

IMPLEMENTATION OF MINE RECLAMATION GUARANTEE BASED ON GOVERNMENT REGULATION NUMBER 78 OF 2010 CONCERNING RECLAMATION AND POST-MINING IN IKN

Grisela Mawa Aqilah Sugiharto¹, Nur Arifudin², Erna Susanti³

Universitas Mulawarman, Samarinda, Indonesia

Email: mawaaqilah06@gmail.com

ABSTRACT

Reclamation is a critical environmental recovery measure aimed at restoring former mining areas to a sustainable and functional state. This research investigates the role of government supervision and law enforcement in the reclamation of ex-mining land within the development zone of Indonesia's new National Capital (IKN), located across North Penajam Paser and Kutai Kartanegara Regencies in East Kalimantan. As the IKN project represents a large-scale transformation of land use, the study focuses on how regulatory oversight and enforcement influence the effectiveness of reclamation efforts. Using a qualitative descriptive method, the study collects data through document analysis, field observations, and interviews with local government officials, environmental agencies, and stakeholders in the mining and reclamation sectors. The findings reveal that while regulatory frameworks for reclamation exist, challenges remain in implementation due to overlapping authority, limited monitoring resources, and weak enforcement of legal obligations by mining companies. Additionally, many ex-mining lands remain unproductive and pose environmental risks due to insufficient reclamation. The study emphasizes the need for a more integrated and accountable supervision system, increased inter-agency coordination, and stricter enforcement mechanisms to ensure that reclamation aligns with sustainable development goals. The implications of this research highlight the importance of legal compliance and government leadership in managing environmental risks in areas designated for national development projects.

Keywords: reclamation, mining land, government supervision, law enforcement, National Capital of Indonesia (IKN)

INTRODUCTION

The definition of the right to control the State is found in Law Number 5 of 1960 (Statute Book of 1960 Number 104) concerning the Basic Regulations of Agrarian Principles, hereinafter referred to as the UUPA, which is a legal basis in the field of agrarian affairs, giving the meaning of "the right to control from the State", namely the authority to regulating and Organizing the change, supply, and maintenance of the earth, water and space, determine and regulate the legal relations between people and the earth, water and space and to determine and regulate the legal relations of the earth, water and space.

This is because the process to obtain the desired minerals and coal is by excavating the soil, both on land and in the sea (waters) (Activity, 2010; post-mining, 2010; G. R. N. 78 of 2010 on R. and Post-Mining, 2010). So that it makes a lot of former mining land that looks destroyed or damaged after all mining activities have been completed. There is no mining that does not damage the environment. Mining will actually have a bad impact on three components, including: (1) biotics, namely humans, animals, plants; (2) abiotic, i.e. soil, water, and air; and (3) culture, namely the social of the community.

Presidential Regulation Number 64 of 2022 concerning the Spatial Plan of the IKN National Strategic Area states that IUP that is still valid can carry out production activities until the end of its licensing period, provided that IUP holders are obliged to carry out mining environmental management. Reclamation and post-mining are examples of environmental obligations in question (Indonesia, 2021; R. and Post-Mining, 2010; Reform, 2023).

And East Kalimantan is one of the provinces that is famous for mining, especially coal mining. Data from the Energy and Mineral Resources Office in 2018 shows that the number of companies holding 1,404 coal IUP and 30 coal PKP2B permit holders. Of that number, 624 IUPs are located in Kutai Kartanegara Regency, while PKP2B permits which are located intersecting with Kutai Kartanegara Regency amount to 11 PKP2B permits (Indonesia expedites restoration of 800, 2024; The Obligation of Post-Mining Reclamation Guarantee: Regulations and Implementation in Indonesia, 2024). Reported by the Klik Kaltim website, there are 148 Coal Mining Concessions, both with the status of Mining Business Permits (IUP) and those with the status of Coal Mining Concession Work

Agreements (PKP2B) in the IKN Area (Bodies, 2020; Reclamation, 2015; review, 2022). The number of mining companies in the region will certainly produce a lot of voids. It is estimated that there are 94 coal voids scattered in the area. It is undeniable that voids in new IKN areas and buffer areas can be a scourge for the development of IKN in the future, but we learn from the experience of other regions and countries that voids can be used sustainably to support regional development (City, 2024; Concept, 2024).

Regulation Of The Regent Of Penajam Paser Utara Number 1.A Of 2006 Concerning Procedures For Mining Areas Of Group C Excavated Materials, which contains the classification of mining materials, mining areas, procedures for granting mining business licenses, conditions for depth and equipment used, production limits, area area and period of sipd, abolition of sipd, rights and obligations of sipd holders, prohibitions, relationship between sipd holders and land rights owners, Coaching and supervision (areas, 2023; Relocation, 2023).

Previous studies have investigated the challenges and implementation gaps in post-mining land reclamation. Chang et al. (2020) emphasized that the implementation of reclamation is often constrained by weak monitoring and minimal enforcement, particularly in coal mining regions like East Kalimantan. Rahmi & Budiani (2020) found that reclamation guarantees were frequently underutilized due to the lack of transparency and government control over mining permits and environmental obligations. However, these studies have not specifically addressed reclamation within the context of Indonesia's new National Capital (IKN), where strategic land use intersects with unresolved mining voids and active mining permits. The novelty of this study lies in its critical analysis of reclamation guarantee implementation based on Government Regulation No. 78 of 2010 in the IKN area, using legal and spatial planning perspectives while considering the administrative complexities between Kutai Kartanegara and North Penajam Paser regencies. This research integrates environmental law, spatial regulation, and policy implementation analysis in a national strategic zone, providing a new dimension to post-mining land governance in Indonesia (Akhmaddhian et al., 2023; Pagouni et al., 2024; Saputra et al., 2025).

The objective of this research is to analyze the implementation of reclamation guarantees by mining permit holders in the IKN area, in accordance with Government Regulation No. 78 of 2010 concerning Reclamation and Post-Mining. It aims to assess the extent of compliance by IUP and PKP2B holders, evaluate government supervision and law enforcement, and identify the challenges in integrating post-mining void management into IKN development plans. The benefit of this study is twofold: academically, it contributes to the understanding of mining governance in high-stakes national development zones; practically, it provides actionable recommendations for policymakers and environmental authorities to strengthen reclamation oversight, optimize void utilization, and mitigate environmental risks in the IKN development corridor. The study also supports efforts to align natural resource extraction practices with spatial planning and sustainable development goals.

METHOD

Types of Research

The type of research used is a type of doctrinal (normative) research, normative legal research which is also called a doctrinal law research which is also called library research or document studies because this research is carried out or aimed only at written regulations or other legal materials.

Legal Materials

The legal materials used in this study are secondary legal materials. Secondary legal material is data obtained indirectly in the sense that this data is obtained based on literature studies and documentation studies related to the object and problem being studied. Legal materials are divided into primary legal materials, secondary legal materials and tertiary legal materials. These legal materials are divided into:

- a. Primary, namely legal materials that are the main source. Primary legal materials are binding obtained from laws and regulations, namely:
 - 1) Government Regulation Number 78 of 2010 concerning Reclamation and Post-Mining
 - 2) Law (Law) Number 5 of 1960 concerning Basic Regulations on Agrarian Principles
- b. Secondary, in the form of research results, books, legal dictionaries, legal journals, scholars' opinions, and problems.
- c. Tertiary, namely legal materials that explain primary legal materials and secondary legal materials. The tertiary legal materials used in this study are the Legal Dictionary and the Great Dictionary of the Indonesian Language.

Legal Material Analysis

The legal materials obtained during the research will be analyzed qualitatively to describe the answers to the research questions:

a. Problem formulation (R1)

The legal materials obtained during the research are directed to analyze the analysis of the implementation of the Mine reclamation guarantee in the "new" National Capital, as a mega project in the administrative area of North Penajam Paser Regency (PPU) and Kutai Kartanegara Regency, East Kalimantan based on Government Regulation Number 78 of 2010 concerning Reclamation and Post-Mining.

Time Allocation

The research will be carried out for 6 months starting from the preparation of research design, research design seminar, literature study, taking of legal materials, preparation of reports, and publications.

RESULTS AND DISCUSSION

Based on data and observations in the field, every exploratory and production mining activity must have a Mining Business Permit (IUP) or Special Mining Business Permit (IUPK). The results of the coordination and supervision (Korsup) of the KPK mineral and mineral industry show that there are still many IUPs that are not Clear and Clean (CnC) status. Of the Non-CnC IUPs, 80% do not have reclamation and post-mining documents, in other words mining companies dredge the earth's contents, without making environmental improvements.³ To show the company's seriousness in carrying out reclamation, the company must submit a reclamation guarantee fund. The reclamation guarantee fund is placed in the Indonesian government bank on behalf of the holder of the exploration IUP in question.

The Government of Indonesia, which plays a role in maintaining and supervising every mining activity, issues regulations regarding the management of the mining environment. One of the regulations on the implementation of good mining management has been regulated in the Regulation of the Minister of Energy and Mineral Resources (ESDM) Number 26 of 2018. In this regulation, one of the obligations that must be fulfilled by holders of Mining Business Licenses (IUP) or Special Mining Business Permits (IUPK) is the provision of reclamation guarantees. And the Exploration stage Reclamation Guarantee in the form of Time Deposits placed in Government banks in Indonesia on behalf of the Director General or the governor qq holder of the Exploration IUP or Exploration IUPK concerned with a guarantee period in accordance with the Exploration stage Reclamation schedule. The placement of the Reclamation Guarantee at the Exploration stage does not eliminate the obligation of the holders of the Exploration IUP and the Exploration IUPK to carry out the Reclamation. Coal mining management policies based on the SDGs implemented in the IKN area are contained in various regulations and laws and products. The Indonesian Constitution states that the earth, water and natural resources contained in it are controlled by the state and used for the greatest possible prosperity of the people. ¹⁷ Through existing policies, the global economic paradigm makes nature used as just a commodity which then causes complex environmental problems. The results of recording law enforcement data based on the status of environmental disputes that occurred in East Kalimantan province between the period 2019-2022 can be seen in the table below:

Table 1. Criminal Law Enforcement Data Based on Environmental Dispute Status

No.	Case	2019	2020	2021	2022
1	Illegal Logging	94	104	124	110
2	Illegal Distribution of Wildlife (TSI)	41	65	48	38
3	Forest and Land Fires	1	2	5	2
4	Land Encroachment	26	11	26	28
5	Environmental Pollution	2	6	8	6
6	Environmental Damage	2	2	9	2

Source: Processed data based on the information from the Environmental Agency of East Kalimantan Province, 2022

Juridically, the form of criminal sanctions that can be imposed on corporations is in provisions such as in the Civil Code, the Criminal Code (KUHP), Law No. 32 of 2009 concerning Environmental Protection and Management, Law No. 18 of 2013 concerning the Prevention and Eradication of Forest Destruction, Law No. 4 of 2009 concerning Mineral and Coal Mining, Law No. 3 of 2020 concerning Amendments to Law No. 4 of 2009 concerning Mineral and Coal Mining, and Law No. 11 of 2020 concerning Job Creation. Based on Article 14 of Government Regulation Number 78 of 2010:

1. The holder of the IUP for production operations or IUPK for production operations is obliged to make changes to the approved reclamation plan as intended in article 13 if there are changes to the approved mining system and motto, production capacity, mining age, land use; and or, environmental documents that have been approved by the authorized agencies in accordance with the provisions of laws and regulations in the field of environmental protection and management.
2. Amendments to the reclamation plan as intended in paragraph (1) shall be submitted within a period of no later than 180 days (one hundred and eighty days) before the implementation of reclamation the following year to the Minister, Governor, or Regent/Mayor in accordance with his authority.

Reclamation Activity Reporting

Government Regulation Number 78 of 2010 Mining and Post-Mining Reclamation, Article 22 paragraph (2) The Minister, Governor, or Regent/mayor in accordance with his authority shall evaluate the reclamation implementation report as intended in paragraph (1) within a period of no later than 30 (thirty) calendar days from the receipt of the report.

In this article, it is explained that mining is obliged to submit a report on the implementation of reclamation activities every 1 (one) year, so that the minister, Governor or Regent/mayor in accordance with their authority can evaluate the reclamation implementation report no later than within a period of 30 (thirty) days from the receipt of the report.

Juridically, the form of criminal sanctions that can be imposed on corporations is in provisions such as in the Civil Code, the Criminal Code (KUHP), Law No. 32 of 2009 concerning Environmental Protection and Management, Law No. 18 of 2013 concerning the Prevention and Eradication of Forest Destruction, Law No. 4 of 2009 concerning Mineral and Coal Mining, Law No. 3 of 2020 concerning Amendments to Law No. 4 of 2009 concerning Mineral and Coal Mining, and Law No. 11 of 2020 concerning Job Creation.

Therefore, related to environmental crime cases, the panel of judges is expected to be progressive considering that environmental cases are complex and there is a lot of scientific evidence, so that the panel of judges in environmental cases must dare to apply the principles of environmental protection and management, including precautionary principles and judicial activism. 22 The implementation of criminal law enforcement against corporations that commit criminal acts will provide legal protection for the preservation of the environment, society and as an effort to provide a deterrent effect for perpetrators of environmental crimes.

The use of the above criminal sanctions can be applied optimally if it includes the following:

1. Criminal acts that are seen by the public are considered to endanger society and the environment, then cannot be justified by whom;
2. There are sanctions, both principal and additional criminal offences for acts consistent with the purposes of the penalty;
3. The eradication of criminal acts does not hinder the desired behavior of the community;
4. Criminal acts can be dealt with fairly or not arbitrarily and are not discriminatory;
5. The regulation in the criminal legal process does not have an incriminating effect either qualitatively or quantitatively;
6. There is no other option for criminal sanctions in the face of the behavior in question.

Therefore, criminal sanctions can be applied if there are indeed governing provisions, then criminal sanctions can be useful if they can be applied carefully, carefully, humanely and used in the right time and in the right circumstances. So that efforts can be made to protect the environment by applying the principle of prudence. The application of this principle can be done by utilizing various instruments, for example in determining the accountability (liability rule) of parties suspected of polluting and/or destroying the environment. In determining accountability, there are two important things to consider, namely negligence related to the state of the damage, the person or legal entity that caused the damage must be responsible if the person concerned applies the principle of prudence below the standards that have been set and strict liability is the state of the person or legal entity that caused the environmental damage seeks to compensate for the damage caused by the behavior that has been caused by the Done.

In Indonesia, the regulation of environmental law enforcement is outlined in the Law on Principles of Environmental Protection and Management (UUPPLH) and the Job Creation Law. There are not many changes in the Job Creation Law to the UUPPLH, namely 2 (two) articles that have been deleted, 3 (three) articles that have been amended and the other articles are still valid. Legal protection aims to protect social subjects and objects. Settlement of environmental cases through non-litigation or out of court and settlement of environmental cases through litigation with the concept of restorative justice. Bismar Bakhtiar said that the settlement of environmental cases can be resolved in a non-litigation manner, because:

1. The demands of the business world;
2. The time is relatively faster if the settlement of environmental cases can be resolved in a non-litigation manner
3. Low cost of non-litigation settlement;
4. A court image;
5. Win-lose solution, from the decision there may be those who cannot accept the decision so that there is no win-win solution that does not harm the parties;
6. Judges are not experts in all fields;
7. Partnership relationships can be broken; and
8. Triggering new conflicts between the parties to the dispute.

Formally and materially in the rules of the Law on Principles of Environmental Management, it can be said that there is no rule that provides legal protection for victims of environmental crimes by corporations. Environmental dispute resolution through non-litigation such as negotiation, arbitration, conciliation or other means at a low cost, the dispute resolution time is relatively fast, the parties to the dispute can actively participate in the dispute resolution and the results of the dispute are not published so that there is no reputation of the aggrieved parties. This makes the authority must be able to formulate management policies that require policy formulation stages that start from problem formulation which is the stage to recognize and identify problems as the most basic step in policy formulation. With the problem will be included in the policy agenda, then the problem is well defined and the policymaker agrees to include the problem on the policy agenda, then the next step is to solve the problem. Because the last thing in the formation of a policy is to determine the chosen policy so that it has the binding nature of legal force. The alternative policy taken is basically a compromise.

CONCLUSION

For Government Regulation Number 78 of 2010 concerning Post-Mining Reclamation, Articles 5, 6 and 7 further emphasize legal sanctions for officials and employees of the Mining Service who are slow to establish sanctions for companies that do not carry out reclamation activity reporting and pay reclamation guarantees to call the company owner to be given a written warning. . The realization of the Sustainable Development Goals in the IKN area through the policy of implementing state administrative laws that function to prevent violations of rights by licensing and supervision, overcome any violations of laws and regulations by imposing legal sanctions in the form of criminal sanctions and punishments, and civil law that functions to restore rights by paying compensation or compensation as a manifestation of the pillars of legal and institutional development management, environmental, social and economic.

REFERENCES

- Activity, R. and P.-M. in M. and C. M. B. (2010). Reclamation and Post-Mining in Mineral and Coal Mining Business Activity. *FAOLEX*. <https://faolex.fao.org/docs/pdf/ins148966.pdf>
- Akhmaddhian, S., Supartono, T., Anugrah, D., Hidayat, S., Budiman, H., Yuhandra, E., & Setiawan, W. (2023). The effectiveness of post-mining land rehabilitation policy in realizing environmental sustainability: Lessons from Sukageuri View, Kuningan, West Java. *Journal of Degraded & Mining Lands Management*, 11(1).
- areas, S. application challenges in post-coal mining reclamation. (2023). Some application challenges in post-coal mining reclamation areas. *Cornell Lab of Ornithology*. <https://www.birds.cornell.edu/ccb/passive-acoustic-monitoring-in-bornean-tropical-forests-some-application-challenges-in-post-coal-mining-reclamation-areas/>
- Bodies, M. in I. – P. L. and R. (2020). Mining in Indonesia – Principal Laws and Regulatory Bodies. *SSEK Legal Consultants*. <https://ssek.com/blog/mining-in-indonesia-ai-principal-laws-and-regulatory-bodies/>
- Chang, Y.-C., Wang, C., Khan, M. I., & Wang, N. (2020). The legal system for environmental protection during exploration and exploitation of marine mineral resources in China. *Resources Policy*, 67, 101670. <https://doi.org/10.1016/j.resourpol.2020.101670>
- City, U. the C. of L. U. T. in I. N. C. (2024). Unveiling the Complexities of Land Use Transition in Indonesia's New Capital City. *MDPI*. <https://www.mdpi.com/2073-445X/13/5/606>
- Concept, T. implementation of green construction in I. K. N. development by applying the S. T. (2024). The implementation of green construction in IKN development by applying the Sustainable Triangle Concept. *Frontiers in Political Science*. <https://www.frontiersin.org/journals/political-science/articles/10.3389/fpos.2024.1489034/full>
- Indonesia, C. M. R. I. in E. K. (2021). Coal Mining Reclamation Improvement in East Kalimantan Indonesia. *University of Twente*. <https://essay.utwente.nl/88178/>
- Indonesia expedites restoration of 800, 000 ha of former mining sites. (2024). Indonesia expedites restoration of 800,000 ha of former mining sites. *Antara News*. <https://en.antaranews.com/news/315855/indonesia-expedites-restoration-of-800000-ha-of-former-mining-sites>
- Pagouni, C., Pavloudakis, F., Kapageridis, I., & Yiannakou, A. (2024). Transitional and Post-Mining Land Uses: A Global Review of Regulatory Frameworks, Decision-Making Criteria, and Methods. *Land*, 13(7), 1051.
- post-mining, G. R. N. 78/2010 concerning reclamation and. (2010). Government Regulation No. 78/2010 concerning reclamation and post-mining. *ECOLEX*. <https://www.ecolex.org/details/legislation/government-regulation-no-782010-concerning-reclamation-and-post-mining-lex-faoc107166/>
- Post-Mining, G. R. N. 78 of 2010 on R. and. (2010). Government Regulation No. 78 of 2010 on Reclamation and Post-Mining. *International Energy Agency*. <https://www.iea.org/policies/25662-government-regulation-no-78-of-2010-on-reclamation-and-post-mining>
- Post-Mining, R. and. (2010). Reclamation and Post-Mining. *Asian Judges Network on Environment*. <https://www.ajne.org/sites/default/files/document/laws/6636/ins107166.pdf>
- Rahmi, H., & Budiani, I. (2020). Faktor-Faktor Yang Mempengaruhi Tingkat Keberhasilan Reklamasi Tambang

- Eksisiting Batu Kapur Pt Semen Baturaja (Persero) Tbk. *J. Sains dan Teknol. J. Keilmuan dan Apl. Teknol. Ind*, 20(2).
- Reclamation, P. M. L. (2015). Post Mining Land Reclamation. *Atlantis Press*. <https://www.atlantispress.com/article/25902914.pdf>
- Reform, S. R. O. through M. L. (2023). Strengthening Reclamation Obligation through Mining Law Reform. *MDPI*. <https://www.mdpi.com/2079-9276/12/5/56>
- Relocation, A. C. D. R. in the C. of I. N. C. C. (2023). Assessing Community Disaster Resilience in the Context of Indonesia's New Capital City Relocation. *Keio University*. https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/download.php/KO90001001-20236181-0003.pdf?file_id=180034
- review, C. mining reclamation as an environmental recovery effort: a. (2022). Coal mining reclamation as an environmental recovery effort: a review. *Universitas Indonesia*. <https://scholar.ui.ac.id/en/publications/coal-mining-reclamation-as-an-environmental-recovery-effort-a-rev>
- Saputra, R., Hanum, W. N., & Gunawan, V. A. (2025). Post-Mining Land Use Regulations and Practices in the United States of America: Lesson for Indonesia. *Journal of Law, Environmental and Justice*, 3(1), 104–133.
- The Obligation of Post-Mining Reclamation Guarantee: Regulations and Implementation in Indonesia, S. (2024). The Obligation of Post-Mining Reclamation Guarantee: Regulations, Sanctions, and Implementation in Indonesia. *Schinder Law Firm*. <https://schinderlawfirm.com/blog/the-obligation-of-post-mining-reclamation-guarantee-regulations-sanctions-and-implementation-in-indonesia/>