

Discussion on Punitive Damages in Cases of Environmental Pollution and Ecological Damage -- Also on the Determination of Punitive Damages Amounts

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Abstract. Articles 1229 to 1235 of the Civil Code of the People's Republic of China are relevant legislation on infringement of environmental pollution and ecological damage. Among them, Article 1232 stipulates that if an infringer intentionally violates the law and causes serious consequences, the infringed party has the right to claim punitive damages. However, the article does not specify the amount and calculation method of punitive damages. The unclear and abstract calculation method may lead to excessive punishment that the parties cannot bear or too lenient punishment that fails to serve as a warning in judicial practice. The relevant judicial interpretation stipulates that the torts are divided into public interest torts and private interest torts. The base for private interest torts is personal injury and property loss, and the multiple is generally no more than two times; The base for public interest infringement is mostly functional loss, with a maximum multiple of three times. By referring to the amount of punitive damages in relevant domestic cases, the calculation method of "base + multiple" in the United States, and drawing inspiration from the percentage of "tip", the author has designed an amount calculation method that can be flexibly applied to all kinds of cases related to environmental pollution and ecological damage, and can also make punitive damages play a role in punishment and warning.

Keywords: Environmental pollution and ecological damage, Tort, Punitive damages.

1. Introduction

The core nature of civil law is the private interest attribute, typical private law, whose core task is to confirm and protect the private interests of individual citizens. Therefore, in the judicial practice of civil law, the principle of private interest protection should be followed first in principle, with emphasis on protecting the personal and property rights of citizens. One of the legislative purposes of establishing punitive damages for environmental torts in China's civil law is to compensate for the personal and property losses suffered by the victims. The judicial interpretation of Article 1232 also states that the relief of private interests should be emphasized rather than public interests [1]. But in China's judicial practice, many or even the majority of punitive damages are insignificant, generally following China's judicial tradition of giving less private interest and more public interest. Public interest restoration is often given priority, and the private interest relief function is relatively weakened and cannot fully make up for the losses of the infringed party, such as requiring the defendant to assume responsibility for environmental restoration. To reduce the amount of compensation to be paid or not to require punitive damages, it seems to force the victim to make concessions to the public interest, which, in the opinion of the author, is not in line with the principle of civil and private law protection. Therefore, the author believes that it is necessary to set punitive damages objectively, clearly and reasonably, and the threshold for the application of punitive damages should not be set too high, and the amount of compensation should also be increased. This article examines the punitive damages system in the field of environmental pollution and ecological damage from the perspectives of the feasibility and necessity of its establishment, the reasonable scope of application, and the determination of the amount of damages.

2. Disputes in Doctrine, Norms and Judicial Practice

2.1. Doctrines and Norms

2.1.1 Discussion On Whether Punitive Damages Should Be Established

First, there is a debate over whether punitive damages should be established and the necessity of punitive damages. Liu Weixian, Li Zhizhuo et al., from a legislative perspective, denied the necessity of establishing punitive damages, arguing that such damages could be directly included in direct liability for damages. Secondly, they argue that the existing system can well protect and remedy the rights of all parties. Li Xue et al. analyzed from the perspective of liability assumption and legal relations, arguing that if it infringes upon private interests, it should be based on compensatory damages; if it infringes upon public interests, it should be based on ecological restoration, and since the subjects and objects of public interest and private interests litigation are different, punitive damages should not be applied to environmental tort public interest litigation [2].

Some supporters, such as Zhou Long, argue from a legal perspective that although punitive damages are necessary and feasible, only the infringed "person" has the right to claim punitive damages, and the party making the claim should be a natural person. As environmental infringement infringes public rights, since there is no specific infringed "person", the punitive damages clause does not apply [3]. Some scholars recognize the legitimacy of punitive damages but limit their scope of application. They argue that punitive damages should only fall within the realm of private interest litigation, where the compensation belongs to the victim, and public interest litigation does not fall within the judicial realm prescribed by civil law, thus excluding the justification of the application of punitive damages in public interest litigation [4]. The majority of supporting scholars believe that it is feasible to establish punitive damages, but they all have more or less restrictions on the subject or scope.

Chinese law has three elements for Article 1232: 1. Objective act: The infringer has actually carried out an act that damages the ecological environment 2. Subjective malignancy: The infringer acted subjectively knowing that it was illegal (i.e., excluding negligence and gross negligence) 3. Objective result: The damage caused by the infringer is serious (serious for private interests is interpreted as serious damage to the death or health of the victim rather than general damage; for public interests, it should be considered in terms of the extent of the damage, the duration of the impact, and the evaluation of the specific tortious act, etc.) [5]. In light of the legislative purpose of this provision, the author supports the establishment of punitive damages for environmental torts. Although the judiciary should generally follow the principle of "no further punishment for the same offense", such as not applying punitive damages for tortious acts and those subject to administrative law penalties, administrative penalties should be imposed on tortfeasors because they have violated administrative law and should be punished, and "already subject to administrative law penalties" should not be used as a reason to exempt them from paying punitive damages. The author believes that the reason why punitive damages are a form of punishment is that the cost of the intentional infringement is higher than the profit from the infringement; otherwise, it would not be able to reflect the meaning of "punishment" at all, nor would it be able to effectively prevent illegal incentives.

2.1.2 Disputes Over the Application of Punitive Damages

The disputes over the scope of application of punitive damages mainly lie in the time of application, the type of litigation, and whether it is applicable to gross negligence, etc. In terms of time, since environmental torts are often persistent and destructive, and the time point of the fact of the act of destruction may not be the same as the time point of the occurrence of the damage, and even the so-called "serious loss" begins many years later, some scholars believe that punitive damages should be retroactively applied to the act of environmental torts. However, some scholars, based on the principle of application of law, should follow "favorable retroactive effect", deny the legitimacy of retroactive effect after judgment [6]. In this regard, the author believes that the so-called retroactive application of law means that the act before the act is evaluated by the law after the act. In the case of the

application of punitive damages for environmental torts, if there were provisions for punitive damages before the torts were made, but the conditions for the application of punitive damages occurred after the judgment, it should have retroactive effect; But if the relevant punitive damages provisions are made only after the tortious act, they should not be retroactively applied.

In terms of the type of litigation, formally speaking, environmental torts are governed by civil law and fall within the realm of private interest litigation. Therefore, punitive damages should only apply between equal subjects. Therefore, some scholars believe that punitive damages do not apply to public interest litigation [7]. But the author believes that such a provision in the Civil Code precisely incorporates the feasibility of applying punitive damages in public interest litigation. The authorities prescribed by law for public interest litigation in environmental torts are the relevant organizations and the people's procuratorates, and they are the embodiment of the "environment", allowing nature and the environment to speak, to tell of their own harm, and to speak for themselves. The author thus holds the view that punitive damages for environmental torts should be applicable to all types of litigation. Some scholars have also written in their discussions on the issue that the right to claim damages for public interest should be added to the legislation.

Regarding gross negligence, some scholars believe that gross negligence should also be included in the subjective element to strictly enforce the professional requirements of enterprises themselves and strengthen their own supervision, but this is not stipulated in Chinese law. Some scholars, based on the principle of reliance, support the imputability of gross negligence, arguing that gross negligence is also subject to punitive damages, but the amount of compensation should be lighter than that for the violation of subjective intent [8]. In comparative law, in Britain, the birthplace of punitive damages, British legal scholars believe that it can only be applied to particularly serious gross negligence, which is limited to "intentional and cruel disregard for the rights of the plaintiff", which essentially still has great subjective malice. In the United States, most states hold the same view as the United Kingdom, and only eight states believe that only gross negligence is required for the application of punitive damages [9]. The author believes that the law should punish intent as the principle and negligence as the exception. Whether it is negligence or gross negligence, both are fundamentally violations of the duty of care and there is no subjective malice equivalent to intent. As for the "particularly serious gross negligence" in the comparative law mentioned above, the author believes that it should not be regarded as negligence but as indirect intent. Therefore, it can be directly determined that they have subjective malice. In contrast, it may be too harsh to impose punitive damages on those who have committed ordinary negligence or gross negligence. Furthermore, including negligence or gross negligence in the requirements would lead to an overly broad range of compensation, which is not conducive to achieving legal certainty.

The author believes that the legislative purpose of Article 1232 of the Civil Code is to punish and deter, and punitive damages are feasible and necessary. Some scholars have included punitive damages as compensation for infringement in the legislative purpose of Article 1232. I do not agree with this view. As compensation is already stipulated in Articles 1229, 1233, and 1234. Therefore, the primary purpose of punitive damages in Article 1232 should not overlap with other articles again. The author believes that in practice, although the infringer is required to bear the responsibility of environmental restoration or compensation for the losses of the infringed party, it cannot be ruled out that punitive damages should be imposed on him, and this provision should be applicable to both private and public interest infringements. The author also believes that in cases of public interest infringement, it is not the case that punitive damages are not applicable without so-called infringed "persons", although China does not stipulate the attribution of punitive damages for public interest infringement, I think it should be handed over to the national environmental protection and restoration authority, and then the environmental protection and restoration authority will jointly control pollution with enterprises. In cases of private infringement, the conditions for applying this provision are too harsh. The above requirement is that the victim's result must be death or serious damage to health before it can be applied. But in fact, if death or serious damage to health has already been caused, what is the victim's need for punitive damages? Life and health cannot be exchanged with

compensation. Therefore, the conditions for application should be lowered. The victim can claim punitive damages if they have suffered abnormal damage. The author believes that reducing the conditions for the application of punitive damages would be beneficial for polluting enterprises to strengthen their self-examination of pollutant discharge before discharging pollutants. With the reduction of pollutant discharge by enterprises, the occurrence of infringement incidents can be directly reduced from the source. With fewer infringement incidents, there is naturally less need for punitive damages, but if there is still intentional infringement causing damage, Punitive damages can be directly compensated as an additional item. At the same time, it is also conducive to urging society to actively respond to the green principles of civil law, adhere to the two mountains theory, presume sustainable and high-quality development, and reduce and minimize damage to the environment.

Secondly, regarding the amount of compensation, there are three existing compensation models: fixed multiple, interval multiple, and discretionary. However, some scholars believe that the existing several compensation models have the drawbacks of being too rigid or the severity of the punishment being unpredictable. The judicial interpretation on punitive damages for environmental infringement issued in China in 2022 indicates that in general, the amount is determined by "base + multiple". In cases of private interest infringement, the base is the compensation for personal injury and property damage caused by the infringer, and the multiple is at most two times. In cases of public interest infringement, the base is the sum of personal and property damage of the specific victim, and the multiple is also at most two times [10, 11]. But whether it is punitive damages for private or public interest torts, they may partially compensate for the loss for the individual, but for polluting enterprises, the liability they bear is negligible compared to their illegal gains. For example, an enterprise itself should spend money to deal with the pollutants it discharges, but it causes torts because it does not deal with the pollution. In the end, it is ordered to pay twice the amount of damages to the victim, which is very little compared to the amount it should have treated the pollution. Therefore, such a low amount of punitive damages is not a deterrent at all. It is necessary to demand an increase in the amount of punitive damages, which should be at least higher than the cost of treatment saved by the violation, in order to have a real deterrent effect. At the same time, if it is only twice the base amount, it may still not be sufficient to offset the illegal incentive.

2.2. Judicial Practice

In environmental torts, there are two different types of tortfeasors: one is enterprises, and the other is individuals. Because the motives for the violation, the scope of harm, the social impact, and the ability to compensate are all different. In typical tort cases, companies often do so to save money by discharging pollutants privately and causing extensive damage, while individuals often do it for fun, such as engraving in scenic spots, and the scope is smaller. The author again exemplifies and compares the two different types of tortfeasors in order to discover and summarize the differences in the amount of punitive damages under the torts of the two different types of tortfeasors, in order to evaluate the current calculation method of the amount.

In the review of judicial cases, the author found that in tort cases of environmental pollution and ecological damage, there were few cases where punitive damages were applied, and even fewer cases with large amounts. In the face of irresponsible and arbitrary discharge by polluting enterprises, the severity of punishment should be increased and the amount of fines should be increased.

In the civil public interest lawsuit on environmental pollution filed by the People's Procuratorate of Fuliang County, Jiangxi Province against a certain chemical group Co., Ltd. in Zhejiang Province, according to relevant evidence, the defendant handed over sewage to a third party for treatment, but due to the third party's irresponsible and improper treatment, the farmland and drinking water sources were separately polluted. The plaintiff spent 2,168,000 yuan on environmental pollution restoration for restoration and to ascertain the truth. 57,135.45 yuan for loss of environmental function, 532,860.22 yuan for emergency response, 95,670 yuan for testing and appraisal, and application for punitive damages [12]. In this case, the court's focus of dispute was on how to apply the punitive damages and how much to pay. Based on the principle of proportionality between offense and penalty,

the court determined a maximum compensation amount of three times the functional damage (57,135.45 yuan), totaling 171,406.35 yuan. In this case, the amount excluding punitive damages was 2,853,655.56 yuan, and after calculation, the amount of punitive damages accounted for only 6%. The enterprise, in an attempt to reduce the cost of treating the sewage, dumped it from the mountain by an employee without the qualification to treat it, with great malice. Although it actively assisted in the treatment afterwards, it could not hide the fact that it was a polluter. At the same time, the loss caused by the compensation is very small compared to the cost of the normal repair of the machine to treat the sewage, and the damage caused to the villagers' farmland and water sources is continuous and life-threatening. Therefore, the author considers the amount of punitive damages to be extremely low.

Secondly, regarding the illegal acts of individuals polluting and damaging the environment, the author believes that punitive damages should also be applied. In the civil public interest lawsuit against Chen Moping for ecological damage by the People's Procuratorate of Jiangkou County, Guizhou Province, the defendant Chen Moping made engravings on Fanjing Mountain, causing irreversible damage and incurring restoration costs and survey and design costs totaling 98,952.08 yuan. The court ruled that the defendant should bear all losses and demand punitive damages of 25,000 yuan. In this case, punitive damages accounted for 25.264% of the actual losses [13].

By comparing the two cases above, it can be concluded that often the environmental infringement acts of enterprises are more malicious than those of individuals, the scope of damage is wider and more persistent, and their ability to bear responsibility is also greater. Therefore, they should bear more punitive damages than individuals. But both individuals and enterprises should be held responsible for the damage they cause. Therefore, the author suggests starting with "damage caused by oneself", and adjusting the way of determining the amount of punitive damages in combination with the harmful consequences and subjective malice, in order to reasonably determine the amount of punitive damages that enterprises and individuals should bear for infringement.

3. Improve the approach

The author suggests adding a lower limit to the original "base + multiple" compensation mechanism, raising the upper limit, and taking into account the percentage of total expenses incurred by the infringed party due to the infringement.

3.1. Lower Limit

A lower limit may be set for punitive damages for environmental pollution and ecological damage torts, similar to the punitive damages under the Food Safety Law of "1,000 yuan for less than 1,000 yuan" and the punitive damages under the Consumer Rights Protection Law of "500 yuan for less than 500 yuan". In light of the characteristics of environmental tort cases, namely that the amount of environmental damage assessment and restoration is generally high and the subject of infringement is mostly enterprises, less than 5,000 yuan is difficult to have the effect of punishment and intimidation. Therefore, the author uses the lower limit of 5,000 yuan as an example amount, and it should be dynamically adjusted in the future based on judicial practice and typical cases.

3.2. Upper Limit

To avoid excessive punishment, an upper limit is also necessary. If the amount of the victim's loss is determined to be more than 10,000, punitive damages shall be capped at 30% of the total loss. The author believes that the original upper limit of 2 to 3 times is too low to effectively deter enterprises or individuals from maliciously damaging the environment. Therefore, the upper limit should be raised to make those who deliberately pollute the environment and damage the ecology pay a higher price.

3.3. Percentage of expenses

In combination with relevant cases, the author found that in most cases, the amount of punitive damages for enterprises accounted for 5% to 15% of the total amount of losses of the infringed party. However, due to many uncertainties in determining the original "base + multiple" compensation amount, such as the method of determining the base, what is the base, whether it is a certain aspect of loss (such as functional damage) or the resulting damage of economic value, and how many times should be compensated, it is difficult to confirm. Therefore, the author believes that it is more convenient to calculate and better reflect the nature of "punishment" rather than supplementary compensation by simply adding up the total loss in terms of value as a percentage.

4. Conclusion

"Punitive damages" are more about "punishment" than "compensation", and the Civil Code Article 1232 should play its role. Many enterprises would rather bear punitive damages than spend money to deal with pollution because the cost of punitive damages is less than spending money to deal with pollution, and the consequence of enterprises discharging pollution is causing long-term or permanent damage to the natural ecology. There are also many people whose health is impaired or even whose lives are lost due to pollution. Therefore, we must demand that enterprises assume their social responsibilities, and at the same time, we must put an end to all bad behaviors that harm the natural environment.

References

- [1] National Database of Laws and Regulations, Interpretation of the Supreme People's Court on the Application of Punitive Damages in the Trial of Ecological and Environmental Tort Disputes - Judicial Interpretation (2022) No. 1, 2022-1-12, 2025-8-23 <https://flk.npc.gov.cn/detail?id=ff80818181cdceb30181d28c77f9217f&fileId=&type=&title=%E6%9C%80%E9%AB%98%E4%BA%BA%E6%B0%91%E6%B3%95%E9%99%A2%E5%85%B3%E4%BA%8E%E5%AE%A1%E7%90%86%E7%94%9F%E6%80%81%E7%8E%AF%E5%A2%83%E4%BE%B5%E6%9D%83%E7%BA%A0%E7%BA%B7%E6%A1%88%E4%BB%B6%E9%80%82%E7%94%A8%E6%83%A9%E7%BD%9A%E6%80%A7%E8%B5%94%E5%81%BF%E7%9A%84%E8%A7%A3%E9%87%8A>.
- [2] Betty. Punitive damages environment infringement research [D]. Jilin university, 2022.
- [3] Rao Lukang. Research on the Binary Construction of Punitive Damages for Ecological and Environmental Torts under the Principle of "expansion of Private interests and prudence of public interests". Southwestern University of Finance and Economics, 2024.
- [4] Gao Xiaodan. Research on the Application of Punitive Damages in Environmental Civil Public Interest Litigation. Journal of China University of Political Science and Law, 2025, (03): 40-52.
- [5] Zhang Xudong, Yan Wencai. The absence and supplementation of Legislation on Punitive Damages for Environmental Public Interest: An Analysis Based on Article 1232 of the Civil Code and Judicial Interpretations. Journal of Dalian Maritime University (Social Sciences Edition), 2022, 21 (06): 47-58.
- [6] Wang Huidan. Punitive damages environment infringement applicable law research [D]. Huazhong university of science and technology, 2024.
- [7] Xin Miao. Research on the Applicability of Gross Negligence in Punitive Damages for Environmental Torts in China. Legal Review, 2025, (16): 31-33.
- [8] Zhang Chenchen. On the Application of Gross Negligence in Punitive Damages for Environmental Torts in China. At zhongnan university of economics and law, 2022.
- [9] Li Xiaoqiang, Guo Jiajia. Restricted Application and Connection of Punitive Damages Norms for Environmental Torts in the Civil Code Journal of Tianshui Normal University, 24, 44 (02): 16-27.
- [10] Janue. Ecological environment research. Southwest university of political science and law, 2023.

- [11] National database of laws and regulations, Interpretation of the Supreme People's Court on the Application of Punitive Damages in the Trial of Disputes over Environmental and Ecological Infringement Cases, January, 12, 2022, August 23, 2025, <https://flk.npc.gov.cn/detail?id=ff80818181cdceb30181d28c77f9217f&fileId=&type=&title=%E6%9C%80%E9%AB%98%E4%BA%BA%E6%B0%91%E6%B3%95%E9%99%A2%E5%85%B3%E4%BA%8E%E5%AE%A1%E7%90%86%E7%94%9F%E6%80%81%E7%8E%AF%E5%A2%83%E4%BE%B5%E6%9D%83%E7%BA%A0%E7%BA%B7%E6%A1%88%E4%BB%B6%E9%80%82%E7%94%A8%E6%83%A9%E7%BD%9A%E6%80%A7%E8%B5%94%E5%81%BF%E7%9A%84%E8%A7%A3%E9%87%8A>.
- [12] People 's court case database, People' s procuratorate of Fuliang county, jiangxi province v. zhejiang Chemical Group co., LTD. Environmental pollution civil public interest lawsuit ---- application of punitive damages in environmental pollution civil public interest lawsuit, August 12, 2024, August 23, 2025
<https://rmfyalk.court.gov.cn/view/content.html?id=y2uO6%252FirjOZHeR9mKrbKCdpDibodVRK0USdcX%252Fo%252Blq4%253D&lib=ck&qw=%E6%B1%9F%E8%A5%BF%E7%9C%81%E6%B5%AE%E6%A2%81%E5%8E%BF%E4%BA%BA%E6%B0%91%E6%A3%80%E5%AF%9F%E9%99%A2%E8%AF%89%E6%B5%99%E6%B1%9F%E6%9F%90%E5%8C%96%E5%B7%A5%E9%9B%86%E5%9B%A2%E6%9C%89%E9%99%90%E5%85%AC%E5%8F%B8%E7%8E%AF%E5%A2%83%E6%B1%A1%E6%9F%93%E6%B0%91%E4%BA%8B%E5%85%AC%E7%9B%8A%E8%AF%89%E8%AE%BC%E6%A1%88%09----%E7%8E%AF%E5%A2%83%E6%B1%A1%E6%9F%93%E6%B0%91%E4%BA%8B%E5%85%AC%E7%9B%8A%E8%AF%89%E8%AE%BC%E4%B8%AD%E6%83%A9%E7%BD%9A%E6%80%A7%E8%B5%94%E5%81%BF%E7%9A%84%E9%80%82%E7%94%A8>.
- [13] People 's Court Case Database, Civil Public interest lawsuit of Jiangkou County People' s Procuratorate of Guizhou Province against Chen Moping for Ecological Destruction - Application of restorative justice in the Protection of Cultural Relics and Natural Cultural Heritage and application of Liability for Compensation in Sydney Harbour, February 11, 2023, August 23, 2025
<https://rmfyalk.court.gov.cn/view/content.html?id=ZkmHWIDn3uiRvUvUES5DjQM65111t654jOaEX1mbWdg%253D&lib=ck&qw=%E8%B4%B5%E5%B7%9E%E7%9C%81%E6%B1%9F%E5%8F%A3%E5%8E%BF%E4%BA%BA%E6%B0%91%E6%A3%80%E5%AF%9F%E9%99%A2%E8%AF%89%E9%99%88%E6%9F%90%E5%B9%B3%E7%94%9F%E6%80%81%E7%A0%B4%E5%9D%8F%E6%B0%91%E4%BA%8B%E5%85%AC%E7%9B%8A%E8%AF%89%E8%AE%BC%E6%A1%88--%E6%96%87%E7%89 %A9%E5%8F%8A%E8%87%AA%E7%84%B6%E6%96%87%E5%8C%96%E9%81%97%E4%BA%A7%E4%BF%9D%E6%8A%A4%E4%B8%AD%E6%81%A2%E5%A4%8D%E6%80%A7 %E5%8F%B8%E6%B3%95%E7%90%86%E5%BF%B5%E7%9A%84%E8%BF%90%E7%94%A8%E5%8F%8A%E6%83%A9%E7%BD%9A%E6%82%89%E5%B0%BC%E6%B8%AF%E8 %B5%94%E5%81%BF%E8%B4%A3%E4%BB%BB%E7%9A%84%E9%80%82%E7%94%A8>.