

The Importance of Environmental Impact Assessment in Environmental Engineering

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Abstract: With the progress and development of the economy, a series of environmental problems and natural disasters have been caused by people's influence and destruction on the environment. Faced with this situation, relevant departments of China have begun to strengthen environmental protection. In the process of carrying out environmental protection projects, environmental impact assessment is an important link. It determines the direction of projects and the formulation of decisions throughout the projects, and is also the prerequisite and basis for the smooth development of environmental engineering. Before the start of an environmental engineering project, it is necessary to comprehensively evaluate the environment to ensure that the entire project can meet all environmental indicators and requirements before the subsequent environmental engineering construction and then development can be carried out smoothly. At the same time, strict approval procedures are required to ensure the rationality and scientificity of the entire environmental engineering construction. In the process of carrying out specific environmental engineering work, it is needed to clarify the importance and significant position of environmental assessment and formulate scientific and reasonable planning and management based on specific environmental conditions. This will play an important guiding role in effectively improving the efficiency and quality of environmental engineering. The importance of environmental impact assessment in environmental engineering is analyzed for reference.

1. Introduction

Environmental impact assessment plays an important role in the entire environmental engineering. It can realize the specific analysis and assessment of the impact of the engineering environment ^[1-2]. Since the reform and opening up, there have been a lot of environmental problems in the process of economic development in China. At present, attention is begun to given to environmental protection, and the development of environmental engineering has been widely recognized by people. However, during the development of environmental engineering, it is necessary to evaluate the rationality and scientificity of a project, and the basis for this evaluation depends on the actual environmental impact assessment ^[3-4], so as to ensure the subsequent development and progress of the entire project. Therefore, environmental impact assessment plays a decisive role in effectively carrying out environmental engineering work, which requires relevant personnel and departments to pay attention to. In the entire environmental impact assessment process, it is necessary to follow the relevant evaluation process and clarify the focus and direction of the environmental assessment, with the purpose to ensure that the engineering nature and direction of the entire environmental engineering project meets the basic requirements of environmental assessment ^[5-6].

2. The Importance of Environmental Impact Assessment in Environmental Engineering

With the development of the economy, China has vigorously carried out the construction of environmental engineering projects in recent years, and environmental impact assessment is very necessary in the whole process of these projects, because it is the basic premise and reference basis

for determining the development of the environmental engineering projects. In the entire traditional engineering construction process, many organizations and individuals tend to shorten the construction period, aiming at achieving cost-saving control and improving the economic benefits of themselves. Therefore, they do not conduct environmental impact assessment before the implementation of environmental engineering tasks, which leads to directional errors and problems in the entire project. This kind of non-standard environmental engineering construction can easily lead to the negative impacts and damages on the surrounding environment and cause great environmental pollution. In order to pursue greater economic benefits, some engineering organization do not hesitate to destroy the surrounding environment and use illegal means to carry out engineering construction, which has caused irreversible impacts on the ecological environment of China. In this context, relevant departments need to carry out strict environmental impact assessment before project construction, with the purpose to suppress the occurrence of illegal construction by illegal enterprises and vigorously promote and apply the environmental impact assessment mechanism. This will be of great significance to improving impacts of environmental engineering on the surrounding environment. Enhancing environmental impact assessment can protect the ecological environment in the project from being affected and destroyed. And at the same time, it can promote the harmonious coexistence and development of human activities and the natural environment, and also provide more experience for long-term environmental protection. The achievement of this goal requires relevant individuals and organizations to improve their environmental protection awareness, thereby constantly optimizing and balancing the harmonious coexistence relationship between human economic development and the natural environment. On the premise of protecting the environment, the development of environmental engineering is of great significance to the economic development and sustainable use of resources in China.

3. Analysis of the Status Quo of Environmental Impact Assessment in Environmental Engineering

Environmental impact assessment plays an important role in the development of environmental engineering. It can provide an important reference for environmental engineering and make the entire environmental engineering more scientific and efficient. With the further development of the engineering construction in China, relevant departments have become more and more aware of the importance of environmental impact assessment work, which has promoted the further development of environmental impact assessment to a certain extent and established the authority and effectiveness of environmental impact assessment there. The current environmental impact assessment in China still has various problems in environmental engineering. Relevant departments have increased their emphasis on it in recent years and related measures have also been performed to standardize and optimize the entire work. But in reality, many environmental engineering companies neglect to implement environmental impact assessment, because they do not realize the importance of environmental protection, which has caused a lot of unreasonable phenomena in the entire environmental engineering construction and resulted in serious damage to the environment.

In addition, the policy system of relevant Chinese departments is not sound enough under the traditional concept of economic development, and there is a lack of scientific management and supervision of environmental impact assessment. This makes the entire environmental impact assessment stay on the surface and has not been implemented in specific work, so it is difficult to produce the expected effects. At the same time, it also leads to the separation and discrepancy between environmental assessment data and actual environmental engineering, which increases the probability of environmental problems. Government departments need to establish a complete supervision and management system for environmental impact assessment to ensure the smooth development and progress of the entire work, so that each work link and environmental engineering tasks can be effectively connected. To achieve the expected effect and quality of environmental impact assessment, the entire environmental engineering must be more efficient and scientific, which will help to obtain economic benefits while generating huge environmental benefits. This is also in line with the sustainable development goal of China's economic construction, and at the

same time, it ensures that the surrounding environment of the project is not affected by the project to a certain extent and improves the environmental quality.

4. Existing Problems in the Construction of Environmental Engineering in China

4.1 Sewage Discharge and Treatment

A large amount of sewage is discharged in the industrial production process. If it is not effectively controlled and treated, the sewage discharge will cause serious environmental pollution problems, because sewage contains strong toxicity and some substances are difficult to disappear through degradation. When sewage is discharged into the local water system, it is easy to cause large-scale water source pollution. Therefore, relevant departments should establish and improve a strict sewage discharge management system to scientifically manage and treat the sewage discharged from projects. Through the analysis and understanding of the current sewage discharge situation in China, many environmental engineering projects did not establish a complete sewage discharge and management system. In the whole process of the projects, the sewage was simply treated and then discharged into the local water system, which has caused a large area of water pollution. Due to the mobility of water sources, the pollution and hazards have seriously affected the health and life safety of local people and caused great social harm. Therefore, the discharge and treatment of water pollution has become one of the important issues in the construction of environmental engineering, which needs to be highlighted by relevant departments.

4.2 Serious Pollution by Domestic Garbage

The specific environmental engineering construction generally requires the participation of a large number of people, which will result in a lot of domestic waste, and it is easy to cause serious environmental pollution if it is not effectively controlled and treated, which is also one of the important pollution sources in the construction of environmental engineering. As the pace of urbanization accelerates, a large number of cities generate thousands of tons of garbage every day, and these rubbishes will cause great pollution to the entire environmental area if they are not processed in time and effectively, which will have a serious impact on people's production and life. The most usual method of treating domestic waste is to transfer it to other relatively open areas or burn it on the spot. However, due to the complex composition of domestic garbage, many different materials will produce a large amount of toxic and harmful gases during the combustion process, which will generate serious pollution to the environment and air. Therefore, domestic waste has become a very common problem in environmental engineering construction, and it needs to be paid attention to by relevant departments. It is necessary to use correct methods for waste disposal to ensure that the entire environmental engineering construction is more environmentally friendly.

4.3 Problems of Personnel

In recent years, relevant departments of China have begun to place stress on environmental issues and have released a lot of publicity on environmental protection, which clarifies the importance and significance of environmental protection and continuously improves the awareness of the public about ecological environmental protection. However, in the actual environmental engineering construction, a large number of people do not notice the importance of environmental protection. They are still stuck at the traditional level of understanding, and at the same time lack understanding and mastery of the relevant skills and knowledge of environmental protection. They do not fully consider the environmental elements around the project field and blindly carry out the project. In this sense, the awareness of these people is also one of the important causes of environmental and ecological problems. Therefore, the promotion and training of environmental protection awareness of relevant management personnel should be strengthened.

5. Methods to Improve the Effect of Environmental Impact Assessment in Environmental Engineering

5.1 Improving Environmental Protection Awareness

In the specific environmental engineering construction, continuously improving the staff's environmental protection awareness can effectively promote the smooth development and progress of the environmental impact assessment work, thereby avoiding the environmental engineering construction from causing greater impact on the surrounding environment. Therefore, it is of great practical significance to improve the environmental protection awareness of personnel, and actively encourage and mobilize them to participate in environmental governance and protection. This requires relevant government departments to increase environmental protection publicity and clarify the importance of environmental protection. It is necessary to actively mobilize social organizations and the public to participate in environmental protection and construction, so that they can accept and highly recognize the significance and importance of environmental impact assessment and then play their own role. At the same time, the environmental department should establish a complete environmental monitoring and management system to ensure the smooth development and progress of the entire work and also ensure the standard and scientific nature of the entire environmental impact assessment work. This is of great significance for protecting the local environment and promoting more standardized and scientific construction of environmental engineering.

5.2 Optimizing and Improving the Approval Process for Environmental Impact Assessment

Through the analysis of the current environmental engineering construction in China, it can be seen that it is needed to continuously improve and optimize the existing approval process of environmental impact assessment to ensure that the entire work is more scientific and efficient and obtain the expected results. The approval process of environmental impact assessment needs to be optimized to facilitate continuous and accurate environmental assessment and judgment, which requires relevant environmental departments to strictly control different links of environmental engineering work and predict the harm and impact that different work links may cause to the environment. At the same time, it is necessary to strictly control the various approval links, and establish and improve a comprehensive environmental service system based on the specific environmental conditions surrounding the environmental engineering projects. Timely stop is required when an unreasonable phenomenon occurs in a project and may cause environmental damage to varying degrees. Strict examination and approval as well as scientific management and supervision is of great significance to the later project construction. Ensuring the scientificity and rationality of the entire environmental engineering is also an important way for the smooth progress of environmental impact assessment. Therefore, improving and strengthening the approval process of environmental impact assessment is of great significance to the effective development of environmental engineering.

5.3 Coordinating the Work between Enterprises

In the specific implementation process, the entire environmental impact assessment work involves many departments, and they need to perform rigorous audits to ensure the smooth development and progress of the entire environmental impact assessment work. This requires relevant departments to do a good job of coordination and communication between different departments. Clarifying the relationship between different organizations and the objectives of environmental protection can effectively avoid the conflicts and disputes of economic interests between them. This can ensure the smooth development and progress of the entire environmental engineering, while achieving common economic and ecological benefits.

5.4 Improving Relevant Laws and Regulations for Environmental Impact Assessment

Before the start of an environmental engineering project, relevant personnel need to fully understand the goal and operation status of the project, and combine the environmental impact assessment data to carry out the work. At the same time, it is needed to strictly follow relevant laws and regulations, comply with specific requirements of environment protection and project construction, and implement each task in the specific construction, so as to make the entire

environmental engineering more scientific and standardized. In the initial stage of an environmental engineering project, it is necessary to expand the scope of environmental impact assessment, and continuously enrich the evaluation content and improve the work intensity, with the purpose to ensure that the entire environmental engineering is carried out within the prescribed laws and regulations. Relevant departments should also establish a complete supervision and management system, strengthen the supervision and management of the entire process of the entire environmental engineering progress, and discover problems as soon as possible. At the same time, it is necessary to select reasonable methods to solve the problem in combination with the specific environmental and project conditions to avoid affecting the development of subsequent projects. In a specific environmental engineering project, it is necessary to strengthen effective communication and cooperation between different departments. At the same time, there is also a need to implement a comprehensive responsibility system for the design department and evaluation department as well as the construction engineering organizations of the project, with the purpose is to improve the responsibility and environmental awareness of the departments and ensure the smooth progress of the entire environmental engineering project and environmental impact assessment.

6. Conclusion

the current status of the environmental impact assessment in the environmental engineering can be understood from the discussion above. The author analyzed the existing problems and summarized some relevant countermeasures, which will help to improve the efficiency and quality of environmental impact assessment and avoid adverse effects of environmental engineering on surrounding environment. Chinese governments should strengthen their support for environmental protection, establish and improve systems for environmental impact assessment, thereby making the entire environmental engineering construction more efficient and scientific and avoiding pollution to the surrounding environment. To achieve the goal of harmonious coexistence and development of human economy and natural resources, it is necessary to continuously strengthen the promotion of environmental protection, raise people's awareness of environmental protection, establish and improve a complete supervision system for environmental impact assessment, so as to ensure that the entire environmental assessment work is more scientific and standard. In actual work, strengthening environmental impact assessment is an inevitable trend for the future development of environmental engineering in China.

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