Brief Analysis on the Construction Site Safety Management Situation and Countermeasure

Yongjun Wang*
Zhenwan Construction and Installation Co. Ltd, Xunyang, Shaanxi 725000, China

ABSTRACT The construction industry is a high-risk, the industry frequent accidents, and in the production process, there are many uncontrollable influence factors. In recent years, the safety management in the construction industry is gradually maturing and perfect, but the construction field casualties multiple situations has not fundamentally reversed, this article focuses on the causes and countermeasures of construction casualties explore.

1. Description of the construction site
(1) Construction site safety evaluation of the construction is seen as a system composed of several elements, and each element of the change, if there is an abnormality and danger will lead to an accident, thereby endangering the safety of the entire system; abnormal presence of each element and dangerous to be adjusted and controlled, and will make the system to consolidate security infrastructure. Evaluation of the security situation on the whole construction site, embodies the basic requirements of system theory, construction safety is no small matter, all related personal safety of construction workers and the interests of the thing, and then a small security issues, but also to make every effort to follow the above. President Hu Jintao has emphasized: "Party committees and governments at all levels firmly establish the 'responsibility is extremely heavy' concepts, adhere to the people's lives and safety in the first place, to further improve and implement various policies and measures of production safety, efforts to improve the safety level of production", so insist on construction safety is no small matter, it is to adhere to the fundamental security interests of the majority of construction workers and building, as our construction company managers the starting point and destination, the current production safety has become to build a socialist harmonious One important part of society, the construction industry as a pillar industry of the national economy, which has been plagued by safety issues the industry and the majority of scholars. The focus of our safety management at the construction site, as has long been the construction site safety management in the traditional "experience based" management of the main post, the construction process is difficult to effectively implement a more dangerous source of comprehensive pre-control, which is also building construction the main reason for the frequent occurrence of accidents, therefore PDCA mode applications to improve system security management theory of traditional construction site safety management is imperative.

(2) In this paper, a comparative study of the qualitative and quantitative analysis combined with empirical research and theoretical research method of combining research results of the integrated use of industry experts and scholars, analyzes the current situation of production safety management of construction enterprises and problems, and then Based on the principles of the safety management system and its core work - introduces and analyzes the evaluation of hazard identification, and occupational health and safety management standard operating mode, the proposed construction site application "PDCA" cycle mode the importance and necessity of security management. In this paper, PDCA cycle mode differences in the quality of management and security management applications comparative analysis, the pattern is applied improvement measures proposed construction site safety management.

(3) This paper also works as the research object to verify the improved PDCA safety management in the feasibility and effectiveness of the implementation of the construc-

KEYWORDS Construction Safety management Situation Countermeasures

Original Article

Copyright © 2015 Yongjun Wang
doi: 10.18686/wcj.v4i1.5
Received: January 15, 2015; Accepted: February 23, 2015; Published online: March 27, 2015
This is an open-access article distributed under the terms of the Creative Commons Attribution Unported License (http://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Corresponding author: Zhenwan Construction and Installation Co. Ltd, Xunyang, Shaanxi 725000, China. E-mail: 246933745@qq.com
2. Construction safety management analysis

Dangerous source generally refers to a construction project in the whole system of potentially dangerous release of energy and materials, under certain triggering factors can be transformed into the site of the accident, area, place, space, equipment and location, but also may lead to death, injury, the combination of occupational, property damage, or damage the working environment of the above formed the roots or state. Through the entire construction site of the construction process analysis, defining a construction site during construction work area, the construction environment, equipment, personnel, etc. which are dangerous source of its hazardous nature, the degree of risk, there is a condition, dangerous source of energy and matter into accident The law of the transformation process, conversion conditions, what is the trigger factor. Through the effective control of energy conversion and material that will not translate into an accident hazard, i.e. accidents and lead to dependency exists between the various sources of danger accident, hazard is the cause of the accident is the result. By analyzing the reasons for the outcome of way, revealing its internal relations and mutual relations in order to arrive at a correct analysis of the conclusions in order to take appropriate security countermeasures; limitations due to the impact of the construction site, the majority of the construction site within the office, staff rest room, staff quarters, warehouses and other buildings adjacent to each other; these buildings are mostly temporary, simple structure, and the fire resistance rating of more than three or four. In addition, some staff quarters and important warehouse and dangerous goods warehouse adjacent to each other, even temporary buildings are spaced just plywood and other flammable materials are separated, combined only set a safe exit, the event of fire, evacuation of personnel is difficult, even very vulnerable to fire camp situation. In addition, due to construction needs, part of the construction site is still using wooden scaffolding and other flammable and combustible material as a security matter, especially stacked renovation site both have a lot of flammable decoration materials, and storing paint and other flammable dangerous goods, in case of fire, is bound to cause violent combustion will spread rapidly.

3. Building construction safety management strategies

Safety Evaluation, also known as hazard assessment or risk assessment, construction site safety evaluation is to risk building production activities or construction site before construction of the existence of hazards and safety measures were evaluated. It uses the principles and methods of systems engineering, systems exist for qualitative and quantitative risk analysis, the system determines the likelihood and severity of accidents, to provide a scientific basis for decision-making, and the safety of the construction supervision and management personnel provide predictive information, so as to carry out targeted supervision and management, to ensure the high-rise construction site fire safety, construction units, construction units should improve the fire safety system, develop appropriate “fire safety management system.” High-rise building construction units and construction units should set up fire leading group, set up voluntary fire brigade, regular fire safety inspections and fire learning. Construction site should enact the necessary fire protection measures and fire safety regulations, and organize relevant personnel to study, so that each contractor and various types of jobs to follow, so the implementation of fire prevention. For the implementation of the various fire prevention measures and fire safety regulations, should strengthen supervision and inspection. High-rise building construction site should strictly enforce the flare approval system, overall layout construction approval system, “prevention” is the principle of safety in production, but no matter how tight the prevention work, always difficult to avoid casualties fundamentally. In order to avoid or reduce the loss of casualties, calmly deal with emergency situations, we should require rigorous contingency plans should improve the organization's emergency response team capable, flexible alarm system and a complete emergency rescue facility. “Emergency Action Plan” covers the “accident prevention, emergency response, rescue” These three parts. It was once the construction site accidents, reduce casualties and reduce property losses of an effective security measures countermeasures [2]. To ensure the smooth progress of construction enterprises in the construction process of production safety, civilized construction site management requirements, based on construction safety hazards and elaborate analysis, we propose the following:

(1) Improve enterprise security management system, attaches great importance to production safety, earnestly implement the various measures to ensure safety in production.

(2) Create a corporate culture of safety in production; so that everyone can speak safety, always grasp the security, the implementation of three education workers, and the
implementation of pre-service training compliance rate of 100%.

(3) Owners to foot safe and civilized construction costs, and construction enterprise safe and civilized measure to be checked.

(4) On contract to establish a sound system, to eliminate layers of subcontractors, ignore the security construction phenomenon.

4. Summary
As a project manager in construction, in addition to improving quality grasp progress, the primary responsibility and obligation is to ensure the well-being of construction workers, maintaining stability and healthy development of the construction industry, to ensure that all aspects of stability and development. Project Department in the daily management, so that the construction safety is no small matter, can we truly on the front building systems, implementation of the "scientific concept of development" important thought, highly responsible for people's lives and property; but also to use practical action to reflect the interests of the masses is no small matter; so that the construction safety production more standardized, more standardized, more secure and more civilized, from the height of the practice of "scientific concept of development" Important Thought to strengthen the legal system, pay close attention to the basic work, to deepen the safety regulation, strengthen safety supervision, Zaza real a new situation on the ground to do the construction work of production safety, and strive to create a safe work produced by our company, in order to promote further improve the local people's material life, for local economic development faster and better and make our due contribution.

References