

# Research on construction site management of environmental protection engineering

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Abstract: With the improvement of the social and economic level, the quality of people's lives has been significantly improved, and environmental protection has gradually attracted people's attention. Environmental protection projects have developed rapidly in this environment. In order to further improve the environmental protection effect of the project construction, it is necessary to do a good job of control and management of the construction site. Judging from the current situation, there are still many problems in China's environmental protection engineering construction site management. Based on this, this article analyzes the deficiencies in the field management of environmental protection projects and proposes corresponding solutions, hoping to promote the overall level of environmental protection projects.

Keywords: Construction engineering; environmental protection engineering; construction site; site management

### 1. Introduction

At present, the urban construction is improving day by day, and the status of environmental protection project is getting higher and higher. It is gradually applied in the overall planning of urban construction. Environmental protection project is a people's livelihood project, which can improve the level of urban environmental hygiene and provide an excellent, clean and healthy living environment for citizens, to a large extent, it improves the quality of life of residents, and promotes a healthy development of spiritual civilization with a good image of a city. Environmental engineering is mainly aimed at environmental protection to solve environmental pollution and destruction caused by industrial production and engineering construction. Specifically, environmental protection projects can be divided into air pollution prevention and control, water pollution control, noise prevention and control, and solid waste disposal. With the continuous improvement of people's awareness of environmental protection, these projects have gradually received more attention and applications<sup>[1]</sup>.

# 2. Importance of construction site management for environmental protection engineering

#### 2.1 Contribute to the development of a harmonious society

Harmonious society requires harmonious coexistence of people, society and ecological environment, adhere to the core of sustainable development, establish an environment friendly social environment, better promote the construction of modern national economy, follow the law of development of natural environment, adopt scientific and reasonable

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methods, and reduce the hard nature of economic activities to the natural environment. Conduct on-site management of environmental protection projects, improve the construction level of environmental protection projects, at the same time, ensure the realization of the final effect and better promote the sustainable development of a harmonious society.

### 2.2 It is the need to optimize economic development

With the improvement of living standards, people pay more and more attention to environmental quality, in traditional social development, economic efficiency is the sole criterion for measuring the progress of a society, the construction of a modern harmonious society pays more attention to environmental protection and ecological construction, and pays more attention to the coordinated development of ecological benefits and social benefits. If we want to achieve rapid economic development under the premise of environmental protection, you must do a good job in environmental protection engineering site management. In a word, if we want to promote the harmonious unification of the economy and the environment and create a comfortable and healthy living environment, we must do a good job in environmental protection and give full play to the implementation effect of environmental protection projects.

### 2.3 It is the need to maintain social stability

The operation of natural environment is complicated, and the relationship between human and natural environment is inseparable, when the natural environment is destroyed and no treatment or remediation is done, it will threaten people's health and even cause serious disputes, which is not conducive to the harmonious development of society. Therefore, in order to maintain a stable and harmonious social relationship, it is very important to do well in the construction site management of environmental protection projects, so that similar problems can be avoided.

# 3. Current situation of construction site management of environmental protection engineering in China

## 3.1 The professional level of environmental protection engineering site management personnel is not high

Compared with other construction projects, environmental protection projects are highly professional, which requires higher requirements for field managers and builders. However, from the current point of view, construction site management personnel do not have mature basic knowledge and rich practical experience, and there are many loopholes in site management work, environmental protection project construction management work is not a task that anyone can perform. It must be rigorously screened. The specialized training and position mechanism of the environmental protection engineering site management personnel in China is in a blank state, and the number of professionals is seriously deficient, which directly affects the overall level of China's environmental protection site management. In addition, the construction personnel, as an important part of site management of environmental protection works, can not operate strictly according to the standard requirements, which affect the quality and performance of environmental protection projects, management work is faced with many difficulties and is not conducive to improving the management level of construction sites<sup>[2]</sup>.

#### 3.2 The management mode of environmental protection works is lack of innovation

Judging from the overall situation, China's technological research and application in environmental protection projects started relatively late and fell with other Western developed countries. The management of environmental protection projects on the spot has not yet formed a mature management model. Most of the management models used in the current project are summed up by previous experience, or other engineering management models, lack of innovation and advanced nature, and can not meet the specific conditions of the construction site of environmental protection engineering. In addition, China has vast territory and complex geographical environment. There are many differences in geographical environment and natural conditions between the east and the west, and between the north and the south. The application of environmental protection engineering in different environment is also different. If the

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management personnel can not combine the actual situation in the local area and take the previous experience summarization, not only can not complete the field management work, but also have negative adverse effects, which seriously hinders the healthy development of environmental engineering<sup>[3]</sup>.

# 3.3 There is no comprehensive understanding of customers and markets when developing environmental projects

At present, the technology of information and intelligence has developed rapidly, in every field, the application is relatively mature. Only by having a comprehensive understanding of all industries and market needs can we ensure that engineering construction is compatible with social development. But at present, many environmental protection projects do not play the same effect as the information technology. The ideological consciousness of the managers does not keep pace with the times, and the technological technology lacks innovation and transformation. In the implementation process of environmental protection projects, the actual needs of customers and the market are not fully understood, and the losses are caused in all aspects. This requires the relevant personnel to grasp the market demand and the expectations of the customers before the implementation of environmental protection projects, and to ensure the effectiveness of the investment.

# 3.4 The supervision and management mechanism of environmental protection engineering is not perfect

The supervision and management of environmental protection projects, like other projects, plays a very important role in project construction. A good supervision and management mechanism is the primary condition for ensuring the value of environmental protection projects, in this process, the supervision engineer must understand their own responsibilities and ensure the realization of environmental protection goals in construction. However, from the point of view of the construction of China's supervision system, the development is slow. There are many problems in the implementation process, and there is no unified, standardized, and scientific supervision model. In addition, the supervision system is mainly embodied in the construction stage, which makes some supervisors unable to define their own responsibilities, and the supervision function can not run through the whole process of the project construction. Many units regard the supervision engineer as the quality inspector of the project. The status and responsibilities of the supervisor are not paid enough attention to, and the effect of environmental protection can not be effectively realized<sup>[4]</sup>.

## 3.5 The late maintenance work of environmental protection project is not in place

Environmental protection engineering construction site management should not only pay attention to process management, but also should be sufficient for the maintenance and maintenance of the later period. For environmental protection engineering construction, the ultimate goal is to realize environmental protection and pollution control, and later maintenance work also belongs to the scope of environmental protection engineering. However, because of the imperfect management system in this area, many units lack the attention to the later maintenance of the project, and have a great impact on the overall benefit of environmental protection engineering, which restricts the smooth development of environmental protection projects.

# 4. Strategies to improve the construction site management of environmental protection engineering

## 4.1 Formulate a scientific and rational construction plan

The implementation of environmental protection projects requires a complete and scientific plan. The construction unit should combine the specific conditions of the local area, comprehensively analyze the impact of the natural environment and geographical conditions, and formulate a scientific and reasonable construction plan, to provide a strong reference for the smooth implementation of environmental protection projects and maximize the effectiveness of environmental protection projects in pollution control and environmental protection. In the process of project

construction, the constructors should work strictly in accordance with the technical methods and technological processes in the project, so as to give play to their own guiding role. In order to ensure the rationality of the project, the staff should prepare the preparatory work in the early stage and scientifically plan and configure the geographical environment, natural conditions, hydrologic conditions, materials and equipment for the site of the project, and reduce the cost and cost while realizing the project quality goal<sup>[5]</sup>.

#### 4.2 Improving the professional quality and management level of management personnel

The environmental protection project site management staff must possess strong professional knowledge and require managers with strong technical skills and rich experience to be responsible. Therefore, in the environment of environmental engineering resources allocation, the relevant units should send professional management personnel, regular training of managerial personnel and construction personnel, improve staff's sense of responsibility and technical level, and cultivate a high-quality and high-tech environmental protection team. In addition, when selecting construction site management personnel, it is necessary not only to examine the professional knowledge of the managers, but also to understand the relevant practical experience, to be able to deal with various problems encountered in the construction of environmental protection projects, and to effectively guarantee the realization of the project quality objectives.

#### 4.3 Establish a perfect project management mechanism

Engineering management system is the basic guarantee for the smooth operation of field management. In order to achieve the ideal environmental protection effect in environmental protection engineering construction, it is necessary to establish and improve the engineering management mechanism, and implement the responsibility and supervision standard. On the basis of the actual situation of environmental protection engineering in the process of standard formulation, on the basis of meeting the relevant laws and regulations and standard standards, the concept of environmental protection is integrated into the environmental protection standards, and the supervision standards for environmental protection are established and perfects. Compared with traditional engineering construction, environmental protection regulatory standards must have environmental protection and environmental protection concepts. The relevant engineering supervision and management departments must set up a special supervision team to conduct real-time dynamic management of the site.

#### 4.4 Strengthen the scientific management of construction materials

Usually, construction materials have a direct impact on the quality of construction. The quality of construction materials plays an important role in the successful completion of environmental protection projects. In the construction site management of environmental protection projects, the construction units, supervision units and construction units should attach importance to the scientific management of materials, strictly control the procurement process, and select suppliers with good reputation and high quality, do a good job of storing and using materials after entering the site, specialized management personnel are responsible for material management, storage and storage records, and adopt scientific and reasonable methods to reduce the impact of poor protection on material quality, increase material utilization, and reduce costs and expenses<sup>[6]</sup>.

### 4.5 Improve environmental protection engineering construction and supervision mechanism

In the construction of environmental protection projects, the role of supervision units cannot be ignored, and the selection of supervision units is an important part of project construction. With the continuous improvement of the economic system, the status of environmental protection project supervision has also been strengthened. Due to various reasons, the supervision unit is facing many problems in its work, and the establishment of the supervision mechanism is becoming increasingly important. Establish a supervision mechanism that is suitable for the development of market economy and conforms to the engineering construction, to make clear the relationship between the three parties of the supervision units, construction units and construction units, and to ensure the scientificity, rationality and effectiveness

of the establishment of the system according to the requirements of relevant technical standards and policies and laws. Provide strong technical support for the construction of environmental protection projects, give full play to the supervisory and management responsibilities of the supervision unit, and ensure the smooth completion of environmental protection projects.

#### 4.6 Clear acceptance and review criteria, and do well in later stage maintenance

After the completion of the project, the corresponding acceptance and review work should be carried out. The environmental protection project should not only have related quality standards, but also strengthen the acceptance of environmental protection standards. The evaluation criteria must be determined in accordance with the requirements of the national laws and regulations. According to the specific indicators of the environmental protection department and the actual conditions of the construction, the corresponding criteria for evaluation and evaluation are formulated. In addition, we must pay attention to continuous control and management after the completion of the project, implement the later maintenance work, and give full play to the value function of the environmental protection project<sup>[2]</sup>.

#### 5. Conclusion

In summary, under the continuous improvement of the economic level, the number of industrial production and construction projects continues to increase, causing great damage to the ecological environment. In order to meet the requirements for the sustainable development of modernization, the construction of environmental protection projects is of utmost importance. In order to realize environmental protection, pollution control, energy saving and reducing consumption, a scientific and reasonable management method must be adopted. Only in this way can the social benefits, economic and ecological benefits of environmental engineering be fully developed. Through the analysis of the existing problems in the construction site management of environmental protection projects, this article discusses the construction scheme, the scientific management of materials, the professional quality and the comprehensive quality of personnel, and the improvement of the public participation, so as to promote the sustainable development of the whole industry.

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