Violation Of The Principle of No Harm in Cases of Mercury Pollution by Chinese Gold Mining in Cameroon

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Abstract

Gold mining activities involving the use of large amounts of mercury by a Chinese mining company in Cameroon have caused serious pollution of rivers and other environmental components. This case calls into question the principle of Do No Harm in international environmental law. This principle requires every state within its jurisdiction to avoid transboundary environmental damage that could threaten the safety of the surrounding environment. This study aims to assess the extent of the violation of the Do No Harm principle in this mercury pollution case and discuss the relevant international legal basis for the case. This study uses qualitative legal research methods supported by analysis of international documents or agreements, a literature review, and a review of environmental data indicating high levels of mercury in rivers surrounding the mine. The results of this study indicate that the resulting pollution has had a significant negative impact on cameroon's environment and has violated the international obligation to avoid transboundary environmental damage. Therefore, this case demonstrates the failure to implement the Do No Harm principle and requires accountability from the state and company under international environmental law.

Keywords: Principle of No Harm; International Environmental Law; Mercury; Cameroon; Chinese Gold Mining.

1. Introduction

Mining is one of the sectors that significantly contributes to a country's economic growth. Its presence contributes to economic growth and helps increase incomes within a country through the efficient management of its mineral resources. However, large-scale mineral management can lead to negative environmental impacts due to the release of waste from mining operations or the subsequent use of resources exceeding established limits.[1] Every country has binding regulations requiring its citizens to protect the environment from damage caused by mining activities. For example, Indonesia stipulates this in Law No. 32 of 2009 concerning Environmental Protection and Management, specifically articles 59-63

[1] N.Y. Nurlaily, A. Supriyo, "Pertanggungjawaban Korporasi Dalam Kasus Pencemaran Lingkungan Hidup", Vol. 3, No. 3, *Media Of Law And Sharia,* 2022, p. 255. DOI : http://dx.doi.org/10.18196/mls.v3i3.14384

concerning the management of hazardous and toxic waste, including mercury, cyanide, and tailings mines.[2]

Because if its use is not controlled, such hazardous substances will cause many diseases, birth defects, death, and even the termination of the chain of an organism. Therefore, if it is not processed properly, it will have a very bad impact on the environment and the surrounding community because it causes environmental pollution. Environmental pollution is a change in the structure of the environment due to human activities that disrupt the quality of the environment so that the environment cannot function properly, this is caused by the entry or introduction of living things, energy substances, and/or other components into the environment.[3] Speaking of environmental pollution, one of the many environmental pollution cases in Cameroon has been highlighted: the case of Chinese gold mining companies Mencheng Mining and Zinquo Mining. Both companies are developing gold mines in the northern and eastern regions of Cameroon. According to a report from the environmental agency, the gold mining practices used by both companies involve mercury and cyanide to extract the gold, which is then dumped into nearby rivers, causing environmental pollution.[4]

As many as 40 liters of mercury and cyanide are found daily in the waters near the gold washing ponds used by the gold mining company. Rivers are polluted, fish populations have declined drastically, and communities have lost access to safe drinking water. The United Nation communication also highlighted the impact of chemical use, particularly mercury, on aquatic biodiversity.[5] This action is certainly very contrary to Article 1 and Article 2 of the Minamata Convention, which in the article confirms the purpose and definition of the convention to always protect human health and the environment from emissions and releases of mercury compounds, because each state party such as Cameroon and China has an obligation to control and reduce the release and disposal of mercury from mining activities. Because both countries have ratified the Minamata Convention, then if these companies channel mercury into the river, of course it is contrary to the purpose and obligations of the Minamata Convention, because it is Cameroon's responsibility to maintain environmental sustainability is questionable.[6]

Cameroon also has Law No. 96/12 of 5 August 1996 on Environmental Management, which establishes a general legal framework for environmental management in its territory. Article 3 states that the President of Cameroon is responsible for establishing national environmental policy, while the government, in collaboration with the relevant non-

[2] Undang-Undang No.32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup

[3] O. J. Sumampouw, J. E. Nelwan, *Dasar Kesehatan Lingkungan: Konsep Dasar dan Pencemaran Lingkungan,* Yogyakarta: Deepublish Digital, 2024, p. 6.

[4] Christophe Nyemeck Beat, *Chinese Companies Criticized For Mercury Pollution In Cameroon*, Mongabay, September 06, 2022, accessed on November 19, 2025, at 7:01 PM, https://news.mongabay.com/2022/09/chinese-companies-slated-for-mercury-pollution-in-cameroon/

[5] Ulises Quero, *Cameroon: UN Experts Urge Action on Mercury Pollution, Corporate Accountability in Gold Mining*, International Service for Human Rights, Juli 29, 2025, accessed on November 19, 2025, at 8:35 PM, https://ishr.ch/latest-updates/cameroon-un-special-procedures-urge-action-on-mercury-pollution-and-corporate-accountability-in-gold-mining/

[6] Undang-Undang Republik Indonesia Nomor 11 Tahun 2017 Tentang Pengesahan *Minamata Convention On Mercury*

governmental organizations, is responsible for its implementation. Article 29 also regulates environmental protection, prohibiting the discharge or indiscriminate release of substances that could damage water quality without special permission. Article 30 lists hazardous substances that are prohibited or permitted to be discharged into water.[7] In 2007, Cameroonians began mining around Betare Oya using traditional methods. However, three years later, a Chinese company arrived and established a mine on Cameroonian soil. According to reports from environmental organizations such as the Centre for Environment and Development (CED), they used the alluvial method, an open-pit mining method, to extract gold from river sediments.[8]

National Geographic explains that for some time, around one hundred mining pits have been abandoned around the Longa Mali village land, East Cameroon. Most of the existing pits are filled with water. Gabriel Yadji, as the Regional Head of the Ministry of Mining explained that when mining companies see that expenses exceed the profits obtained, the companies will move to another location, this has become one of the major issues faced by the Cameroonian government because it failed to rehabilitate abandoned sites. Based on Forest and Rural Development (Foder) data, from 2011 to 2014 it was known that there were more than 100 mining companies in the region and most of them came from China, Korea, Canada, America, and South Africa. And it is clearly stated that 285 kilograms of gold were excavated in Cameroon in 2017. However, all of these results are not felt by the Cameroonian people, they feel that mining companies only exploit Cameroon's mineral resources, because Betare Oya District should have collected more than 1.6 million US dollars or around 22 billion from mining company royalties since 2014.[9]

These companies exploit policy gaps, weak governance, and a lack of regulatory enforcement in the mineral-rich West African nation. Not only do the Cameroonian people feel ecologically and socially disadvantaged, but the actions of these two companies also call into question the No Harm Principle. This principle is a fundamental pillar of international environmental law, particularly in cases of mercury pollution from foreign mining operations. In the context of international environmental law, the No Harm Principle explains that a state has an obligation to prevent activities within its jurisdiction from causing damage to the environment of another state. This concept has long been studied in international legal literature as a customary norm (customary international law).[10]

The Cameroonian government calls on Chinese companies involved in gold mining activities in Cameroonian territory to respect human rights in all their overseas operations. The communication includes input from civil society, including Forêts et Développement

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[7] Law No. 96012 of August 5, 1996, on the Framework Law on the Environmental Management, Cameroon

[8] Voice of America Indonesia, "Warga Kamerun Protes Perusahaan Tambang China", 11 Maret 2016, accessed on November 20, 2025.

[9] Gita Laras Widyaningrum, "Dampak Penambangan di Kamerun: Nyawa dan Rusaknya Lingkungan", National Geographic. https://nationalgeographic.grid.id/read/13313008/dampak-penambangan-di-kamerun-nyawa-dan-rusaknya-lingkungan. accessed on November 20, 2025.

[10] M. Aditya, W. B. Rakhmi, "Prinsip *No Harm Rule* Dalam UNCLOS Sebagai Dasar Pertanggangungjawaban Negara Atas Kerusakan Laut Akbit Perubahan Iklim", *Reasearchgate*, October 2025, p. 2.

Rural (FODER) and International Service for Human Rights, while also noting the systemic barriers faced by human rights defenders and affected communities seeking justice for their territories. Cameroon's regulatory weaknesses constitute a violation of its obligations under international human rights treaties, including the Minamata Convention on Mercury, which Cameroon ratified in 2021, the International Covenant on Economic, Social and Cultural Rights (ICESCR), and the African Charter on Human and Peoples' Rights.[11]

From all the polemics that occurred between the Chinese-owned mining company and the state of Cameroon, it emphasizes that the principle of No harm is clearly violated, even though there are binding regulations, there are still individuals who violate it. This study will discuss the extent to which the violation of the principle of no harm in the mercury pollution case has occurred, as well as discuss the relevant international legal basis for the case of mercury pollution due to gold mining from China. There have been many studies related to mercury pollution in gold mining areas in Cameroon, (Bela Atangana et al., 2023) discussing the Hydrogeochemistry and mapping of water quality in the Lom River Basin that measures mercury concentrations and its effects on water and sediment quality, (Heliyon et al., 2022) discussing the impact of gold mining on the water quality of the Lom River at Gankombol (Adamawa Cameroon), and there are many more studies that examine issues from Health to the environment. However, in this study, although general literature on the principle of no harm in the international environment is widely available, especially in the International Law Commission and academic articles, there is still very little focus that discusses the application of the principle of no harm. Therefore, this study will explicitly link existing problem cases with violations of the Principle of No Harm with an in-depth legal analysis of the responsibility of the state or Chinese-owned mining companies due to cross-border environmental pollution.

2. Method

This study uses a normative legal research method supported by analysis of international documents or agreements such as the Minamata Convention, literature reviews, and environmental data reviews that show high levels of mercury in rivers around mining.

3. Result and Discussion

3.1 Mercury Pollution by Chinese Gold Mining in Cameroon

Gold mining activities by Chinese companies in Cameroon have led to a significant increase in mercury levels in river water. Locations adjacent to gold washing processes show the highest mercury (Hg) levels, especially those in areas subject to heavy exploitation. Furthermore, pollution increases downstream due to the accumulation of mining waste streams. Mercury concentrations in the upstream areas of the river have been recorded as high as 21 μg/L in some locations over a period of time, and in other locations, specifically in the middle reaches of the river, mercury levels have reached 31 μg/L. Compared to the Hg standard set by the World Health Organization (WTO) for drinking water, which is 1 μg/L, while river concentrations in Cameroon reach 8-50 31 μg/L, the

[11] Jose Luis Trevino, "Cameroon: UN Experts Urge Action on Mercury Pollution, Corporate Accountability in Gold Mining", *International Service for Human Rights*, 29 July 2025, accessed on November 21, 2025.

mercury levels recorded in some areas of the Cameroon River are 50 times higher than the safe limit set by the WHO. This reinforces the failure of environmental management and heavy metal pollution control regulations in Cameroon.[12]

A researcher from Gadjah Mada University in Yogyakarta, Marike Mahmud, explained that the negative impact of gold mining is mercury pollution. In fact, environmental changes including water quality, sediment, aquatic animals, and vegetation are also affected by the use of mercury in gold extraction. Based on her findings, mercury pollution is a result of the amalgamation process of gold processing. Marike explained that the milling process carried out simultaneously with the amalgamation process can result in the leaching of mercury from the dregs into rivers. This then leads to accumulation and biomagnification in the bodies of aquatic animals such as fish and shellfish, which are ultimately consumed by humans.[13]

To minimize the negative impacts of mining activities on Cameroon's local population and environment, all stakeholders must implement Law No. 2016/017 of December 14, 2016, concerning the mining code on health, safety, hygiene, and environmental protection. However, environmental restoration efforts at abandoned mine sites remain minimal, which are vulnerable to erosion of waste rock piles and tailings into rivers. Recently, there has been an increase in artisanal gold mining in several districts in the Eastern Region, including Betare-Oya, Batouri, Yokadouma, and Kette. Extraction methods include open-pit mining of weathered primary gold deposits or from alluvial sediments using traditional methods, and semi-mechanized exploitation often using heavy machinery, which inevitably has a negative impact on the environment.[14]

3.2 Violation of the of No Harm Principle and Corporate Liability for Cross-border Damage

The principle that obligates states to ensure that activities within their jurisdiction do not cause damage to the territory of other states is a fundamental foundation of international environmental law. The occurrence of mercury pollution in the rivers of Cameroon is the worst damage caused by humans to the environment. The principle of no harm is rarely mentioned explicitly in international responses to environmental damage. This principle explicitly requires states to ensure that activities within their jurisdiction do not cause serious transboundary damage.[15] The principle of no harm was first affirmed by the Trail Smelter arbitration award of 1941, and re-affirmed by Principle 21 of the 1972 Stockholm Declaration on the Human Environment in h the following terms:

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[12] M. S. B. Atangana, J. R. N. Ngoupayou, J. F. Deliege, "Hydrogeochemistry and Mercury Contamination of Surface Water in the Lom Gold Basin (East Cameroon): Water Quality Spatial Interpolation", Vol. 15, MDPI, 2023, pp. 7-18.

[13] Bambang Priyo Jatmiko, "Penambangan Emas Picu Pencemaran Merkuri", *National Geographic Indonesia*, May 2, 2012, accessed on November 22, 2025. https://nationalgeographic.grid.id/read/13282140/penambangan-emas-picu-pencemaran-merkuri

[14] M. E. Mimba, et al., "Environmental Impact of Artisanal and Small-Scale Gold Mining in East Cameroon, Sub-saharan African: An overview", Vol. 15, ScienceDirect, September 2023.

[15] Assistant Professor Benoit Mayer, "The Relevance of the No-Harm Principle to Climate Change Law and Politics", Vol. 19, Asia Pasific Journal of Environmental Law, 2016, pp. 79-104.

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.[16]

The environmental legal system is currently facing three crucial crises: climate change, biodiversity loss, and pollution. Existing laws may be weak or poorly enforced in addressing the damage caused by human actions. This raises questions about whether these laws provide adequate protection for the independence of humans, their fellow species, and the planet. The United Nations General Assembly (UN) recognized the right to a clean, healthy, and sustainable environment as a fundamental human right at its June 2022 General Assembly. However, the increasing number of air pollution cases threatens the stability of this right. Further, in March 2025, the UN Human Rights Councilcalled upon states to respect, protect and fulfil human rights in all actions undertakento address environmental challenges. While 'soft law', these resolutions reflect agree-ment on the links between sustainable development, protection of the environmentincluding ecosystems, and promotion of human wellbeing and full enjoyment of allhuman rights for present and future generations. The Kunming-Montreal Global Biodi-versity Framework (GBF), which was adopted by the 15th Conference of Parties to theConvention on Biological Diversity, also acknowledges the right to a clean, healthyand sustainable environment. It is hoped that the above-mentioned UN resolutionsand the GBF will be a catalyst for action in this area.[17]

Furthermore, legal literature states that due diligence and prevention are essential to avoid environmental damage, especially in cases of severe and irreversible damage. Therefore, the no-harm principle will apply normatively in mining operations that impact the environment, including the use of mercury.[18] However, this case demonstrates a failure or violation of the principle of harmlessness, because as previously explained, mercury pollution was indicated through studies in the Lom River basin located in eastern Cameroon. Total KHg in the river reached between 0.7 μg/L to more than 11 μg/L during the low water season, and during the high water period reached 50 μg/L. These results caused a drastic decline in water quality, had a negative impact on human health, especially children, and environmental degradation such as a decrease in fish populations, a reduction in river ecosystems, and difficulty in obtaining clean water for the

[16] Declaration of the United Nations Conference on the Human Environment, United Nations Conference on the Human Environment, principle 21 (1972)

[17] G. Parihar, L. Bhullar, "Reviving India's River Goddesses: Ecocide, the Human Right to a Healthy Environment and Rights of Nature", *The International Journal of Human Rights*, 2025, pp. 3-5. DOI : https://doi.org/10.1080/13642987.2025.2573386

[18] J. S. Arazea, N. J. Mourinho, "Tanggung Jawab Negara Atas Kejahatan Lingkungan: Studi Kasus Tumpahan Minyak Deepwater Horizon", Vol. 13, No. 8, *Jurnal Hukum dan Kewarganegaraan*, 2025.

Cameroonian community.[19] Even though the use of mercury in Cameroon has been banned, there are reports from international organizations and United Nations experts that mercury is still being used within unreasonable limits by mining companies, including Chinese mining companies called Mencheng Mining and Zinquo Mining. This is why it can be considered a violation of the principle of no harm because the mining companies do not control the use of mercury so that the river is heavily polluted by mercury, indirectly the existing law enforcement in Cameroon is not carried out effectively, the obligation for due diligence and mining supervision, corporate responsibility for the impacts made, as well as transparency to access to justice for victims is not prioritized, therefore from a legal perspective there has been a violation of the principle of no harm.

One way to resolve this case is to demonstrate good faith and corporate accountability in addressing the environmental damage caused. Although law enforcement appears weak, the Cameroonian people have long awaited accountability. Numerous pollution reports have been filed through non-governmental organizations, including the Center for Environment and Development (CED), Forest and Rural Development (FODER), and media reports detailing mercury pollution and alleged mining waste disposal practices by Chinese companies. However, these NGOs have found it difficult to obtain confirmation of the companies' responses. Furthermore, media investigations and field studies have captured images of impacts such as contaminated water, dead animals, and human exposure, but there has been no action to indicate that court decisions or fines have been imposed on these foreign companies.[20]

United Nations experts have demanded action and accountability, including communication of special procedures, to require enforcement, access to justice, and corporate accountability. The Cameroonian government has taken preventative measures but not strictly punished the company. The actions in question include Cameroon ratifying the Minamata Convention in 2021 and, together with the United Nations Industrial Development Organization, developing a National Action Plan for the artisanal and small-scale gold mining sector by 2024, aimed at reducing mercury use. While these policies represent progress in policy or mitigation efforts by Cameroon, they do not constitute evidence of corporate legal accountability, such as fines, prosecution, or restitution for mercury-affected victims. Therefore, despite communication and media reports, Chinese mining companies have yet to fully address environmental damage caused by mercury pollution in Cameroon.[21]

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[19] M. S. B. Atangana, J. R. N. Ngoupayou, J. F. Deliege, "Hydrogeochemistry and Mercury Contamination of Surface Water in the Lom Gold Basin (East Cameroon): Water Quality Spatial Interpolation", Vol. 15, MDPI, 2023, pp. 7-18.

[20] Yannick Kenne, "Treacherous Pits and Lakes Left in the Wake of Cameroon's Abandoned Mining Sites", *Mongabay*, February 24, 2023, accessed on November 24, 2025. https://news.mongabay.com/2023/02/treacherous-pits-and-lakes-left-in-the-wake-of-cameroons-abandoned-mining-sites/

[21] United Nattion Industrial Development Organization, "UNIDO Assist Cameroon to Tackle Mercury Pollution Through New National Action Plan for ASGM Sector", July 10, 2024, accessed on November 24, 2025. https://www.unido.org/news/unido-assists-cameroon-tackle-mercury-pollution-through-new-national-action-plan-asgm-sector

4. Conclusion

The case of mercury pollution by a Chinese gold mine in Cameroon provides a clear illustration of the violation of the no-harm principle and the failure to implement it as a fundamental principle of international environmental law. It has proven that the country and the companies have not fully fulfilled their obligations to prevent, control, and reduce the risk of mercury contamination as stipulated in the Minamata Convention and the principle of state responsibility. Although they have taken steps forward with the creation of a National Action Plan with the United Nations Industrial Development Organization, this step cannot yet be an answer to the issue of responsibility for the damage that occurred in Cameroon. Ultimately, this study reaffirms that there has indeed been a violation of the No Harm principle, and this case is important to discuss because without consistent and absolute law enforcement, the No Harm principle will lose its existence and effectiveness as a fundamental principle of international environmental law.

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[9] Undang-Undang Republik Indonesia Nomor 11 Tahun 2017 Tentang Pengesahan *Minamata Convention On Mercury*

[10] Law No. 96012 of August 5, 1996, on the Framework Law on the Environmental Management, Cameroon

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