

### Mining Company Integrated Risk Management

This paper points to the possibilities and needs of integration maintenance functions with other management systems, in accordance with the requirements of ISO 9001, ISO 14001, OHSAS 18001 as well as new standard ISO55001. Flow chart of the risk process is defined in the mining equipment maintenance, as well as the methodological framework for risk assessment during maintenance of mining equipment. The proposed risk assessment model defines the criteria for the probability of hazardous events as consequences that may arise, as well as mechanisms to control the estimated risk. This model of risk assessment may be put into the context of integrated risk management of the mining company and/or specific organizations managing the maintenance of mining equipment, that are faced with various risks that may affect the achievement of the objectives.

Objectives may relate to a number of activities within the mining company, from strategic initiatives for all operations, processes and projects, and can be viewed in terms of corporate social responsibility, meeting the requirements of legislation, commercial and financial measures. Risk assessment involves the systematic application of logical methods for communication and consultation during the process of mining equipment maintenance. Risk assessment is the part of management that provides a structured process, which analyzes dangerous events which may cause the cancellation of mining equipment, and can cause incidents, accidents and accidents that are reflected in unforced outages, accidents, environmental pollution, work injuries, fire. The objectives of development regarding this methodological procedure of risk assessment in the mining equipment maintenance, is to try to find answers to the following questions: -What can happen in the process of maintaining the mining equipment and why (Identification of dangerous events that may cause the cancellation or unforced outages)? - What is the probability of hazardous events that may cause the outage? - Are there factors that may affect the reduction of the probability of hazardous events? - Are estimated levels of risk are acceptable and whether it requires further treatment?

Risk assessment in the process of mining equipment maintenance is intended to provide evidence-based identification and analysis of hazardous events that have occurred in the past, or may occur, and cause the outage, on how to treat the estimated risks, and how to choose the best management option of risk assessed.

Mining companies that want to improve their business must in each moment, to have the relevant information on which equipment/fixed assets are available and in functional condition.

Analysis of the current state of equipment/fixed assets, is necessary need to be devoted by

sufficient attention, because in this way the company management has important information that encourage appropriate decisions for improvement of equipment management systems, as well as integrated management of the entire system. A very important step in the development of equipment maintenance system is the inclusion of top management and staff responsible for the operation and maintenance of equipment. Defined flow chart and methodological process of risk assessment in the procedure of maintenance of equipment/fixed assets is of great benefit to the development of equipment management system (AMS). Risk assessment and establishment of control management mechanisms is of great benefit during designing of integrated management systems. The proposed model of risk assessment enables the risk information in equipment maintenance, to be properly processed and used in decision-making by the relevant levels of the organization.