# A Brief Discussion on Environmental Impact Assessment Reporting System and Suggestions

Zhou Hang 1, 2, 3, 4, 5, \*, Wang Jian 1, 2, 3, 4, 5,

**Abstract.** Environmental impact assessment system has made great progress in recent years in China, but it still cannot meet the needs of practice, and there are still various problems in the compilation of environmental impact assessment report, but the existing environmental impact assessment system still needs to be improved. Therefore, in order to promote the normative and scientific development of the environmental impact assessment system, this paper constantly finds problems and draws experience from the development, improves the system, and provides improvement measures for the improvement of the environmental impact assessment(EIA) report in terms of content and form that adapt to the development of practice.

**Key Words:** Environmental Impact Assessment Report, Environmental Impact Assessment Law, System Improvement.

# 1. Basic Concepts of Environmental Impact Assessment System

The concept of environmental impact assessment was first proposed at an international environmental quality assessment academic conference held in Canada in 1964, and the environmental impact assessment system was first established in the United States in 1969. China first proposed the concept of environmental impact assessment in 1973. Article 6 of the Environmental Protection Law (for Trial Implementation) promulgated in 1979 clearly stated that "when new construction, reconstruction and expansion projects are carried out, a report on environmental impact must be submitted", formally established the environmental impact assessment system. China passed the "Environmental Impact Assessment Law" in 2002, establishing this system for the first time in the form of special legislation, and it was implemented on September 1, 2003. The implementation of this law marks that Chian's environmental legislation has entered a new era. The characteristics environmental impact assessment system in China are mainly reflected in: environmental protection laws are mandatory; planning and construction projects are included in the assessment; and environmental impact assessment is included in the capital construction procedure, which requires approval. The environmental impact assessment system combines law and science, and many of the laws and regulations are technical, and some scientific and technological means

are used in the implementation of the system. It integrates a variety of disciplines, including environmental science, chemistry, biology, fluid mechanics, etc., and comprehensively analyzes the impact of various human activities on various environmental elements and the overall regional environment [1].

<sup>&</sup>lt;sup>1</sup> Shaanxi Provincial Land Engineering Construction Group Co., Ltd., Xi'an 710075 China

<sup>&</sup>lt;sup>2</sup> Institute of Land Engineering and Technology, Shaanxi Provincial Land Engineering Construction Group Co., Ltd. Xi'an 710075 China

<sup>&</sup>lt;sup>3</sup> Key Laboratory of Degraded and Unused Land Consolidation Engineering, Ministry of Natural Resources Xi'an 710075, China

<sup>&</sup>lt;sup>4</sup> Shaanxi Provincial Land Consolidation Engineering Technology Research Center, Xi'an 710075, China

<sup>&</sup>lt;sup>5</sup> Land Engineering Technology Innovation Center, Ministry of Natural Resources, Xi'an 710075 China

<sup>\*</sup> Corresponding author: 260294988@qq.com

<sup>©</sup> The Authors, published by EDP Sciences. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (http://creativecommons.org/licenses/by/4.0/).

# 2. Problems in Environmental Impact Assessment Report System

Since the promulgation and implementation of the "Environmental Impact Assessment Law" in 2003, environmental management has formulated a large number of policies and regulations around environmental impact assessment in China. The evaluation is mainly carried out from the aspects of pollution prevention, technical standards and ecological protection, and at the same time, it also takes into account the relationship with economic development, and provides an institutional guarantee for environmental impact assessment. With the gradual improvement of the environmental impact assessment system, there are more and more environmental impact assessment problems in society, such as the confusion of EIA agencies, conflicts between environmental impact assessment standards, and the emergence of "intermediaries" in the environmental impact assessment technology market. Compared with some developed countries, there are still some problems.

### 2.1 The environmental impact assessment report lacks technicality and authority

Environmental protection related laws and regulations are gradually improving in China, but the environmental assessment mechanism still does not play its due role. One of the reasons is the lack of corresponding technicality and authority of environmental impact assessment report in China [2].

The EIA report is the conclusive document and the centralized presentation form of the environmental impact assessment, which plays a vital role. At present, China's "Environmental Impact Assessment Law" "Construction Project Environmental Management Regulations" stipulate that major construction projects must first conduct an environmental impact assessment and pass an environmental impact assessment report, and be reviewed by a qualified EIA agency. However, the authenticity of the environmental impact assessment report has been questioned in practice, and it is believed that the EIA report can be concealed and falsified [3]. Even if the environmental impact assessment report is formulated in strict accordance with the law, it still cannot be implemented in practice, and it is just a piece of paper. Moreover, the environmental impact assessment report itself lacks corresponding technical support. The content of the environmental impact assessment report itself is too general and its authority is insufficient, which is also an important reason for questioning the validity and scientific nature [4].

### 2.2 Transition period is disorderly during environmental impact assessment work

The procedures of the environmental impact assessment system are imperfect, and the procedures for different objects are different. For example, there are obvious differences in the procedures followed between planning and construction projects, resulting in problems in the connection of the provisions of the environmental impact assessment system at different stages. From 2003 to 2018, a complete set of work system was gradually formed for the environmental impact assessment work. Each EIA agency is equipped with a corresponding number of professionals who have obtained the certificate of environmental impact assessment engineer, and employees who have obtained the employment certificate of environmental impact assessment, and are managed by industry category, reflecting the professionalism and pertinence of the environmental impact assessment work. In response to the policy guidelines, the "Environmental Impact Assessment Law of the People's Republic of China" has been revised to cancel the review and issuance of environmental impact assessment qualification original environmental impact certificates. The assessment system is abolished, and the new environmental impact assessment management system has not been fully established [5]. According to the latest draft of the Ministry of Ecology and Environment, the environmental impact assessment technical institution only needs to have professionals who have obtained the certificate of environmental impact assessment engineer to preside over the preparation. Since the environmental impact assessment work is quite professional, in the current transition period, some engineers ignore the technical nature of the environmental impact assessment documents for the sake of income and widen the business, do not pay attention to the quality of the environmental impact assessment documents, and do not systematically study the latest promulgated Relevant guidelines, standards, etc., disrupt the implementation of the environmental impact assessment system.

## 3. Analysis of the Causes of the Problems

### 3.1 Analysis from the perspective of Legal Positivism

In order to realize the system function and carry out effective environmental assessment, the environmental impact assessment report should be an analytical description with primary and secondary, rather than a comprehensive encyclopedia-style introduction. Important matters of environmental impact should be discussed and explained, rather than a brief description and explanation of the important matters. For example, if it is determined that a certain matter is not an important influencing factor, it is necessary to explain why the matter is not an important influencing factor, rather than ignoring or simply explaining the matter. In addition, the environmental impact assessment report should describe how the project's impact and alternative solutions are

analyzed and demonstrated, and whether they comply with national standards, local standards or industry standards [6].

Article 17 of "Environmental Impact Assessment Law" stipulates the contents that should be listed in the environmental impact report of a construction project, mainly including: the general situation of the construction project, the current situation of the surrounding environment of the construction project, the analysis and prediction of the possible impact of the construction project on the environment and evaluation, environmental protection measures of construction projects and their technical and economic demonstrations, economic profit and loss analysis of construction projects' impact on the environment, recommendations for environmental monitoring of construction projects and conclusions of environmental impact assessment [7]. Judging from the specific content of the environmental impact report for construction projects in Article 17 of Environmental Impact Assessment Law, the report is mainly an explanation of the objective situation, lacking explanation and analysis of the objective situation, and the recommendations are mainly on the implementation situation, while lack of relevant analysis and explanation.

#### 3.2 Analysis from the angle of ought to be

According to the analysis of my country's environmental assessment report, in order to achieve the institutional objectives of the "Environmental Impact Assessment Law", environmental impact assessment behavior should include the following contents in addition to the contents stipulated by laws, regulations and rules:

First, a proposal related to the environmental impact assessment reporting matter should be prepared in a timely manner. This suggestion is to prepare for the timely completion of the final explanatory report. The form of the suggestion can be flexible and diverse, it can be in the form of a separate document, or it can be an incidental explanation in a certain document of the formulation body. But recommendations must be presented at least in the form of normative documents in order to enhance the legal effect of the recommendations.

Second, the legal basis for the report must be clarified. In this sense, clarifying the legal basis is the legal obligation of the reporting body, because only the main responsible agency can write the environmental impact assessment report. The responsible agency shall be accountable to the entrusting agency.

Then, important behavior needs to be specified. The socalled important behavior refers to the behavior that may have important effects or the behavior that is potentially controlled and held by the government. This means that the analysis of specific behavior should be carried out in the society as a whole, in the affected area, in the affected interest, in the affected situation. For the description of important behaviors, it is necessary to describe both favorable and unfavorable situations, and more detailed descriptions of public health and safety impacts.

Finally, the possible effects must be stated. Effects include direct effects and indirect effects. Direct effects occur at the same time as the behavior, and indirect effects

may appear within a certain period of time or within a certain distance, but are reasonably foreseeable results. Whether it is a direct or indirect effect, or even a cumulative effect, the possible benefits or harms must be reasonably met and fully explained and analyzed in the report.

#### 4. Suggestions and Measures for Improving China's Environmental Impact Assessment Report

First, the environmental impact assessment report should state clear objectives and necessity. The environmental impact assessment report should briefly explain the alternatives proposed by the environmental protection agency, including the basic goals and necessity of the proposed behaviors [8].

Secondly, the matching of data and analysis with impact should be stated in the environmental impact assessment report, and important and unimportant materials and data should be classified, indexed and explained. The environmental impact assessment report should avoid citing a lot of useless content in it, and should describe the environment that may be affected in detail, and fully explain the measurement standard of environmental impact [9].

Finally, a list and index of the relevant participants should be included in order to identify tasks and hold them accountable. The environmental impact assessment report shall list the list of relevant participants, the qualifications of the relevant participants, and the list of persons who are mainly responsible for the personnel with important background qualifications in the environmental impact assessment report. Personnel should be substantially certified.

#### References

- Wang KL. Research on Environmental Impact Assessment System and Its Improvement Strategy [J]. Resources Information and Engineering, 2019, 34(03): 116-117+119.
- Wang JP, Zhang W. A review of research on strategic transformation of environmental management [J]. China Environmental Management, 2016, 2: 85-88.
- 3. Zhang H, Zuo L. Status and Development Trend of Environmental Impact Assessment Research [J]. Environment and Development, 2019, 31(02): 11+13.
- 4. Chen T. Deficiencies of Environmental Impact Assessment System in China and Its Improvement Suggestions [J]. China High-tech, 2018(24): 120-122.
- Chen R. Brief Discussion on Planning Environmental Impact Assessment System in China and Its Improvement [J]. Urban Planning, 2004(08):84-86.
- 6. T. Tietenberg. Emissions Trading: An Exercise in Reforming Pollution Policy [J]. Land Economics, 1986, 62(2): 214-216.

- 7. Chen Y. Environmental Impact Assessment System and Its Improvement in China [D]. China University of Political Science and Law, 2007.
- 8. Li SJ, Niu XJ. A Comparative Study of Public Participation in the Environmental Impact Assessment System of China and the United States [J]. Environmental Science and Management, 2007, 12:176-178.
- 9. Xiong J. The Shortcomings and Suggestions of China's Environmental Impact Assessment System [J]. Urban Geography, 2015 (6): 195.