The Problems Existing in the Emergency Management of Coal Mine Safety Production and the Countermeasures for Improvement Are Discussed

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Abstract: Safety is the most important issue in coal mine production, mainly because it is easy to have all kinds of hidden safety problems in coal mine production, which will not only increase the probability of safety accidents to a great extent, it can also magnify the minor safety risks, affect the normal production of coal mining enterprises, and deviate from the current green economy and sustainable development of the important strategic goals. Emergency Management has always been a very important work that all levels of government, departments, enterprises and social sectors participate in and implement together, we need to attach importance to emergency management. Based on the principle of coal mine safety production emergency management, this paper analyzes the existing problems of coal mine safety production emergency management, and puts forward corresponding improvement suggestions.

1. Introduction

Mining industry itself is a high-risk industry, safe production has always been the focus of attention of the community, the safety of mining production for national economic development is of great significance. In recent years, local governments at all levels have begun to raise their requirements for emergency management, especially local production and business units, paying more attention to this issue and increasing their investment in emergency management techniques, the state also gave some support to it. At present, our country has also issued a series of emergency management related laws and regulations, mainly to guide the industry towards standardized development, the staff are required to be more fully aware of the importance of work safety emergency management, and the current situation is still serious, need to pay adequate attention to this.

2. Measures for Emergency Management of Coal Mine Safety Production

2.1 Processing Steps of Coal Mine Safety Events

First of all, we need to understand the cause and details of the incident, clearly the type of incident, place, time and so on, the accident site analysis, full consideration of the people around the accident site, the transportation of unrelated personnel to relatively safe areas to avoid causing more casualties due to the occurrence of unattended management is making the entire handling of coal mine safety incidents more difficult. Due to the sudden movement of coal mine safety incidents, workers must be isolated and protected from the site and surroundings[1]. Secondly, we should grasp the other impact of coal mine safety incidents, make prompt decisions to prevent the situation from spreading or expanding, and deal with the emergency of the incident as seriously as possible to eliminate the consequences brought about by coal mine safety incidents, psychological counseling to personnel, statistics of property losses, coal mine safety events adversely affected the recovery, to prevent the recurrence of similar events. To conduct a comprehensive assessment after the handling of the incident, to profoundly summarize and reflect on whether the methods used in handling various types of coal mine safety incident are appropriate, and whether there are other

hidden dangers arising, whether to carry on the comprehensive analysis to the whole incident, summarizes this coal mine safety incident the entire flow and for others reference[2].

2.2 Principles of Handling Coal Mine Safety Incidents

Through on-the-spot investigation and understanding, we can know that the coal mine enterprises in our country should strictly follow the following principles in dealing with the safety accidents, especially emergency incidents: (1) the first principle of saving people. In the event of a safety accident in the production of a coal mine enterprise, the staff shall rescue the victim as soon as possible, organize the rescue work in the shortest time, and rescue the victim, at the same time, organize the necessary personnel to evacuate the accident site in a timely manner, and strengthen the protection of staff^[2]. During the emergency rescue, the wounded should be transferred safely so as to avoid the re-emergence of safety problems resulting in casualties during the actual rescue; (2) the principle of rapid hazard control. The actual production and operation of a coal mine are prone to safety accidents. Once again, in the process, the coal mine enterprise should arrange professional personnel to carry out a comprehensive examination of the accident and its possible consequences, the scope of the accident involved, the nature of the harm, the possible causes of the accident were comprehensively analyzed^[3]. In the emergency management of safety accidents in coal mine enterprises, it is the most important part to control the dangerous sources of accidents, and make a systematic treatment plan to eliminate the threat of the dangerous sources in time, and to rescue workers to provide more adequate time to solve the problem; (3) the principle of mutual rescue. In actual production, if there is a safety problem, but because of the limitations of some objective factors such as the working conditions of the enterprise, the rescue will be carried out slowly. At this time, the staff can help themselves and each other, minimising casualties^[4];(4) the first principle of life safety of rescuers. In essence, after an accident in a coal mine, rescuing the injured is one of the most urgent tasks, but the safety of rescuers is the key to the smooth operation of the whole rescue. Therefore, as rescue workers must pay attention to protect themselves, as far as possible to avoid casualties. For the expansion of emergency response, it mainly refers to enterprises dealing with safety issues, aiming at the uncontrollable severity of some accidents to carry out this problem, which needs to start from the coal mine enterprises themselves, this is not a good response to the loss of these accidents to the enterprise, so must rely on external forces, the joint response to the enterprise's existing safety incidents ^[5].

2.3 Conditions for Handling Coal Mine Safety Incidents

There are five kinds of consciousness in managing coal mine safety incidents: (1) political consciousness because of the sudden and chaotic nature of the incident, our staff must keep clearheaded and clear-minded; And must unconditionally carry out the various tasks and orders issued by the superior.(2) awareness of service. At the scene of the incident, we must have awareness of service, comfort the victims, strengthen the collection of information on the incident and the assessment of possible risks, and propose effective preventive measures to report to the leadership, to provide a reference for the leadership, and the leadership of the information sent to the grassroots, for the grass-roots masses to guide the work^[6].(3) Responsibility Awareness, emergency management should ensure the safety of personnel, reduce accident losses, prevent secondary accidents. Emergency managers have great responsibilities and arduous tasks. They must put the safety and interests of the staff at the top of their work.(4) awareness of the masses. The most difficult problem in a mission coal mine safety incident is the coal mine personnel. First, we must ensure the safety of the coal mine personnel and the public mood for safety. Second, we must make great efforts to improve the coal mine staff's emergency management level and emergency management awareness.(5) awareness of learning, as an emergency management workers, coal mine safety incidents may occur at any time, we must continue to learn, in a matter of experience, and through knowledge reserves to predict the likely event, prepare the contents of emergency management for others to learn. We should also sum up the experience of others, constantly enrich themselves for the next accident, there is a more correct judgment.

There are three kinds of abilities to deal with coal mine safety incidents: (1) the ability of information capture, the emergency manager should have the sensitivity to the information, and can react to the coal mine safety incidents quickly. To collect true, accurate and effective information. (2) ability to judge the situation. There may be a variety of contingencies at the scene of an emergency. Initially, the incident is piecemeal, unfocused and sourcing circumstances. We must ensure that, determine the course of events, and events concise, condensed report to the superior leadership, for leadership reference to make a clear choice. (3) coordination capacity. In order to ensure that all work is carried out, it is necessary not only to carry out the work done by higher-level leaders, but also to say that what happens at the grass-roots level is reported to the higher-ups. This is the beginning of the work, in order to ensure the orderly work, we must adjust the relationship between the two, have a strong ability to organize and coordinate.

3. Main Points of Emergency Management of Coal Mine Safety Production

3.1 Ideological Awareness to Be in Place

When a coal mine safety incident occurs, leaders at all levels need to handle it calmly, rationally and quickly, which is an important manifestation of public administration for the people, fully and conscientiously implement the Scientific Outlook on Development. We will continue to raise awareness of, address and concern about emergencies, scientifically analyze and accurately judge information, prevent and handle them. To Do the world's first worry and worry, after the world's joy and joy. It is necessary to eliminate major contradictions, strengthen the overall management capacity of the United Nations, and take a responsible and reasonable attitude towards the management of incidents, so as to minimize the loss of life and property to the country and the people caused by coal mine safety incidents.

3.2 Advance Management Work to Be in Place

In other words is to tamp down the foundation, sound safety management system. First, legal education: all activities must be carried out within the framework of the legal system, we must carry out legal publicity activities in the whole society, and create a good legal environment. Local departments concerned should use various forms of communication to strengthen the construction of the rule of law in coal mining areas and improve the awareness of managers and managers.

3.3 On-Site Command to Be in Place

Dealing with coal mine safety incidents is the most important policy, involving all aspects. In an emergency, every minute counts, and strong and effective organizational leadership is the key to optimal performance. In emergency situations, leaders at all levels must be on the ground from the outset, react quickly and deploy a response force immediately, quickly establish a joint coordination system and fully mobilize and play a role.

3.4 Emergency Response Capability in Place

At present, the factors that influence the work of coal mine safety emergency management are increasing, the foundation of coal mine safety production emergency management is weak, and the ability of coal mine safety production emergency management personnel needs to be further strengthened. All Kinds of emergency management training courses, through training to enhance awareness of emergency management, familiar with emergency preparedness system and working methods, procedures and requirements, etc. . Familiarization with emergency preparedness action programmes in emergency situations, through fact-finding at the local level, in order to manage emergencies at the local level and to learn lessons in a timely manner in order to improve decision-making services and emergency response capacity, especially for emergency management personnel at the local level. Early monitoring and monitoring of coal mine safety incidents and emergency response capacity, support the overall emergency response capacity building.

3.5 Coordination Capability in Place

Coordination is a working tool for adjusting dynamic combat. As emergency managers, it is important to strengthen the coordination capacity. Strengthen Communication and information exchange with relevant departments and emergency management personnel of coal mine production safety at all levels, shorten information transmission chain, lead effective organization, rapid response and effective work, ensure smooth operation in emergency. We must respond together.

4. Problems in Emergency Management of Coal Mine Safety Production

4.1 Enterprises Pay Less Attention to Emergency Management

Enterprises need to pay attention to emergency management, the importance of emergency management, the work focus on emergency management institutions, management systems, management systems, do a good job of basic support, set up a special emergency team, make adequate material reserves, etc., but because of the poor operating conditions of some enterprises, some of the emergency support is difficult to meet the actual needs, it will focus on emergency materials and equipment, manpower, and so on, resulting in emergency management can not be run through all aspects of work, and coordination between the various departments, it is difficult to effectively play the management level.

4.2 The Emergency Plan System is Not Perfect

The enterprise wants to make more emergency plans for production safety accidents in Xirong, we must strictly abide by the relevant laws, regulations, regulations and standards, such as the guidelines for the preparation of emergency plans for production safety accidents (GBT29639-2020), the guidelines for the evaluation of emergency plans for production safety accidents for production and business State Administration of Work Safety (AQT9011-2019), the regulations for the emergency response to production safety accidents (No. 708), and the measures for the management of emergency plans for production safety accidents (No. 88). The enterprise production safety emergency plan is divided into comprehensive, special and on-site disposal plans, in which the comprehensive emergency plan mainly includes the scope of use, information reporting and other necessary corresponding procedures. But from the practical point of view, most of the current coal mine production enterprise's emergency plan system is more or less there are some loopholes, so it is difficult to identify some safety hazards accurately.

4.3 Internal and External Communication is Not Close

Enterprises need to establish a more complete system of external communication, more often carry out the necessary census work, mainly to check the adequacy of emergency materials and equipment, technical strength, need to be on their own emergency plans for timely record, if a major accident, the need to contact the local government, emergency plans to link up. However, at present, many coal mine production enterprises lack the coordination of emergency plans. When an accident occurs, it is usually only for the enterprises to carry out rescue work internally. It is difficult to link up with the government in the first place, and communication with the outside world is not smooth, lead to a lot of events difficult to connect the first time.

4.4 Insufficient Emergency Knowledge Propaganda and Training

Most of the enterprises do not have enough pertinence in the work of emergency training, and many coal mine production enterprises can not carry out precise training according to different positions and regions, so it is easy for some personal reasons, it is difficult to accurately identify the necessary security risks. At the same time, regardless of the enterprise has not developed a system of disaster prevention and treatment plans, such as emergency contingency plans for safety accidents, which will increase the probability of safety risks.

4.5 The Leaders Paid Little Attention to the Emergency Management

From the practical point of view, the enterprise leaders, employees for the lack of attention to emergency management, the specific performance in the following two aspects: (1) emergency drill has not been implemented. In the development of the exercise program is not standardized, and the content of the exercise is relatively simple, the organization of the exercise did not carry out systematic coordination and planning, resulting in the actual exercise, the emergency response process is not clear, and for the emergency drill evaluation is not in place; (2) emergency supplies, equipment is not reasonable. Coal Mine production is prone to all kinds of disasters and safety accidents, therefore, it is necessary to reserve materials and equipment, equipped with targeted, specialized protective devices, rescue devices, but if the equipment department is complete, it will be difficult to meet the basic needs of relief work.5 The improvement strategy of coal mine safety production emergency management

4.6 Strengthen Emergency Publicity and Education

For the emergency management of coal mine safety production, first of all, the leadership should strengthen the training of emergency management knowledge, so that the leadership has a correct understanding of the important performance of emergency management, in this way, in the daily management of enterprises, can also be combined with emergency management work and system; secondly, the need for its management of more targeted publicity and education, to be able to accurately identify risks and strengthen risk management; finally, the enterprise can carry out a special education column in the publicity, so that all can participate in it, so that all attention, everyone involved.

4.7 To Standardize the Preparation of Emergency Plans

For the production safety emergency plan, in the actual preparation, need to strictly follow the corresponding provisions, need to set up a special leading group, responsibility group, before the necessary preparation, it is necessary to conduct a comprehensive survey of the present situation of safety in production and the surrounding conditions of the enterprises, and to understand clearly the survey report that is suitable for the unit, and at the same time, it is necessary to aim at the nature of the enterprises themselves, different posts and regions, carry out systematic risk identification and evaluation reports, and conduct a more comprehensive survey of some of the unit's emergency supplies, equipment, reserves, etc. , combined with the report and the results of the survey, to prepare a more suitable emergency response plan for the safety accident of Shengquan, after all the preparation is completed, it is also necessary to contact experts inside and outside the enterprise to carry out a systematic assessment and audit, and make timely amendments to the audit results, and by the person in charge of the release, and carry out the necessary work.

4.8 Rationalize the Emergency Management System

The enterprise needs to combine the actual production and the operating situation, according to the management organization establishment, establishes the specialized responsible occupation management department, the dispatcher as the first time receives the information the personnel, may set up the specialized dispatch room, assign someone to be responsible for it. Other departments and sections need to be under Unified Command and leadership, with their own business scope, responsibility for a systematic and clear division of labor, and carry out the necessary emergency management.

4.9 Build a More Scientific and Rational Emergency Mechanism

According to the scale and type of production and operation of the enterprise, we can determine the emergency command system and the level of the enterprise, each level needs to clear their own responsibilities, in order to ensure the stability of the system operating procedures, to ensure that all the links can be maintained in the normal state of operation. When an accident occurs and needs to be upgraded, the conditions for upgrading need to be further clarified, and systematic cooperation needs to be carried out with designated departments. When rescue and support needs to be carried out at various levels, should be clear about their own needs.

4.10 Strengthen and Attach Importance to Emergency Management

Enterprises should train all personnel in different batches and types. They must make full use of various types of meetings such as pre-class meetings to highlight both the content and methods of the meetings, pay attention to practicality, the pursuit of the effectiveness of teaching materials, so that people at all levels to prompt, warning education, improve their own emergency management level, can let the related staff emergency disposal level get the obvious promotion. At the same time, there is a need to conduct specialized emergency drills, prepare adequate material reserves and introduce more cash-based equipment and equipment. It is very important to choose the appropriate emergency drill method, and the emergency drill should be combined with the actual production situation as far as possible, to clarify the script process, before the development of a specific exercise program, but also the need for a certain degree of training and demonstration of relevant personnel, in order to ensure that personnel from different departments can quickly coordinate with each other, in the face of emergency management work, to ensure that all aspects of the process more smoothly, after the end of training, it is necessary to sum up and evaluate the actual situation of the exercise, improve the measures and form a closed-loop management. At the same time, it is necessary to carry out surprise drills regularly or irregularly in order to improve the reaction ability and problem-solving ability of the personnel at all levels, without providing more adequate protection for subsequent safe production operations. Emergency supplies are an essential part of the event of a coal mine accident, personal protective equipment, etc., can be directly emergency. The mine itself is in very bad condition, and if the production scale is small, the rescue environment will be very bad, therefore, we need to prepare sufficient rescue equipment in advance, for example: Exploration Robots, special drilling rigs and other equipment. In this process, we also need to set up a special material management system, do a good job of material reserves, so in the first time, the accident can be called in time, so as to meet the basic needs of rescue.

5. Conclusion

On the whole, it is very important to do well the emergency management of enterprises. The safety accidents occur frequently in coal mine production industry. Among them, both the leadership and the staff at the grass-roots level need to raise their self-protection awareness and realize the importance of safety management. The leadership needs to have a more adequate understanding of work safety emergency management, in the actual production, it should be easy to safety production emergency management thinking system, so as to strengthen the corresponding protection work, develop a more comprehensive scientific mining plan; Grass-roots staff need to learn how to use specific protective equipment correctly, master the management ability of various accidents, and need to systematically analyze some of the accident content, familiar with the causes of various accidents. Among them, emergency command personnel still need to accumulate experience continuously, and in each mining, they need to take into account in advance the possible rescue countermeasures at the scene, so that when an accident occurs, more flexible adjustment between the emergency response team activities to promote the sustainable development of coal mining enterprises.

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