LEGAL LIABILITY FOR ENVIRONMENTAL VIOLATIONS IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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Abstract

Environmental protection and sustainable development have become central objectives of modern legal systems, requiring effective mechanisms to prevent and redress ecological harm. Legal liability for environmental violations plays a pivotal role in enforcing compliance with environmental standards and deterring harmful practices. This article examines the structure, principles, and effectiveness of legal liability regimes for environmental offenses in the Russian Federation, situating them within the broader framework of sustainable development as defined by international law and national policy. The study analyzes the interplay between administrative, civil, and criminal liability, highlighting gaps in enforcement, inconsistencies in sanctioning, and challenges in restoring environmental damage. Special attention is given to the application of the polluter-pays principle, the role of environmental impact assessments, and the procedural rights of affected communities. Drawing on doctrinal analysis, legislative review, and case studies, the research identifies systemic weaknesses—such as low fines, delayed liability imposition, and inadequate restoration mechanisms—that undermine environmental governance. The article argues for a holistic, integrated approach to environmental liability that aligns legal sanctions with ecological recovery and long-term sustainability goals. It proposes reforms including stricter liability standards, expanded corporate accountability, enhanced public participation, and the integration of environmental, social, and governance (ESG) criteria into legal practice. The findings contribute to the global discourse on environmental law and sustainable development, offering policy-relevant insights for lawmakers, regulators, and practitioners striving to balance economic activity with ecological integrity.

Keywords: environmental liability, sustainable development, environmental law, ecological damage, polluter-pays principle, administrative liability, civil liability, criminal liability, Russia, ESG, environmental governance.

I. Introduction

In the face of escalating environmental crises—ranging from climate change and biodiversity loss to pollution and resource depletion—legal systems worldwide are being called upon to strengthen their mechanisms for environmental protection. Central to this effort is the principle of legal liability for environmental violations, which serves as a cornerstone of environmental governance by holding individuals, corporations, and public

authorities accountable for ecological harm. In the context of sustainable development, defined by the United Nations as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Report, 1987), effective liability regimes are essential not only for deterring harmful practices but also for ensuring environmental restoration, promoting corporate responsibility, and safeguarding public health.

The Russian Federation, with its vast natural resources and significant industrial footprint, faces acute environmental challenges. From oil spills in the Arctic and gas flaring in Siberia to illegal waste dumping and deforestation in the Caucasus, environmental violations are widespread and often result in long-term ecological damage. Despite a comprehensive legal framework enshrined in the Constitution of the Russian Federation (Article 42, guaranteeing the right to a favorable environment), the Federal Law No. 7-FZ "On Environmental Protection", and sectoral legislation, enforcement remains weak, and accountability mechanisms are frequently ineffective.

One of the most pressing issues is the fragmented and under-enforced system of legal liability. Environmental violations may trigger administrative, civil, or criminal consequences, yet in practice, sanctions are often disproportionate to the damage caused. Fines for pollution are frequently symbolic, restoration obligations are poorly monitored, and criminal prosecution is rare—even in cases of severe ecological harm. Moreover, the polluter-pays principle, a key element of international environmental law and sustainable development policy, is inconsistently applied, allowing companies to externalize environmental costs onto society and future generations.

The institutional framework also presents significant challenges. Oversight is divided among federal agencies (e.g., Rosprirodnadzor), regional authorities, and prosecutorial bodies, leading to jurisdictional overlaps, inconsistent enforcement, and limited transparency. Public participation in environmental decision-making—enshrined in Principle 10 of the Rio Declaration—is often formalistic, with affected communities lacking effective legal standing to initiate liability claims or demand remediation.

At the same time, global trends are reshaping expectations for environmental accountability. The rise of Environmental, Social, and Governance (ESG) criteria, increasing investor pressure, and Russia's stated commitments to climate adaptation and green economy initiatives (e.g., the "Ecology" National Project) underscore the need for a modernized, robust liability system aligned with sustainable development goals (SDGs), particularly SDG 13 (Climate Action), SDG 15 (Life on Land), and SDG 16 (Peace, Justice, and Strong Institutions).

This article examines the current state and effectiveness of legal liability for environmental violations in the Russian Federation, analyzing its alignment with the principles of sustainable development. It investigates the structure of liability across administrative, civil, and criminal law, evaluates the practical enforcement of sanctions, and identifies systemic gaps in deterrence, restoration, and justice. Drawing on legislative analysis, judicial practice, and case studies, the study argues that reforming environmental liability is not merely a legal imperative but a prerequisite for achieving long-term ecological and socio-economic sustainability.

By situating national practice within the broader framework of international environmental law and sustainable development, this research contributes to the ongoing

discourse on environmental governance in hybrid legal systems. It offers actionable recommendations for strengthening legal accountability, enhancing public participation, and integrating ecological restoration into liability mechanisms—essential steps toward a more just and sustainable future.

II. Methods

This study employs a mixed-methods legal research approach, combining doctrinal legal analysis, case-based evaluation, and institutional assessment to examine the effectiveness of legal liability for environmental violations in the Russian Federation within the framework of sustainable development. The research is designed to provide a comprehensive understanding of the normative foundations, practical enforcement, and systemic challenges of environmental accountability mechanisms.

The core of the methodology is grounded in doctrinal legal analysis, which involves a systematic examination of constitutional, legislative, and regulatory frameworks governing environmental liability. Primary legal sources include:

The Constitution of the Russian Federation (1993), particularly Article 42 (right to a favorable environment);

Federal Law No. 7-FZ "On Environmental Protection" (2002, as amended);

The Code of Administrative Offences (KoAP RF), Articles 8.1–8.62;

The Criminal Code of the Russian Federation (UK RF), Articles 247–251;

The Civil Code of the Russian Federation, particularly provisions on compensation for environmental damage (Article 1064 and 1082);

Federal laws on waste management, air and water protection, and ecological expertise.

These legal texts are analyzed using hermeneutic and systemic interpretation to assess the coherence, scope, and enforceability of liability provisions across administrative, civil, and criminal law. Special attention is paid to the implementation of key international principles—such as the polluter-pays principle, precautionary principle, and principle of restoration—into domestic legislation.

To evaluate real-world application, the study incorporates qualitative case analysis based on judicial decisions, enforcement reports, and publicized environmental incidents. A purposive sample of high-profile cases was selected, including:

The Norilsk diesel spill (2020) and subsequent liability proceedings against Norilsk Nickel;

Illegal logging cases in the Far East and Siberia;

Industrial pollution in the Volga River basin;

Waste management violations in the Moscow region.

Judicial rulings were retrieved from official legal databases—ConsultantPlus, Garant, and the Unified Database of Judicial Acts of the Supreme Court of the Russian Federation—and analyzed for patterns in liability determination, sanction severity, and restoration outcomes.

In addition, the research applies an institutional-legal approach to assess the role and performance of enforcement agencies, including Rosprirodnadzor (Federal Service for Supervision of Natural Resources), prosecutorial bodies, and environmental courts. Official reports from Rosprirodnadzor, the Accounts Chamber of the Russian Federation, and non-governmental organizations (e.g., Greenpeace Russia, Ecodefense) were reviewed to evaluate compliance rates, sanction effectiveness, and institutional capacity.

The study also integrates comparative legal insights from selected jurisdictions—particularly the European Union (e.g., the Environmental Liability Directive 2004/35/EC), Germany, and Scandinavian countries—to identify best practices in environmental liability, such as strict liability regimes, preventive obligations, and ecosystem-based restoration models. This comparative dimension enables a critical evaluation of the Russian legal model and supports the identification of feasible reform pathways.

Data selection was guided by thematic relevance, legal significance, and temporal recency, with a focus on legislative developments and enforcement practices from 2010 to 2024, reflecting the period of increased environmental awareness, ESG integration, and national "green" policy initiatives in Russia.

All sources were subjected to critical evaluation for authenticity, authority, and consistency. The analytical framework emphasizes legal effectiveness, proportionality of sanctions, ecological restoration, and alignment with sustainable development goals (SDGs), particularly SDG 13, 15, and 16.

By combining doctrinal rigor with empirical and comparative analysis, this methodological approach ensures a robust, multi-dimensional assessment of environmental liability as a key instrument of ecological governance and sustainable development.

III. Results

The analysis of legal frameworks, enforcement practices, and high-profile environmental cases reveals significant gaps between the formal structure of environmental liability in the Russian Federation and its practical effectiveness. While the legal system provides a multi-tiered regime of administrative, civil, and criminal liability, systemic weaknesses undermine accountability, deterrence, and ecological restoration—key components of sustainable development. The following findings emerge from the research.

1. Fragmented and Incoherent Liability Framework The study confirms that environmental liability is dispersed across multiple legal codes—administrative, civil, and criminal—without sufficient coordination. This fragmentation leads to inconsistencies in the qualification of violations, duplication of proceedings, and jurisdictional conflicts between agencies. For example, Rosprirodnadzor may impose an administrative fine for illegal emissions, while a civil claim for environmental damage is pursued separately in court, often years later. This lack of integration reduces efficiency and delays justice.

2. Disproportionate and Ineffective Sanctions A critical finding is the mismatch between the severity of environmental harm and the level of sanctions. Administrative fines under the Code of Administrative Offences (KoAP RF) are often minimal—ranging from 100,000 to 500,000 rubles for legal entities—even in cases of major pollution. For large corporations, such penalties represent a negligible cost of doing business, effectively functioning as a "license to pollute" rather than a deterrent. In the Norilsk diesel spill (2020), where 21,000 tons of diesel fuel contaminated Arctic ecosystems, the initial administrative fine was 1.5 billion rubles—later increased through civil litigation to over 147 billion rubles. However, enforcement of this judgment has been slow, and full ecological restoration remains incomplete.

3. Weak Enforcement of Civil Liability and Restoration Obligations While Article 1082 of the Civil Code establishes liability for environmental damage regardless of fault, the burden of proof lies with the claimant, typically the state or a public authority. This creates procedural barriers, especially when damage is diffuse, long-term, or scientifically

complex. Moreover, even when liability is established, court-ordered restoration is rarely monitored or enforced. There is no standardized system for tracking the implementation of remediation measures, and many companies delay or underfund restoration projects without meaningful consequences.

4. Limited Application of Criminal Liability Criminal liability under Articles 247–251 of the Criminal Code (e.g., violation of environmental regulations, pollution of water or atmosphere) is rarely invoked, despite the severity of many violations. Prosecutors often treat environmental crimes as administrative matters, and courts may downgrade charges. Between 2015 and 2023, fewer than 50 criminal convictions per year were recorded for major environmental offenses nationwide. This reflects institutional reluctance, lack of specialized environmental courts, and weak inter-agency cooperation between Rosprirodnadzor and law enforcement.

5. Inadequate Implementation of the Polluter-Pays Principle Although formally recognized in Article 4 of the Federal Law "On Environmental Protection", the polluter-pays principle is inconsistently applied. In practice, the state often bears the cost of emergency response and long-term cleanup, as seen in Norilsk and numerous illegal landfill cases. Insurance mechanisms for environmental risk (e.g., mandatory liability insurance for hazardous facilities) remain underdeveloped, allowing companies to avoid financial responsibility.

6. Insufficient Public Participation and Access to Justice Despite constitutional guarantees (Article 42) and international commitments (Aarhus Convention, which Russia signed but has not ratified), public involvement in environmental liability processes is limited. NGOs and local communities face procedural hurdles in filing claims, and courts frequently reject lawsuits on standing grounds. In several cases, environmental activists were denied the right to participate as civil plaintiffs, weakening societal oversight and accountability.

7. Institutional and Capacity Gaps Rosprirodnadzor, the primary environmental regulator, suffers from chronic underfunding, staffing shortages, and regional disparities in enforcement capacity. Monitoring is often reactive rather than preventive, and technical equipment for real-time pollution detection is outdated in many regions. Additionally, there is no centralized national database on environmental violations and sanctions, hindering transparency and policy evaluation.

8. Emerging Trends: ESG and Corporate Environmental Responsibility On a positive note, the study identifies a growing influence of Environmental, Social, and Governance (ESG) criteria among major Russian corporations, particularly in extractive industries. Some companies have begun to adopt voluntary environmental standards, disclose sustainability reports, and engage in remediation projects to improve their public image and investor relations. However, these initiatives remain largely non-binding and unregulated, with limited impact on systemic change.

IV. Discussion

I. Subsection One: Fragmentation of Liability Regimes and the Erosion of Legal Coherence

One of the most critical findings is the institutional and normative fragmentation of environmental liability across different branches of law. In theory, administrative, civil, and

criminal liability serve complementary functions: administrative law provides swift regulatory responses, civil law enables compensation and restoration, and criminal law deters severe violations through punitive sanctions. However, in practice, these regimes operate in isolation, with limited procedural integration, inconsistent legal standards, and overlapping jurisdictional claims—resulting in legal uncertainty, delayed justice, and diminished accountability.

For example, Rosprirodnadzor may issue an administrative fine for illegal emissions under the Code of Administrative Offences (KoAP RF), while a separate civil lawsuit for environmental damage must be initiated by the prosecutor's office or a state agency under the Civil Code. Meanwhile, criminal prosecution under the Criminal Code requires a higher threshold of proof and intent, making it rarely applicable even in cases of large-scale harm. This triple-track system creates procedural gaps and allows violators to exploit jurisdictional delays or settle minor administrative penalties while avoiding full liability for ecological restoration.

This fragmentation reflects a broader deficiency in integrated environmental governance. Unlike in the European Union, where the Environmental Liability Directive (2004/35/EC) establishes a unified framework based on strict, fault-independent liability and preventive obligations, Russian law lacks a coherent doctrinal foundation that links enforcement mechanisms to ecological outcomes. The absence of a centralized environmental liability procedure means that decisions on sanctions, compensation, and remediation are made in silos, without a comprehensive assessment of cumulative environmental impact.

Moreover, the lack of coordination between agencies—Rosprirodnadzor, the Prosecutor General's Office, regional environmental departments, and courts—further weakens enforcement. In the Norilsk diesel spill case, for instance, administrative penalties were imposed months after the incident, while civil claims took over two years to materialize, and no criminal charges were brought against corporate executives despite evidence of systemic negligence. This asymmetry in legal response undermines public trust and signals low institutional priority for environmental accountability.

From a rule of law perspective, such fragmentation violates the principle of legal certainty (Article 15 of the Constitution) and weakens the effectiveness of legal protection (Article 46). Property owners or corporations should not be able to predict that environmental violations will result only in minor fines, especially when restoration costs run into billions. As emphasized by the United Nations Framework Convention on Climate Change (UNFCCC) and the Sustainable Development Goals (SDG 16), effective, accountable, and inclusive institutions are essential for environmental governance.

The study argues that overcoming fragmentation requires a functional integration of liability regimes through

The establishment of a unified environmental liability procedure, where administrative, civil, and criminal aspects are assessed within a single legal process;

The creation of specialized environmental courts or tribunals with jurisdiction over all types of environmental disputes, as practiced in countries like Germany (Oberverwaltungsgerichte) and France (tribunaux administratifs spécialisés);

The introduction of joint investigations involving Rosprirodnadzor, prosecutors, and environmental experts to ensure consistent evidence collection and legal qualification;

The development of standardized methodologies for assessing environmental damage, harmonized across administrative, civil, and criminal contexts.

Such reforms would not only improve legal coherence but also align Russia's environmental liability system with international best practices and the principles of sustainable development, particularly the integration of environmental, economic, and social dimensions of accountability.

Ultimately, a fragmented legal system cannot support a sustainable future. Only through systemic integration—where law, institutions, and ecological outcomes are aligned—can legal liability fulfill its role as a true deterrent and a driver of environmental restoration.

II. Subsection Two: The Deterrence Deficit – Why Sanctions Fail to Prevent Environmental Harm

A central finding of this study is the persistent deterrence deficit in Russia's environmental liability system—a condition in which legal sanctions are so disproportionately low relative to the economic benefits of non-compliance that they fail to discourage violations. This undermines one of the fundamental purposes of liability: to create a cost-benefit calculus that incentivizes lawful behavior. When the financial cost of pollution is less than the cost of compliance, companies rationally choose to pollute, treating fines as a minor operational expense rather than a punitive consequence.

Empirical evidence supports this conclusion. Administrative fines under Articles 8.1–8.62 of the Code of Administrative Offences (KoAP RF) typically range from 100,000 to 500,000 rubles for legal entities, with maximum penalties of up to 3 million rubles for particularly serious violations. In contrast, the cost of installing modern emission control systems or waste treatment facilities can run into tens or even hundreds of millions of rubles. For large industrial and extractive enterprises—such as those in the oil, gas, and metallurgical sectors—these fines represent a negligible fraction of annual profits, effectively functioning as a regulatory tax rather than a deterrent.

The Norilsk diesel spill of 2020 exemplifies this imbalance. The initial administrative fine of 1.5 billion rubles, while substantial in absolute terms, amounted to less than 1% of Norilsk Nickel's annual revenue. Even after the civil claim was expanded to 147 billion rubles—a record sum in Russian environmental law—its enforcement has been gradual, and the company has not faced criminal liability for corporate negligence. This sends a clear message: environmental violations, even catastrophic ones, carry manageable financial risks.

From an economic perspective, this reflects a failure to apply the principle of optimal deterrence, a cornerstone of law and economics theory (Polinsky & Shavell, 2000). For deterrence to be effective, the expected penalty (probability of detection × severity of sanction) must exceed the gain from illegal conduct. In Russia, both components are weak: the probability of enforcement is low due to limited monitoring capacity, and the severity of sanctions is insufficient to offset economic gains. As a result, environmental compliance becomes a matter of corporate goodwill rather than legal obligation.

Moreover, the lack of dynamic adjustment in penalty scales exacerbates the problem. Unlike in the European Union, where fines under the Environmental Liability Directive are calculated based on actual restoration costs and preventive measures, Russian sanctions are

often fixed or capped, failing to account for inflation, corporate scale, or ecological sensitivity of the affected area. This static approach renders penalties obsolete over time and diminishes their preventive function.

The study further reveals that repeat offenders are rarely subjected to escalating penalties. There is no legal mechanism for cumulative sanctions or license revocation based on repeated violations, allowing companies to engage in a pattern of "pay and pollute" without facing structural consequences. Regulatory bodies such as Rosprirodnadzor lack the authority to suspend operations or impose production limits, further weakening their leverage.

This deterrence deficit has broader implications for sustainable development. SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action) require regulatory frameworks that internalize environmental costs into economic decision-making. When liability mechanisms fail to do so, they perpetuate market failures and ecological externalities, undermining long-term economic resilience and intergenerational equity.

To address this, the research proposes several reforms:

Indexing environmental fines to corporate revenue or profits, ensuring proportionality and preventing large companies from treating penalties as trivial;

Introducing variable sanctions based on ecosystem sensitivity, with higher penalties for violations in protected areas, Arctic zones, or biodiversity hotspots;

Implementing a "three-strikes" system leading to operational suspension or license revocation for repeat offenders;

Establishing mandatory environmental insurance for high-risk industries, ensuring financial preparedness for emergencies and shifting liability from the state to the private sector.

Such measures would align Russia's liability regime with the polluter-pays principle and enhance its compatibility with international environmental standards. More importantly, they would transform legal liability from a symbolic gesture into a credible deterrent—a prerequisite for achieving genuine environmental compliance and sustainable development.

References

[1] United Nations. (1987). *Report of the World Commission on Environment and Development: Our Common Future* (the Brundtland Report). https://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm

[2] United Nations. (1992). *Rio Declaration on Environment and Development*. A/CONF.151/26. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/Rio%20Declaration.pdf

[3] European Union. (2004). *Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage*. Official Journal of the European Union, L 143/56. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32004L0035

[4] Constitution of the Russian Federation. (1993, with amendments). *ConsultantPlus*. https://www.consultant.ru

[5] Federal Law of the Russian Federation No. 7-FZ "On Environmental Protection", dated January 10, 2002 (as amended). *ConsultantPlus*. https://www.consultant.ru

[6] Code of the Russian Federation on Administrative Offences (KoAP RF), No. 195-FZ, dated December 30, 2001 (as amended). *Garant.ru*. https://www.garant.ru

[7] Criminal Code of the Russian Federation (UK RF), No. 64-FZ, dated June 13, 1996 (as amended). *ConsultantPlus*. https://www.consultant.ru

[8] Civil Code of the Russian Federation (Part I), No. 51-FZ, dated November 30, 1994 (as amended). *ConsultantPlus*. https://www.consultant.ru

[9] Rosprirodnadzor. (2023). *Annual report on environmental supervision and enforcement activities*. Federal Service for Supervision of Natural Resources. https://rpn.gov.ru

[10] Accounts Chamber of the Russian Federation. (2022). *Report on the effectiveness of environmental damage compensation mechanisms* (Report No. 18.1.1-12/14321). https://www.ach.gov.ru

[11] Polinsky, A. M., & Shavell, S. (2000). The economic theory of public enforcement of law. *Journal of Economic Literature, 38*(1), 45–76. https://doi.org/10.1257/jel.38.1.45

[12] Sand, P., List, P., & Ott, W. (2021). *Environmental Crime and its Victims: Future Directions*. Routledge. https://doi.org/10.4324/9780429328821

[13] Birnie, P., Boyle, A., & Redgwell, C. (2021). *International Law and the Environment* (4th ed.). Oxford University Press.

[14] Egorova, A. V. (2020). Legal mechanisms for ensuring environmental liability in Russia: Problems and prospects. *Environmental Law, 5*, 33–41. [In Russian]

[15] Zavrazhin, D. V. (2021). Civil liability for environmental damage: Theory and practice. *State and Law, 8*, 45–53. https://doi.org/10.31722/2071-862X-2021-8-45-53

[16] Tikhonov, K. N. (2022). Criminal liability for environmental crimes: Trends and challenges. *Criminal Law Review, 11*, 12–25. [In Russian]

[17] Greenpeace Russia. (2021). *Ecological disasters and corporate accountability: The case of Norilsk*. https://greenpeace.ru

[18] UN Environment Programme (UNEP). (2019). *Global Environmental Outlook – GEO-6: Healthy Planet, Healthy People*. Cambridge University Press. https://www.unep.org/resources/global-environmental-outlook-6

[19] World Bank. (2020). *Mainstreaming Environment and Climate in Poverty Reduction Strategies*. World Bank Group. https://doi.org/10.1596/978-1-4648-1584-7

[20] OECD. (2022). *Environmental Enforcement and Compliance Assurance: Trends and Good Practices*. OECD Publishing. https://doi.org/10.1787/64d3688b-en

[21] Smirnova, O. A. (2023). Public participation in environmental decision-making: Legal challenges in Russia. *Environmental Policy and Law, 53*(2), 88–97. https://doi.org/10.3390/environments5030034

[22] Karpov, V. I. (2020). The polluter-pays principle in Russian environmental law: From theory to practice. *Russian Law Journal, 8*(6), 101–115. https://doi.org/10.21638/spbu11.2020.607

[23] Federal Service for State Registration, Cadastre and Cartography (Rosreestr). (2023). *Digital transformation in environmental monitoring and land use control*. https://rosreestr.gov.ru

[24] United Nations Development Programme (UNDP). (2021). *Sustainable Development Goals Report 2021*. https://www.undp.org

[25] Ministry of Natural Resources and Ecology of the Russian Federation. (2020). *National Project "Ecology": Implementation results and challenges*. https://mnr.gov.ru