

# The Primary Discussion on the Safety Management of Construction Site

### Qi Feng<sup>\*</sup>

College of Engineering and Management, Nanchang University of Science and Technology, Nanchang, Jiangxi 330013, China

**ABSTRACT** In recent years in building construction site construction workers due to the complexity, the project construction period, the working environment is poor, the construction process hazard and more security-conscious workers partial bottom. When accidents occur, such as by falling, falling objects wounding, electric shock, earthmoving collapse, overturning and other machinery, causing casualties, to construction companies and property losses caused by the economy to varying degrees. Throughout its reasons, one is security responsibilities are not clear, safety supervision and management system is not perfect, the other is the weakening of the internal management of construction enterprises, especially flawed construction site management, lack of effective security measures, the responsibility is not implemented, management personnel and operations personnel have not performed the necessary education and training, lack of knowledge of security technologies, illegal command, illegal operation.

#### 1. Problems of construction site safety management

Construction safety problems can be said to be a persistent problem. Current construction sector production safety situation is still grim, full of crisis incidents in security management. Site safety management is an important part of the project construction management, the paper by exploring the construction process of various harmful factors, and the unity of opposites contradiction between the study of the construction process unsafe, unhealthy factors and workers, better use These laws make scientific, rational and effective various safety production management system, improve and perfect safety technical measures aimed at preventing and eliminating a series of management during the construction of various harmful factors to fatalities conversion carried out work to ensure the safety and health of workers, to ensure production safety. Due to insecurity construction of relatively large,

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the slightest mistake, accidents can occur. In recent years, the statistics and large construction accidents casualties occurred across the country told us that the safety of construction momentum is still very grim. However, construction safety issues, like with everything else, with the objective law, it objectively resides throughout the construction activities. So, naturally, it can be analyzed to understand it, grasp its law, and adopt organizational and technical measures to its pre-control, in order to achieve the purpose of safe construction. Construction site safety production management refers to construction activities, construction companies and projects organized by the Ministry of production safety of all management activities, through specific state control of the factors of production, so that the construction of unsafe behavior and state to reduce or eliminate, not cause accidents, especially not cause the accident hurt people, so that benefits of project objectives achieved. However, at present our countries in the safety management are still many problems to be solved.

#### 1.1. Safety management system is not implemented

Construction site safety responsibility is unknown, strict reward and punishment, the system is not perfect, even if there is a system, is a mere formality, not strictly implemented; safety measures in place, poor implementation; inspection team, the project inspection, the company checks cannot be organic integration; site security system

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<sup>\*</sup>Corresponding author: College of Engineering and Management, Nanchang University of Science and Technology, Nanchang, Jiangxi 330013, China. E-mail: feng\_q1q1@126.com

is weak, the project manager focus only production, regardless of security, and some even to the higher authorities to detect security risks cannot be timely and thorough rectification [1].

#### **1.2. Security management mechanism and management personnel can not meet the actual needs**

Security management agencies and personnel been streamlined, merged, full-time security staff cannot meet the actual needs of the project, a lot of poor technical quality of security staff, security management Luezhipimao, neither the supervision and management functions, they cannot perform their duties.

### **1.3. Credit control effects appear, funding sources further diversified**

Construction requirements of each project by trained, presided with corresponding qualifications of the project manager, but in fact there are a lot of projects are anchored, the project department in order to reduce costs, reduce costs, managers are not complete. Construction site safety management confusion, the construction of electricity, closed operations, limb protection do not meet the specification does not form a large system, generous, low management level.

#### 1.4. Safety education is not implemented

Safety education for construction workers is not timely, is not implemented, the quality of employees cannot meet the needs of construction safety. Especially migrant workers, there has been no special security education and training, safety skills, poor, poor awareness of self-protection, the phenomenon of serious illegal operations, the majority of people untrained on the posts.

## 2. Measures to strengthen construction site safety management

### 2.1. Establish a "people-oriented" concept of safe production

Safety construction projects throughout the whole story, either elements throughout the schedule, quality and technology among the formation process in any one of the elements, if neglected security, will most likely lead to accidents, such that the economic damage, severe cases may affect the company and corporate image. Therefore, the construction authorities and construction units should unify our thinking: Construction safety is no small matter, should always be the safety of production on the most important position to deal with, and the construction of production safety as the most important task.

## 2.2. Improve the business leaders to construction safety awareness

Business leaders have a high degree of awareness of security, safety-critical production Well: (1) Strengthening of the safety training enterprise legal representative and director of safety in production led to make deep understanding and awareness of production safety guidelines, policies and laws and regulations. Establish only truly safe production, in order for the enterprise to bring longterm economic thinking, which is more profound understanding of the importance and necessity of safe production, and make it into action. (2) The effective exercise of safe production "vote veto" safe production and business intelligence, security intelligence, project manager qualification, bidding and corporate performance and leaders linked to performance. (3) To increase penalties for those responsible for safety-related accidents, forcing business leaders attach great importance to the safety of real agenda, effectively establish a "safety first" concept, so that always and everywhere attention to production safety action.

### **2.3. Strengthen safety education and training of the construction team**

Security First is people management, to strengthen security education and training, and constantly improve the quality of security services, and enhance people's awareness of security, and to take effective measures to regulate people's behavior, the implementation of standardized operations, to eliminate the feel of work, based on experience, so that the construction who form a program standardization work habits. To implement the "Production Safety Law", "Construction Safety and Health Convention" as an opportunity to make full use of modern media, promotional vehicles, posters, safety talks, safety knowledge contests and other forms extensively to promote safety production management knowledge, and in newspapers, TV open safe production column, laws and regulations to promote safe production method. By strengthening safety laws, regulations and safety education and training of technical standards, norms, improve the quality of personnel. On the basis of comprehensive training, we paid attention to the accident unit, security checks failed units, weak management units of the security responsibility and safety supervision and management of each agency law enforcement personnel, construction enterprise management personnel training and education, and strengthen safety awareness, improve Security personnel quality. According to the Ministry of Construction, "Construction Workers Safety Training Education Interim Provisions" and national safety regulations on technical education and training of special operations personnel requirements, conscientiously study on production safety guidelines, policies, laws and regulations, the timely transmission of new safety technology standards, norms, enhance employee safety awareness and responsibility for security protection.

(1) They should pay attention to work safety training of employees. Training and education should be focused,

targeted, to prevent out forms through the motions, and constantly improve the quality of full security. This should be done: the backbone of a good job safety training, with a focus on the team leader and part-time security officer and project leader for training. Strengthening technical training production run job security. Catch regular training, to carry out mass security technology training and technical contest activities, gradually increase the level of technical operations staff.

(2) To strengthen safety education and special types of temporary workers. Special types must undergo a rigorous training and examination certificates. Temporary workers must undergo pre-service training, to enter the construction site after passing the examination. Employers and security departments must pay attention to temporary safety education, improve the quality of temporary workers safety.

(3) To take a variety of ways and means to continuously improve the professional quality of staff, to ensure the construction of production procedures, standardization, strengthen process management, implementation of advance guard, to prevent the construction of blindness.

(4) Efforts to create a variety of safety culture. Through various forms of security and cultural activities, educational and entertaining take positive combination, popularize safety knowledge, strengthen safety awareness.

#### 2.4. Depth theoretical study and scientific management of the Security Architecture

Currently, the theoretical study of safety management in developed countries has been very depth, and played a very important role in the prevention and control of accidents in. The theoretical study of the security of our country is still relatively weak, so that construction site safety management failed scientific, arbitrary, low results. Therefore, strengthening the construction site safety management must pay attention to theoretical study, so the theory with practice, guidance time, so that the safety management embarked on a scientific way. Strengthen security awareness, establish and improve the system. According to the characteristics of the construction of the system of production safety accident, to determine the priorities and the special treatment target annual production safety work, to develop construction site safety precautions, the construction safety production targets and responsibility down to every level to the grassroots level, a layer of grip layer, layers of implementation. At the same time, the establishment of the construction project completion and acceptance of the filing system, monitoring feedback system, construction plans review system, building safety risks, dangers and accidents social reporting system, through a series of effective system to ensure safety in production carried out, to ensure that the city's construction project quality remained "steadily" development trend.

Responsibility, to implement the plan. In the daily safety

supervision and management, on the one hand based on objective assessment of production safety regulations, the safety oversight declaration and issuance of construction permits is closely linked to the rules and regulations is not established, not established on-site safety assurance system, not according to the site characteristics of the development of effective security measures, not on-site construction safety production commitments civilization construction companies, will not handle safety oversight. For safety oversight has handled construction projects, according to "construction safety inspection standards" to take on a regular basis (every quarter, half inspection, inspection) and occasional production safety, civilized construction standards inspection, supervision and construction companies to establish and improve construction safety management guarantee system, improve the safety rules and regulations, implementation of safety responsibilities, correctly handle the relationship between safety and production, safety and efficiency, enable enterprises to achieve leadership in place, realizing that position, measures are in place, responsibility, efforts to reduce the injury rate.

### 3. Construction site accident management measures control

#### 3.1. Incident control

Accident control means before the accident comprehensively addressing the root causes of the accident and tried to reduce the probability of resulting in the accident, after the accident to reduce the human and economic loss severity. The basic contents of the accident control mainly include two aspects: First, before the accident, the full elimination of the root causes of the accident, to minimize the chances of an accident; the second is the extent of the accident, after efforts to mitigate losses. Accident prevention and accident control suppression is the basic technological accidents, the former control measures before the accident, which is mainly focused on the time of the accident after the accident and control measures.

Accident prevention means taking various preventive means to maximize the potential to eliminate or reduce a variety of factors that could cause accidents. There are two ways to prevent accidents. One way of engineering physics law, the theory that the energy released Hatton said that the main emphasis on material factors accident prevention measures which can be taken include: preventing the risk factors generated; reducing risk factors already exist; isolation risk factors of time and space; risk factors with isolation barrier; to improve the basic properties of risk factors; risk units to strengthen defense capability; the other man's behavior method, the theory is based on Heinrich accident causation chain, mainly focused on the specification of accidents caused by human behavior; the way the measures taken included: ideological education, strengthen technical training, not near the residence and other risk factors for no reason.

### 3.2. Construction site accident management suppression

Construction site accident in accordance with the timeframe suppression can be divided into two parts: the processing time of the accident and after the accident process.

(1) Processing when the accident occurred. When the construction site accident, to immediately start the emergency plan, all aspects of management personnel, leading to the scene as soon as possible, emergency treatment accident. Accident at this time were mainly includes work in the following four areas: organizational personnel to enter the accident site quickly rescue the wounded, evacuate personnel to prevent further incidents caused unnecessary casualties increase; protect the construction site, requiring the construction site each article the position, color, shape, etc. hold the end of the accident, in order to prepare for future accident investigation; timely and police, fire, health and epidemic prevention and safety supervision and other government departments to contact and seek their help and necessary support; to businesses responsible and timely information about developments in the accident, with the power companies to properly handle incidents [2].

(2) Treatment after the accident. After the accident, the accident investigation team immediately organized through on the scene, scene photographs, drawings and other means live scene of the accident investigation, collected first-hand information, and in accordance with relevant national regulations and standards for analytical work cause of the accident, according to the fact-finding confirmed, starting from the direct cause, the gradual deepening of the indirect causes, to analyze the whole cause of the accident, on this basis, to determine the direct responsibility and leaders responsible for the accident, then determined in accordance with its role in the accident the primary responsibility of the relevant persons responsible for serious treatment; in order to prevent accidents from happening again, the preparation of accident prevention measures, the measures will improve working conditions, working environment and improve the technical level in the first place; the majority of construction workers on-site education so that they learn, abide by the rules, good security; for accident casualties to properly treat and follow the provisions of its placement.

(3) Increase administrative punishment, so that the law must be strictly enforced. According to relevant laws and regulations, we disregard the production worker safety, safety management is chaotic, safe production responsibility system is not implemented, the scene there is a serious risk of enterprises to increase efforts to discipline, punish them according to the law, truly cause of the accident is unclear hold too, and employees responsible for the accident left off no education, no process responsible for the accident left off, do not miss the development of preventive measures. Dare to tackle tough problems. Really exercise the "safe production a veto".

## 4. Government regulatory measures to improve building safety

#### 4.1. Establish temporary security facility costs earmarking system

Cost must be established to provide for the safe production guarantee mechanism, in the construction bidding, security costs shall enter bid cannot compress. In construction, supervision, construction and other units and related building safety supervision departments must strengthen supervision, so that security costs in time, earmarking, shall be used.

#### 4.2. Establish and improve the safety oversight bodies and construction firms for safe administration

Because less staffing, professional and technical personnel less, funding is not guaranteed, construction safety supervision work hard to smoothly; construction internal enterprise security management mechanism can not be optimistic, present, except for a small number of one, two companies with a Safety Section , with full-time security staff, other companies and construction sites are basically part-time security officer, mainly in order to meet the inspection passively, not actively working. This leads to loose internal security management, construction site safety no catch, no security technology ledger management, production safety has become, "said it is important, do not get busy" and "cumbersome".

### 4.3. Improve construction safety supervision and management measures

First, the use of dynamic tracking and checking with the person responsible for the system fixed combination of methods. In the process of safety supervision procedures, designated as the site of a safety supervision, responsible for the safety oversight site correspondent, usually technical guidance and supervision of the implementation of site safety education and protection measures. The construction site of civilization, assess the level of security, station leaders led by dynamic tracking checks [3]. Such a person designated services, collective dynamic scoring assessment methods, which addresses the construction site security officer problem of low level of technology, mentoring and training the company security officer project department, but also to ensure the fair and equitable security checks, and honest law enforcement.

#### 5. Conclusion

Construction safety management, adhere to safety first, prevention, comprehensive management policy, which is an important policy of our party and the country is a fundamental principle of socialist enterprise management. In recent years, China's production safety work is facing new challenges and opportunities, production must be safe, secure production of security, how to promote work safety culture, improve enterprise security management, should be focus on "management".

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