

N.E. Tverdokhliebova, N.S. Yevtushenko

National Technical University "Kharkiv Polytechnic Institute", Ukraine, Kharkiv

ENSURING THE SAFETY OF EMPLOYEES OF METALLURGICAL ENTERPRISES IN THE CONDITIONS OF SUSTAINABLE DEVELOPMENT

Ensuring the safety of workers of metallurgical enterprises is an important element of sustainable development in this industry.

The problem of ensuring the safety of workers at metallurgical enterprises should be considered in a complex, taking into account all the factors that create working conditions. Along with technological measures, special attention should be paid to organizational measures and, in particular, to increase the level of technical discipline and strengthen work on labor safety training [1].

According to the statistics of the mining and metallurgical trade union of workers, the main causes of accidents that occurred at metallurgical enterprises in the first half of 2022 were:

- • unsatisfactory organization of work execution - 71.4%;
- • violation of labor and industrial discipline – 14.2%;
- • unsatisfactory maintenance and deficiencies in the organization of workplaces – 4.8%;
- • violation of the technological process - 4.8%;
- • imperfection of technological processes – 4,8%.

Ensuring safety in an emergency is based on the recognition of the need to implement preventive engineering and technical measures that provide the ability to manage the development of potentially possible scenarios for the development of situations; the need to create an organizational and economic mechanism for the interaction of all interested business entities; on the acceptability of only environmentally compatible and safe facilities, technologies and equipment; on the recognition of the priority of safety in the performance of professional activities [2].

The main directions of ensuring the safety of employees of metallurgical enterprises in the conditions of sustainable development are as follows:

1. Using the latest production technologies. One of the main weaknesses of industrial production is outdated equipment, which can be dangerous for workers [3]. The use of the

latest technologies and equipment reduces the level of production risk and improves the safety of workers.

2. Professional development and training of employees. Productivity and production safety depend on the professional training of employees. Organization of a more effective system of education and training of workers can reduce production risks and contribute to worker safety [4].

3. Creating an effective security management system. The development and implementation of an effective safety management system will allow identifying and reducing production risks, resisting the negative consequences of accidents and ensuring the necessary level of safety for workers at metallurgical enterprises.

4. Spreading safety culture. Safety culture must be integrated into all stages of production, from planning to product realization. Creating a positive approach to safety and involving workers in the process can improve worker safety and reduce production risks.

In general, ensuring the safety of employees of metallurgical enterprises is important in the ecological and social dimension of sustainable development and involves the relationship between the development of industrial production, environmental protection, occupational safety and improving the quality of life of the population.

Література

1. Пономаренко О.І., Євтушенко Н.С., Твердохлебова Н.Є., Мезенцева І.О., Семенов Є.О., Євтушенко С.Д. Забезпечення безпечних умов праці для профілактики професійних захворювань працівників металургійного і ливарного виробництва. Метал та лиття України. Т.30, №3 (330). 2022, С. 117-125.

2. Твердохлебова Н.Є. Шляхи підвищення рівня техногенної безпеки в Україні. Наука і техніка сьогодні – Київ, 2022. № 3 (3). С. 127-135.

3. Твердохлебова Н. Є., Євтушенко Н. С., Семенов Є. О. Забезпечення безпеки працівників металургійних підприємств в умовах сталого розвитку / Н. Є. Твердохлебова, Н. С. Євтушенко, Є. О. Семенов // Інформаційні технології: наука, техніка, технологія, освіта, здоров'я = Information technologies: science, engineering, technology, education, health : тези доп. 31-ї міжнар. наук.-практ. конф. MicroCAD–2023, [17-20 травня 2023 р.] / гол. Є. І. Сокол ; уклад. Г. В. Лісачук. – Харків : НТУ "ХПІ", 2023. – С. 379.