

## **Valerij Nikolajevich Cherneta**

SHEE "Pridneprovskaya state building and architecture academy", Dniepropetrovsk

# **THE SYSTEM OF THE LABOUR PROTECTION MANAGEMENT IN THE TIME OF THE EXTREME SITUATIONS CONSEQUENCES LIQUIDATION**

## **ABSTRACT**

In this work the necessity of the systematic approach to the development of the information subsystems for the system of the labour protection management at the productive enterprises in the time of the extreme situations (ES) consequences liquidation for the ensuring their effective functioning has been considered. Orienting structure of the information ensuring and standard order of actions as for its development and introduction have been shown.

## **KEYWORDS**

labour protection management, information process, stages of information-analytic system.

## **Introduction**

One of the most important condition for the creation safe and healthy labour facilities at the enterprise is a high level of organizational activity on the base of modern methods of safe labour management (SL) and their constant improvement. While accident reconstruction period is carrying out the rescuers essentially reduce the time for making decisions as for safe labour management and bringing to the executors consideration. Safe labour depends much not only on inviting people for this forming but for people who need to be free from the destroying zones and possible fallings.

Setting up goals and tasks. The purpose of this publication is the development a number of measures for future improvement the structure and function the system of the labour protection management (SLPM) in conditions both at typical enterprises which present practical meaning and in the formings taking part in the extreme situations consequences liquidation. Possible suggestions conformally to the following tasks: more accurate definition of the separate fundamental concepts and terms, the systematization of the structure information maintenance (SSIM) are considered.

The analysis of the normative documents. All work as for standardization in Ukraine is regulated by the Decree of the Cabinet of Ministers "About standardization

and certification” and by the complex of the standards of the Standardization state system, these standards for the first time were put into action on the first of October 1993 by the order № 116 of State standard 29.07.1993. In native standard system (point 5) common rules and norms concerning person’s safety in the labour process are set up. “System of the standards of safety labour” (SSSL). Interstate standard “System of the standards of safety labour”, “Systems of labour safety management ” (SLSM) for the first time was adopted by Euroasian Council on standardization of metrology and certification (protocol № 28 23.03.2007). Present standard is identical to the document of International Labour Organization (ILO) ILO-OSH 2001 Guidelines on occupational safety and health management systems. National standard sets up order free-will application and systematic use of SLSM and it must be developed with regard national conditions and practice. Positive influence on the SLSM information at the level of organization expresses both in reduction dangerous and harmful industrial factors and risks and in rise of productivity and nowadays this positive influence is recognized by the governments, employers and employees. The demands are developed in accordance with the generally accepted international principles on the base of the wide scale approach and these demands are determined by the representatives of the ILO who are members of the three parts of social-labour relations and other interested organizations. This three-sided approach assumes power, flexibility and proper base for the development of stable culture of safety labour within the organization. The demands to SLSM voluntary accepted express values and means ILO that allow to provide safety and health of employees.

Recommendations that you can find in this standard are for common use by people who are responsible for Safe Labour management. The employer is directly responsible for providing safe conditions and employees’ labour protection within the organization. The application of SLSM promotes the meeting of the obligations. That’s why this standard is a practical instrument for the assistance of organizations and competent establishments in the realization of continuous perfection of activity as for safety and hygiene labour. According to the decision of the state-members of the Council the demands of the interstate standards from the 1<sup>st</sup> of October 2008 are spreaded in Ukraine as well.

This standard (p 4) determines the management system of LS in the organization: the duty and the interest of the leader are set up as for installation SLSM, its main elements are revealed and the directions of the contentious improvement of this system are shown. The separate section in the standard (point 4.10.3) defines the measures as for warning emergency situations, readiness for action and the liquidation of consequences of these situations. They must:

- a) Determine possible character and scale of accidents and emergency situations and foresee the warning connected with risks in the sphere of SL;
- b) guarantee that available information, inner connection systems and coordination provide protection for all people in the working zone when emergency situations take place;
- c) give information to the correspondent competent organs, territorial structures and emergency services as well as to provide reliable connection with them.

The necessity of the system approach application to the problems of SLM as well as its methodology is fully revealed in the G.G. Gogitashvily’s works which were realized in SLSM.

In the same time the listing concepts of management in the sphere of safety labour, to my mind, are in some way narrow, as far as not only monitoring but all system of SLSM must be built on the theoretical and practical propositions of management. In these works the attention is accented on the necessity of the achievement the accordance of SLSM at the enterprises of Ukraine. To international standards of safety labour and the necessity of the normative-legal acts are noted and these works realize SLSM taking into account all these standards.

The system of the information ensuring of civil people protection that nowadays may be considered one of most effective out of the real existing systems which is characterized in the G. I. Oleynik's publications and co-authors [3, 4, 5]. Specific influence of the progressive process of people's information on the base of modern means of communication and computer technologies is considered in V. M. Popov's article [6].

Common concepts and theoretical preconditions. As far as in the sphere of SLSM in Ukraine the system of normative documents are not developed the main different aspects are not formalized yet. In the works of different authors we can notice that various aspects of concepts, interpretations and some definitions are omitted. That's why some separate concepts in this article are given in formulations which authors are considered to be advisable. Under leadership of LS the preparation, acceptance and realization of decisions as for realization of organizational, technical, sanitary-hygienic and medical preventive measures directed to the providing safety, preservation of health and person's capacity of work in the process of labour.

Under SLSM we will mean the whole complex of documents that contain mutually coordinated organization, technical, social, economic, educational measures directed to the complex programe and special purpose ensuring SL for employees on the base of close cooperation of all management levels. From this definition follows that SLSM is a special purpose subsystem in the common management system at the enterprise. It can classified as scholastic dynamic system and it has retroactive connection between the subject and the object of management. Retroactive connection in SLSM has information character.

It is known that the main system formative factor is a purpose. The structure of the system and effectiveness of its functioning depend on rightly set aim.

The purpose of SLSM in our understanding is constant improvement of management influence as for providing healthy and safe labour conditions on account of modernization of organization structure if management, concrete definition of functions, rise of significance of information maintenance as the most important condition for effective work of all system. Functions of SLSM as well as any other management system in the conditions corporative labour must be classified according to two main groups:

- 1) Common or universal-forecasting and setting purposes of activity, planning, organization of activity, operative management or coordination and regulation, control, accounting, stimulation and motivation;
- 2) Special, for example financing of safe labour measures.

Realization of management functions carries out through setting concrete tasks by executors. Extended list of typical tasks revealed in G.G. Gogitashvily's and his co-authors works [1, 2]. Management by SL in SLSM realizes on all levels on the base of normative-legal, material-technical, mathematical and information maintenance of system by realization correspondent functions of management. Final result of SLSM functioning must be absolute performance by all workers all norms and rules of

industrial safety, demands, instructions, regulations, directions of inspection organs, consolidation of labour and production discipline, creation of the preconditions for carrying out production program:

- Improvement of LS state;
- Well-grounded forecast of expected level of LS and timely performance of demanded preventive measures;
- Education in working collective activity in the SL tasks;
- Revealing of the best workers in providing SL and correspondent encouragement their activity.

According to the fundamental management theory all managerial impacts, realization of management functions in SLSM are based on the information. Information is the object of the manager's labour. That's why without qualitative information maintenance practically it is impossible to achieve high efficiency of functioning of all SLSM. Information system (IS) is considered to be a form of the organization maintenance of managerial activity in this case as for providing healthy and safe labour conditions. Information flows of SLSM either connected with environment or they have inner nature. Different legislative and normative acts on the safe labour come from environment to the enterprises as well as directions as for safe labour. Sources of inner information may be plans of measures, report documents about their realization, materials of control checkings and inspections, documents on a passport system of working places and many others in the first place on the level of primary documentation.

Information process in SLSM consists of main, subsidiary and service operations. To the main operations the getting and processing of information take place. Subsidiary operations with information:

- Fixation in the working process, in the periods of SL state checkings, investigations, passport systematization;
- Conservation (on paper, magnetic, optic and other bearers);
- Transportation (transference of bearers of information, documents, literature, magnetic and optical disks);
- Reproduction with the help of computers and other technical means;
- Search of the necessary information.

The main directions of the formation of the subsystem information maintenance SLSM at the enterprises and the order of their activity as for their realization. The analysis of situations connected with the development and introduction of SLSM at the enterprises of Dnipropetrovsk region ("Jrast of reconstruction and development", Dnipropetrovsk silicate factory) shows that even this work carries out productively enough, information maintenance is not considered as priority element of the system. At these enterprises only separate elements are subjected to modernization and these elements are the most actual for a certain enterprise. Little information is paid in this work to modern information technologies and without them the level of effectiveness and operativeness of management are hardly possible. The development of highly effective system of information maintenance SLSM shows that it is labour-consuming process, it takes much time, financial funds and intellectual resources. In nowadays economic conditions enterprises as a rule do not have resources for full value work in the given direction. There is a lack of experience in the performance of such work among production workers. Operations for serving information process in SLSM are those that provide condition for its existing: finance for buying necessary means, materials,

technologies, training and extension courses of the staff, corresponding corrections of the personnel's official responsibilities as well as staff schedule.

According to the classification IS are divided into manual, mechanized, and automated. The first and the second types are considered to be out of day for this situation but automated information systems should be regarded as perspective for primary introduction information-searing and information-reference blocks. The final aim is creation of information management system as subsystem of SLSM.

As analogue we can use information analytic system that works in the structure of state management in the extreme situations, this system was developed at the high professional level for organizing and forming emergency-saving services (Picture 1). The first stage is planning work for creation IS and on this stage methods of net modeling are very useful and constructive.

The second stage means the necessity of structure IS development. It is advisable to include the following main blocks taking in account future possible replenishment and development:

- International legislation of LS;
- Laws of Ukraine and corresponding sublegal acts concerning system of labour safety;
- International standards of LS;
- State standards touching all questions of LS and those are in force in Ukraine including system of standards of safe labour (SSSL);
- State norms for LS covering all production processes at the enterprise;
- Departmental rules and norms of LS;
- SSSL in the form of a complete set of standards at the enterprise, minimum configuration of it must include separate standards as for each universal management function, for IS, for special functions that are significant for this enterprise;
- Norms of the enterprise for LS, developed in strict correspondence with state norms;
- System of education, certification and additional certification of the staff;
- A set of instructions of the enterprise for LS, covering all working places, technological processes and specific labour conditions approved in the established order;
- Primary documents on account of the conducted instruction among personnel, including initial;
- Official instructions of managerial and engineers and technical staff in LS;
- Orders and directions at the enterprise concerning any aspects of LS;
- Materials of operative (multistaged) control including reports of operative meetings where there is information about carrying out planned measures;
- Documents on highly risk working places certification;
- Materials as for investigation of accidents with acts of established forms, materials as for additional measures and facts about their real implementation;
- Collective agreements between workers and administration as well as materials of compulsory periodical control and their carrying out;
- Materials of labour safety control and carrying out of the set norms of safety by the state control organs and inspections as well as their acts – directions where they indicate facts about their performance;
- Materials of labour safety control by the public organizations and correspondent documents;
- Long term, current, operative and additional plans of work of the enterprise in the whole and its production structure subdivisions LS;

- Acts of the periodical, preventive tests examinations, measures and inspections of machines, equipment and systems stipulated by the correspondent norms;
- Acts-directions of the LS services of the enterprise and materials about their fulfillment;
- Materials as for payments to victims of the accidents and profdiseases;
- Materials of law-suits connected with LS;
- Financial documents connected with the realization of LS measures;
- Methods and examples of typical engineering calculations connected with safety and harmlessness of labour;
- Methods and calculation of the social-economic effectiveness of SLSM;
- Scheme of documents circulation.

The third stage is the organization of work as for concrete definition of dates, performers, financing and other components.

The fourth stage involves accumulation and regulating of the necessary legislative, standard and other information materials in correspondence with adopted structure as well as accurate definition.

The fifth stage supposes the introduction of modern information technologies and necessary technical means, development of the applied program maintenance.

The sixth stage includes measures on adjusting and regulating IS.

The seventh stage implicates the realization of organization measures on instruction IS into common structure of SLSM. After introducing this system it is necessary to carry out constant work as for its improvement and modernization.

Conclusions

- 1) Information system from the position of microapproach is a subsystem of SLSM at all enterprises, independently from the forms of property and subordination.
- 2) The effectiveness of the functioning of SLSM at the production enterprises in liquidation of the emergency situations consequences is impossible without qualitative processing of IS.
- 3) For informational system it is necessary:
  - a. To develop it in correspondence with methodology of system approach;
  - b. To use modern information technologies and technical means;
  - c. Continuously renovate and perfect with the regard of analysis of accident-reconstruction works carried out at other enterprises;
- 4) Is must be a base for the development of the more highly level system – information-managerial.
- 5) For the development of the automated IS at the enterprises of Ukraine it is advisable to use information analytic system of management of LS.

## References

- 1) Gogitashvily G.G. *Systems of labour safety management*. – Lviv. Afisha 2002. – 320 page
- 2) Gogitashvily G.G., Karchevsky E. L., Lapin V. M., *Labour safety management and risks according to the international standards*. – Kyiv. Znannya, 2007. – page 367
- 3) Oliynyk G. L., Shchitov V. E., *Kharkiv territorial subsystem of the state information analytic system (UIAS) NS. Person's safety in modern conditions*. Materials of the VIII intereducation establishments conference. – Kharkiv NFU,2008. – page 66-68
- 4) Oliynyk G. L., Lavryk V. P., Stukhorsky V. I., *Information maintenance of the territorial subsystem UIAS NS. Person's safety in modern conditions*. Materials of the VIII intereducation establishments conference. – Kharkiv NFU,2008. – 68-70 pages
- 5) Oliynyk G. L., Lavryk V. P., Krychevsky V. V., *Organization of information interaction with the questions of NS // Person's safety in modern conditions*. Materials of the VIII intereducation establishments conference. – Kharkiv NFU,2008. – 70-72 pages
- 6) Popov V. M., *Person's safety in the information society. Person's safety in modern conditions*. Materials of the VIII intereducation establishments conference. – Kharkiv NFU,2008. – 57-58 pages

## Pictures

Picture 1. Information analytic system of labour safety management SM ES

