

# A Study on Determining the Multiplier for Punitive Damages in Environmental Torts: Starting with the “One to Two Times” Ruling in the Jianyang Brick Factory Air Pollution Case

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**Abstract:** Determining the multiplier for punitive damages is a “practical challenge” in environmental public interest litigation. In the 2025 Jianyang Brick Factory air pollution case, the procuratorate initially proposed a one-fold multiplier as the punitive damages in the indictment, which was upheld at the hearing, but the mediation ultimately settled on a two-fold multiplier. This shift serves as a case study of the evolution in the exercise of discretion regarding the multiplier, from a one-fold multiplier to a two-fold multiplier. This paper focuses on the question of “why the multiplier was changed from a one-fold multiplier to a two-fold multiplier” to discuss current issues of discretionary misconduct. The study found the following: First, the dispute over “one-fold” versus “two-fold” is essentially a difference in the assessment of two aggravating factors—“28 months of continuous emissions” and “malicious acts of interfering with monitoring.” Second, the current law only requires a multiplier of “up to two-fold,” leading to a “black box” in multiplier discretion, with uncertain scales, uncertain weightings, uncertain rules for aggregation, and ambiguous thresholds for changes; Third, the fact that the hearing confirmed a one-fold multiplier but the ruling resulted in a two-fold multiplier reflects the tension between procedural justice and substantive justice; Fourth, establishing a “list of factors” system provides a traceable conceptual framework for discretion, clarifies the weighting of each factor and the corresponding multiplier ranges, and makes the transition from a one-fold multiplier to a two-fold multiplier more logically transparent in the exercise of discretion[7].

**Keywords:** Environmental Public Interest Litigation; Punitive Damages; Multiplier

## Damages; the Jianyang Brick Factory Air Pollution Case

### 1. Introduction

Article 1232 of the section on tort liability in the Civil Code of the People's Republic of China (hereinafter referred to as the Civil Code)[1], promulgated in 2021, provides a clear legal basis for punitive damages in environmental torts[2]. It stipulates that in cases of environmental torts where intentional pollution causes serious consequences, the aggrieved party may seek “corresponding punitive damages.” Judicial interpretations further specify that the upper limit for the multiplier is “twice”[4]. However, determining the appropriate scope of “commensurate” damages remains a practical challenge.

In 2025, Sichuan Province's first public interest litigation case involving punitive damages for air pollution—the Jianyang Brick Factory Air Pollution Case—provided a typical example of this issue. From December 2021 to April 2024, the brick factory exceeded emission limits for particulate matter and sulfur dioxide by a total of 1.5 metric tons. The factory's premises are located near residential areas and fall within a key air quality control zone. In March 2023, during an enforcement inspection by the district's Ecological Environment Bureau, the brick factory repeatedly interfered with the online automatic monitoring devices at the pollution source in an attempt to evade its environmental responsibilities. In June 2023, after the Jianyang Municipal Public Security Bureau investigation and uncovered evidence of the factory's violations harming public environmental interests, the case was transferred to the Jianyang Municipal People's Procuratorate for review. Subsequently, the Jianyang Municipal People's Court filed a civil public interest lawsuit against the brick factory. In January 2025, the Chengdu Railway Transport Intermediate Court

settled the case through mediation. The most notable aspect of this case is the process by which the multiplier for punitive damages was determined: Prosecutor Tang Bo, who handled the case, initially set the punitive damages at a one-fold multiplier as the specific amount for this case, and the public hearing also deemed a one-fold multiplier to be a reasonable amount for punitive damages; however, the compensation amount ultimately determined in the mediation record was a two-fold multiplier.[6] This change raises the most important question addressed in this article: Why did the multiplier change from a one-fold multiplier to a two-fold multiplier? What gaps in discretionary standards does this change in a single case under current law reveal?

## 2. The Debate Between One-Fold and Two-Fold: The Discretionary Dilemma in This Case

### 2.1 Is One Times Sufficient?

Regarding Article 1232 of the Civil Code on “commensurate” punitive damages, Yang Yue and Shi Tiantian point out that the multiplier should be commensurate with the severity of the tortious conduct.[3] As shown in Table 1, let us consider the basic facts of this case as a

**Table 1. Factors Considered in Determining the Punitive Damages Multiplier in the Jianyang Brick Factory Case**

| Factors to Consider           | Circumstances of This Case                                                                                                | Tendencies and Impact on the Multiplier |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Total Emissions               | Total emissions of particulate matter and sulfur dioxide: 1.5 metric tons                                                 | Moderate                                |
| Duration                      | December 2021 to April 2024, for a total of 28 months                                                                     | Significant aggravating circumstances   |
| Subjective Causes             | To evade environmental regulatory oversight, the defendant repeatedly interfered with pollution source monitoring devices | Aggravating Circumstances               |
| Emission Area                 | Located near residential areas and within a key atmospheric control zone                                                  | Aggravating Circumstances               |
| Attitude toward Rectification | Failure to take proactive and timely corrective measures after being investigated                                         | Aggravating Circumstances               |

### 2.2 Is there a basis for the two-fold penalty?

Proponents of the two-fold multiplier argue that tampering with online automatic monitoring devices at pollution sources constitutes an active act of disrupting government regulatory order, reflecting greater subjective malice than the mere discharge of pollutants without cause—which constitutes an aggravating circumstance. Additionally, the 28-month duration of continuous emissions is sufficiently long and should also be considered an aggravating circumstance. When these two highly

whole. Looking solely at emission volumes, the total discharge of the two types of “three wastes” amounts to 1.5 metric tons. Given that the total emission volume in this case is not “large”, a one-fold multiplier might be sufficient. However, if other factors are taken into account, the 28-month period of continuous emissions is already sufficiently long; subjectively, the factory has repeatedly discharged pollutants without authorization and interfered with automatic monitoring devices in an attempt to evade penalties. Geographically, the factory's discharge site is located near a residential area and within a key atmospheric control zone; even after being investigated, the factory failed to proactively implement corrective measures. Some who support the one-fold multiplier view argue that this case involves both temporal factors—such as the duration of emissions—and subjective factors, and that these elements should indeed be taken into account. However, the amount calculated using the virtual remediation method is 22,075.75 yuan, which remains within a reasonable range; therefore, the duration and degree of subjective malice should be considered as reference factors rather than decisive ones[7].

aggravating factors are combined, a one-fold multiplier is no longer sufficient to deter the factory's illegal conduct; imposing punitive damages at a two-fold multiplier is the appropriate course of action.

### 2.3 What Does the Shift from One-Fold to Two-Fold Indicate?

The divergence between one-fold and two-fold multipliers essentially reflects differing evaluations of these two aggravating factors. However, the problem lies in the fact that there is no discernible progression justifying the

leap from a one-fold multiplier to a two-fold multiplier[8]. We cannot determine which specific factor influenced this change in the multiplier, nor is it clear at exactly which point in time this abrupt shift occurred.

### 3. The “Black Box” of Multiplier Scales: Institutional Questions Behind the Changes

#### 3.1 Conceptual Definition of the “Black Box” Problem

The “black box” problem regarding the multiplier scale refers to the absence of clear, traceable, and verifiable measurement traces in the case for the leap from a one-fold multiplier to a two-fold multiplier. We see only the outcome but not the process. The first level is the disappearance of the scale-multipliers can only be integers, with no intermediate values; in this case, this manifests as the question of why the final adjudicated multiplier was not a multiplier of 1.5[7]. The second level concerns unclear weighting—the contribution and influence of each relevant factor on the final multiplier. In this case, this specifically manifests as the question of whether the 28-month period of pollution discharge should be weighted at 0.3 or 0.5[7]. The third level concerns unclear rules for combining factors—were there two or more aggravating circumstances or significantly aggravating circumstances? Are the rules for combining them additive or multiplicative? In this case, how should the multiplier be calculated for the significantly aggravating circumstances of the duration of continuous emissions and subjective malice[8]? The fourth issue concerns the lack of clarity regarding the process by which the multiplier is adjusted: at which specific stage does the adjustment occur, which party initiates it, and on what basis is it made? It is easy to see that the final outcome in this case was settled during the mediation process, but the mediation process itself is equally opaque—we do not know at which stage of mediation the change occurred, which party proposed it first, or whether new factors were introduced. Consequently, the exact point at which the change took place remains unclear. The four issues mentioned above are interrelated and collectively form a “black box” surrounding the exercise of discretion regarding the multiplier, against the backdrop of current legislation that merely stipulates “up to twice the amount.” Without rules governing

weighting of factors, the discretionary process cannot be traced back to specific provisions, and the outcome of such discretion is difficult to predict.

#### 3.2 The Absence of Current Discretionary Standards

3.2.1. The law is too general and lacks rules on the weighting of factors

Article 1232 of the Civil Code merely provides for “corresponding” punitive damages. Judicial interpretations list factors such as the degree of fault and the severity of consequences, but the weighting of these factors is unclear, and no specific multipliers are assigned to them. Furthermore, the law offers no guidance on how to aggregate these factors when two or more are present simultaneously[8].

3.2.2. The discretionary process lacks transparency, and its evolution is untraceable

In this case, the negotiated shift from a one-fold multiplier to a two-fold multiplier occurred during mediation. While mediation offers the advantages of “flexibility and efficiency,” the trade-off is a lack of transparency regarding the discretionary process. We do not know whether new facts emerged behind the scenes during mediation, or whether the company voluntarily accepted the two-fold multiplier. Was the two-fold multiplier figure the result of “negotiation” or “discretionary decision-making”? Public reports provide no clarification on this point.

3.2.3. Lack of a mechanism to address the tension between hearing opinions and the final outcome

In this case, the public hearing endorsed a one-fold multiplier, while the final outcome was a two-fold multiplier; the tension between these lies in clarifying the relationship between procedural justice and substantive justice. According to Article 29 of the *Guidelines on Hearings for Public Interest Litigation Cases by People's Procuratorates*[5], hearing opinions serve as “important references” rather than final rulings. If the majority opinion is not to be adopted, the matter must be reported to the procurator-general; however, this specific process is an internal procedure that does not require public announcement or explanation. When the final conclusion deviates significantly from the hearing's findings, the public is left unsure whether the hearing opinions were seriously evaluated.

#### **4. Establishing Rules for Discretionary Multipliers: From a “Black Box” to “Transparency”**

##### **4.1 The Institutional Framework of the Factor List: Core Elements and Reference Ranges**

To address the “black box” issue surrounding the multiplier scale, the first step is to implement a factor list system, providing a traceable framework for discretion. The factor list is not a mathematical formula but a conceptual framework, aimed at shifting the determination of multipliers from “intuition” to “logic”, and from a “black box” to “transparency”. The factor list should include the following basic elements, with flexible reference ranges specified for each: the amount of ecological and environmental damage as the base multiplier; an additional 0.1 to 0.3 for each additional year of duration; an additional 0.5 to 1.0 for subjective malice (such as interfering with monitoring or falsifying data); an additional 0.2 to 0.5 for regional factors (such as residential areas, water sources, or nature reserves); and adjustments of -0.5 to +0.5 based on whether the attitude toward rectification is positive or negative, respectively [7]. Judges still have discretion within the reference range, but the boundaries of that discretion are clearly defined. A proviso is also included: “If the penalty deviates from the reference range due to special circumstances, an explanation must be provided in the judicial document.” While this allows for flexibility and adaptability, the requirement to provide reasoning also compels transparency in the exercise of discretion. If a list of factors were used—taking the Jianyang Brick Factory case as an example—the determination of the multiplier would be even more straightforward: a base multiplier of 1.0; emissions lasting 28 months or longer may result in an increase of 0.3; severe misconduct such as tampering with monitoring equipment or clandestine discharges may result in an increase of 0.7; the sensitive factor of proximity to residential areas may result in an increase of 0.3; failure to promptly rectify violations after being investigated may result in an increase of 0.1. The sum of these factors is a multiplier of 2.4 [7]. This demonstrates a clearer and more discernible calculation process from a multiplier of 1.0 to a multiplier of 2.0.

##### **4.2 Justification for the List of Factors:**

##### **Balancing Standardization and Flexibility**

Some have questioned whether the list of factors is too stringent and restricts discretionary authority. On the contrary, this case demonstrates the necessity of such a list. It is precisely because we lack such a list that we are unable to answer the question of a one-fold multiplier to a two-fold multiplier. The list is not “too restrictive” or “too strict”; rather, we simply need it to fill the gaps in the current system and provide a “checklist” to support discretion regarding the multiplier. First, the list is a framework, not a formula. It represents a line of reasoning rather than a predetermined outcome; judges use the list to make substantive determinations [8]. The list defines the scope of discretion without eliminating the appropriate space for independent judgment. Second, the list serves to safeguard rather than restrict. Without a list, judges face a blank slate, lacking a clear target; the outcome of their discretion is unpredictable, and it is difficult to reach consistent rulings in similar cases. With a list, judges have a “framework” to rely on; “parties can estimate the general range of discretion”; similar cases can be referenced; rulings are grounded in evidence; reasoning can be detailed and itemized; and the results of discretion are more easily scrutinized. Third, the flexibility of the list preserves room for discretionary judgment. The reference range allows judges to make case-specific choices and trade-offs based on the facts; exceptions may extend discretion beyond the reference range in special circumstances, provided that reasons are given. This preserves flexibility while avoiding arbitrary decisions; the application of the list can be dynamically adjusted in specific cases [8].

##### **4.3 Supporting Mechanisms for the List of Factors: Response to Hearing Input and Process Transparency**

First, strengthen the mechanism for responding to hearing opinions. For example, add a “Statement on the Adoption of Hearing Opinions” at the end of the document, providing a brief and public explanation of the reasons—whether the opinions are adopted or rejected. Taking this case as an example, the mediation agreement could state: “The majority at the hearing agreed on a one-fold multiplier; however, considering the proven malicious intent behind 28 months of emissions and interference with monitoring, we

believe a two-fold multiplier carries greater punitive value and therefore do not adopt the hearing opinion.” This approach acknowledges the hearing while also meeting the requirement for reasoning in procedural fairness. Second, promote greater transparency in the mediation process. In terms of content, mediation agreements should appropriately outline the general factors considered in determining the multiplier, or provide an “explanation” to the public in an appropriate format, ensuring that the rationale for discretionary decisions is both verifiable and accessible without compromising the efficiency advantage that mediation holds over litigation. Third, establish guidelines for reference in similar cases. For example, the Supreme People’s Court and the Supreme People’s Procuratorate could issue reference cases regarding the discretionary determination of punitive damages multipliers, specify compensation multiplier ranges for common scenarios, and establish empirical benchmarks, thereby providing reference cases for the transition from a one-fold multiplier to a two-fold multiplier.

## 5. Conclusion

The shift from a one-fold multiplier to a two-fold multiplier in punitive damages in the Jianyang Brick Factory air pollution case also exposes a deeper-seated dilemma in the current exercise of discretion regarding multiplier ratios: “the provisions on the range of multipliers are overly abstract,” turning the exercise of discretion into a “black box”-with unclear scales, unclear weightings, unclear rules for increases, and unclear points of aggregation. We know only the two endpoints of the calculation formula (a one-fold multiplier and a two-fold multiplier), but it is difficult to trace the procedures and content of the calculation in between. The essence of the debate between one-fold and two-fold lies in the differing evaluations of two significant aggravating circumstances: “28 months of uninterrupted emissions exceeding standards” and “malicious interference with monitoring devices.” This also reflects the inherent leeway in normal judicial discretion regarding multiplier application; however, underlying this superficial issue is the fact that the transition from a one-fold multiplier to a two-fold multiplier lacks a clear “pathway” for exercising such discretion. To address the “black box” problem, this paper

proposes establishing a “list of factors” system for multiplier discretion. The “factor list” is not a one-size-fits-all formula, but rather a framework that balances the norms of discretionary power with the scope for discretion by establishing reference ranges, setting exceptions, and supplementing these with illustrative examples [7]. It provides judges with a reference when faced with gaps in the law, offers parties a degree of predictability regarding the outcome of discretionary decisions, and transforms the arbitrariness of determining the multiplier from a “black box” to a “transparent” process. Only in this way can the determination of the multiplier for punitive damages evolve from “intuition” to “logic” and from “vagueness” to “precision”, thereby truly embodying the institutional purpose of “commensurate” punitive damages as set forth in Article 1232 of the Civil Code.

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