of physical, nervous, and mental stresses including labor monotony.

Improved aesthetic performances are characterized by rational arrangement of workplaces and machines, rooms and territories, combination of color shades, etc.

Changes of the working environment state according to the factors are evaluated by the difference of absolute values before and after the implementation of measures, as well as by a comparison of the relative indicators characterizing the degree of conformity of these or other factors with the maximum allowable concentrations, limit values or a given level. Comprehensive assessment of the working conditions status change is carried out according to increase in number of working places, where working conditions are brought in compliance with regulatory requirements.

Social results of measures to improve conditions and labor protection are determined by the following indicators:

- increase in number of working places which correspond to regulatory requirements and the reduction of the number of workers working in unsatisfactory conditions;
- decrease in the level of occupational injuries;
- decrease in the number of cases of occupational diseases related to unsatisfactory working conditions;

- reduction of the number of disability cases caused by injuries or occupational disease;
- decrease in personnel turnover due to unsatisfactory working conditions.

To assess the social results other factors such as the degree of job satisfaction and its prestige, etc. can be used. Indicators of social and socio-economic efficiency are calculated as the ratio of social or socio-economic results to the expenses required for their implementation.

Economic results of measures to improve conditions and labor protection are expressed in the form of savings by reducing losses due to accidents, work accidents and occupational diseases as in the economy in general as well as at each enterprise [10].

The question of labor protection is one of the most important at the present stage of social life. At a time when employer's main task is to obtain the greatest profit as quickly as possible and with a minimum investment of means little attention is paid to labor protection and sometimes the requirements of work safety are entirely ignored.

### Conclusions

Labor protection is a multifaceted concept. It includes not only ensuring the safety of workers during the performance of their duties, in fact, it covers a variety of activities. For example, prevention of occupational diseases, the organization of proper rest and nutrition of workers during work breaks, providing them with the necessary working clothes and hygiene products, and even the implementation of social benefits and guarantees. So the correct approach to the organization of labor protection at the enterprise, the clever use of a variety of non-financial ways to promote employees give the latter the necessary sense of security, stability and governance interest in its employees. Also enterprise manager must comply with all regulations and requirements of the legislation on Labor Protection and take responsibility for their violation. The manager should strengthen the control over the condition of production and technological discipline and the employees work in accordance with medical records on the results of medical examination, obligatory to carry out periodic briefings for employees. Thus, due to an established Labor Protection, personnel turnover is reduced which in turn positively affects the stability of the entire enterprise.

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