



Smagulov A. R.,
Technical Director

Seminderov I.M.
The Head of the OSFSS

HEALTH AND ENVIRONMENTAL PROTECTION THE SUCCESS OF KOSTANAY MINERALS JSC IS THE KEY TO THE PROSPERITY OF THE REGION

Today Kostanay Minerals JSC is a modern highly mechanized mining and processing enterprise, the only one in the Republic of Kazakhstan for the extraction and processing of chrysotile ores. The raw material base of the enterprise is the Dzhetysay chrysotile deposit, which ranks fifth in the world in terms of mineral reserves. The company turns 60 years old next year, its production capacity is designed for 400 thousand tons of chrysotile per year.

The corporate policy of Kostanay Minerals JSC (hereinafter – KM JSC) in the field of social responsibility, based on the Message of the Head of State Kassym-Jomart Tokayev to the people of Kazakhstan «**A just State, a United Nation, a Prosperous Society**», and the strategic development plan of the Republic of Kazakhstan up to and including 2025, includes four main directions.

NEW HUMAN CAPITAL

The first direction, PERSONNEL DEVELOPMENT, is aimed at attracting and retaining capable, talented employees and provides:



- Conclusion of a socially oriented collective agreement;
- Training and professional development;
- application of motivational payment schemes;

- provision of a social package;
- creating conditions for recreation;
- employee participation in management decision-making, etc.

Special emphasis is placed on social partnership and enhancing the role of the collective agreement. The amount of social expenses increases annually and currently amounts to about 1.2 billion tenge.

For many years, despite the difficulties encountered, the company has successfully implemented all the tasks set for social support of employees and maintains its position on social responsibility to society.

The social programs of JSC «KM» are designed for all categories of employees:

- young professionals;
- Human resources staff;
- veterans of labor and pensioners of the enterprise.

Social guarantees are provided in accordance with the agreements reached between the administration of the enterprise and **the trade union committee, reflected in the collective agreement, which ensures:**

- compensation of fees for the maintenance of children of employees of the enterprise in preschool institutions - 11.2 million tenge;
- partial compensation for the cost of meals for employees in canteens and buffets of the industrial zone of JSC «KM», employed full-time outdoors - 83.7 million tenge;
- compensation of expenses for utilities for employees with three or more children under the age of 18 – 6.4 million tenge;
- compensation for the full cost of travel to the industrial site – 4.2 million tenge per year;
- financial assistance within the framework of the «Road to School» campaign for low-income and large families to prepare children for school - 5.3 million tenge;
- allocation of vouchers to the sanatorium-dispensary of Densaulyk 2008 LLP, which is a partner company of KM JSC, to employees and pensioners, employees with the honorary title of «Veteran of Labor», participants in the war in Afghanistan and other local wars, participants in the liquidation of the Chernobyl accident. The cost of vouchers is paid from the company's funds;
- allocation of vouchers to summer health camps: the administration of JSC «KM» and the trade union committee pay half the cost of vouchers – 1.7 million tenge;
- allocation of financial assistance to employees with children who graduate from schools for the organization of graduation parties;
- payments to young employees upon marriage – 0.7 million tenge.
- allocation of temporary financial assistance to young professionals to improve living conditions;
- bonuses for employees on public and professional holidays;
- encouraging employees to take well-deserved rest and on the occasion of anniversaries;
- one-time vacation compensation: for personnel in the amount of two minimum wages – about 82 million tenge; for young workers in the amount of one monthly tariff rate - 7 million tenge.

Thanks to the current social support measures, KM JSC has formed its own corporate lifestyle: employees feel cared for, honor traditions, strive for self-development and, importantly, cheer for their company.

The second direction – HEALTH PROTECTION AND SAFE WORKING CONDITIONS – is ensured by the creation and support of additional (in relation to legally established) standards of health protection and workplace safety conditions.

In order to carry out internal control over compliance with safety and labor protection requirements at the Kostanay Minerals JSC enterprise, in accordance with the regulatory legal acts of the Republic of Kazakhstan, the Labor Protection and Industrial Safety Service (hereinafter – SOTiPB) has been established since November 2003.

In order to comply with the requirements of the Labor Code of the Republic of Kazakhstan, the Law of the Republic of Kazakhstan «On Civil Protection», the Environmental Code of the Republic of Kazakhstan and to ensure the conditions of labor protection and safety, medical care of personnel, maintenance of sanitary and hygienic working conditions, **the following structures operate in SOTiPB:**

- Department of Labor Protection;
- Department of Environmental Protection;
- Medical service;
- sanitary laboratory.

Providing staff with safe working conditions for the management of KM JSC is one of the most pressing issues. He is the focus of attention of every head of the structural unit and all ordinary specialists.

The management of the joint-stock company, relying on personnel, designates as a priority the care of staff and their family members.

One of the sections of the collective agreement provides for:

- Labor protection guarantees;
- Creating a safe environment;
- Providing employees with the required benefits and compensation.

Kostanay Minerals JSC pays great attention to the issues of a systematic approach and management in solving all tasks based on international standards. Today, the company meets the following systems of ST RK: ISO 45001-2019 «Health and Safety management System» and ST RK ISO 14001-2006 «Environmental Management System»

The third area – ENVIRONMENTAL PROTECTION AND RESOURCE CONSERVATION – is aimed at:

- rational consumption of natural resources;
- prevention of environmental pollution;
- organization of an environmentally safe production process;
- carrying out gardening campaigns and clean-up days.

Thanks to resource-saving measures, Kostanay Minerals JSC has achieved savings:

- electric energy – due to the modernization of pneumatic transmission and aspiration systems, power factor control by generating reactive power on site by automatic condenser units, optimizing the movement of traction units for passing a shift inspection, overhaul of 3 traction units with the introduction of an electric power recovery system and digital traction control, modernization of EKG excavators with the introduction of thyristor low-voltage complete devices. Together with the Research Institute, research has begun on the efficiency of vacuum chamber and pneumatic transport fans, initial conclusions indicate the prospects for modernization and improvement of work efficiency

- natural gas – transfer of heating of the boiler house and nearby buildings from steam to hot water, changes in the boiler room operation mode in the summer to intermittent; reduction of thermal waste - return of technological water discharges in the boiler room back to technology, use of evaporative coolers with heating of incoming water, optimization of heating network schemes; scientific work was carried out with the involvement of research institutes on modernization of mine furnaces for drying ore, which made it possible to reduce the specific gas consumption - according to the results of the work, the furnaces are being modernized (3 furnaces have been modernized by 2024)

- diesel fuel and gasoline – by improving the quality of roads in the quarry, reducing technological downtime, downtime for loading and unloading in a motor transport company;

- cold water – due to a change in the water consumption regime for the whole enterprise, the transition from steel pipelines of household water to plastic (reduction of gusts and improvement of water quality), the return of technological water discharges in the boiler room back to technology, the transfer of filters for chemical water treatment from sulfocarbon to ion exchange resins, optimization of thermal network schemes. Over 10 years, consumption has been reduced by more than 2.5 times

The total economic effect achieved in 2024 due to energy-saving measures, in general, for Kostanay Minerals JSC amounted to 80.2million tenge (Gas – 758.3 thousand m³, water - 31.3 thousand m³, electricity - 156512kw. per year, or 48.8 million EURO at 2024 prices). The economic effect of 3 upgraded PE 2m traction units is 1493.3 thousand kW per year or 31.4 million tenge (at prices in 2024).

In general, the following measures were implemented: reactive power compensation – allowed to free transmission power lines and substations from parasitic reactive power, which allows transmitting large capacities without replacing equipment; overhaul of 3 traction units with the introduction of a recovery system and digital traction control – reduced the specific rate of electricity consumed per ton * km of rock mass by an average of 32% due to electricity generation during recovery, the ability to use 1 dumpcar more thanks to a computer-controlled power application system that eliminates slippage; reduction of thermal waste - during boiler room operation discharges from boilers are regularly applied to eliminate the formation of steam plugs inside. The discharges were carried out into the sewers. A number of measures made it possible to redirect this water into a condensate tank, from where it is taken into the technology. Both the water and the heat contained in it are preserved. Vapor coolers connected to the main water supply pipeline to the boiler room and to deaerators (exhaust steam outlet pipes) allow steam to condense into water and take it into the technology, as well as preheating the water at the entrance to the boiler room. Vapor coolers make a significant contribution to saving gas and water;

the transfer of heating of the ABC boiler house and nearby buildings from steam to hot water made it possible to eliminate the round-the-clock operation of the steam boiler in winter by cutting the heating systems of the ABC boiler house and nearby buildings into water heating pipelines. the transition from steel drinking water pipelines to plastic ones – a significant reduction in the number of gusts, a longer trouble-free service life, convenience and ease of installation affects not only water conservation, but also labor facilitation and increased productivity; the transfer of filters for chemical water treatment from sulfocarbon to ion exchange resins made it possible to use technical salt more efficiently, reduce the number of filter regenerations from once every 4 days to once every 2-3 months, with this regeneration about 200 m³ of water was lost; optimization of the thermal network circuits – changing the hot water supply scheme to the ATP along a shorter route and a pipe with a smaller diameter allowed to reduce the discharge of hot water.

Green economy and environment



Kazakhstan is a country with an energy-intensive economy, so today steps are needed to transition to sustainable long-term development.

The company has also been tasked with reducing energy consumption. In general, the company has approved a Strategy for improving the environmental performance of Kostanay Minerals JSC and the ecology of the city for 2020-2025 since 2020.

In the implementation of the Concept of a «green» economy, the issues of transition to renewable energy and environmental protection are comprehensively considered.

Kostanay Minerals JSC commits to achieve the stated contributions to reduce greenhouse gas emissions by 2030.



In order to comply with the requirements of environmental legislation to reduce the negative impact of the enterprise on the environment, a plan of environmental protection measures is developed with the necessary frequency.

The most significant environmental measures of JSC «KM»:

- 1) continuous control of emissions from stationary sources;
- 2) replacement of worn hoses in the vacuum chamber to improve the quality of air purification and reduce emissions into the atmosphere;
- 3) current and major repairs of dust cleaning equipment;
- 4) dust suppression on drilling rigs;

5) chemical control of the composition of quarry and groundwater, as well as storm drains.

The main source of emissions at the enterprise is a quarry, considered as a single source of evenly distributed emissions from drilling, blasting, excavation, loading and trucking operations. During the production of all these types of work, there is a significant release of dust into the atmospheric air. In order to suppress the gas and dust cloud in the area where blasting operations are carried out, hydraulic drilling of wells is used. In addition, hydraulic irrigation of roads in the quarry is being carried out.

A Belarusian-made irrigation machine is used to solve this task. Modern equipment equipped with powerful pumps and with a larger irrigation area. It also has equipment for irrigation of excavator faces. The machine is used in the summer,

This important event is carried out to ensure that the dust content in the atmospheric air does not exceed the maximum permissible standards at workplaces in the quarry. Environmental monitoring, which is constantly carried out at the enterprise, allows us to assess the impact of emissions on the state of the environment in dynamics and develop a set of measures in case of a negative impact. According to the results of monitoring over the past 5 years, no exceedances of the maximum permissible concentration at the border of the sanitary protection zone of the enterprise were detected.

The costs of environmental protection measures are increasing from year to year, and today amount to more than 400.0 million tenge.

The fourth direction is THE DEVELOPMENT OF THE LOCAL COMMUNITY.

Kostanay Minerals JSC, as a city-forming enterprise, actively participates in socially oriented projects and actions, supports socially protected segments of the population. Fulfilling and supporting the policy of Kazakhstan's content of goods and services, KM JSC concludes contracts with many small and medium-sized businesses in the region.

As a sponsor, the company provides financial support to cultural, sports, and healthcare institutions, and participates in the preservation and development of the city's housing and communal services.

According to the results of work for 2023, annual tax revenues to the state budget from the company's activities amounted to: about _1.7billion tenge to the local budget, more than 3.5 billion tenge to the republican budget.

Since 2008, a memorandum of cooperation has been signed between the Akimat of Zhitikarinsky district and Kostanay Minerals JSC on the implementation of social projects in the region within the framework of corporate social responsibility of business.

In particular, JSC «KM» finances:

- hot meals for one hundred students in two schools of the city;
- measures for the socio-economic development of the Zhitikarinsky district and its infrastructure;
- cultural, mass, sports events of the Zhitikarinsky district;
- Spiritual organizations are used as charitable assistance: to strengthen the material and technical base, repair work and pay for utilities.

More than 80 million tenge is allocated annually for the maintenance of social facilities – these are expenses for the improvement of urban areas (streets, parks, squares, etc.), repair of departmental buildings of the swimming pool and the Gornyak stadium.

New ways in production management

In the current global economic situation, Kostanay Minerals JSC uses new company management models, paying due attention to the diversification of production. This will become an effective shock absorber for crisis phenomena.

Today, the company enters the market with new products such as asphalt concrete and which use products related to the main production: mineral powder, crushed stone, construction sand. This reduces the load on a ton of chrysotile fiber.

An action plan has been implemented to develop a technological scheme for obtaining a stabilizing additive for asphalt concrete mixtures. By expanding the product line, the company creates new jobs in its region.

Strengthening the health of employees

Kostanay Minerals JSC pays great attention to promoting a healthy lifestyle and strengthening the health of employees.

Every year, the Department of Culture and Sports develops a comprehensive program of mass sports events, which include:

- winter mini-football championship;
- the traditional autumn mini-football tournament «Golden Autumn»;
- The championship of the league of JSC «KM» in ice hockey;
- Swimming championships (individual, team);
- Sports and entertainment contests: «Come on, girls!», «Mom, Dad and I are a sports family», «Zhas Batyr»;
- Ice fishing competition;
- Men's and women's basketball and volleyball championships;
- The athletics relay dedicated to Victory Day;
- open bike ride for prizes of the Board of Kostanay Minerals JSC;
- holiday on the city beach «Neptune Day»;
- mini-spartakiads dedicated to the professional holidays of metallurgists, railway workers, motorists, miners, concentrators, power engineers.
- urban sports competitions.

A children's football and hockey school has been established on the basis of KM JSC, whose students take part in all sports events of the region and the district, deserve the title of champions and prize-winners of the region.

We work in one team!

Kostanay Minerals JSC is an enterprise with a half-century history, with its own traditions. Management involves employees in the management of corporate responsibility aimed at protecting labor and social rights.

To achieve this goal, the main task has been developed – the creation and maintenance of a favorable moral and psychological climate in labor collectives: the organization of relations based on the principles of mutual respect, competence, politeness and correctness.

Great emphasis is placed on human resource management issues – professional and personal growth of staff, leadership and talent development.

The reputation of the company is also evidenced by the fact that Kostanay Minerals JSC was awarded the honorary title «Industry Leader 2014», a national certificate and a wall medal «Leader of Kazakhstan» were awarded.

Technological management and digitalization

The onus of responsibility for the safe performance of work lies with the management of the organization. If an organization operates both hazardous production facilities (OPO) and non-hazardous facilities at the same time, then the boundaries of the application of requirements in the field of industrial safety (PB) and occupational safety (OT) are difficult to establish and comply with. In addition to the control and fulfillment of production tasks, production is paramount, as well as the task of safe production, aimed at reducing occupational risk and preventing occupational injuries and occupational diseases. For this complex issue, such tools as the «AUTOMATED CONTROL SYSTEM FOR THE TECHNOLOGICAL PROCESS OF ENRICHMENT OF CHRYSOTILE ORES OF the FIRST TRACT, the SECOND SECTION OF the CENTRAL PROCESSING PLANT» come. The company is taking a very broad turn on the project approach to such tasks as increasing productivity, manageability of the technological process and, of course, improving occupational safety. In 2021, after the protection and approval of the project passport, this project began its implementation under the guidance of the automation service. In addition to the economic justification of the project, the project also provides for regulatory factors for the safe organization of work. In the future, the platform is to create a full-fledged system for managing production and technological processes, into which data from various units of groups will flow and be provided to a single control center (dispatcher) in an understandable processed form. This system will improve the efficiency of the production process by modernizing the control system. The use of a new block diagram of automation under the control of a Siemens controller will allow real-time automated control of the 1st tract, the second section of the central control center from the operator's workplace, a system for diagnosing shutdowns appears, the cause of shutdowns, emergency conditions are recorded in the database, this will solve tasks such as:

- increase the efficiency of the production process;

- It will allow monitoring the operation of equipment, basic and auxiliary parameters of the system in order to diagnose and early warn of the occurrence (or possibility of occurrence) of emergency situations;
- convenience of graphical representation of the technological process for the purpose of comprehensive monitoring of its operation and operational management in real time;
- display in real time and for an arbitrary period of time diagnostic, information and emergency messages, equipment operation;
- the ability to quickly and flexibly configure the operation of system elements in terms of the possibility of ensuring the system's operability in case of failure of hotel elements without compromising the safety and operating parameters of the complex as a whole;
- data collection from process units;
- improving the reliability of the equipment;
- improvement of the quality indicators of the final product;
- production process reporting;
- output of archived and current data;
- generation of reports on downtime for each of the controlled units;
- Improving the quality of regulation;
- minimizing the influence of the human factor on the operation of the equipment;
- protection against unauthorized access.

The investment costs for the automated control system for the technological process of the 1st tract of the total cost amounted to 60,993,142.36 tenge. Lessons learned from the project and recommendations of S.M.A.R.T. on improving the productivity of finished products and reducing downtime of technological equipment. Digital – industrial automation provides data collection, data analysis in order to draw conclusions, and conclusions are necessarily needed to adjust our actions. The system displays in real time the operation of the first tract, the second section in the form of digital information on the screen of the operator panel of the Central control center in a convenient and understandable form. The system is quite flexible to changes, updated data is entered by the staff of the automation service on-line. Increasing the pace of digitalization integration of technological and production processes.

During the period of operation, the following advantages have been identified: Automatic mode. The technological mode is controlled according to a given algorithm in automatic mode without the participation of an operator. In case of emergency situations, the technological process either stops in accordance with the algorithm, or execution continues according to an alternative algorithm, or the operator decides to unblock (disable from the algorithm) some part of the program. The start and stop of technological installations is carried out by technological personnel in an automated mode from the operator's control panel, which is directly related to the safe method of operation. The SCADA system provides a user-friendly interface for viewing diagnostic events. Automatic monitoring of the technological process status of the first tract, the second section of the central control center in real time checks violations of the warning and pre-emergency values of technological variables. The operator panel provides an alarm system for violations, expressed by sound and color change, which is directly related to the visualization of the process, which ensures a reduction in operator tension during working hours. Conditions have been created for the sustainable operation of production and increasing the productivity of the workshop. The reliability of the equipment has increased in accordance with the established algorithm, while ensuring mutual interlocks to avoid disruption of the start and stop sequence. Real-time display of the occurrence of abnormal situations, indicating the source of occurrence, this leads to a decrease in the time to find the causes and a decrease in the time of repair and restoration work, and this is directly related to minimizing the influence of the human factor on the operation of equipment. This project also allows you to start phased work on replacing the morally and physically outdated existing equipment of the process control system, relay (PTS) of the enrichment shop. Creation of a modern automated control system based on advanced automation equipment. Today, the project provides an opportunity for convenient graphical representation of the technological process in order to comprehensively monitor its operation and operational management in real time.

The criterion for achieving the goal of creating an automated control system is: Uninterrupted operation of equipment in automated mode in accordance with the required algorithm of the technological line and the specified performance parameters, and this is directly related to occupational safety at the enterprise of Kostanay Minerals JSC. The introduction of further stages of the management and control system allows, will increase efficiency, eliminate downtime of technological equipment, allows for high-

quality data accounting and analysis of the technological process in order to adjust further actions to increase the productivity of the workshop.

In general, the implementation of the automated control system should ensure the achievement of the main goal of the company's quality policy: obtaining stable profits through the production of competitive products that meet the requirements of consumers, creating safe workplaces and the absence of injuries.

RPA as an Occupational Safety Tool RPA (Robotic Process Automation) is a technology that automates routine and repetitive tasks, increasing work efficiency and reducing the risks associated with human error. However, RPA should be considered not only as a tool for improving operational processes, but also as an important means of occupational safety. This is due to the fact that RPA can significantly reduce the workload on employees, reduce their fatigue and minimize the risks that arise when performing monotonous or physically difficult work. The company has already successfully implemented several RPA projects, which have brought significant advantages in different departments. The personnel department has robotized the processes of concluding employment contracts on the Enbek website and the formation and automatic mailing of a vacation schedule, which has reduced processing time, eliminated errors related to the human factor and reduced the burden on employees. The Legal Department uses RPA to compare contracts, which ensures faster and more accurate verification of documents. It also reduces the burden on employees, freeing them from routine work and allowing them to focus on more complex and important tasks. The accounting department has robotized the process of transferring employee debt from an account to an account, which significantly speeds up accounting processes and minimizes the risks of errors. RPA needs to be introduced as a tool for occupational safety and health in the category of reducing the intensity of the labor process for several reasons:

Firstly, automation of repetitive and monotonous tasks reduces the physical and emotional burden on employees, which directly affects their fatigue and, consequently, their safety. Reducing stress and fatigue leads to a reduction in the number of mistakes that can lead to workplace incidents.

Secondly, the use of RPA helps to improve working conditions, as employees are freed from routine tasks that can be dangerous or physically demanding. This is especially important in the context of occupational safety, as improved working conditions contribute to an increase in the overall level of safety at the enterprise. In addition, automation using RPA can provide more accurate and timely monitoring of compliance with occupational safety requirements. For example, robots can process and analyze data on compliance with safety standards, generate reports and notifications about potential risks. This allows you to quickly identify and eliminate dangerous situations, increasing the level of safety in the workplace. Thus, RPA not only contributes to improving operational efficiency, but is also an important tool in the occupational safety system, helping to reduce the burden on employees, improve working conditions and increase the overall level of safety at the enterprise. Given the successes already achieved in other departments of the enterprise, the introduction of RPA as a means of occupational safety can bring significant benefits both for employees and for the organization as a whole. Why can RPA be considered an effective tool for occupational safety? First of all, automation using RPA reduces the physical and emotional burden on employees. When routine and monotonous tasks are handed over to robots, employees are freed from performing jobs that can be a source of fatigue, stress and, ultimately, mistakes. Reducing fatigue has a direct effect on reducing the number of workplace incidents. In addition, automation of work processes improves general working conditions, especially when it comes to tasks related to increased physical activity or adverse conditions. This not only increases the comfort and safety of employees, but also helps to reduce the risk of occupational diseases and injuries. The RPA also opens up new opportunities to improve the monitoring of compliance with occupational safety standards. Robots can automatically collect and analyze data on compliance with safety requirements, generate reports and promptly notify about possible risks. This allows you to quickly identify and eliminate dangerous situations, which significantly increases the overall level of safety at the enterprise. Thus, the application of RPA can be considered as an important innovation in the field of occupational



safety. This technology not only improves productivity, but also creates a safer, healthier and more sustainable work environment. Considering the results already achieved, it is safe to say that RPA is not just an automation tool, but also a powerful means of protecting the health and safety of employees.

The entire implementation program cannot be implemented without the competence, training and awareness of the staff.

In the established main areas of activity of the enterprise, personnel training is carried out in the existing Training Center (hereinafter referred to as the Training Center), which directly interacts with the heads of all structural divisions. Determining the need for training in OTiPB issues, as well as when setting criteria for deciding whether to send employees for training, the need for personnel to undergo a certain type of training is established annually when developing enterprise development plans and personnel training.

Training and education of personnel at various levels is carried out:

- when applying for a job at an enterprise;
- within the framework of targeted training programs for employees of structural divisions on OTiPB issues, taking into account their specific job responsibilities;
- as part of the training of personnel (workers and specialists) with specific responsibilities in the field of OTiPB to work at facilities subordinate to supervision and control bodies;
- within the framework of professional development programs for workers;
- within the framework of professional development programs for managers, specialists and employees.

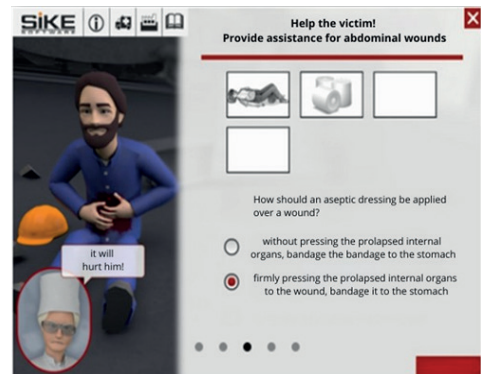
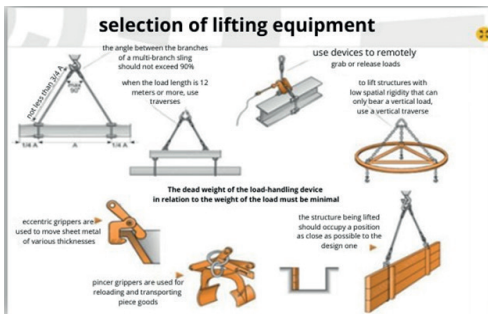
The material and technical base of the Training Center is at a sufficient level for the organization of the educational process. In each classroom there is visual material corresponding to the discipline taught: posters, layouts, samples, etc. This year, in order to improve the quality of education, the Company's Training Center purchased interactive SIKE learning tools, such as electronic posters and courses on the following topics:

- First aid;
- Welding;
- repair mechanic;
- slinger;
- Occupational safety and health;
- cargo slinging.

These tools are installed on 12 PCs in the computer classroom of the training center, which allows you to study individually and at a comfortable pace to study each direction of the course. Electronic posters provide an opportunity to familiarize yourself with the rules of occupational safety and health, with the main types of equipment and tools used in work in a certain direction, with their characteristics and criteria for assessing suitability for safe operation, as well as the procedure for performing work.

Electronic courses allow the student to study the theoretical part of the course, which is divided into sections, then familiarize himself with the regulatory framework governing the procedure for performing actions, upon completion of training, he is tested on the material he has passed. The e-course is also designed in such a way that, if necessary, you can return to a specific topic and study it again.

Training on the subject of «First aid» takes place in the form of a quest: the student is offered various situations and options for actions that need to be performed in a particular case, followed by an explanation of the correctness of the answer.



We believe that such an approach to the study of the material significantly increases the effectiveness of its assimilation and further application of safe methods of work in practice.

The Training Center of Kostanay Minerals JSC conducts personnel certification in accordance with the requirements of industrial safety, labor protection, and fire safety.

Personnel involved in work at hazardous production facilities (quarry, warehouse of explosive materials (VM),

warehouse of flammable liquids (LVL), drying building, boiler room) are trained in 10- and 40-hour programs corresponding to the industry, as well as knowledge testing in the field of industrial safety. The certification coverage is about 3,000 people annually.

It is worth noting that the company is very demanding about the responsibility and implementation of practical measures to prevent and control the impact of harmful factors on employees at the enterprise. Annually, measures are drawn up for all structural units to ensure the protection and controlled use of chrysotile, primarily aimed at preserving health and improving working conditions. The events are planned and implemented jointly with such partners as:

RSE «National Center for Occupational Hygiene and Occupational Diseases» of the Ministry of Health of the Republic of Kazakhstan, Karaganda:

- for the implementation of research works «Medical examination and inpatient rehabilitation of persons with initial signs of diseases of employees of Kostanay Minerals JSC.
- to carry out research work on the «Periodic medical examination of employees of Kostanay Minerals JSC in the number of 1000 people», annually.

RSE «Karaganda State Medical University» of the Ministry of Health of the Republic of Kazakhstan, Karaganda:

- on the implementation of sanitary and hygienic studies «Certification of production sites according to working conditions»;
- on the implementation of sanitary and hygienic studies «Assessment of working conditions, general and occupational morbidity in the development of occupational risk indicators in the main professions» of Kostanay Minerals JSC;
- on the development of acceptable work experience in conditions of exposure to chrysotile-asbestos-containing dust for employees of Kostanay Minerals JSC.

The national occupational safety management system in force in the Republic of Kazakhstan is regulated by labor legislation. The implementation of the priorities outlined in strategic and program documents determines the state significance of bringing the occupational safety management system in line with the standards of the International Labor Organization. The main aspect of the new occupational safety management system, taking into account the considered and adopted «Concept of safe work in the Republic of Kazakhstan 2030», is the development and active implementation of software and automation in the field of occupational safety and health, to create an innovative occupational safety management system in the Republic of Kazakhstan. As a result of the work carried out by SOTiPB, innovative approaches to the introduction of a new occupational safety management system at the enterprise were identified. In this part, we are keeping up with the times by introducing this occupational Safety program at the enterprise on the 1C Enterprise platform. According to the approved project for the implementation of the Labor Protection software product on the 1C enterprise platform, the labor protection service, with the support of accounting, information technology department, warehousing, training center and representatives of Inform Consot LLC, implemented this program. The main goals of creating an information system are: improving the efficiency of specialists by freeing up time for monitoring occupational safety, industrial and fire safety by automating the preparation and analysis of necessary, required documentation and reporting, increasing the level of accident-free and safe production, as well as reducing the cost of financing measures to ensure and improve safety and working conditions. The application of the 1C program allows you to create Records of the issuance of PPE, create a personal card for an employee, take into account the timeliness of briefings, training in the field of industrial safety, as well as create the necessary reports both for the whole enterprise and for structural divisions.

The study of atmospheric air at the border of the SPZ and in the residential area of the city of Zhitikara for contamination with suspended solids and respirable asbestos fibers.

Next year, Kostanay Minerals JSC will celebrate its 60th anniversary. With qualified personnel and modern material and technical resources, the management confidently sets optimistic development goals for itself and the team, and none of the residents of the region has any doubt that the stable operation of the city-forming enterprise of Kostanay Minerals JSC is the key to their well-being and prosperity.

