

Judicial Determination of Major Risks in Preventive Environmental Civil Public Interest Litigation

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ABSTRACT

The current judicial practice is facing core challenges such as vague connotations of "major risks", inconsistent identification standards, and misplaced identification subjects. These problems stem from the inherent scientific uncertainty of environmental risks and the limitations of judicial expertise. On the basis of clarifying that "major risks" should be protected by the ecological environment itself, comprehensive identification standards should be adopted, and the occurrence of potential damage consequences should have a high degree of probability. At the same time, it is necessary to establish the dominant position of the court in the determination of "significant risks" and reasonably play the auxiliary role of administrative agencies and experts to ensure the independence and scientificity of the judgment. By systematically reshaping the identification criteria, proof rules, and subject roles, a clear and operational regulatory path is provided for the judicial identification of "significant risks" in preventive environmental civil public interest litigation.

KEYWORDS

Preventive environmental civil public Interest litigation; Major risks; Prevention principle; Identification subject

With the successful conclusion of the 14th Five-Year Plan, the 15th Five-Year Plan period is about to usher in a critical stage for China's ecological civilization construction to advance in depth. As an important institutional innovation in judicial guarantee for ecological civilization, the effectiveness of preventive environmental civil public interest litigation is directly related to the overall improvement of ecological environmental governance capacity during the 15th Five-Year Plan period. However, the current preventive environmental litigation still faces institutional bottlenecks in practice. Problems such as vague criteria for determining "major risks", unclear rules of evidence, and ambiguous division of powers between judicial and administrative authorities have led to inconsistent adjudication standards among courts across the country in hearing such cases, which not only affects judicial credibility but also restricts the full play of the preventive litigation system to a certain extent.

This article is grounded in the strategic deployment of the 15th Five-Year Plan on ecological environmental risk prevention and control, and is dedicated to solving the identification difficulties in preventive environmental judicial practice. By constructing a systematic framework for determining "major risks", it enriches the theoretical system of environmental justice, and provides academic support for establishing a governance paradigm of environmental risks that conforms to the requirements of Chinese-style modernization. It promotes a benign interaction of coordinated governance between judicial and administrative authorities, enhances the efficiency of ecological environment governance, and through strengthening preventive judicial protection, contributes to the realization of the goal of building a beautiful China during the 15th Five-Year Plan period.

1 Judicial Practice of the Determination of Major Risks in Preventive Environmental Civil Public Interest Litigation

In recent years, preventive environmental civil public interest litigation, as a new type of judicial remedy, has gradually attracted attention from all sectors of society. However, due to the lack of a complete system of relevant legal norms and obvious deficiencies in supporting mechanisms, the number of such cases in judicial practice remains relatively small. From an overall perspective, the existing system is insufficient to effectively cope with the impact of environmental risks and the challenges of ecological governance faced by modern society.

Judicial practice shows that in preventive environmental civil public interest litigation, the disputes between the parties are mostly concentrated on the determination of "major risks". However, courts in different regions have not yet unified their criteria for judging this key element, and the adjudication standards vary significantly, presenting a diverse and inconsistent practical pattern.

1.1 Analysis of Typical Cases

There are four typical concluded cases in preventive environmental civil public interest litigation, namely the Five-leaf Maple case, the Yunnan Oil Refinery case, the Huilongshan Hydropower Station case, and the Green Peacock case.

Although typical cases cannot exhaust all manifestations of "major risks", they provide necessary perspectives for examining the determination standards and intuitively reveal that litigants and judicial organs in practice understand "major risks" in their own ways when facing different types of cases^[1].

1.2 Existing Judicial Determination Models

The current judicial determination models for major risks mainly include administrative standard determination, scientific and technological determination, and social perception determination^[2].

1.2.1 Administrative Standard Determination Model

In the trial of environmental civil cases, due to the highly specialized, complex and uncertain nature of environmental risk cases, judicial organs often find it difficult to independently complete the determination of "major risks" without administrative judgment. Therefore, courts often take the regulatory conclusions of administrative organs on environmental risks as important adjudicative references. This determination model mainly includes four types: recognizing acts entrusted by administrative organs clarifying that administrative subjects are not suitable defendants, respecting the pre-judgment of administrative organs, and referring to environmental risk standards in the administrative field.

1.2.2 Scientific and Technological Determination Model

In some cases, courts mainly rely on reports from relevant experts as the basis for determining major risks. Environmental risk assessment is a specialized work centered on science, and its conclusions are generally regarded as reliable and true at the social level. Legal and technical standards provide legitimacy for experts' independent judgments, and their dual possession of "technical rationality" and "social rationality" in risk perception further reinforces this authority. However, although continuous scientific and technological innovation has significantly enhanced human ability to identify and control risks, the process of social development itself constantly gives rise to new types of risks and makes existing risks more complex. Risks are not static; they continuously multiply, evolve, and upgrade with the evolution of social structure and the deepening of technological application. Excessive expectation of scientific reliability will lead to a misorientation of environmental risk assessment.

1.2.3 Social Perception Determination Model

In some cases, courts determine major risks based on the current public perception. From the perspective of risk cognition, public perception of risk is a multifaceted complex, encompassing fear, uncertainty, and subjective judgments about risk controllability. This differs significantly from the expert approach, which mainly assesses risks based on probability. Experts, with their professional knowledge and objective analytical methods, can generally approach the true nature of risks, and their conclusions are built on systematic scientific reasoning. In contrast, public risk judgments often combine rational thinking and emotional experience, and are susceptible to emotional fluctuations or cognitive shortcuts in the analytical process, leading to systematic biases in risk level assessment—sometimes overestimating and sometimes underestimating threats.

2 Practical Issues in the Determination of Major Risks in Preventive Environmental Civil Public Interest Litigation

2.1 Vague Connotation of Major Risks

In environmental law, the concept of major risk represents the baseline for judging whether the ecological environment faces a serious threat. However, the Interpretation of Environmental Civil Public Interest Litigation does not clearly define its specific connotation. This legislative gap directly leads to ambiguity in the determination standards of major risks in judicial practice.

The unclear definition of "major risks" in judicial practice directly affects the adjudication standards at the case acceptance stage. Due to the lack of clear criteria, different judges often make discretionary decisions based on personal perceptions when determining whether a case meets the "major risk" requirement, resulting in highly subjective judgments and even different rulings in similar cases.

In the Yunnan Green Peacock case and the Five-leaf Maple case, the courts found that the construction of hydropower stations posed a major risk to the habitats of endangered species and thus accepted the cases; whereas in the Yunnan Oil Refinery Project case, the court held that the plaintiff failed to prove the existence of a major risk and ruled to reject the

case. Although the former two cases involve rare and endangered species while the latter does not, if the only basis for judging risk is whether the protected object is "endangered" or "precious", without a systematic analysis of the "quality" and "quantity" of the risk from scientific and normative perspectives, it may lead to oversimplification and deviation in judicial reasoning.

2.2 Inconsistent Determination Standards of Major Risks

In the process of determining whether a major environmental risk exists, judges must rely on certain evaluation criteria to weigh the facts of the case, so as to confirm whether the existing evidence as a whole meets the legally required risk level. However, different judges adopt significantly different evaluation criteria in practice, reflecting the lack of a unified and stable determination standard in judicial practice.

In some cases, the social perception standard is adopted, determining major risks based on current public cognition; in other cases, judges combine scientific expert opinions and witness testimony, adopting the scientific and technological standard; and in still other cases, judges apply rules of experience and public perception to evaluate and correct scientific evidence provided by environmental authorities, thereby adopting a comprehensive standard.

When determining environmental major risks, judges' inner convictions and discretion are highly susceptible to subjective factors such as personal knowledge and experience, ultimately leading to different or even contradictory conclusions, seriously undermining the uniformity of judicial standards^[3].

2.3 Misplacement of the Subject of Determination of Major Risks

Legally, it should be the court's duty to determine whether a "major risk" exists. However, in some cases, courts merely rely on the administrative opinions of environmental protection departments without providing their own analysis or explanation. This practice effectively allows administrative organs to make the key judgment in place of the judiciary, resulting in a role misplacement^[4].

For example, in the Yunnan Oil Refinery case, the court only briefly stated in its judgment that the environmental impact assessment report of the project had been approved, directly citing the administrative determination. In the Green Peacock case, the Five-leaf Maple case, and the Huilongshan Hydropower Station case, the courts also mainly relied on the environmental impact assessment reports submitted by the defendants.

In the case of Tangshan Procuratorate v. Guangdong Shipping Company, the court, when determining "major risks", primarily relied on the Accident Liability Determination for Water Traffic Accidents and the records and reports formed by the maritime department during the investigation^[5]. This practice allows administrative organs to dominate the fact-finding process, while judicial power shows an excessive dependence on administrative judgments, leading courts to fall into passivity in risk determination. When administrative approval opinions effectively become the default basis for adjudication, the judge's independent review function is to some extent displaced, and the actual decision-making power over environmental risk assessment is transferred to administrative agencies and their technical support units. In the long run, when facing such complex environmental risk issues, if courts merely rely on empirical and evaluative conclusions provided by the administrative system without independent scientific review and value judgment, it will be difficult to ensure the scientificity and fairness of the judgments.

3 Specific Construction of the Determination of Major Risks in Preventive Environmental Civil Public Interest Litigation

3.1 Comprehensive Standards Should Be Adopted for the Determination of Major Risks

In the judicial determination of major environmental risks, judges should be allowed to comprehensively apply social common cognition, scientific causation rules, and rules of experience to evaluate relevant factual evidence. For example, in the Yunnan Green Peacock case, the environmental impact assessment approval was completed in 2014, while the *Cycas chenii* was only officially listed in the world list in 2015, thus not being within the assessment scope at that time. This case shows that scientific cognition is constantly developing, and its progress continuously expands the boundaries of human risk identification; what is considered safe today may be proven to be risky tomorrow, so scientific conclusions themselves may not always provide a comprehensive and accurate picture of risks^[6].

Against this background, the common sense and rules of experience that judges rely on not only derive from the summary of life practice but also possess the predictive function of inferring the unknown from the known. Only by allowing judges to supplement and scrutinize scientific evidence with life experience and logical common sense can a dialectical unity between legal rationality and scientific cognition be achieved in risk determination.

3.2 The High Probability Standard Should Be Adopted for Causal Relationship Determination

Adopting the high probability standard aims to strengthen the burden of proof and place judicial decisions on a more

solid factual foundation^[7]. In practice, it is necessary to prevent excessive restriction of industrial activities and economic development, while also reducing misjudgments by setting a relatively high standard of proof, thereby coordinating the potential conflicts between the two at the institutional level. It should be clarified that the "high probability" standard mainly applies to the final adjudication stage. At the early stage of litigation, the plaintiff only needs to preliminarily prove that the risk exists and reaches a high degree of probability, which is sufficient to initiate subsequent judicial review procedures.

3.3 Correcting the Subject of Determination of Major Risks

In preventive environmental civil public interest litigation, the court should be the sole appropriate subject for determining "major risks", and its legitimacy is based on the following three considerations: First, from the perspective of the source of power, as a legal concept established by judicial interpretation, the definition of the connotation and extension of "major risks" essentially falls within the scope of judicial discretion. The principle of judicial independence guaranteed by the Chinese Constitution provides the fundamental institutional basis for courts to exercise this determination function. Second, from the perspective of functional division, the focus of environmental administrative law enforcement is on determining and punishing actual damage results, while "major risks" concern potential, unrealized environmental threats, which usually fall beyond the conventional trigger boundaries of administrative supervision. Third, risks are dynamically evolving, which requires the determining subject to have the capacity for continuous assessment and flexible judgment, and judicial procedures can precisely provide institutional safeguards for this^[8].

Of course, administrative organs, with their professional capabilities and information resources, can play an important auxiliary role in risk identification and assessment. However, as far as legal determination is concerned, the ultimate decision-making power on "major risks" should remain exclusively with the judiciary, so as to ensure the uniformity of legal application and the realization of procedural justice.

4 Conclusion

Faced with the inherent scientific uncertainty of environmental risks and the difficulty of proving causation, judicial practice cannot simply follow the logic of traditional tort litigation. Instead, it should build a determination system that fits the characteristics of risk prevention based on the intrinsic requirements of the precautionary principle. This requires not only clarifying the conceptual boundaries of "major risks" from a legal perspective, explicitly taking the ecological environment itself as the core of protection, but also integrating scientific judgment and value measurement methodologically to form a comprehensive determination standard that is both professional and operational. In procedural construction, a phased allocation of burden of proof should be established, which not only protects the plaintiff's reasonable right of action but also achieves litigation balance through timely shifting of the burden of proof. More critically, the dominant position of the judiciary in determining "major risks" must be upheld, while respecting administrative professional judgments, maintaining the independence and finality of judicial review, and avoiding the substitution of judicial discretion with administrative conclusions.

About the Author

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