RESEARCH ARTICLE

Analysis of problems and solutions in safety management of building engineering

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Abstract: The safety of the production process of the construction project will directly affect the personal safety of the construction personnel. Therefore, the safety management of the construction project should be strengthened so as to achieve the goal of sustainable development. This paper studies the problems and solutions in building engineering safety management.

Keywords: Building engineering; safety management; problems; solutions

1. Problems in the safety management of construction engineering

1.1 Less supervision of the relevant management department

The relevant management departments need to supervise the construction safety of the construction project, but some management departments do not fully understand the importance of the safety management problem in the actual work. A number of departments did not fully implement the safety management documents and systems, resulting in some safety problems during the construction process[1]. A part of supervisors do not attach much importance to safety issues. In the process of supervision, for some key problems, it is usually managed by inspection. For some problems that need to be checked, it will not be inspected. The responsibility of the regulatory authorities can not be fully exploited. In addition, if the construction problems in some areas can not be properly handled, it will affect the safety management of building construction. At present, the right to deal with the problem of construction safety is attributed to the City Construction Bureau, and the regulatory department has no right to punish the related enterprises, so that the construction safety problems cannot be effectively solved, so that some security problems often occur during the construction process.

1.2 Enterprises do not attach importance to the problem of safety management

If a construction company does not attach importance to safety management, the level of safety management in construction will not be high. It can be seen that whether the construction enterprises attach importance to safety management has an important influence on the level of safety management[2]. In some enterprises, leaders do not attach importance to safety management issues. Some policy makers do not consider themselves responsible for construction safety management, resulting in incomplete safety management systems. Some construction enterprises did not sign the

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safety guarantee in the process of construction, so that the safety management system could not be implemented. At present, some construction enterprises have not set up relevant management departments, and there are no professional managers in the construction site, resulting in the increase of the probability of safety accidents in the construction process.

1.3 The construction equipment is more obsolete and the safety consciousness is weak

During construction, construction equipment will also affect construction safety. The construction equipment used previously cannot meet the requirements for the construction safety. If the lifting equipment, such as tower crane and elevator used during the construction process, is a long time or improper maintenance, many construction workers are migrant workers during the construction process, however, these migrant workers have a relatively weak sense of safety, they often do not use safety belts and helmets and other safety equipment in the construction process for convenience[3]. They use safety equipment only when they are inspected, so that safety equipment cannot fully play its role. In the construction site, building materials and wastes are piled up in a random manner, which will affect the traffic conditions at the construction site. At the construction site, the installation of fire fighting equipment is unreasonable, and even there is no fire fighting equipment at some construction sites, if there is a fire, it will cause serious consequences; the closed management of the construction site is not strict; safety signs do not play a warning role. All these phenomena may lead to safety accidents on the construction site.

1.4 The level of construction technology is not high enough

China's construction technology level is not high enough, especially in terms of safety construction, construction technology is not perfect. First of all, the level of construction technology is not high enough. The use of advanced construction techniques in the construction process has resulted in some hidden safety hazards during the construction process[4]. Second, less funds are invested in construction technology. In order to reduce construction costs, construction companies and construction companies have invested less in safety construction and have not used safe construction techniques. Finally, the construction personnel's professional knowledge level and professional ability level are relatively low, and they can't correctly use construction equipment and construction technology, which increases the safety risk.

1.5 Safety precautions is weak

At present, it is only after the occurrence of safety accidents will be handled, and there is no foreseeable safety construction management concept, and related protection measures are also weak. First, the safety protection measures are less conscious; secondly, the complete protection facilities are not set up so that the safety and stability of these protection facilities are relatively poor, and if the safety accident will not be timely through effective measures to reduce the loss caused by the safety accident[5]. Finally, there is no information transmission platform for construction protection measures, which causes some hidden information and can not be shared, which increases the risk of construction.

2. Corresponding solutions

2.1 Improving the safety management consciousness of enterprise leaders

The safety management consciousness of enterprise leaders will directly affect the level of safety management. In order to improve the safety management level of construction engineering, the safety management consciousness of enterprise leaders should be improved so that they can correctly understand the importance of safety management and make correct decisions so as to ensure the safe management work can be carried out smoothly[6]. For example, during the construction process, the relevant person in charge of the construction company should pay attention to safety management and hold regular safety management meetings. In the course of the meeting, the security risks found in the construction process should be raised, and the relevant person in charge should be given a certain amount of punishment.

During the meeting, corresponding solutions should also be analyzed to reduce the adverse impact of the security risks on the construction. In addition, the relevant person in charge should regularly check the construction progress and construction quality, and hold regular meetings to analyze the construction process in detail, identify potential safety hazards in a timely manner, and ensure that relevant policies can be implemented.

2.2 Establish a complete management mechanism

In order to improve the safety management level of the construction project, a complete management mechanism should be established, including the safety management mechanism of the construction enterprise and the safety management system of the government management department. The construction company should send professional personnel to supervise the safety management during the construction process, discover some areas with potential safety hazards in time, and take effective measures to solve the problems. For some construction workers who do not wear safety equipment according to regulations, they should be given safety education and given a certain amount of punishment to ensure the safety of construction projects[7]. The relevant government departments should conduct inspections by means of surprise inspections. If there is a safety problem in the construction of the construction project, safety education and certain punishments must be given to the construction company. We can improve the safety management mechanism to ensure that safety measures can be implemented in order to avoid safety accidents during the construction process.

2.3 Use advanced construction equipment

During the construction process, the aging and wear of construction equipment can all lead to safety accidents. Therefore, the construction equipment should be care and maintenance in time[8]. It is necessary to eliminate the construction equipment which is more than the service life, so as to avoid the safety accidents caused by the aging of the construction equipment, and even the casualties will occur seriously, which will cause serious economic losses to the enterprises. Before construction, the construction enterprises should check the construction equipment and ensure the safe operation of the construction equipment.

2.4 Strengthen the training of the builders

The safety assurance mechanism of construction enterprises is the basis for safety management of construction projects, so we should constantly improve the safety guarantee mechanism of construction enterprises. In the safety management of construction engineering, we should adhere to the principle of "safety first and prevention mainly". Therefore, we should strengthen the safety education of enterprises, strengthen the safety training for the construction personnel, and improve the safety awareness and corresponding ability of the builders through training. When a construction company completes its security assurance mechanism, it must perform supervision under the supervision of all levels of administrative departments and safety regulatory agencies. It must ensure that the security assurance mechanism is scientific and reasonable[9]. In order to avoid the occurrence of safety accidents in the construction process, the safety education of the builders should be strengthened so that the constructors can consciously carry out the construction according to the relevant regulations. In addition, the construction enterprises should make full use of the teaching resources of migrant workers' schools, train the migrant workers, improve the level of professional knowledge, safety and safety consciousness of the migrant workers. In addition, enterprises also need to encourage technical personnel to actively participate in technical level training, improve technical personnel technical level; constantly standardize the contract of labor contract, to ensure that every migrant workers have signed a labor contract. Construction enterprises should carry out safety education for construction managers every year, and develop training schedule and training plan according to relevant regulations. When carrying out safety training, construction enterprises should attach importance to the effect of education, and cannot take training in a formal way.

2.5 Introduce advanced construction technology

The construction technology level will affect the safety of the construction process. First, in the construction

process, the use of intelligent and digital construction technology can effectively improve the construction speed, ensure the stability of the construction project, and reduce the probability of the occurrence of safety accidents. Secondly, we should make the construction staff fully grasp the construction technology and choose the safest construction technology.

2.6 Establish safety protection measures

First, increase the investment in safety protection measures. Before the construction, it is necessary to purchase enough safety protection facilities or supplies. At the same time, relevant safety warning signs need to be hoisted. Second, to increase the awareness of construction workers on wearing safety equipment, construction workers need to wear appropriate safety protection equipment when entering the construction site[11]. Third, the safety of safety protection equipment and supplies should be checked regularly to ensure that these safety equipment and supplies can fully play their role, and to replace the damaged or obsolete safety protection equipment in time. In addition, the security information transmission platform should be built to ensure that the construction personnel can be transmitted to the construction personnel in time when the hidden danger is found, so as to ensure that these problems can be solved in time. In short, safety protection equipment has an important impact on the safety of construction projects. In order to ensure construction quality and speed, safety measures should be taken seriously.

Conclusion

In short, safety accidents not only threaten people's life and property safety, but also cause huge economic losses to enterprises, which is detrimental to the development of the construction industry. Therefore, in the construction, we should fully understand the common safety problems, and take effective measures to solve these problems, to ensure that the production activities can be carried out safely and steadily, while ensuring the quality of construction and promoting the sustainable development of the construction enterprises.

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