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OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT RULES ACCORDING TO PIER-MERIT PROGRAM IN POLISH COAL MINES

This article presents the realization methods of occupational health and safety system, which was implemented to Polish coal mines. The nine areas of occupational health and safety were presented as well as the interpretation of obtained results. This article highlights the importance of the workers participation in the program. Also the results of systems effectiveness in one Polish coal mine were presented (years 2003-2005).

В статье описывается исполнительная процедура Системы управления безопасностью и гигиеной труда, которая вводилась в польских шахтах согласно программе PIER-MERIT. Представлено девять главных проблем исследований, а также способ обработки и интерпретации полученных данных. Подчеркивается участие сотрудников шахты в проводимых исследованиях. Приведены итоги изучения эффективности системы в одной из польских шахт в 2003-2005 гг.

Introduction

According to *OHSAS 18002:2000* occupational health and safety management system is defined as a part of overall management system that facilitates the management of the occupational health and safety risks associated with the business of the organization. This includes the organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the organization's occupational health and safety policy.[1] With most safety management systems people spend a lot of time pulling together documentation and procedures that then are simply a part of bureaucratic work. The real safety is about one-to-one interactions, supervisors to managers, supervisors to workers, managers to workers. Safety is about these interactions happening every day. It is people every day looking out for each other. That is how safety is achieved.

For business, protecting workers' safety and health is the right thing to do. It saves money and adds value to the organization. We are not only talking about reduced medical expenditures, decreased payout for return-to-work programs, fewer faulty products, and lower costs for job accommodations for injured workers but also about indirect benefits such as increased productivity, lower costs for training replacement workers, and decreased costs for overtime.

The best companies build a reputation that is synonymous not only with an excellent product, but also an outstanding work environment where safety and health is a core value.

Every employee benefits when safety and health is a priority at the workplace. Every worker wants to make a contribution through his job, yet the primary purpose of work is to make a living. Safety and health add value to the lives of workers by enabling them to maintain their incomes and provide for their families. Getting hurt or sick is not just physically painful. On-the-job injuries and illnesses can significantly reduce income, increase stress, and hinder a full family life.[2]

Also in Poland day by day this seems to be more and more important. Till the end of the year 2005, 28 out of 34 coal mines in Poland had implemented the Occupational Health and Safety Management System (data from The Polish State Mining Authority).

PIER-MERIT Program in Poland

PIER Program was conducted by the USAID/Poland. The Cooperative Agreement was signed with Partners for International Economic Reforms (PIER) on September 11, 1995 and provided for two years of assistance, until

September 30, 1997. The general objective of this project was: «Demonstrable and sustainable reduction of risk to life and health in a selected number of Silesian coal mines».

The two rounds of MERIT survey were carried on. Targeted 43 coal mines sent back their responses, which covered approximately 9000 miners. The results of the survey were analyzed and presented to the Coal Holding Companies. Also during international seminars on Job Safety, organized in Gliwice on 27-28 June 1997 and in September 1998, the findings of the survey were presented and areas of worker perception of rules and job and tasks analysis were identified as requiring the most emphasis.[3]

Setting goals was essential for construction of a successful safety program, they had to be specific, measurable and practical, but besides working to encourage and promote safety, management had to take steps to actively involve the miners in the safety program – it was done by the safety audit based on MERIT standard.

First, the audit questionnaire was prepared. The objective of the questionnaire was to evaluate all phases of health and safety program of the mining company. The following nine areas comprise this program (they were specified for the Polish coal mine conditions):

• **Program Management.** Evaluates existing safety and health programs with emphasis on written policies and the involvement of all employees.

• **Accident Investigation.** Evaluates accident reporting with emphasis on the causes, completeness of written reports, recommendations and involvement of workers.

• **Inspection.** Evaluates the reporting of workplace safety and health inspections, the frequency of actions, and if self-propelled equipment issues are included.

• **Job and Task Analysis.** Evaluates work practices with emphasis on identification of unsafe conditions and actions and corrective measures required including training.

• **Personnel Protection.** Evaluates the wearing of personal protective equipment and the conditions and policies that promote its application.

• **Rules.** Evaluates the awareness and understanding of workers to safety and health rules and the enforcement and disciplinary actions required to implement the rules.

• **Communications.** Evaluates how employees are informed on safety and health matters with emphasis on meetings, types of employees involved, and the use of bulletin boards.

Promotion. Evaluates how safety and health practices are encouraged with emphasis on newsletters, incentive awards and awareness activities such as handouts and hardhat stickers.

• **Personal Perception.** Evaluates the concern of employees with emphasis on the attitude of management and if workers feel that colleagues support and practice safe procedures.

In the questionnaire a brief introductory statement was written at the beginning of each of the 9 areas of the evaluation. The introductory statements described the goal of those safety program areas. Following this introductory statement were five sentences describing various ways in which a safety program function. The participant (mine worker) was supposed to circle the one item 4,3,2,1 or 0 which most closely described his plant's efforts in the given health and safety program area. Filling in the questionnaire was anonymous to obtain the most reliable results. Workers who took a part in this evaluation were chosen form all employees of the mine by the computer program (approximately 10 % of all workers). After filling in all the questionnaires, the results form each area separately was transferred to the tally sheet (matrix) where the program management element (index) was evaluated. After all 9 elements were obtained. Comparing the results of the questionnaire between each other helped to make decision to eliminate any weaknesses that existed in the health and safety program. One year latter this audit was repeated to see what steps were taken to improve the quality of the areas which obtained the worst marks.

Years 2003-2005

The method of evaluation based on PIER-MERIT standard was used in the year 2003 to estimate the quality of the Occupational Health and Safety Management System in one of the Polish mines just after implementing the OH&S System. After two years the research was repeated. The results are presented in the table 1.

Table 1. Rating of Occupational Health and Safety Areas

	Year			
	2003	2005	2003	2005
OH&S AREAS	**RATINGS**		**RANKING**	
A Program Management	3,34	3,50	1	1
B Accident Investigation	2,95	3,43	6	2
C Inspection	3,01	3,05	4	8
D Job and Task Analysis	2,54	3,06	8	7
E Personnel Protection	2,96	3,08	5	6
F Rules	2,74	3,29	7	4
G Communications	2,96	3,33	5	3
H Promotion	3,28	3,22	2	5
I Personal Perception	3,16	3,50	3	1
Overall Health and Safety Evaluation Rating	**2,99**	**3,27**		

As we can see that after the first assessment (audit) the overall health and safety evaluation rating was 2.99. During the next two years the management of the mine was working to encourage and promote safety, they also took steps to actively involve the miners in the safety program. In the year 2005 almost all ratings went up, the total index was much higher (3.27), which is almost 82 % of the ideal mark (ideal mark is 4). As we can see "each organization must create and communicate performance measures that reflect its unique strategy."[4] but "there is no one right way to do it, each organization must determine its own right way[5] suitable to the present conditions of the company".

Conclusion

The success of the safety program at the mine depends to a great extent on the cooperation of everyone at the mine form upper management to each and every miner. Safety and health must become a top priority and the entire workforce must recognize the value of safety and health and acknowledge that this is central to the mission and key to the corporate vision and identity. A safety program can not work if it is just words on a piece of paper. Management at each mine has a responsibility for determining the scope of the program as well as for formulating and enforcing company rules and policies concerning safety. Not only does management need to make a firm commitment clear to all mine employees. Communicating this commitment is essential if the necessary cooperation and participation is to be achieved.

REFERENCES

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