

GOVERNMENT CONSISTENCY IN ENFORCEMENT OF REGULATIONS REGARDING MINERAL AND COAL MINING RELATED TO MINE RECLAMATION

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Abstract

Reclamation is an activity that aims to improve or manage the use of disturbed land as a result of mining business activities so that it can function and have the power to function according to its designation. excavated. For this reason, the government has issued Government Regulation Number 78 of 2010 concerning Post-Mining Reclamation Decree and Regulation of the Minister of Energy and Mineral Resources (ESDM) Number 26 of 2018 concerning Implementation of Good Mining Principles and Supervision of Mineral and Coal Mining. The purpose of issuing these two regulations is very clear, so that the negative impacts of mining activities can be reduced or even eliminated. Various productive efforts on ex-mining land by carrying out reclamation and utilizing it as an ecotourism area. Utilizing part of it as a fish farming pond and the rest being used as a model of a biological conservation forest with proboscis monkeys and various kinds of birds as the key space is one of the efforts to restore nature's preservation. The research method used is normative or doctrinal legal research. Normative legal research or doctrinal legal research, which is also referred to as library research or document study, is research that is carried out or aimed only at studying written regulations or other legal materials. The result of research reclamation is an activity to restore the ecosystem so that it can function again as before. While Post-mining Activities are activities to repair ex-mining land to restore environmental functions and social functions according to local conditions throughout the mining area.

Keywords: minerals and coal, mine reclamation, law enforcement

INTRODUCTION

Reclamation is an activity carried out throughout the stages of the mining business to organize, restore and improve the quality of the environment and ecosystem so that they can function again according to their designation. Post-mining activities are planned, systematic and continuing activities after the end of some or all of the mining business activities to restore the functions of the natural environment and social functions according to local conditions throughout the mining area.

The Ministry of Energy and Mineral Resources (ESDM) presents data on the successful fulfillment of mine reclamation targets. However, this success received criticism because there were still victims in the mining pits. The success of reclamation data by the Ministry of Energy and Mineral Resources is presented through the Minerba One Data (MODI) website. This data states that the mine reclamation rate from 2013 to 2021 has met the target. Except in 2013, of the planned 6,559 hectares, only 6,400 hectares (96.98 percent) were reached.

The rest, from 2014 to 2021 reclamation achievements are above 100 percent. The highest percentage occurred in 2020, namely from the target of 7,000 ha, 9,694 ha (138 percent) was reached. But this success is doubted by environmental resistance. The 2018 report owned by the Indonesian Extermination Team recorded the five provinces with the most mining pits, namely East Kalimantan with 1,735 mining pits, South Kalimantan with 814 mining pits, Central Kalimantan with 163 mining pits, South Sumatra with 163 mining pits, and Jambi with 59 mining pits.

As long as they record this, reclamation and post-mining obligations are not directed to be part of business activities. The definition of reclamation activities in the regulations at that time (UU No. 4 of 2009 concerning Mineral and Coal Mining) was not directed at instead providing space for entrepreneurs so that they could avoid reclamation and post-mining obligations. Accidents that result in death cannot be separated from the negligence of oversight of this mine pit. The Mining Advocacy Network (Jatam) noted that in East Kalimantan, from 2011 to 2021, 40 people died as a result of the presence of mine pits.

The government and mining companies are also considered to be ignorant of this condition. Mine pits are dangerous because of their depth and also because they are not marked with signs. In addition, the results of an investigation by environmental activists showed that the water in the hole contained heavy metals such as manganese and iron, above the park's safe limit. If consumed, the air in former mining pits can be hazardous to health. Laboratory test results on water samples from a former coal mining pit that resembles a lake in Rapak Dalam Village, Loa Janan Ilir District, Samarinda City, East Kalimantan revealed the presence of heavy metal content above the boundary house specified in Minister of Health Regulation Number 416 of 2010 concerning Terms and Conditions for Monitoring Water Quality. The threshold for clean water quality also regulates Permenkes No.32/2017 concerning Quality Standards for Environmental Health Quality and Water Health Requirements for Sanitation Hygiene Purposes, Swimming Pools, Solus Per Aqua, and Public Baths. In the Minister of Health, sanitation hygiene is water of a certain quality used for daily needs whose quality is different from the quality of drinking water. heavy metals such as manganese, iron, mercury, chromium, cobalt, zinc, arsenic, selenium, cadmium, barium, lead and thallium were found. Of all these heavy metals, manganese and iron content far exceeded the threshold.

The manganese (Mn) content in the first water sample reached 9.21 micrograms per liter. This amount is 18 times greater than the maximum limit for clean water, which is 0.5 micrograms per liter. The iron (Fe) content in the air sample reached 3.27 mg/liter. This amount is more than three times the maximum threshold for clean water which is only 1.0 mg/liter. In addition, the degree of acidity (pH) of the water in the lake reaches 2.76, which means the concentration is very acidic. The effects of consuming air intake containing heavy metals can interfere with chronic health. "Water that contains manganese and iron can interfere with the body's metabolism, so you get tired easily and can develop cancer.

There are several factors why the former mining area was simply abandoned without reclamation, namely:

1. Because it is not licensed, it is difficult for the government to pursue illegal miners
2. There is land that has been handed back to the government which has been closed or has expired its mining period and has been accepted by the government so that there is no proper supervision.
3. It is possible that there are mining areas that have been abandoned by licensed companies but have not followed the correct rules, here the Government must take firm action.

Prior to mining, apart from committing to rehabilitation or reclamation in the form of a transfer of functions, it is also known that the entrepreneur must save a certain amount of money in the national foreign exchange bank as a post-mining guarantee with special calculations. All of this has been

stated in the reclamation plan and post-mining plan before starting mining. The local government is tasked with supervising.

RESEARCH METHODS

The type of research used is normative or doctrinal legal research. Normative legal research or doctrinal legal research, which is also referred to as library research or document study, is research that is conducted or aimed only at examining written regulations or other legal materials.

The approach used in this research is the statute approach and the conceptual approach. Source of data used is secondary data. Secondary data is data that comes from library research, namely data obtained not directly from the first source, but from data that has been documented in the form of legal materials.

The collection of legal material is carried out through library research, namely data collection techniques by conducting study studies of books, literature, records, and reports that are related to the problem being solved. The analysis used is qualitative data analysis which is the process of organizing data according to emerging themes according to research objectives (categorization) and then interpreting them.

RESULTS AND DISCUSSION

Compilation of Postmining Plans

Based on the Decree of the Minister of Energy and Mineral Resources Number 1827 K/30/MEM/2018 concerning Guidelines for Implementing Good Mining Engineering Principles.

- a. Holders of Exploration IUP and Exploration IUPK are required to submit Postmining plans based on a Feasibility Study and Environmental Documents that have been approved by the competent authority in accordance with the provisions of laws and regulations in the field of environmental protection and management as a requirement to obtain Production Operation IUP and Production Operation IUPK.
- b. In the event that the mine life of the Production Operation IUP and Production Operation IUPK of non-metal mineral and rock commodities is less than or equal to 5 years, then the holders of Exploration IUP and Exploration IUPK in preparing the Reclamation plan for the Production Operation stage are included in the Postmining plan.
- c. The Postmining Plan contains:
 - 1) regional profile, including: (1) location and area coverage; (2) land ownership and allotment; (3) initial environmental baseline, including land use, morphology, surface water, groundwater, aquatic and terrestrial biology, as well as social, cultural and economic aspects according to the approved Environmental Documents; and (4) other activities around the mine.
 - 2) a description of mining activities, including the condition of the initial reserves, systems and methods of mining, processing and/or refining, as well as supporting facilities;
 - 3) final environmental setting of the Postmining land, including the condition of remaining reserves, land use, morphology, surface water and groundwater, aquatic and terrestrial biology, as well as social, cultural and economic aspects;
 - 4) Postmining program, including: (1) Reclamation of remaining ex-mining land and land outside of ex-mining during Post-mining; (2) Reclamation of the Production Operation stage for Production Operation IUP and IUPK holders of non-metal mineral and rock commodities with a mine life of less than or equal to 5 (five) years; (3) social, cultural and economic development; (4) maintenance of Reclamation results; and (5) monitoring
 - 5) organization, including postmining implementation schedule;
 - 6) Postmining success criteria, including success standards on ex-mine sites, processing and/or refining facilities, supporting facilities, and monitoring; And
 - 7) Postmining cost plan.
- d. The Postmining cost plan is calculated based on:
 - 1) direct costs, consisting of costs: (1) at ex-mine sites, consisting of costs of: (a) demolition; (b) Reclamation; and (c) securing all mine openings.
 - 1) (2) at processing and/or refining facilities, consisting of costs of: (a) unloading; (b) Reclamation; and (c) Remediation of contaminated soil.
 - 2) (3) on supporting facilities, consisting of costs of: (a) dismantling; (b) Reclamation; (c) handling remaining fuel oil, lubricants, and chemicals; and (d) recovery (remediation) of contaminated soil.
 - 3) (4) social, cultural and economic development;
 - 4) (5) maintenance; And

5) (6) monitoring.

Indirect costs, consisting of: (1) equipment mobilization and demobilization; (2) Postmining planning; (3) administration and benefits of third parties as Postmining executors; and (4) supervision.

- a. e. Social, cultural and economic development costs are regulated in order to increase entrepreneurship after entering Postmining.
- b. f. The Postmining cost plan must take into account the future value of money at the time of Postmining implementation.
- c. g. The future money value refers to the government bond interest rate if the currency is in Rupiah or the United States Dollar bond interest rate if the currency is in United States Dollars.
- d. h. The Postmining cost plan must cover all costs of Postmining implementation including Postmining implementation carried out by third parties.
- e. The holder of an Exploration IUP and an Exploration IUPK must consult with stakeholders in preparing a Postmining plan.
- f. j. Holders of Exploration IUP and Exploration IUPK who are in the process of upgrading their Production Operation stage have Environmental Documents other than Environmental Impact Analysis or UKL-UPL in preparing Postmining plans may consult with stakeholders
- g. k. Stakeholders consist of: 1) Ministry of Energy and Mineral Resources and/or provincial government technical offices in charge of mineral and coal mining; 2) other relevant agencies; and 3) communities that will be directly affected by mining business activities.
- h. The results of consultations with stakeholders are made in the form of minutes signed by stakeholders as part of the Postmining plan submitted simultaneously with the application for Production Operation IUP or Production Operation IUPK to the Minister through the Director General or governor according to their authority.
- i. If the holders of Production Operation IUP and Production Operation IUPK apply for an extension of Production Operation IUP or Production Operation IUPK, then Production Operation IUP and Production Operation IUPK holders propose changes to the Postmining plan.
- j. For Production Operation IUP and Production Operation IUPK for non-metal mineral and rock commodities with a mine life of less than or equal to 5 (five) years, the Reclamation plan for the Production Operation stage is included in the Postmining plan.
- k. Format for the preparation of plans for Post-mining IUP Production Operations and IUPK Production Operations for non-metal mineral and rock commodities with a mine life of less than or equal to 5 (five) years.

Submission of Postmining Land

Based on the Decree of the Minister of Energy and Mineral Resources No. 1827K/30/MEM/2018 concerning Guidelines for Implementing Good Mining Engineering Principles.

- a. Holders of Production Operation IUP, Production Operation IUPK who have completed Postmining must hand over Postmining land to the entitled party in accordance with the provisions of laws and regulations through the Director General on behalf of the Minister or governor in accordance with their authority after fulfilling:
 - 1) principles of environmental protection and management, occupational safety and health, and mineral and coal conservation; and
 - 2) Postmining success assessment of 100% (one hundred percent) as stated in Matrix 24.
- b. Holders of Production Operation IUP and Production Operation IUPK before handing over the land must submit an application for approval to hand over the Postmining land.
- c. The handover of land is the entire post-mining area in all Production Operation WIUP and Production Operation WIUPK.
- d. The Director General on behalf of the Minister or governor in accordance with his authority is obliged to carry out a field inspection before giving approval for the handover of land that has been carried out by Postmining.
- e. The results of the field inspection must be recorded in the form of an official report.
- f. The Director General on behalf of the Minister or governor in accordance with his authority gives approval for the handover of the Postmining land within a maximum period of 60 (sixty) days from the receipt of the application for the handover of the Postmining land.
- g. The responsibility for maintaining and monitoring the land that has been reclaimed by the holder of a Production Operation IUP or Production Operation IUPK is declared to end after the Director General on behalf of the Minister or governor in accordance with his authority gives approval for the handover of the reclaimed land.

- h. Production Operation IUP and Production Operation IUPK which have expired or are revoked by the Minister or governor in accordance with their authority, do not eliminate the obligation of Production Operation IUP and Production Operation IUPK holders to carry out Postmining.
- i. In the context of implementing Postmining, the Director General on behalf of the Minister or in accordance with his authority issues a letter regarding the implementation of Postmining to the holders of IUP Production Operations and IUPK Production Operations.

Submission of Postmining land

Based on the Decree of the Minister of Energy and Mineral Resources No. 1827K/30/MEM/2018 concerning Guidelines for Implementing Good Mining Engineering Principles.

- a. Holders of Production Operation IUP, Production Operation IUPK who have completed Postmining must hand over Postmining land to the entitled party in accordance with statutory provisions through the Director General on behalf of the Minister or governor in accordance with their authority after fulfilling: 1) principles of protection and management environment, occupational safety and health, and mineral and coal conservation; and 2) Postmining success assessment of 100% (one hundred percent).
- b. Holders of Production Operation IUP and Production Operation IUPK before handing over the land must submit an application for approval to hand over the Postmining land.
- c. The handover of land is the entire post-mining area in all Production Operation WIUP and Production Operation WIUPK.
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Form of Reclamation Guarantee for the Production Operation stage can be:

- 1) The Joint Account is placed at a government bank in Indonesia in the name of the Director General or governor and the holder of Production Operation IUP or Production Operation IUPK;
- 2) Time Deposits are placed at Government banks in Indonesia on behalf of the Director General or governor and the holder of the relevant Production Operation IUP or Production Operation IUPK with a guarantee period in accordance with the Reclamation schedule for the Production Operation stage;
- 3) Bank Guarantees issued by Government banks in Indonesia or National private banks in Indonesia with a guarantee period according to the Reclamation schedule for the Production Operation stage; or
- 4) Accounting Reserves, can be placed if the holder of Production Operation IUP or Production Operation IUPK fulfills the following requirements:
 - a) is registered on the stock exchange in Indonesia and has placed more than 40% of its shares
 - b) (forty percent) of the total shares owned; And
 - c) has a total paid-up capital of not less than US\$ 50,000,000.00 (fifty million United States dollars) as stated in the deed of establishment, the company and/or its amendments which are legalized by a notary.

Reclamation on the location and area of disturbed land to be reclaimed which includes:

- a. arrangement of land surface (ex Exploration activities and former Exploration supporting facilities);
- b. backfilling of ex-Exploration activity land (former drill holes, drilling ponds, test wells and test trenches); and

c. erosion control. contains a description of the techniques and equipment used for land reclamation.

Mining Companies Can Still Operate Even though They Are Proven to Damage the Environment Related to regulations that seem to spoil entrepreneurs in terms of responsibility for repairing ex-mining land. The rules for repairing ex-mining land consist of two separate activities, namely reclamation and post-mining activities. Before discussing the issue of regulations that benefit mining entrepreneurs, it is necessary to understand the difference between Reclamation and Post-mining Activities.

Reclamation is an activity to restore the ecosystem so that it can function again as before. While Postmining Activities are activities to repair ex-mining land to restore environmental functions and social functions according to local conditions throughout the mining area. If you follow the rules of Law no. 4 of 2009, mining companies are required to carry out all reclamation and post-mining activities as well as deposit reclamation and post-mining guarantee funds. Even though there are regulations like this, in fact there are still many violations in the field in the form of ex-coal mining holes being left open and becoming giant lakes that have claimed lives. Miraculously, the government actually made a new regulation that freed mining entrepreneurs from destroying the environment by changing the contents of the law. As written in the Minerba Law Article 96 letter b, the company's obligation in repairing ex-mining land is currently only carrying out one of the repair obligations. Mining companies can freely choose between Reclamation Activities or Post-mining Activities.

Maintenance of Revegetation Plants

Maintenance of revegetated plants aims to maintain all revegetated plants grow well and healthy. In addition, this maintenance keeps all types of plants planted so that they are not disturbed or damaged either caused by activities humans or as a result of the activities of pests and diseases that can attack. Plants Revegetation contains descriptions regarding the type of plant and number of plants, spacing, location, and area of land to be revegetated. Maintenance contains a description regarding maintenance of the reclaimed land, fertilization, and eradication of plant pests and diseases, bengkiray, shorea balangeran. In addition to the above plants, MPTS (Multi purpose tree species) are also planted, namely local fruits such as kalangkala, sapodilla, standar, Kapul, jengkol, Langsat, pampakin, Durian, ketapi, kuini, mangosteen, kasturi, rambai, ramania. The result of this open pit mining is that land is opened more quickly and ecosystems change, so environmental management is required. Environmental management is an integral part of mining operations so that mining activities do not leave problems in the future.

CONCLUSION

Reclamation is an activity to restore the ecosystem so that it can function again as before. While Post-mining Activities are activities to repair ex-mining land to restore environmental functions and social functions according to local conditions throughout the mining area.

According to Law no. 3 of 2020 concerning Mineral and Coal Mining (Minerba Law) which defines "reclamation" as activities carried out throughout the stages of the mining business to organize, restore and improve the quality of the environment and ecosystem so that they can function again according to their designation (Article 1 point 26).

Reclamation is a responsibility that arises because of the law, because Law Number 4 of 2009 concerning Minerals and Coal and Government Regulation No. 78 of 2010 concerning Reclamation and Post-mining requires carrying out reclamation and post-mining for IUP and IUPK holders. The authority given by the law is given to the Government in the form of making regional regulations, granting permits for implementing reclamation, developing and empowering local communities in the mining business with attention to environmental sustainability, guidance and supervision. The government's authority is so broad that there needs to be synergy between mining companies, communities, NGOs and universities/research institutions,

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