



Criminal Law Aspects in the Quartz Sand Mining Activities in West Kalimantan Province

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Abstract

This research aims to analyze the criminal law implications in resolving disputes related to quartz sand mining in the West Kalimantan Province. The significant ecological impact of quartz sand mining activities creates conflicts concerning permits, land ownership, environmental damage, and the rights of local communities. Criminal law plays a crucial role in upholding justice and addressing potential violations. This paper discusses the role of criminal law in several essential aspects: First, the Role of Criminal Law in Mining Permits, where criminal law can be employed to enforce mining permits, creating obstacles for those intending to violate established permits. Second, Criminal Law Aspects related to Environmental Damage, where violations of environmental regulations can lead to criminal actions with the aim of preventing environmental harm. Third, Conflicts with Local Communities and Landowners, where criminal law protects the rights of local communities and landowners through sanctions imposed by the Law. Fourth, Illegal Mining, where criminal law is used to address illegal mining practices, uphold the principles of justice, and protect the interests of the state and the community. Additionally, dispute resolution also requires more collaborative alternative approaches, such as mediation or arbitration. The criminal law implications in this approach must be understood to ensure that the dispute resolution process continues to be fair and effective. The role of law enforcement agencies and the judicial system is crucial in ensuring that criminal actions are taken in accordance with the principles of justice.

Keywords: *Criminal Aspects; Mining; Quartz Sand*

Introduction

Quartz sand mining in West Kalimantan Province may involve various legal aspects, including environmental, permits, and compliance with government regulations. Criminal law implications can arise from violations of regulations governing mining and the environment (Sudarwanto & Kharisma, 2020). Some potential criminal law implications that may occur are: Environmental Violations (Wahyu Risaldi, Mujibussalim, 2018): If quartz sand mining fails to comply with environmental regulations, such as unauthorized disposal of hazardous waste or causing damage to the local ecosystem, mining operators and related companies may face charges of environmental violations (Mubarak, 2019). This can lead to

criminal penalties, including substantial fines or even criminal charges against the individuals responsible (Tamaulina Br. Sembiring, 2019).

Misuse of Permits: If mining is conducted without the required permits or violates the terms of existing permits, it can be deemed an illegal action. Misuse of mining permits may lead to criminal legal claims against the responsible parties for the mining activity (Priyanta, 2010). **Environmental Pollution** (Linggotu & Polii, U. Papatungan, 2016): If quartz sand mining causes water, air, or soil pollution, it can be considered a legal violation that may lead to criminal charges. Environmental pollution can have adverse effects on human health and ecosystems, prompting governments to take stringent measures to address polluters.

Social and Economic Losses: If quartz sand mining results in significant social and economic losses for the local community, such as disruptions to traditional livelihoods or environmental damage, this can also trigger criminal legal actions against the responsible parties. It is important to note that laws and regulations related to mining and the environment may change over time. Quartz sand mining is a crucial sector in the mining industry in many countries (Said, M.Yasir, 2020). Quartz sand is utilized in various industries such as construction, electronics, and manufacturing. However, similar to many other mining activities, quartz sand mining often gives rise to issues and disputes, both among the parties involved in the activity and with the communities affected socially and environmentally.

This research will specifically address the impact of quartz sand mining on the environment and discuss the criminal law aspects related to quartz sand mining activities in the West Kalimantan Province.

Research Methodology

The methodology employed in this research will be empirical-judicial, utilizing primary data as the main research data and secondary data as supportive information. Data collection for the research will involve observation and literature review (Said, M.Yasir, 2020). The collected data will be analyzed qualitatively. Literature review data will be utilized to comprehend the criminal law implications in the context of quartz sand mining, while case data will be analyzed to identify patterns in dispute resolution that have occurred.

Discussion

Quartz sand mining is a mineral extraction activity that has significant impacts on the environment and the surrounding community (Diyah Sita Prahesti, Sukardi, 2022). The criminal law implications for dispute resolution in quartz sand mining activities become crucial to analyze. This paper will discuss various aspects related to the criminal law implications in resolving disputes arising from quartz sand mining activities.

The Impact of Quartz Sand Mining on the Environment

Quartz has many uses, such as in the glass, ceramic, and technology industries. However, quartz sand mining often leads to negative environmental impacts, such as damage to natural habitats, water and air pollution, and soil erosion. Social impacts also frequently occur, including conflicts with local communities affected by these activities. Quartz sand mining has several significant environmental impacts, such as damage to aquatic ecosystems and disturbance to coral reefs: (Ahmad Redi, 2016) Sand mining can damage coral habitats, disrupt marine life, and reduce biodiversity. **Sedimentation:** Sand dredging can lead to increased sedimentation in rivers or water bodies, disrupting aquatic life and reducing water transparency, thereby affecting aquatic ecosystems (Aulya Noor Rahmah, Muhammad Rasyid Ridha, 2021).

Impact on Wildlife, Habitat Loss: Mining activities can reduce or eliminate the natural habitat for various species of animals and plants (Aalders, Marius, 1997). **Disruption to Ecosystem:** Damaging the food chain and disrupting the balance of the ecosystem, which can result in the migration or extinction of certain species.

Impact on Air and Soil Quality. Dust and Particulate Matter (Ijaiya, Hakeem, 2014): The mining process can generate dust and particulate matter that disrupt air quality and may lead to health issues for both humans and animals. **Compromised Soil Structure:** Sand mining can alter soil structure, causing soil erosion and reducing land fertility (R.K. Khitoliya, 2002).

Landscape Changes. Damaging natural aesthetics, as sand mining often alters the natural spatial arrangement and beauty of the existing landscape. **Social Impacts** such as resource conflicts, where sand mining frequently triggers conflicts over resources and land use among local communities, the government, and mining companies. **Hydrological Changes,** (Nissim Seror Boris, 2020) due to changes in water flow, sand dredging can affect the water flow in rivers and surrounding areas, influencing water patterns and the availability of clean water. To mitigate these impacts, it is important to implement sustainable mining practices, prioritize environmental protection, and comply with existing regulations. Efforts to recycle sand, reduce waste, and develop more environmentally friendly mining technologies can also help minimize its negative impacts.

Criminal Law Implications in Quartz Sand Mining

Criminal law implications in quartz sand mining can involve various aspects, including: **Environmental Violations:** Quartz sand mining that does not comply with environmental regulations may be considered a criminal offense (Is, 2020). Such actions can result in environmental pollution, ecosystem damage, and disruption to the livelihoods of local communities (Chaofeng Yin, 2021).

Health Violations: Quartz sand mining can generate fine dust particles containing silica crystals. If inhaled by mining workers or residents in the vicinity, they may experience serious health issues such as lung diseases and silicosis. If mining management fails to ensure safe working conditions, it can be considered a criminal law violation (Sulaiman et al., 2019).

Land and Resource Damage: Uncontrolled mining can damage land and natural resources. This destruction can lead to erosion, river sedimentation, and the loss of agricultural land. Such actions can be considered criminal offenses against natural resources (Kaefer et al., 2015). **Violence and Conflict:** Disputes between mining companies and local communities often escalate to physical conflicts or threats of violence. Such actions constitute criminal offenses and need to be addressed through law enforcement (So Woong Kim, 2009).

Quartz sand mining involving illegal activities often violates various criminal laws and related regulations. Some criminal law aspects related to illegal quartz sand mining include; **Violation of Mining Laws,** where illegal quartz sand mining may breach mining laws regulating permits, regulations, and procedures for exploiting natural resources. Additionally, it may involve **Corruption Crimes,** as in some cases, illegal mining may entail corrupt practices involving bribery to obtain permits or disregard existing regulations (Safitri, 2020).

The criminal law aspect related to the environment is **Environmental Violation,** as illegal mining activities can create serious environmental impacts such as habitat destruction, water and air pollution, violating environmental protection laws. Another criminal aspect is (Deslita, Hartiwingsih, 2020), **Natural Resource Theft,** the illegal dredging or mining of quartz sand can be considered as the theft of natural resources protected by the law.

Violation of Property Rights: Illegal mining often occurs on land not owned by the perpetrators, violating property rights and land laws that regulate land ownership. Tax Evasion and National Income: Illegal mining activities often do not comply with tax obligations and avoid the economic contributions that should be provided to the state (Wahyu Risaldi, Mujibussalim, 2018). The various legal aspects make quartz sand mining an industrial activity that can have positive economic impacts but also involves violations of criminal law. Therefore, there must be sanctions to prevent violations and illegal mining activities. Penalties for illegal quartz sand mining can include hefty fines, imprisonment, revocation of business permits, or other legal actions in accordance with the laws of a country. These sanctions are intended to deter illegal practices, provide a deterrent effect, and protect natural resources and the environment. Additionally, preventive efforts to curb violations of illegal quartz sand mining activities involve collaboration between the government, law enforcement agencies, and environmental organizations to stop these illegal practices and maintain environmental sustainability. Enforcing the law against illegal mining perpetrators is crucial for preserving environmental sustainability and ensuring responsible utilization of natural resources.

Conclusion

Based on the discussion of this research, it is concluded that quartz sand mining activities in West Kalimantan Province can contribute to the economic growth of the community. However, on the other hand, it has environmental impacts such as the disruption of aquatic ecosystems, influence on wildlife, disturbance to ecosystems, damage to the food chain, and disruption of the ecosystem balance that can result in the migration or extinction of certain species. The criminal law aspect in quartz sand mining can involve several aspects, including: Environmental Violations, violations of mining laws, especially related to mining business permits, and violations of tax laws if the mining activities are illegal. Therefore, preventive and repressive efforts are needed to regulate quartz sand mining activities in West Kalimantan Province, ensuring that mining activities bring positive impacts to the community.

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