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Exploration on the Legal Application of Punitive Damage System for Tort of Ecological Environment Damage--Taking Article 1232 of the Civil Code as an Entry Point

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Abstract

The rule of law for the ecological environment is in rapid development, and article 1232 of the Civil Code establishes the system of punitive damages applicable to the ecological environment, which is a significant development of China's environmental tort liability system. However, the basis for the construction of the system of punitive damages and the ambiguity of the legal provisions themselves bring uncertainty in the application of the law. From the legislative purpose, the background of the legal system for a deep understanding of the function and characteristics of the punitive damages system, and then clarify the basis of the right to claim the qualification of the subject of the application. Through the existing legal provisions and empirical statistical data, the contradictions of the ecological environment infringement compensation system are solved, and the gap in the calculation standard of punitive damages is made up. Finally, from the liability system as a whole, to promote the ecological environment damage tort liability into the overall liability system to consider, in order to realize the punitive damages system responsibility for comprehensive, rationalization of the system to provide the basis.

Keywords

Ecological infringement; Punitive damages; Subject matter of the claim; Calculation of the amount of damages

1 Overview of the problem

Article 10 of the report by General Secretary Xi Jinping at the 20th National People's Congress of the Communist Party of China: "On the promotion of green development and harmonious coexistence between human beings and nature" re-emphasizes that "respecting nature, adapting to nature, and preserving nature are intrinsic requirements for the comprehensive construction of a modern socialist country. " "Ecological prosperity is the rise of civilization, ecological decline is the decline of civilization" of the green development concept needs to rely on strict institutional provisions, strict rule of law thinking, scientific and technological means to solve various problems in the development process. Law is the product of society, is the comprehensive

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solution to the real social contradictions, in the civil code tort liability section 1232 the introduction of ecological and environmental infringement of the application of punitive damages system is not only the implementation of the civil code in the general responsibility of the requirements of the green principles established in the section, but also China's legislature of ecological environmental protection issues related to the rule of law to the importance of a profound response. However, the application of Article 1232 of the ecological environment punitive compensation provisions of the typical cases, such as "Fuliang County People's Procuratorate v. Zhejiang Hailan Chemical Industry Group Co. Criminal incidental civil public interest litigation case", reflecting the judicial authorities in practice, most of the environmental punitive damages system into the environmental public interest litigation cases for application. From the perspective of legal provisions and legal practice, the flourishing development of the punitive compensation system in the field of environmental public interest litigation and the limitations of the definition of the Civil Code 1232 will inevitably produce a disagreement: "the Supreme People's Court on the trial of ecological and environmental infringement disputes applying punitive damages of the Interpretation of the twelfth on the infringed subject, punitive damages amount of the standard provisions of the subject of the infringing is relatively general and vague and can not solve the environmental public interest, private interests protection. Can not solve the environmental public welfare, private interest protection due to its own characteristics and the ecological environment public welfare protection of the conflict between the formation. Therefore, this paper tries to "civil code" article 1232 as the entry point, the ecological environment damage infringement applicable punitive compensation system subject, punitive compensation amount standard, the legal application of the responsibility system and other aspects of the research, and strive to further build and improve the ecological environment judicial practice field basis.

2 Legal basis for the application of the punitive compensation system for ecological and environmental damage infringement

The system of punitive damages, which is an additional monetary compensation paid by the tortfeasor to the tortfeasor over and above the scope of his or her damages, dates back to the ancient Roman Empire and subsequently constitutes an important part of the tort law of common-law countries. They believe that the core function of the application of the system is twofold: one is to compensate for the damage suffered by the infringer, and the other is to prevent the recurrence of similar situations in the future through additional penalties. From the conceptual and functional deconstruction, the punitive damages system naturally combines the two functions of "punishment and prevention" and "compensation for private interests" . However, from the perspective of traditional civil law, the core meaning of damages is to make the infringed person equalize the imbalance of interests due to the infringer's tortious act by filling in the way of damages, and the amount of compensation is measured by the actual infringement of the infringed person's rights. Punitive damages system is special in that it destroys the traditional civil law damage to fill the damage constructed by the equilibrium of interests, additional "punitive" as a damage to fill the additional compensation, so that the infringer ultimately gained more than the benefit of the loss suffered by the benefit.

From the perspective of balancing the interests of the infringer and the infringed, the punitive damages

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system lacks logical rigor. However, from the perspective of case-by-case interest measurement, the introduction of punitive damages system in the field of ecological environment is in itself an innovative regulation of environmental infringement, in promoting the development of social public interest at the same time can also stimulate the infringed to defend the rights of the active. Specifically: first, the ecological environment belongs to the interests of all mankind to enjoy the common social interests, it has a "holistic", "common", "indivisible". If a citizen commits an act that jeopardizes the ecological environment, it will inevitably lead to the damage of the overall environmental rights and interests, and the ecological and environmental rights and interests enjoyed by the rest of the law-abiding citizens will also be reduced, therefore, China's Civil Code classifies the ecological and environmental interests as social private rights, which go beyond the purely individual private rights recognized by the traditional civil law. The legislator also introduced punitive damages system in Article 1232, is expected to clarify the boundaries of the obligations of both parties through legal provisions, to additional punishment to warn the ecological and environmental infringement of the perpetrator as well as the potential implementation of ecological and environmental infringement of the third party must be taken in accordance with the law to engage in green production activities, increase social wealth while avoiding to cause the rights and interests of other people to be derogated from. Second, the ecological environment damage to the ecosystem damage caused by long-term, latent characteristics, which leads to the ecological environment damage in the infringement of the infringement of the ecological environment is difficult to prove that the ecological environment suffered the severity of the damage and the ecological environment infringement and whether there is a causal relationship. If the infringer and the infringed two-way balance of interests perspective, the infringer judgment for the right to defend the cost may be higher than the damage to fill the compensation, it is easy to exercise their rights, resulting in ecological and environmental infringement of the facts can not enter the judicial process. Even if the case into the judicial process, due to the existence of the degree of ecological environment damage, damage to the causal relationship between behavior and damage results in the fact that difficult to prove, resulting in ecological environment damage infringer and the infringer can never be in a balanced position, and its pursuit of justice is only a form of justice. Some scholars believe that the nature of a responsibility not only depends on the characteristics of the sectoral law and its predetermined responsibility function, but also depends on the different sectors of jurisprudence thinking tradition, should be regarded as the system of economic law in the "incentive compensation" responsibility, so the civil code 1232 introduction of punitive damages system, is precisely the Therefore, the introduction of punitive damages system in Article 1232 of the Civil Code is precisely a double incentive for the degree and means of relief, and the maintenance of substantive justice: on the one hand, the infringer does not need to bear the excessive burden of proof, and the anticipatory benefit is obviously increased; on the other hand, it can also obtain additional relief to make up for the loss due to the characteristics of ecological damage.

In addition, there is legal space for the application of the punitive damages system in ecological and environmental damage infringement.

In specific cases of punitive damages for environmental infringements, the provisions of article 1235 of the Civil Codeare first applied to compensate for damages, and the system of punitive damages is applied in the case of serious consequences. What are "serious consequences"? Compared with the general damage

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of the object, the ecological environment system is always in the process of dynamic change, once suffered damage there is an irreversible loss of value, so the judicial practice usually take the virtual cost of governance to be assessed. The scientific level of each region is not the same, it is difficult to accurately assess the cost of ecological environment management, which leads to the limitations of the final amount of the determination of the inevitable existence of a large discretionary space. Therefore, the author believes that to assess the degree of damage suffered by the ecological environment function due to ecological environment damage behavior, combined with the Ministry of Ecology and Environment issued the "on the release of the ecological environment damage appraisal and assessment of the technical guide to the technical guidelines of the general outline and the key links of the first part: the general outline of the six standards of the announcement" of the hazard coefficient, the duration of the coefficient, the coefficient of the environmental function of the criteria for comprehensive consideration, in order to prevent the cost of compensation can not be filled to repair the ecological damage.

3 Qualification of the subject matter of the right to claim for the application of the punitive compensation system for the infringement of ecological and environmental damages

An accurate understanding of "tortfeasor" helps to clarify the scope of the subject of the right to claim in ecological environment compensation litigation. The prerequisite for determining the subject of the claim is to meet the requirements for the application of the punitive compensation system in cases of ecological and environmental damage, namely: first, the intentionality of the damage to the ecological environment; second, the illegality of the objective act; third, the ecological and environmental infringement resulting in the occurrence of the damage; and, fourth, the causal relationship between the act and the result.

Article 1232 of the Civil Code does not specify the scope of "tortfeasors" who have the right to claim. This ignores the ecological environment damage cases, there are often many "unspecified infringers", the part of the subject can obtain the right to claim and participate in public interest litigation or ecological environment damages litigation? Most scholars believe that the punitive damages system is a borrowed private law litigation procedures to achieve the protection of environmental public welfare "public law private law" of the figurative, "unspecified infringers" can claim punitive damages system, and has been hailed as the first case of environmental pollution civil lawsuit in China. The first case of public interest litigation in China's environmental pollution civil "fuliang county people's procuratorate v. zhejiang hailan chemical group limited company of environmental pollution case" of judicial practice also support the view.

In the author's opinion, this provision should limit the subject of the claim to a specific infringer. From the perspective of systematic interpretation, this article is located in the civil code, tort liability, the purpose is to safeguard the "private interests" and by the "private interests" convergence of the "common interests". Secondly, our country is a statutory law countries, civil subjects enjoy the common ecological environment rights in the civil code, but is not a private interest in the field of solid rights, can not go beyond the scope of private law adjustment. Furthermore, from the ecological environment damage public law relief channel

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has been the tortfeasor punishment, and then by the unspecified tortfeasor punitive damages superimposed on the application of the tortfeasor may lead to the tortfeasor is responsible for too heavy. Finally, in the theoretical discussion, "public law privatization" theory on this topic seems to be somewhat inapplicable. According to scholars, in modern practice, the state uses private law means or through private subjects to achieve "public" goals, in which the main body to carry out public tasks is still the traditional public institutions . Therefore, the theory essentially regards public law as the "body" and private law as the "use", and private law is only involved in the process of "realizing the public task" as a rule or means. However, the punitive damages system has become a substantive rule, if it is applied in the field of environmental pollution and ecological damage regulation, in fact, beyond the scope of "use", and is inconsistent with the theory of "public law privatization". Therefore, in the absence of specific rights and interests of the tortfeasor, the "environmental rights" damage to the civil rights and interests of citizens, and environmental public welfare litigation plaintiffs claim punitive damages, or by the administrative organs of the ecological and environmental damages lawsuit for environmental infringement of punitive damages liability, the law can not support. In the case of damage to the rights and interests of a specific tortfeasor, the content of article 1232 should be regarded as an innovation in the way and extent of remedies for the rights of the tortfeasor, and the lawsuit should be filed by the specific tortfeasor.

According to the existing laws and policies in China, the main damages resulting from the implementation of ecological and environmental damage are personal damage, property damage and ecological and environmental damage. The three types of damage results from the basis of environmental private interests and environmental public interests respectively. China's legislation, taking into account the public nature of the ecological environment, non-exclusive characteristics is difficult to become the object of personal rights, it will not be stipulated as a civil subject to enjoy the entity of civil rights, but as a benefit enjoyed by the public. If this public welfare suffered damage, citizens have the right to monitor, environmental protection, the right to know the state of the ecological environment, and suffered damage continues to be transformed into individual citizens of personal rights and interests, property rights and interests of the individual, the infringing citizens of the damage suffered by the individual part of the damage to the private interests of the ecological environment to obtain punitive damages claim. The ecological environment public interest part of the right to request the subject, according to the civil procedure law article 58 provides that the people's procuratorate and social organizations can file civil public interest litigation to achieve the ecological environment public interest damage relief and major risk prevention. However, some scholars believe that the Tort Liability Part of the Civil Code does not specify whether the procuratorates and social organizations representing environmental public interests can request punitive damages in the capacity of tortfeasors. The fact that the punitive damages provision in Article 1232 of the Code appears before the ecological and environmental interest protection provisions in Articles 1234 and 1235 raises questions about the order of the provisions. According to the legislative logic, compensatory damages should be stipulated before punitive damages, so it is formally inferred that the Public Prosecutor's Office and social organizations may not be able to request punitive damages under Article 1232 of the Civil Code. The author holds a negative view on this, according to Article 9 of the Constitution , natural resources belong to the state ownership, the object of ecological environment damage is state-owned natural resources, the state based on the socialist public

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ownership system naturally enjoys the basis of the right of claim to bring ecological environment damage lawsuit, only the original right of claim is authorized to the People's Procuratorate and the relevant social organizations to exercise. Therefore, article 1232 of the civil code "the infringer: shall include specific civil subjects, the people's procuratorate and the relevant social organizations.

4 Completing the gap in the calculation criteria for the application of the punitive damages system to ecological and environmental damage

Through the deconstruction of the provisions of Article 1232 of the Civil Code, it is easy to find that there is no clear provision on the amount of punitive damages and the method of calculation. Noting the blankness of this part of the law, the relevant departments and scholars have suggested to stipulate that it should be two or three times of the compensatory damages; or to set up the upper and lower limits of the amount of compensation in accordance with the provisions of Article 55 of the Law on the Protection of Consumer Rights and Interests, so as to prevent the emergence of the astronomical price of the compensation. In the author's opinion, there are two reasons for introducing the above calculation method: first, the existence of compensatory damages is the premise for the application of punitive damages system, and the latter often takes the former as the basis for calculation; second, according to the provisions of Article 55(1) of China's Protection of Consumers' Rights and Interests Law, Article 148(2) of the Food Safety Law, and Article 17(3) of the Anti-Unfair Competition Law and other provisions of China's legislation on infringement of rights and interests. It can be seen from the legislative provisions on punitive damages that China adopts a "multiplier" calculation method, i.e., the amount of punitive damages = the base amount (the amount of compensatory damages)*multiplier .

The determination of the amount of punitive damages is a bottleneck problem in the environmental trial, and the lack of rules for determining the amount of punitive damages constrains the improvement of the quality and efficiency of the environmental trial. To accurately calculate the amount of punitive damages, first of all need to clarify the implementation of ecological and environmental damages infringement of the perpetrator whether to meet the laws and regulations required by the degree of liability for punitive damages. At present, our country in determining the responsibility standard in addition to the civil code tort liability, will also refer to the "environmental damage appraisal and assessment of recommended methods (II version)", "ecological and environmental damage appraisal and assessment of the technical guide to the technical guidelines and key aspects of the general outline and the general outline" and the "ecological and environmental damages management regulations" and so on to make a comprehensive judgment.

Some scholars believe that, although the field of ecological and environmental damage tort has its own special characteristics, but with other areas of tort still have the following commonalities: First, the punitive damages system in the scope of the interests of the law are applicable to private interests and public welfare relief. Secondly, they all stipulate the strict conditions for the establishment of the liability for punitive damages, such as "intentionally (knowingly)" and "causing the degree of severity". Third, the punitive damages amount of the calculation of the base of uncertainty. Torts are generally oriented to unspecified social subjects, and the degree of damage caused varies due to different factors such as living environment

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and personal constitution. Fourth, based on the concept of communitarianism, all damage to the public interest of society. Then for determining the ecological environment damage field applicable punitive damages system mode selection can also draw on the current has other areas of mature legislative achievements. Such as the first, "food safety law" article 148 paragraph 2 of the provisions of the "fixed amount mode" (also divided into fixed amount and fixed multiples of two kinds), punitive damages amount = the basic loss amount * multiplier (loss of three times)/fixed coefficient (the price of ten times, less than one thousand according to the calculation of one thousand yuan), the model under the ability to Avoid the problem of broad discretionary space. The second is diametrically opposed to the first "unlimited amount model", to give the judicial staff enough discretion to set the amount of money according to the actual results of the damage and the potential results of the damage to make the judgment to adapt to the individual case, in the U.S. Supreme Court's case decision is not difficult to find the model figure, due to the country for the statutory law As China is a statutory law, the model violates the law with certainty and predictability, so it has not been adopted by our country. The third mode is respected by the theorists more "flexible amount mode", that is, only the amount of punitive damages upper and lower limits, based on the ecological environment damage to the elements of responsibility for the determination of the multiplier.

With regard to the choice of a model for punitive damages, the author believes that a "fixed-amount model + flexible-amount model" can be adopted. Because the ecological environment damage behavior has caused to the public good, private interests of the double damage, lead to the calculation of punitive damages need to consider different characteristics. Ecological and environmental damage to private infringement of punitive damages part of the infringer's personal injury and property loss for the calculation of the base has been widely recognized, the public welfare part of the infringement of the base of the determination of the standard is not yet uniform. The main focus of controversy is: is to choose to ecological environment in the damage, repair completion period, permanent damage to ecological environment function loss as the calculation and the base, or to the environmental administrative penalty as the base of punitive compensation for ecological and environmental damages infringement. Article 1232 of the civil code to determine the ecological and environmental areas of punitive damages system is to hope that the private mechanism to public law punishment to realize the protection of public environmental interests, the essence of the direct damage to the ecological and environmental violations of the negative evaluation. Therefore, the "judicial interpretation of punitive damages for ecological and environmental infringement," Article 10 provides that "environmental pollution, ecological damage caused by personal injury compensation, the amount of property loss as the basis for calculation", Article 12 provides that "the ecological environment is damaged to the completion of the restoration of the period of the loss of service function caused by the loss of Article 12 stipulates that "the amount of loss resulting from the loss of service function during the period between the damage to the ecological environment and the completion of restoration shall be taken as the basis for calculation", which is reasonable. However, some scholars believe that the provisions of Article 12 are insufficient, with "repair costs are too large and ecological environment repair cost calculation has taken into account the degree of fault of the tortfeasor" reason completely exclude the repair cost as the calculation of the base is not only insufficient justification, and legal practice is not in line with the authorization of a specific court, the court to carry out a comprehensive assessment of the type of loss and repair costs, for the

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damage to the ecological environment to the completion of permanent damage to the ecological environment as the basis for calculation. Therefore, it can be authorized to a specific court, which will assess the type of loss and the cost of repair in a comprehensive manner, and can make a superimposed calculation for the period of loss and permanent loss other than personal and property loss.

The current means and standards for assessing and appraising ecological damage are not mature enough. If the use of environmental administrative penalties has a stronger operation, but also more in line with the "administrative law enforcement in the first, the judicial trial after the" procedure, will not lead to excessive judicial "invasion" of administrative powers , so the author believes that the final base should be determined by administrative penalties based on the amount of actual damage to the ecological environment should be calculated on the basis of actual losses. Therefore, the author believes that the final base should be based on the administrative penalty, if the actual loss of the ecological environment exceeds the limit of the administrative penalty, then the actual loss of the ecological environment should be the basis for calculation.

With regard to the setting of multipliers for the "flexible amount model", according to article 12 of the Judicial Interpretation of Punitive Damages for Ecological and Environmental Torts, the amount of punitive damages shall not exceed two times the base amount of punitive damages. This only set the upper limit of the regulations, especially suitable for ecological environment damage, because taking into account the different cases of ecological environment loss cost difference is obvious, it is likely to appear "base" is larger but the other circumstances are less serious, so it is not appropriate to limit the multiplier of punitive damages "lower limit. ". In order to ensure that the ecological environment public welfare infringement of the reasonable application of flexible multiples as well as for the ecological environment private infringement of the cautious expansion of the "flexible amount model" can refer to the "Food Safety Law", "Consumer Protection Law" and other provisions for the multiplier, which will be punitive multiples of more than 1 times to 3 times the interval. And reference to the actual case statistics of China's courts (Table 1), the range of punitive damages multiplier in practice cases is also limited to 1-3 times, so it is in line with the expectation to set the range between 1-3 times.

Table 1: *Judicial practice of punitive damages in ecological environment damages litigation calculation base multiplier statistics*

judicial case	Calculation basis and multiplier	**Multiplier Selection**
Environmental Pollution Liability Dispute of Zhejiang Hailan Chemical Group Co.	3 times the cost of loss of environmental functionality	3x
Jilin City People's Procuratorate, Jilin Province, Wang Mou and other ecological damage civil public interest litigation	1 times the amount of loss of ecological services	1x

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Civil Public Interest Litigation between Jiange County People's Procuratorate of Sichuan Province and Wang Mou	3 times of the baseline value of wildlife	3x
Shaanxi Xunyang Municipal People's Procuratorate v. Wang Moumou's Criminal Incidental Civil Public Interest Litigation for Illegal Mining	1 times the cost of ecosystem restoration and management	1x
The case of Duan Moumou, Chaling County, Hunan Province, for digging up mountains and destroying forests	2 times the loss of ecosystem services	2x
Consultation on ecological and environmental damages between Haian Ecological Environment Bureau of Nantong City, Jiangsu Province and a chemical enterprise	1.3025 times the amount of compensation for ecological damage	1.3 x
Environmental pollution in Forest Park, Huainan City, Anhui Province, China	3 times the cost of ecological restoration	3x

5 Promoting the integration of the punitive compensation system in the field of ecology and environment into the overall liability system process

Influenced by the traditional civil law system sectoral law separation theory , China's ecological and environmental rule of law field presents a variety of legal responsibility and coexistence of each other, and the introduction of punitive compensation system in the field of ecological and environmental aggravates the phenomenon. In order to realize the best deterrent effect of liability, the improvement of the punitive compensation system of ecological and environmental infringement should also adopt the perspective of external relations, based on the holism theory to explore the systematic proposition of legal liability. Punitive damages system has a typical functionalist color, based on the overall consideration of the responsibility for the punishment of ecological and environmental damages and torts, the responsibility for causing damages is the overlap of civil, criminal, and administrative responsibility, plus all three have the same nature of the punishment of ecological and environmental violations, with which a strong mix of the private law responsibility system and the public law responsibility system has been formed. Due to the mixture of the two liability system, it is necessary to incorporate these liability measures into the overall liability system of punitive damages system, for the same ecological environment damage infringement of the different responsibilities arising from the configuration of the "offset rule" to avoid the imposition of infringement of the perpetrator of the "sum of the responsibility of the excessive Avoiding the imposition of "excessive aggregate liability" on the tortfeasor.

As the same with the nature of public law sanctions administrative penalties and penalties can be offset,

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such as detention period offset into the calculation of the term of imprisonment. In the field of ecological environment damage, punitive compensation system and public law sanctions have a high degree of similarity, both have "punishment + prevention" of illegal behavior, and even in the complete competition in the state , but with the nature of the public law sanctions are still different, can not be directly offset. The reason is: first of all, China's Civil Code, Article 179 has been clearly punitive damages for civil liability, from the legal level to determine the nature of liability. Secondly, although the two functions overlap, but the focus tends to be different, for the public law sanctions, it is more emphasis on the ecological and environmental infringement through the subjective fault of the perpetrator of the size of the responsibility to realize the punishment. While the core goal of punitive damages is deterrence, through the setting of additional additional penalties to form a preventive mechanism. Finally, if the liability of punitive damages system is included in the public law liability system, it will give rise to many legal interpretation dilemmas, such as the necessity of setting up a set of public law sanctions in addition to criminal and administrative penalties, and the legitimacy of lowering the strictness of the public law liability procedure through civil procedures.

In Europe and the United States developed countries usually use administrative penalties or criminal penalties to offset the occurrence of environmental violations, in contrast to the actual situation of China's development, although since the reform and opening up the formation of a system based on the Constitution as the foundation, the environmental protection law as a leader, pollution prevention and control and ecological protection of the law as a pillar of the professional environmental legislation system, as well as the greening of the civil code, the criminal law of ecological, procedural law, administrative law, and the coordination of the ecological civilization construction composed of the legal norms system. However, there are still problems such as imperfect environmental legislation system, insufficient coordination of related laws, weak synergy with other social norms, and strained judicial and law enforcement resources , relying only on public law to monopolize the environmental punishment will inevitably lead to inefficient operation of the punishment mechanism, and the introduction of the punitive compensation system into the field of private liability can alleviate the need to punish public welfare liability, and diversify the liability bearing solution mechanism .

For the ecological environment damage punitive compensation system and the judicial application of public law sanction relationship, the key lies in the overall legal liability system, punitive compensation system should be the same as other ways of responsibility by the principle of proportionality constraints, such constraints are mainly embodied in two aspects: on the one hand, can not be because of ecological and environmental damages to the tortfeasor has borne the responsibility of the public law, or the amount of the responsibility of the public law is higher than punitive damages. The infringer is prohibited from filing a claim in the private law liability, otherwise it is easy to cause unclear responsibility and punishment; on the other hand, when judging the infringer to bear the ultimate responsibility, the judiciary should consider the amount of public law sanctions that the responsible person has already borne, not necessarily offset. Theoretically, the court may rule that the responsible person bears "zero amount of punitive damages", but should pay attention to the risk of abuse of power. In order to be more scientific and long-term, it is recommended that the total amount of legal liability to be borne by the responsible person in a particular case of ecological damage should be clarified at the legislative level, and that the procedural norms for punitive damages should be optimized in order to prevent the abuse of alternative public law sanctions.

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6 Conclusion

The improvement of ecological and environmental legal system is an inevitable legal choice for mankind to enter the era of ecological civilization, and is also a clear requirement of the socialist legal system with Chinese characteristics. Punitive damages system is based on public law and private law under the influence of the formation of special legal products, but at present in the judicial practice and academic theory there is still a huge controversy, the reason is that the Civil Code on ecological and environmental damages and punitive damages system of the legal pursuit of environmental and ecological areas of responsibility is limited. In order to resolve the controversy, improve the systematic construction of liability and optimize the legal system in the field of ecological environment, it is necessary to strengthen the synergistic mechanism of public law and private law, especially the system design and articulation with the field of environmental law, summarize the experience in the practice of ecological environment private law, innovate the methodology of the construction of the rule of law for ecological civilization, and improve the system of the rule of law guarantee for ecological civilization.

References

[1]Xi Jinping. (2022). Holding high the great banner of socialism with Chinese characteristics and unitedly striving for the comprehensive construction of a modernized socialist country-Report at the 20th National Congress of the Communist Party of China. Party Building (11), 4-28.

[2]Article 1232 of the Civil Code stipulates that: "If the infringer intentionally pollutes the environment or damages the ecosystem in violation of the provisions of the law, resulting in serious consequences, the infringer shall have the right to claim the corresponding punitive damages."

[3]Zhang, X. D. & Yan, W. C.. (2022). The Lack and Completion of Punitive Damages Legislation for Environmental Public Welfare: An Analysis Based on Article 1232 of the Civil Code and Judicial Interpretation. Journal of Dalian Maritime University (Social Science Edition) (06), 47-58.

[4]Article 12 of the Interpretation of the Supreme People's Court on the Application of Punitive Damages in Hearing Cases of Ecological and Environmental Infringement Disputes: Where an organ prescribed by the State or an organization prescribed by law, as a representative of the infringed party, requests that the infringer be ordered to bear the liability for punitive damages, the people's court may refer to the foregoing provisions in dealing with the matter. However, the amount of punitive damages shall be determined on the basis of the loss caused by the loss of service function during the period from the damage to the ecological environment to the completion of the restoration, and the amount of loss caused by the permanent damage to the ecological environment function.

[5]Liu, Changxing. (2023). A public law response to punitive damages for environmental damage. Politics and Law (10), 34-47. doi:10.15984/j.cnki.1005-9512.2023.10.004.

[6]Wang, Chong. (2023). Review and regulation of punitive damages system for environmental infringement in the Civil Code. Journal of Chongqing University (Social Science Edition) (05), 253-266.

[7]Liu, Shui Lin. (2009). On "punitive damages" of civil law and "incentive compensation" of economic law. Journal of Shanghai University of Finance and Economics (04), 3-10.

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[8]Article 125 of the Civil Code: Where damage to the ecological environment is caused in violation of state regulations, an organ prescribed by the state or an organization prescribed by law shall have the right to request the infringer to compensate for the following losses and expenses: (1) losses resulting from the loss of service functions during the period from the damage to the ecological environment to the completion of the restoration; (2) losses resulting from the permanent damage to ecological environment functions; (3) costs of investigation, appraisal and assessment of ecological environment damage; (4) costs of removal of pollution and restoration; (5) reasonable expenses incurred in preventing the occurrence and expansion of the damage. (c) the costs of investigation, appraisal and evaluation of ecological environment damage; (d) the costs of removing pollution and restoring the ecological environment; and (e) the reasonable costs of preventing the occurrence and expansion of the damage.
[9]Ma Shengnan. Research on punitive compensation system for ecological environment damage [D]. Gansu University of Political Science and Law,2024.DOI:10.27785
[10]Li, Huaqi & Pan, Yunzhi. (2020). Study on the application of punitive damages in environmental civil public welfare litigation. Law Application (23), 124-133.
[11]Jin, Zining. (2007). Rethinking the concept of "privatization of public law"--with the background of public administration reform movement. Zhejiang Journal (05), 143-149.
[12]Wang, Chong. (2023). Review and regulation of punitive damages system for environmental infringement in the Civil Code. Journal of Chongqing University (Social Science Edition) (05), 253-266.
[13]Article 58 of the Code of Civil Procedure: In respect of acts that harm the public interests of society, such as polluting the environment and infringing on the lawful rights and interests of numerous consumers, the organs and relevant organizations specified by the law may bring an action in the people's court. Where a people's procuratorate, in the performance of its duties, discovers acts damaging the ecological environment and resource protection, or infringing on the lawful rights and interests of numerous consumers in the area of food and drug safety, which are detrimental to the public interests of society, it may bring an action in the people's court if there is no organ or organization as stipulated in the preceding paragraph, or if the organs and organizations as stipulated in the preceding paragraph do not bring such an action. Where an organ or organization as provided for in the preceding paragraph brings an action, the people's procuratorate may support the prosecution.
[14]Li, Dan. (2020). The limitation of the subject of the right to claim punitive damages for environmental damage. Guangdong Social Science (03), 246-253.
[15]Article 9 of the Constitution of the People's Republic of China: Natural resources such as mineral deposits, water flows, forests, mountains, grasslands, wastelands and mudflats belong to the State, that is, to all the people; except for forests and mountains, grasslands, wastelands and mudflats, which are collectively owned as provided by law. The State guarantees the rational utilization of natural resources and the protection of valuable animals and plants. Any organization or individual is prohibited from appropriating or destroying natural resources by any means.
[16]Huang Wei, Interpretation of the Tort Liability Section of the Civil Code of the People's Republic of China, China Law Press, 2020 edition, pp. 250-251.
[17]Wu, Satellite & Yulin He. (2021). On the Prudent Application of Punitive Damages in Ecological and Environmental Damages Litigation. Nanjing Social Science (09), 91-100.

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[18]Article 55, paragraph 1, of the Law on the Protection of Consumer Rights and Interests provides that "the amount of increased compensation shall be three times the price of the goods purchased or the cost of the services received by the consumer".
[19]Article 148, paragraph 2, of the Food Safety Law stipulates that "In addition to claiming compensation for damages, the consumer may also claim from the producer or operator ten times the price or three times the damages."
[20]Article 17(3) of the Anti-Unfair Competition Law provides that the operator shall determine the amount of compensation in accordance with the amount of actual loss or infringement gain "from one to five times".
[21]Wang, L.. (2000). Research on punitive damages. Chinese Social Sciences (04), 112-122+206-207.
[22]Chen, Hsing-Huan. (2021). The Rule Definition and Normative Progress of Judicial Determination of Ecological and Environmental Damages--Taking the 24th Batch of Guiding Cases on Environmental Trials as a Sample. Law Review (01), 153-164.
[23]Chen, Juanli & Xu, Yajie. (2023). Argumentation on the calculation of the amount of punitive damages for ecological and environmental infringement. Journal of Central South Forestry University of Science and Technology (Social Science Edition) (06), 68-77.
[24]Liu, Zhu-Mei & Liu, Muhan. (2022). Understanding and Application of the Interpretation on the Application of Punitive Damages in Trial Cases of Ecological and Environmental Tort Disputes. People's justice (07), 51-56.
[25]Zhang, Hui. (2023). Calculation base of the amount of punitive damages for ecological environment damage: dilemma and way out. Law Forum (05), 110-123.
[26]Sun, Youhai & Zhang, Jingxue. (2022). The Evidence and Application of Punitive Damages for Ecological and Environmental Damages. Journal of China University of Political Science and Law (01), 26-37.
[27]Song, Y. H.. (2021). Social base change and modern development of sectoral law separation pattern. Jurist (01), 1-14+191
[28]CHENG Y. (2023). Improvement of punitive compensation system for ecological and environmental infringement under the perspective of internal and external relationship. Journal of Nanjing University of Technology (Social Science Edition) (03), 16-36+113.
[29]Jiang, Fan & Zhu, Warwick. (2019). Punitive damages:Normative evolution, social mechanism and future trends. Academic Forum (03), 61-67.
[30]Zeng, Na & Wu, Man-chang. (2019). Exploring the Proportionality Review of Multiple Responsibilities in Ecological Environment Damage Compensation. Journal of Wuhan University of Technology (Social Science Edition) (01), 110-115.
[31]Qin, Tianbao & Yuan, Ye Sunshine. (2022). On the limited application of punitive damages in environmental civil public interest litigation. Journal of Nanjing University of Technology (Social Science Edition) (01), 32-49+111.
[32]Article 179 of the Civil Code stipulates the following ways to bear civil liability: (1) stopping the infringement; (2) removing obstruction; (3) eliminating danger; (4) returning property; (5) restoring the original state of affairs; (6) repairing, reconstructing or replacing; (7) continuing to fulfill the obligations; (8) compensating for losses; (9) paying liquidated damages; (10) eliminating the influence and restoring reputation; and (11) apologizing for any damages. Where the law provides for punitive damages, the law shall

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provide for such damages in accordance with its provisions. The ways of assuming civil liability provided for in this Article may be applied separately or in combination.
[33]Helmut Kautzio, Vanessa Wilcox (2012). Punitive Damages: Common Law and Civil Law Perspectives [M]. Dou Haiyang, Translation, Beijing: China Law Press.
[34]CHENG Y. (2023). Improvement of punitive compensation system for ecological and environmental infringement under the perspective of internal and external relationship. Journal of Nanjing University of Technology (Social Science Edition) (03), 16-36+113.
[35]Lv, Zhongmei. (2021). The ecological civilization rule of law theory of Xi Jinping's rule of law thought. Chinese Law Journal (01), 48-64.
[36]Yang, G. D. (2017). Theory of Private Law Punishment: Centering on Tort Liability Law [M]. Beijing: Law Press

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