

Environmental Impact on Class C Quarry Mining Activities

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ABSTRACT

One of the industries that can bring in a lot of foreign exchange is mining. In this case it is recognized that the mining sector can contribute significantly to local revenue, but it should be noted that there will also be environmental and social impacts. Mining activities of class C excavation materials starting from the exploration stage to exploitation and utilization have an impact on society both negatively and positively. In this study using normative research methods. The focus of this research is the impact of C excavation mining activities on the environment. Some common environmental impacts associated with quarry mining include: Habitat destruction, water pollution, air pollution, climate change and social impacts.

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1. INTRODUCTION

One industry that can bring in a lot of foreign exchange is mining. Natural resources from the mining sector are one of the natural resources (1). The excavation material is controlled by the State which has the authority to regulate, manage, and supervise the management or exploitation of excavation materials, and is obliged to utilize as much as possible for the prosperity of the people. Control by the state is organized by the government (2). This sector produces various types of mining commodities that have different economic values. In addition, the mining sector also absorbs quite a lot of labor from the district or city area and the mining sector is a source of original regional income (PAD). The mining sector can play an important role in contributing to original regional income. Here are some contributions of the mining sector to local revenue: Tax and Retribution Receipts: Mining is often a major source of tax and levy revenue for local governments. Local governments can impose taxes such as income tax, mining royalties and property tax on mining companies. In addition, the government can also impose levies on the use of land and natural resources used in mining activities. Dividends and Revenue Sharing: Local governments that own shares in mining companies can receive dividends and revenue sharing from the company's profits. This can be a significant source of revenue for local governments. Revenue from Contracts and Licenses: Mining companies usually have to apply to the local government for contracts and licenses to carry out mining activities in the area. Local governments

may earn revenue from the receipt of contract fees, business licenses, or related document processing fees. Labor Absorption: The mining sector usually requires a large workforce. With mining activities, many local workers can be employed, thereby increasing the income and purchasing power of the local community. The income received by the workforce can increase local revenue through income tax payments and consumption expenditures. Impact on the Local Economy: Mining activities can have a positive impact on the local economy through a multiplier effect. Revenues received by mining companies can flow to other sectors such as transportation, hospitality, construction services, and others. Although the mining sector can contribute significantly to local revenue, it is also necessary to consider the environmental and social impacts that may be caused by mining activities. Mining activities of class C excavation materials ranging from exploration to exploitation and utilization have an impact on society, both negative and positive (3). It is important for local governments to maintain a balance between economic growth and environmental sustainability as well as the welfare of local communities in managing the mining sector. In addition to bringing in foreign exchange and absorbing a fairly high workforce, the environmental damage left behind is also not small, but has a considerable and serious impact, especially for the people of the mining area. One indicator of environmental damage due to mining activities is as follows: Water Pollution that often produces liquid waste: If this waste is not managed properly, it can pollute surrounding water sources. Water pollution can damage aquatic ecosystems, threaten the lives of aquatic organisms, and affect the quality of water used by local communities. Air Pollution, the excavation, drilling and processing processes in mining can generate dust, toxic gases and fine particles that can pollute the air around the mining site. This air pollution can have negative impacts on human health and the surrounding environment, especially if toxic particles are inhaled or deposited in soil and water. Habitat and Biodiversity Destruction, mining activities often involve extensive land excavation, deforestation, and displacement of forests or other natural ecosystems. This results in loss of habitat for flora and fauna, as well as reduced biodiversity in the area. Species that depend on these environments can become endangered, and damage to ecosystems can disrupt the natural balance that exists. Soil Damage and Erosion: Uncontrolled quarrying and mining can result in physical damage to the soil. This can lead to serious soil erosion, decreased soil fertility, and loss of soil layers essential for plant growth. Soil damage can also affect the land's ability to retain water and increase the risk of flooding and landslides. Global Warming and Greenhouse Gas Emissions, some mining activities, such as coal mining, can cause greenhouse gas emissions that contribute to global warming and climate change. The burning of fossil fuels and the release of methane gas from coal mining can increase the concentration of greenhouse gases in the atmosphere. Law No. 32/2009 on Environmental Protection and Management stipulates that the use of natural resources must be in harmony, harmonious and balanced with environmental functions. As a consequence, policies, plans, and/or programs must be in harmony with the environment.

2. RESEARCH METHODS

Describe the types of research, the location and time of the study, population and sample, sampling techniques, data collection techniques, data analysis, and data presentation. Research using tools and materials, need to write specifications of the equipment and materials used. The qualitative research such as case studies, phenomenology, ethnography, and others, need to add a description of the checking of the validity of the study results (4). The focus of this research is on the impact of the mining of class c excavation.

The normative legal research method is one of the approaches used in legal research. This method focuses on the analysis and interpretation of existing legal norms, including laws and regulations, court decisions, legal doctrines, and other legal sources. The main purpose of normative legal research methods is to understand and explain what should be the applicable legal rules.

3. RESULTS AND DISCUSSION

In the context of environmental impacts, there are several theories that can be used to understand and analyze how human activities can affect the environment. Some relevant theories include: Externality Theory: This theory focuses on the concept that human activities can generate negative or positive impacts that are not reflected in the direct costs or benefits borne by the actors of those activities. In the context of environmental impacts, this theory explains how economic activities such as industry or mining can create negative externalities in the form of environmental pollution. This theory encourages the need for internalization of environmental costs in economic decision-making. Sustainable Development Theory: This theory emphasizes the importance of achieving a balance between current human needs and the protection and maintenance of the environment so that life can be sustainable for future generations. This approach leads us to consider the long-term impact of human activities on the environment and encourages the adoption of environmentally friendly practices. Sustainable Development Theory: This theory emphasizes the need to integrate economic growth, social justice and environmental protection in development efforts. In the context of environmental impacts, this theory notes the importance of considering ecological aspects in the planning and implementation of development policies. Ecological Theory sees the environment as a complex system consisting of interactions between living organisms and their environment. In this theory, environmental impacts are understood as the

result of human interactions with ecosystems. The ecological approach considers the dynamic relationships between humans, other species, and the natural environment, and how the impacts of human activities can disrupt the balance of ecosystems. Theory of Life on Earth (Gaia Theory) proposes that the Earth is a complex and dynamically integrated system, in which living organisms and their physical environment interact and influence each other. According to Emil Salim, the environment is the unity of space with all objects, forces, conditions, and living things, including humans and their behavior, which affect the continuity of life and the welfare of humans and other living things (5). In this theory, environmental impacts are seen as the response of the Earth as a whole to human activities. This approach raises awareness of human dependence on the health and sustainability of the environment as a common home. Environmental management provides social economic and cultural benefits and needs to be carried out based on the principles of prudence, environmental democracy, decentralization, and recognition and respect for local wisdom and environmental wisdom, so that Indonesia's environment must be protected and managed properly based on the principles of justice.(6). Article 16 of the Environmental Law states that every plan that is expected to have an important impact on the environment must be equipped with an environmental impact analysis whose implementation is regulated by government regulations (7). Relation to the Gallic mining activities carried out by C excavation mining activities, such as coal mining, iron ore, nickel, and the like, have a significant impact on the environment. This case of pollution and destruction of the environment is very dangerous for the welfare of mankind.(4).Some common environmental impacts associated with C excavation mining include: Habitat Damage: Quarrying often requires massive excavation and cutting of vegetation in the mining area. This leads to the destruction of natural habitats for flora and fauna in the area. Habitat loss can threaten the survival of certain species and disrupt the harmony of the ecosystem. Land Damage: The process of quarrying C usually involves the destruction of fertile soil layers. Damaged soil is difficult to restore and often results in long periods of unproductive land. Uncontrolled mining can also lead to serious soil erosion and land degradation. Water Pollution: Quarrying often produces toxic waste and chemicals that can contaminate nearby water sources. Wastewater from mining contains heavy metals and hazardous chemicals that can pollute rivers, lakes and water wells. Water pollution can damage freshwater ecosystems and threaten the health of humans who rely on the water. Air Pollution: During the mining process, dust and fine particles can be released into the air. Blasting, milling and transportation of mining materials can generate air pollutants such as dust particles, toxic gases and greenhouse gas emissions. This air pollution can damage local air quality and contribute to climate change. Social Disruption: Quarrying often involves displacing local people or disrupting their traditional livelihoods. This can lead to social tensions, conflicts between communities and mining companies, and cultural loss for affected communities. Climate Change: Quarrying can contribute to climate change due to the release of greenhouse gases such as carbon dioxide (CO₂) and methane (CH₄) from the quarrying process and the burning of fossil fuels. These greenhouse gas emissions contribute to global warming and broader climate change.

The new Mining Law has been enacted on June 10, 2020, replacing Law Number 4 of 2009 and has issued Presidential Regulation Number 55 of 2022 concerning Delegation of Authority in Mineral and Coal Mining Management and Government Regulation Number 55 of 2022 concerning Taxation Treatment and/or Non-Tax State Revenue (PNBP) in the Coal Mining Business Sector on April 11, 2022. Perpres No. 55 of 2022 is a mandate from Law (UU) No. 3 of 2020 concerning Amendments to Law No. 4 of 2009 concerning Mineral and Coal Mining, related to the delegation of part of the authority to manage mineral and coal mining from the Central Government to the Provincial Government. This means restoring the participation of local governments in licensing and supervision in mining governance in the regions. In this case, there are several things that can be underlined. First, regarding the types of delegated authority, Article 2 paragraph (1) letters a-c states that the Delegation includes:

Granting: 1. standard certificate; and 2. license; b. guidance on the implementation of delegated Business Licensing; and c. supervision on the implementation of delegated Business Licensing.

Second, the Regional Government is allowed to impose administrative sanctions on violators of laws and regulations related to mineral and coal and their implementation in the regions. As stipulated in Article 2 paragraph (9) that the Governor may provide guidance and/or administrative sanctions. Third, PERPRES 55/2022 emphasizes the delegation of this authority to the Provincial Government only, where Article 2 paragraph (11) states that the authority granted in this Article 2 cannot be sub delegated to district/city governments. Partial Restoration of the Role of Regional Autonomy by PERPRES 55/2022 The provisions of Article 2 paragraph (11) clearly prohibit the Provincial Government from sub delegating the authority of licensing and supervision of mineral and coal mining to District or City Governments. This indicates that Perpres 55/2022 only partially restores the role of regional autonomy. This can be seen from the absence of the role of districts / cities in the regulation. In fact, the vast area of the province is certainly an obstacle for district / city governments to make complaints / reports if there are mining problems in the district / city area. Moreover, mining locations are usually located in remote or inland areas, even outside the island, and of course far from the provincial capital. This was responded to by the Energy and Mineral Resources Office of Central Kalimantan Province, which is a mining area that on the one hand Perpres 55/2022 provides an opportunity to

increase PAD through the provision of standard certificates and the granting of non-metallic mineral licenses, minerals and minerals.

4. CONCLUSION

In general, Perpres 55/2022 certainly does not fully accommodate regional interests. This is because sealing is only limited to non-metal minerals, certain types of non-metal minerals, and community mining assistance and licenses. The existence of various types of mining in the environment, according to more serious handling so that there is no arbitrary mining that can cause losses both to the government and to the community. Supervision aims to make the implementation run well (8). In the sense of supervision (controle), including government supervision of laws and regulations. Thus law enforcement can be carried out preventively and repressively. In preventive law enforcement, it means "active supervision is carried out on compliance with regulations without direct events concerning concrete events that give rise to the suspicion that legal regulations have been violated (9).

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