



Reconstruction of Minerals and Coal Mining Management Policies in Indonesia

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Abstract. Article 33 paragraph (3) of the Republic of Indonesia 1945 Constitution sets forth guidelines for the development of natural resources inside the country, which are under governmental control for the benefit of the populace. These two ideas are complementary to one another. In fact, separating the two would be detrimental to the idea of state control and might allow capital owners or foreign parties to monopolize the use of natural resources. The benefits from this would only go overseas, benefiting a small number of people rather than Indonesia's development and society as a whole. Regulations in the mining sector in Indonesia, in the Old Order era were regulated in Act Number 11 of 1967 concerning Basic Mining Provisions which had a centralized character and limited people's access to minerals. In the post-reform era, there are demands for legal reform of Act Number 11 of 1967 with the issuance of Act Number 4 of 2009 concerning Mineral and Coal Mining, and finally Act Number 3 of 2020 concerning changes to Act Number 4 of 2009 which has a decentralized character and opens access to the public for minerals. The implementation of these new regulations is not always as expected and is even considered to be contrary to the Constitution of 1945. Therefore it is felt necessary to reconstruct regulations in the mining sector.

Keywords: Reconstruction, Regulation, Mining, Mineral, and Coal.

1 Background

One of the major sectors that can propel Indonesia's economy is the mining industry. This indication can be seen from the contribution of state revenue which shows an increase every year. Based on the Press Release of the Directorate General of Mineral and Coal (Ditjen Minerba), Ministry of Energy and Mineral Resources (KESDEM) Number 1. Pers/KM.01/DJB/2023, dated 31 January 2023, recorded the investment value, Non-Tax State Revenue (PNBP), and investment in the mineral and coal sub-sector in 2022 above the set target. As of December 31, 2022, investment realization reached USD 5.69 billion, higher than the target of USD 5.01 billion. Based on adjustments to RI Presidential Regulation Number 98 of 2022 concerning Changes to

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M. Umiyati et al. (eds.), *Proceedings of the International Conference on "Changing of Law: Business Law, Local Wisdom and Tourism Industry" (ICCLB 2023)*, Advances in Social Science, Education and Humanities Research 804,

https://doi.org/10.2991/978-2-38476-180-7_144

the 2022 Target, the PNPB paid to the state is Rp. 183.35 trillion or exceeding the target of Rp. 101.84 Trillion. Coal commodity contributes 80% of the royalty value of PNPB.

In addition, the mining sector also provides a multiplier effect or drives the growth of other development sectors and provides employment opportunities, especially for communities around mining. In its development, problems in the mining industry related to political, social, regulatory, and unlicensed mining (PETI), pollution, and environmental damage Retna (2003). Environmental pollution and damage, including irregular landscape changes and soil damage leading to erosion and land degradation, can result from mining practices that are not planned in accordance with the potential or reserves of mining materials and do not apply environmentally friendly mining principles. These are facts found in the field. become unproductive and maybe bring to a human catastrophe.

Mining practices carried out by the community illustrate the failure of planning for environmental-based mining management. Ex-mining lands are not managed or in other words, abandoned and even abandoned by miners and landowners. Based on the results of an inventory based on satellite imagery, it was found that there were 8,384 points with an area of 6,368 Ha, giving an indication that ex-community open system mining in Indonesia generally causes environmental changes. Field verification results illustrate that environmental changes are characterized by irregular land surfaces, low soil fertility, and damage to soil structure which has the potential to cause erosion. Loose soil material eroded by rainwater and lifted into the nearest river will increase river water's turbidity and pollution from certain metal elements.

In relation to regulations in the mining sector, the journey has been regulated since the issuance of Law Number 11 of 1967 concerning Mining in the Old Order era, then in the reform era the issuance of Law Number 4 of 2009 concerning Mineral and Coal Mining, and finally Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining Saleng (2004). These laws and regulations were issued in an effort to improve the mineral and coal mining sector and improve people's welfare. However, it cannot be denied that even though the government's goodwill in issuing policies related to the management of the mining sector always has an impact Soemarwoto (2005) on the suffering felt by the community due to environmental damage caused by mining activities. Therefore, more massive efforts are needed from the authorities so that the management of mineral and coal mining can still be carried out without ignoring the community's right to a good environment and community welfare can be realized.

1.1 Problem

The author formulates the following problem based on the background information provided:

What policies should be carried out by the Government in the management of mineral and coal mining so that environmental sustainability is maintained and people's welfare can be realized?

2 Writing Methodology

Qualitative analysis will be used in this article. Additionally, the writers employ two methods for gathering precise data and information:

1. The goal of a literature research is to gather precise facts and information from important texts, like the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social, and Cultural Rights, and the Declaration of Human Rights. The Republic of Indonesia's 1945 Constitution as well as other laws and regulations that can enhance the analysis will be reviewed as part of the literature study.

2. Acquiring exact facts and information from key documents, such as the Declaration of Human Rights, the International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social, and Cultural Rights, is the aim of a literature research. The literature study will include a review of other laws and regulations that can improve the analysis, as well as the 1945 Constitution of the Republic of Indonesia.

3 Discussion

Negative Impacts of Mining Activities

The following are some of the impacts that can arise as a result of mining activities:

- Land

In addition to contaminating water, mining can also contaminate soil because it leaves behind big holes that are impossible to plug, creating acidic water pools. Chemicals include iron (Fe), manganese (Mn), sulfur (SO₄), mercury (Hg), and lead (Pb) are present in the pool water. Large concentrations of Fe and Mn are poisonous to plants, which prevents them from developing normally. Plants that are growing on contaminated soil will perish because SO₄ lowers soil PH and fertility. In addition, other impacts that can occur are the increased threat of landslides, loss of ground cover vegetation, and soil erosion.

- Water

Water pollution is a direct result of mining, specifically from the waste generated during the coal-sulfur separation process. The washing waste contaminates the river, discoloring it and making it appear murky and acidic. Additionally, the coal-washing sediment causes the river to silt up. Examined waste from coal washing contains compounds that, if ingested in water, are extremely detrimental to human health. Lead (Pb), sulfur (S), hydrochloric acid (HCl), manganese (Mn), sulfuric acid (H₂SO₄), and mercury (Hg) are all present in the trash. Two heavy metals that might cause skin cancer in humans are mercury and lead. Additionally, sedimentation and a decline in water quality are potential effects.

- Forest

Due to the company's release of agricultural land that was formerly a forest, mining can also destroy people's means of subsistence. This is because the community's business area has become more limited as a result of mining expansion activities. Because of the clearing of the forest in the upstream area, which was intended to serve as a water catchment area, this extension may also result in flooding. The loss of swamp woods and inadequate drainage make this worse.

- Sea

Mining-related sea water pollution happens when coal barges are loaded and unloaded. Furthermore, pollution can harm the mangrove forests' and the marine biota's ability to function.

1. Impact on Humans

The impact of pollution due to mining activities on humans can cause various diseases, including:

- Skin cancer can be brought on by washing waste materials that are extremely harmful to human health if ingested through water. This is possible due to the fact that dust and mining waste produce air pollution along roadsides and contain sulfur (S), mercury (Hg), sulfuric acid (H₂SO₄), manganese (Mn), and sulphuride acid (HCN). which is used in the activity of transporting mining products, causing the spread of respiratory tract infections to lung cancer.

2. Prevention of Environmental Pollution Around Mining Locations

- Environmental research and analysis prior to program implementation

Mining company activities are not normal activities Yusgiantoro (2000). This is because every production process must produce waste, which is difficult to decompose by microorganisms in the environment. Therefore, companies are not allowed to carry out work activities, without conducting research and direct surveys regarding the current environmental conditions. Data collection on environmental conditions cannot be done just once but must be done periodically and many times, as long as the company is still standing there.

One of the ways to deal with environmental pollution is not to carry out work programs that are likely to pose a risk to the environment and the surrounding community. So it is necessary to carry out surveys on an ongoing basis so that the data in the field is not outdated.

- Periodic checking and monitoring

The next step is to acquire environmental condition monitoring and assessment tools. This seeks to ascertain whether the execution of mining firms' programs and the surrounding environment are compatible. By avoiding delays in checking, we can prevent recurring environmental damage. The program being run can be momentarily stopped and an alternative solution looked for if a condition discrepancy is found during checking.

- Processing the remaining waste of company activities

Relating manufacturing waste to environmental contamination is the next strategy to be employed. Because mining operations invariably result in the generation of hazardous waste for the environment, these outcomes cannot be treated arbitrarily. As a

result, mining businesses must follow specific protocols when it comes to disposing of this waste.

Existing waste cannot be released directly into the environment, because it has the potential to cause acute pollution and disrupt people's lives simultaneously. Because of that, mining companies must first settle it, then process it, so it's ready to be disposed of.

- Avoiding protected and conservation zones

The development of a mining company definitely requires land acquisition. Therefore the company is responsible for paying attention to the mining location. This is to avoid damaging environmental conditions, which can impact on the existence of flora and fauna that are there.

The company also has full responsibility for the preservation and safety of flora and fauna in the environment. Do not let mining operations actually damage the existing ecosystem.

- Implementation of reclamation

Reclamation is an endeavor to overcome the previously cleared land that has been left fallow. This is so that it can be used in many ways that don't harm the environment. It is the responsibility of mining firms to plan the reclamation process with consideration for the surrounding environment and human needs.

It's risky to leave excavation marks behind. Because there is a chance that the environment could later become contaminated due to the presence of metals. Due to the fact that accidents frequently occur there, the former excavation pit is also hazardous. Considering the shoddy oversight of the communities entering the mining region. Therefore, in order to avoid having a long-lasting harmful effect, reclamation needs to be done as fast and precisely as feasible.

The responsibility for how to deal with environmental pollution cannot be separated from the hands of mining companies. By ensuring the implementation of the EIA and prioritizing the good of the environment and society Wibisono (2007).

3. Mining Sector Management Policy

Government policies Islam (1984) in the management of the mining sector have been carried out since the beginning of the independence of the Republic of Indonesia. As is known, the regulation regarding the mining sector began with the issuance of Law Number 11 of 1967, then changed with the issuance of Law Number 4 of 2009, and finally Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining, despite protests and criticism from the wider community. As for things that are considered controversial and even ignore the side of environmental conservation and are far from the goal of people's welfare, namely:

- Communities are no longer able to submit protests to the Regional Government

Prior to Law Number 4 of 2009 being repealed and replaced by Law Number 3 of 2020, a business or individual needed permission from the local regency or city government in order to conduct mining operations in a given area. Each mining location's regional government is tasked with guiding, resolving conflicts, and even supervising the mining industry. The Regional Government is able to suspend or even cancel the Mining Business Permit (IUP) in the event that a public report reveals a mining busi-

ness has violated the law and it is found to be at fault. Anyone wishing to protest mining operations in their region must notify the Central Government or the Provincial Government at the very least once Law Number 3 of 2020 is passed. However, most mining sites are currently located in isolated places. This rule defies good governance principles in every way.

- Risk of being policed if you refuse a mining company

Keeping an eye on Article 162 of Law Number 3 of 2020, which states, in general, that anyone attempting to impede mining operations in any way may be reported back to the corporation and face criminal penalties, including fines of up to Rp 100,000,000. As a result, after Law Number 3 of 2020 is passed, anyone attempting to stop a few large mining companies from exploiting their land may face legal repercussions.

- Mining Companies Can Still Operate Even though They Are Proven to Damage the Environment

According to Law Number 4 of 2009, mining enterprises must deposit guarantee money for reclamation and post-mining activities in addition to performing reclamation and post-mining activities. Despite the existence of these restrictions, several infractions persist in the field, such as the abandonment of abandoned mining holes that transform into enormous lakes that result in fatalities. Following the passage of Law Number 3 of 2020, the government actually released mining entrepreneurs from their duty to conduct post-mining and reclamation operations concurrently. According to Article 96 letter b, the corporation is only required to carry out one repair requirement on former mine ground; as a result, it is free to choose between post-mining and reclamation activities. Furthermore, as per Article 169A of Law Number 3 of 2020, businesses who are found to be careless and fail to perform reclamation or post-mining activities may still be able to extend their contract permissions.

- Mining Companies Can Make Profits as Much as Possible with 0% Royalty Guarantee

A 0% royalty is one of the advantageous treatments for corporate actors who can raise the added value of coal, as described in Article 128A of Law Number 11 of 2020 concerning Job Creation. Despite the fact that the royalties set by the government for mining entrepreneurs are currently included in state revenue and are deposited into the region's profit sharing fund through that mechanism. It is evident that the Central Government, along with a few mining conglomerates, is keen to exhaust Indonesia's remaining natural resources as evidenced by Law Number 3 of 2020 and other revisions to the Job Creation Law's Articles. The government is even more passionate about exploiting the environment as much as possible, without regard for the future of the people who live near the mining area, rather than protecting it from ecological damage.

4. Green mining in the mining sector

The definition of green mining (green mining) is a concept or mining activity based on environmental insights. This process pays close attention to every detail that is carried out before, during, and after the mining period is over by minimizing the amount of waste. Utilizing environmentally friendly mining equipment and reforesting post-mining land are two important things in exploring natural resources. Strict

supervision must be carried out strictly by the responsible party. Written regulations to be obeyed by mining companies to support green mining have actually been contained in hundreds of articles. However, the problem returns to the company's awareness to comply with these rules. The government also plays an important role in supporting the achievement of the green mining concept that does not harm nature. Because, slowly if nature is damaged little by little, human life and other living things will also slowly disappear.

To support the implementation of green mining, there are 4 (four) scopes of environmental management that must be considered, including:

1. Managing Water Waste

To manage the waters so that mining waste does not spread further, the company can plant several plants, such as water hyacinth. This plant plays a role in filtering waste before it flows into sewers and spreads widely. In other words, the concept of green mining can be pursued as simply as planting water hyacinths. In addition, you can also plant a variety of other green plants.

2. Maintaining Ecosystem Balance

No less dangerous than mining waste in waters, disruption to the life of various biodiversity at mine sites is also a big problem. When plants can no longer grow as usual, the quality of nature will automatically decline and become increasingly unfit for living things. The solution is to replant several types of plants according to suitability with the soil. This effort is made to maintain the long-term sustainability of all living things and minimize environmental damage.

3. Managing Toxic Waste

Toxic waste from mining products can also be managed appropriately through the green mining process so that it becomes a new source of income. If managed properly, the mineral balance can even present the brick industry as a building construction. The Ministry of Environment and Forestry (KLHK) issued an appeal to mining entrepreneurs to turn B3 waste into productive goods. This is because the bad consequences of ignoring toxic waste not only have an impact on the environment but also on investors' decisions.

4. Managing Air Waste

Finally, waste can automatically cause damage or air pollution. For its management, none other than increasing the green area. There must be strict supervision by the authorities so that there are no illegal acts anywhere.

4 Conclusion

Based on the description that has been described above, the conclusion that can be put forward is that although the policy in the mining sector that is currently in effect is a policy that has made several changes in the hope of getting better, in fact, the construction of the substance contained therein has not changed, still prioritizing income streams. state finances and protecting the interests of mining entrepreneurs, on the other hand, do not prioritize the protection of the community and the environment. Therefore it is highly expected that the government and people's representatives are

serious about reconstructing existing policies so that they are more pro-society and make real efforts to preserve the environment.

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