



## Fair Mine Management in Indonesia

Moh Ilias Bin Hamid<sup>1</sup>, La Ode Angga<sup>2</sup>, Barzah Latupono<sup>3</sup>, Muhammad Irham<sup>4</sup>

<sup>1</sup> Program Pascasarjana Universitas Pattimura, Ambon, Indonesia.

<sup>2,3,4</sup> Fakultas Hukum Universitas Pattimura, Ambon, Indonesia.

 : mohiliashamid@gmail.com

**ABSTRACT:** *Environmental protection and management has consequences for the development of an integrated national policy system, and must be implemented in accordance with principles from the central government to the regions. Related to the above, Immanuel Kant thought that the principle of practical law comes from pure reason which is the basis for determining an action or deed. The type of research used is normative legal research, which is research that mainly examines positive legal provisions, legal principles, legal principles, and legal doctrines in order to answer the legal problems faced. This type of research is normative juridical, which is a legal research method that is carried out by reviewing literature or secondary materials. The form of legal rules related to equitable mining environmental management in Indonesia in the future should contain material that contains the following elements: a) integrated environmental management; b) clarity of authority between the central and regional governments; c) strengthening environmental control efforts; d) strengthening of pollution and/or environmental damage prevention instruments which include strategic environmental assessment instruments, spatial planning, environmental quality standards, environmental damage standard criteria, Environmental Impact Analysis, environmental management efforts and environmental monitoring efforts, licensing, environmental economic instruments, environment-based laws and regulations, environment-based budgeting, risk analysis environment, and other instruments in accordance with the development of science and technology; e) the use of licensing as a control instrument; f) the use of ecosystem approaches; g) certainty in responding to and anticipating global environmental developments; h) strengthening environmental democracy through access to information, access to participation, and access to justice as well as strengthening people's rights in environmental protection and management; i) Stricter enforcement of civil law, state administration, and criminal law; j) Strengthening institutions for more effective and responsive environmental protection and management; and k) Strengthening the authority of environmental supervisory officials and environmental civil servant investigators.*

**Keywords:** *Management; Mining; Justice.*

## INTRODUCTION

Article 1 Paragraph (2) of Law of the Republic of Indonesia Number 32 of 2009 concerning Environmental Protection and Management (UUPPLH), states that environmental protection and management is a systematic and integrated effort carried out to preserve environmental functions and prevent environmental pollution and/or damage which includes planning, utilization, control, maintenance, supervision, and law enforcement. Thus, environmental protection and management contains consequences for the development of an integrated national policy system, and must be implemented in accordance with principles from the central government to the regions.

Related to the above, Immanuel Kant assumed that the principle of practical law<sup>1</sup> comes from pure reason which is the basis for determining an action or action. According to Kant, practical principles are propositions that contain the provisions of the general will that have some practical rules. These principles are subjective, or maximal, when these conditions are

---

<sup>1</sup> Practical law or positive law is legal knowledge in everyday life, especially in the context of resolving legal cases or disputes. Practical law involves the analysis and application of applicable laws to solve a particular problem or case. Carl Joachim Friedrich, 1969, *The Philosophy of Law in Historical Perspective*, The University of Chicago Press. Raisul Muttaqien (translator), 2010, *Philosophy of Law in Historical Perspective*, Print VII, Nusa Media Publisher, Bandung, pp. 207-108.

considered valid by the subject only for his own sake. These principles are objective, or are practical laws, when these conditions are known to the subject to be objective, that is, valid for the will of every rational being.<sup>2</sup>

Thales the Greek philosopher then sought to discover the principle or principle of the universe. According to him, the first principle of the universe is water. All come from water and end up in water as well. There is no life without water, there is not a single living thing that does not contain the element of water.<sup>3</sup> For this reason, law enforcement against environmental crimes is very important as an action and/or process of coercion to obey the law, which can be passed in three steps systematically, namely: *first*, starting from the enforcement of administrative laws; *second*, dispute resolution outside the court or through the court; *Third*, the investigation of environmental crimes.<sup>4</sup> Environmental law enforcement also goes hand in hand with legal responsibility of both the central and regional governments and the community, etymologically, legal responsibility or *liability* is often interchangeable with *responsibility*, in *Black's Law Dictionary* states that *the term liability* has a broad meaning. The definition of *legal liability* is *a liability which courts recognize and enforce as between litigant parties*. Meanwhile, *responsibility* has the meaning of *being answerable for an obligation, and includes judgment, skill, ability, and capacity. The obligation to answer for an act done, and to repair or otherwise make restitution for any injury it may have caused*.<sup>5</sup>

The shift in government from centralization to decentralization and democratization in Indonesia, as well as changes at the global level in the form of shifts in several international policies in the implementation of conservation. The international strategic environment has undergone many changes reflected in international agreements on the principles of sustainable development, the Millennium Development Goals (MDGs), agreements related to climate change and others.<sup>6</sup>

These changes have encouraged the construction of joint efforts to carry out development with the principle of "green growth" or also known as the green economy, where development is directed to ensure human life and the implementation of social justice while minimizing adverse ecological impacts, as well as the scarcity of biological natural resources with low carbon emissions and efficient utilization in accordance with the carrying capacity of the environment.<sup>7</sup>

The most prominent change in the strategic environment is the change in the government system of the Republic of Indonesia from centralization to decentralization, with this change most of the implementation of development, including development related to natural resources, has been determined to be the authority of the Regional Government, which in the implementation of development has been determined the principle of *concurrency* by paying attention to its externalities, impact and efficiency.<sup>8</sup>

The management of conservation forest areas such as national parks is strictly still the authority of the Government (central), while other activities including conservation outside the state forest area should be the authority of the region. In addition to changes in the government system, changes that are also prominent at the national level are reforms related

---

<sup>2</sup> Immanuel Kant, *Critique of Practical Reason*, (New York: The Liberal Arts Press, 1956), Nurhadi (Translator), *Criticism of Paktis' Intelligence*, (Yogyakarta: Student Library, 2005), p. 29.

<sup>3</sup> Zainal Abidin, *Introduction to Western Philosophy*, (Jakarta: RajaGrafindo Persada, 2011), p. 85.

<sup>4</sup> Hasbullah F. Sjawie, 2017, *Board of Directors of Limited Liability and Corporate Criminal Liability*. (Jakarta: Gold, 2017), p. 304.

<sup>5</sup> Bryan A. Garner, *Black's Law Dictionary*, Ninth Edition, (United States of America: Thomson Reuters, 2009), p. 997.

<sup>6</sup> Report of the Ministry of Environment and Forestry of the Republic of Indonesia 2015, p. 5.

<sup>7</sup> *Ibid.*

<sup>8</sup> *Ibid.*

to the improvement of public services, the rapid growth of information technology, as well as the strengthening of indigenous peoples' institutions, the strengthening of the role of the DPR/DPRD and DPD, and the role of Non-Governmental Organizations (NGOs) in pushing the direction of development forward.<sup>9</sup>

Realizing the principles of good governance in the field of biological conservation, in this case including increasing the participation of parties in conservation activities, including in this case related to limited government funds. The "principles of good governance" are that biodiversity conservation is imbued with the principles of participation, transparency, accountability, efficiency, and justice.<sup>10</sup>

Good and healthy are also human rights of every Indonesian citizen as mandated in Article 28H UUD1945. However, environmental damage has not only damaged the ecology due to the massive degradation of the carrying capacity of the environment, but has also had an impact on the moral degradation of state administrators due to neglect of responsibility for environmental damage.

Victims of a crime do not always have to be individuals, individuals, or it can also be groups of people, communities, even in certain crimes, the victims can also come from other forms of life such as plants, animals or ecosystems, environmental victims are usually found in crimes against the environment and forestry, which results in the loss of state wealth so that it has an impact on the welfare of the people.

Based on the considerations of Law of the Republic of Indonesia Number 2 of 2025 (Law Number 2 of 2025) concerning the fourth amendment to Law Number 4 of 2009 concerning Mineral and Coal Mining, it is explained that mineral and coal mining business activities have an important role in providing real added value for national economic growth and sustainable regional development.

Law Number 2 of 2025 improves Law Number 4 of 2009 concerning Mineral and Coal Mining, namely adding new content material in the form of: (1) regulations related to the concept of Mining Legal Areas; (2) the authority to manage Minerals and Coal; (3) Mineral and Coal management plans; (4) assignment to state research institutions, state-owned enterprises, state-owned enterprises, or business entities to conduct research and research in the context of the preparation of WIUP; (5) strengthening the role of SOEs; (6) the rearrangement of licensing in the mining of Minerals and Coal, including the concept of new licensing related to the cultivation of rocks for certain types or for certain purposes, as well as permits for people's mining; and (7) strengthening policies related to environmental management in mining business activities, including the implementation of Reclamation and Post-Mining. In this Law, a rearrangement is also made related to the policy of increasing the added value of Minerals and Coal, share divestment, coaching and supervision, land use, data and information, Community Empowerment, and the continuation of operations for holders of Employment Contracts/KK or Coal Mining Concession Work Agreements/PPK2B.

Law Number 2 of 2025 also changes several provisions in Law Number 4 of 2009 concerning Mineral and Coal Mining. In this Law, there are new content materials added to this Law, including the following: 1) Adjustment of several provisions in this Law as the implementation of the Constitutional Court Decision; 2) Arrangements related to the determination of WIUP for metal or coal minerals which are given in a priority manner to

---

<sup>9</sup> *Ibid.*

<sup>10</sup> *Ibid.*

cooperatives, small and medium business entities, and business entities owned by religious community organizations that carry out economic functions to improve the regional economy; 3) Provision of Metal Mineral WIUP, Coal WIUP, or WIUPK in a priority manner for the benefit of universities to SOEs, regional-owned enterprises, or private business entities by considering the area of Metal Mineral WIUP, Coal WIUP, or WIUPK, university accreditation, and for improving access and educational services for the community; and 4) Arrangements related to non-tax state revenues obtained in the implementation of Mineral and Coal Mining business activities are managed by the Minister.

The State of Indonesia through the central government is responsible for the use of Minerals and Coal in the jurisdiction of the Unitary State of the Republic of Indonesia through the optimal, effective, and efficient management and utilization of Minerals and Coal so that it can encourage and support the development and independence of national industrial development based on Mineral and/or Coal energy resources.

The role of local governments can be included in the formulation of Article 6 paragraph (1) of Mineral and Coal Mining, it is norm that the central government in the management of Mineral and Coal Mining, is empowered: f. to determine the Mining Area (WP) after determined by the provincial Regional Government in accordance with its authority and to consult with the House of Representatives of the Republic of Indonesia. Article 8 and Article 9 of Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining. Based on the background of the above legal problems, the problems to be studied are what are the legal rules related to the equitable management of the mining environment in Indonesia?

## RESEARCH METHODS

The type of research used is normative legal research, which is a research that mainly examines positive legal provisions, legal principles, legal principles, and legal doctrine in order to answer the legal issues at hand. This type of research is normative juridical, which is a legal research method that is carried out by examining literature materials or secondary materials.<sup>11</sup> With a statute *approach*, a conceptual *approach* is used to find and find laws and regulations related to the principle of justice in the formation of legal rules related to the equitable management of the mining environment in Indonesia, in order to obtain research answers that are carefully, systematic and descriptive. The *comperative approach* is used to search, review and find laws and regulations in other countries related to fair mining management.<sup>12</sup>

## RESULTS AND DISCUSSION

The granting of authority to regulate and manage their territory is basically to accelerate the realization of community welfare. The achievement of community welfare is a fundamental consideration, the granting of very broad authority to the local government in carrying out government affairs, which is the authority of the region. Local governments are given the opportunity to exercise the widest possible autonomy to regulate and manage government affairs based on the principle of autonomy and assistance duties.<sup>13</sup> Faisal Akbar Nasution as quoted by Marhaeni Ria Siombo explained that utilizing natural resources

---

<sup>11</sup> Bambang Sunggono, *Legal Research Methodology*, (Jakarta: Rajawali Pres, 2011), p. 94.

<sup>12</sup> Peter Mahmud Marzuki, *Legal Research*, (Jakarta: Kencana Prenada Media Group, 2006), p. 137-139.

<sup>13</sup> Marhaeni Ria Siombo, "Local Government Responsibility for Environmental Damage in Relation to Licensing Authority in the Forestry and Mining Sector", *Journal of Legal Dynamics*, 14, no. 3 (2014): p. 400-404.



(SDA), especially for natural resource-producing areas, the central government implements central and regional balance funds but it often becomes a problem because in practice the technical department in Jakarta makes different calculations, so it seems that the central government has not been able to coordinate well in implementing regional autonomy policies.<sup>14</sup>

The regional authority to use mining natural resources to the regions is naturally carried out, thus the regions can use it as a source of regional income that is used for the welfare of their communities. However, this is accompanied by an obligation to control the impact and conservation efforts, which occur as a result of the use and management of mining in the area. Therefore, Article 72 of Law Number 32 of 2009 concerning PPLH states that regents/mayors are obliged to supervise the compliance of the person in charge of business and/or activities with environmental permits. This means that when the environmental permit has been granted to the applicant, the function of supervision of the compliance of the person in charge of the business/activity must be carried out. Thus, every activity listed in the EIA and UKL-UPL documents can be monitored for implementation in the field. Mining activities are regulated in Law Number 4 of 2009 concerning Mineral and Coal Mining (Mineral and Coal Law). To further detail the implementation of this Law, it was re-revealed in the form of Government Regulation (PP), one of which is Government Regulation No. 23 of 2010 concerning the Implementation of Mining Business Activities.<sup>15</sup>

The issuance of Mining Business Permits (IUP) for rocks based on Government Regulation Number 23 of 2010 is carried out by way of a regional application. The regional application means that every business entity, cooperative or individual who wants to have an IUP must submit an application to the Minister, governor or regent mayor according to his authority. The division of authority of Ministers, governors and regents/mayors is: Minister of Energy and Mineral Resources, for applications for areas that are across provincial or sea areas more than 12 miles from the coastline; Governor, for applications for areas that are across districts/cities within one province or sea area 4 to 12 miles; Regent/mayor, for applications for areas that are within 1 district/city area or sea area up to 4 miles.<sup>16</sup>

The rock mineral IUP is given by the Minister of Energy and Mineral Resources (hereinafter referred to as the Minister), the governor or regent/mayor in accordance with his authority based on applications submitted by: business entities, cooperatives, and individuals. IUP is given through 2 stages, namely: Granting of Mining Business License Areas (WIUP); and Granting of Mining Business Licenses (IUP). The provision of WIUP for rocks includes several things. *First*, business entities, cooperatives or individuals submit a regional application to obtain a rock WIUP to the Minister, governor or regent/mayor according to their authority; *second*, before granting WIUP, the Minister must receive a recommendation from the governor and the regent/mayor and the governor must receive a recommendation from the regent/mayor; *third*, the application for WIUP that has first met the requirements of latitude and longitude geographical coordinates in accordance with the provisions of the nationally applicable geographic information system and paid the cost of regional reservation and map printing, obtains the first priority to obtain the WIUP; *fourth*, the Minister, governor, or regent/mayor within a maximum of 10 working days after receiving the application is obliged to give a decision to accept or reject the WIUP

---

<sup>14</sup> *Ibid.*

<sup>15</sup> *Ibid.*

<sup>16</sup> *Ibid.*

application; and *fifth*, the decision to accept is submitted to the WIUP applicant accompanied by the submission of a WIUP map along with the boundaries and coordinates of the WIUP. The refusal decision must be submitted in writing to the WIUP applicant accompanied by the reason for the refusal.<sup>17</sup>

The provision of rock IUP includes several things. *First*, the IUP consists of: Exploration IUP and Production Operations IUP; *second*, the requirements for the Exploration IUP and Production Operations IUP include the following requirements: administrative, technical, environmental and financial; and *third*, the Minister or governor submits the issuance of a map of the WIUP of rocks submitted by business entities, cooperatives, or individuals to the governor or regent/vice governor to obtain recommendations in the context of the issuance of the Exploration IUP. The governor or regent/mayor gives recommendations no later than 5 working days from the receipt of proof of submission of the rock mineral WIUP map.<sup>18</sup>

Ministers, governors, or regents/mayors may reject the application for the extension of the Production Operations IUP if the Production Operations IUP holder based on the evaluation results does not show good production operation performance. The Minister, governor, or regent/mayor in accordance with his authority has the right to grant administrative sanctions' to IUP holders for violations of the provisions of this law in the form of: written warning, temporary suspension of part or all of exploration activities or production operations, or revocation of IUP. Based on the Government Regulation as described above, the control function through the application of administrative sanctions is quite clearly mandated in laws and regulations, in accordance with the authority of each minister, governor and regent/mayor.<sup>19</sup>

Production Operation IUP is a business license granted after the completion of the implementation of the Exploration IUP to carry out the stages of production operation activities. The Production Operations IUP contains provisions, among others: the environment including reclamation, reclamation and post-mining guarantee funds, and community development and empowerment plans around the mining area, as well as the rights and obligations of IUP holders. This means that after the IUP is given, inherent supervision must continue to be carried out by the local government as stipulated in it.<sup>20</sup>

This package of authority to utilize and control is what in many cases of environmental damage, by local government officials intentionally or unintentionally (due to incapacity) interpret as two separate parts, which should be a unit that is reflected in the decision-making of IUP. Assessment of the feasibility and not like the environment if a mining activity takes place, is a requirement that must be assessed by the local government where the activity plan will be carried out. The ability to understand and the sincerity of the local government apparatus, especially the regent as a decision-making official, has a strategic role.<sup>21</sup>

Natural resources need to be managed and utilized properly and responsibly, utilization by considering the principles of sustainability, so that these natural resources continue to function for humanity. How can this be implemented? Rules or laws are needed to regulate and provide guidelines on how people should behave in utilizing natural resources.

---

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

<sup>21</sup> *Ibid.*

According to Hoebel, the law exists in order to control behavior, so that the difference in various interests does not become an open conflict.<sup>22</sup>

There are so many problems related to the environment related to development, especially in the use of mining natural resources. In this era of autonomy, it appears that there is a tendency for environmental problems to become more complex, which should be better than when they have not been given broad authority through the implementation of regional autonomy. There is a temporary allegation that environmental degradation is related to the implementation of regional autonomy, where regions want to increase PAD by exploiting natural resources that do not pay proper attention to environmental aspects.<sup>23</sup> Laws and regulations related to environmental management are adequate, but nevertheless in their implementation, including in supervision, their implementation needs to receive serious attention.<sup>24</sup> The mining permits that have been issued by the regions in the regional autonomy policy, all return to the discretion of the regional head. Before mining permits are issued, the local government "should" have the ability to verify the ability of investors, the ability of human resources in the context of mining, ironically, all of them are not owned by the local government properly, so the question arises, whether the issued permit has met the requirements, namely encouraging economic growth for the region concerned or not?<sup>25</sup>

Local governments in issuing IUPs, lacking, or even not paying attention to the aspects of the technical scientific rules of an IUP are issued, ignoring the concept of AMDAL or UKL/UPL or integral reclamation between one IUP block and another, or furthermore, it is found that there is no coordination of the concept of integral environmental control over two or several IUPs that coincidentally happen to be at the boundary of each other's administrative areas, And weakness of supervision and control is one of the causes of damage to the post-mining environment.<sup>26</sup>

Therefore, the occurrence of environmental damage due to mining and forestry activities, the local government through the regent, if administratively it is in its area. In general, mining natural resources are located in the district area. The law provides control opportunities for the community to file a lawsuit for administrative negligence that results in environmental damage.<sup>27</sup>

Law of the Republic of Indonesia Number 23 of 2014 concerning Regional Government is a legal product of the revision of Law of the Republic of Indonesia Number 32 of 2004 concerning Regional Government. Article 27 Paragraph 3 of Law of the Republic of Indonesia No. 23 of 2014 which reads: The authority of the provincial regions to manage natural resources in the sea as referred to in Paragraph (1) is a maximum of 12 (twelve) nautical miles measured from the coastline towards the open sea and/or towards the waters of the archipelago, where it can visually refer to the attachment to the Regulation of the Minister of Home Affairs No. 76 of 2012 concerning Guidelines for the Affirmation of Regional Boundaries.

Based on the mandate of Article 18, Article 18A, Article 18B, and Article 25A of the 1945 Constitution of the Republic of Indonesia, it implicitly contains the substance regarding the state's recognition of the specificity of regulation of the archipelagic regions. As a unitary

---

<sup>22</sup> *Ibid.*

<sup>23</sup> *Ibid.*

<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.*

<sup>26</sup> *Ibid.*

<sup>27</sup> *Ibid.*

country with archipelagic characteristics, Indonesia adheres to the principle of decentralization, where regional heads are given the authority to regulate and manage their own households. This is reflected in article 18 paragraph (1) of the 1945 Constitution of the Republic of Indonesia which reads: The Unitary State of the Republic of Indonesia is divided into provincial areas and the provincial area is divided into districts and cities, each of which has a local government, which is regulated by law. Furthermore, Article 18A paragraph (1) and Article 18B paragraph (1) of the 1945 Constitution of the Republic of Indonesia emphasize that the regional autonomy that is carried out still pays attention to the specificity, privileges and diversity of each region.

Article 18A paragraph (1) of the 1945 Constitution of the Republic of Indonesia reads in full: The relationship of authority between the central government and the provincial, regency, and city local governments, or between provinces and districts and cities, is regulated by law by taking into account the specificity and diversity of the region. Seeing the importance of the marine area above, the government of the Republic of Indonesia should have a legal policy for the development of marine areas in the context of borders because it concerns the territorial area in the a country. the island group that can be found in Indonesia is located in Maluku.

Based on the mandate of Article 18, Article 18A, Article 18B, and Article 25A of the 1945 Constitution of the Republic of Indonesia, it implicitly contains the substance regarding the state's recognition of the specificity of regulation of the archipelagic regions. As a unitary country with archipelagic characteristics, Indonesia adheres to the principle of decentralization, where regional heads are given the authority to regulate and manage their own households.

This is reflected in article 18 paragraph (1) of the 1945 Constitution of the Republic of Indonesia which reads: "The Unitary State of the Republic of Indonesia is divided into provincial areas and the provincial area is divided into districts and cities, each of which has a local government, which is regulated by law". Furthermore, Article 18A paragraph (1) and Article 18B paragraph (1) of the 1945 Constitution of the Republic of Indonesia emphasize that the regional autonomy that is carried out still pays attention to the specificity, privileges and diversity of each region. Article 18A paragraph (1) of the 1945 Constitution of the Republic of Indonesia reads in full: "The relationship of authority between the central government and the provincial, regency, and city local governments, or between provinces and districts and cities, is regulated by law by taking into account the specificity and diversity of regions". Article 18B paragraph (1) of the 1945 Constitution of the Republic of Indonesia reads: "The State recognizes and respects special or special local government units regulated by law".

The main juridical basis for the reality that Indonesia is an archipelagic country, so it is necessary to regulate the specificity of the archipelagic region is found in Article 25A of the 1945 Constitution which states: "The Unitary State of the Republic of Indonesia is an archipelago state characterized by an archipelago with a territory whose boundaries and rights are determined by law". The various constitutional provisions that have been described above show that the archipelago needs to be regulated separately because of their specificity. The Archipelago has specific differences from other regions, especially related to: a) Different characteristics so that the construction model must be different from the common model; b) Government administration management must be island-based; c) Community services must be directed to the islands because the people of the archipelago live on isolated islands; d) On average, people in the archipelago are late in infrastructure



development; e) The outermost small island needs a *prosperity* and *security approach* at the same time.<sup>28</sup>

Mustofa as quoted by Marhaeni Ria Siombo said that one of the principles in *sustainable development* is justice, justice that natural resources must be enjoyed by all current and future generations, by everyone, not just a group of people. Because natural resources are a gift from God Almighty that is intended and enjoyed by mankind. Efforts to manage and preserve the environment (natural resource conservation) are mandatory affairs that are the authority of the regions, both provinces and districts/cities.<sup>29</sup> Government affairs based on Law Number 23 of 2014 concerning Regional Government consist of absolute government affairs, concurrent government affairs and local government affairs.<sup>30</sup>

This is also emphasized in Law No. 32 of 2009 which states that every preparation of laws and regulations at the national and regional levels must pay attention to the protection of environmental functions and the principles of environmental protection and management. Every preparation of laws and regulations at the national and regional levels must pay attention to the protection of environmental functions and the principles of environmental protection and management.<sup>31</sup>

If the above provisions are with the Job Creation Law, then ratification through the government according to ICEL and WALHI there are provisions that should be criticized in environmental management and protection, where many articles are amputated, such as environmental permits being eliminated, changing business licenses, and then narrowing public access to legal remedies for decisions that have the potential to cause environmental damage.<sup>32</sup> Furthermore, the considerations of Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining, it is explained that mineral and coal mining business activities have an important role in providing real added value for national economic growth and sustainable regional development.

This Law regulates the addition of new content materials in the form of: (1) regulations related to the concept of Mining Jurisdiction; (2) the authority to manage Minerals and Coal; (3) Mineral and Coal management plans; (4) assignment to state research institutions, state-owned enterprises, state-owned enterprises, or business entities to conduct research and research in the context of the preparation of WIUP; (5) strengthening the role of SOEs; (6) the rearrangement of licensing in the mining of Minerals and Coal, including the concept of new licensing related to the cultivation of rocks for certain types or for certain purposes, as well as permits for people's mining; and (7) strengthening policies related to environmental management in mining business activities, including the implementation of Reclamation and Post-Mining. In this Law, a rearrangement is also made related to the policy of increasing the added value of Minerals and Coal, share divestment, coaching and supervision, land use, data and information, Community Empowerment, and the continuation of operations for holders of Employment Contracts/KK or Coal Mining Concession Work Agreements/PPKP2B.

The use of Minerals and Coal in Indonesia is carried out through the management and utilization of Minerals and Coal optimally, effectively, and efficiently so that it can encourage and support the development and independence of national industrial

---

<sup>28</sup> Kotan Y. Stefanus, Archipelago as a Special Regional Government Unit, *Journal of Legal Dynamics* 11, no. 1 (2011): p. 100

<sup>29</sup> *Ibid.*

<sup>30</sup> Muhammad Irham, et al., *Constitutional Law*, (Bandung: Manggu Makmur Tanjung Lestari Publisher, 2023): p. 109.

<sup>31</sup> *Ibid.*

<sup>32</sup> WALHI Position Paper, *Real Threat of the Omnibus Law*, Indonesian Forum for the Environment (WALHI), 2021.

development based on Mineral and/or Coal energy resources. The role of local governments can be included in the formulation of Article 6 paragraph (1) of Mineral and Coal Mining, it is norm that the central government in the management of Mineral and Coal Mining, is empowered: f. to determine the Mining Area (WP) after determined by the provincial Regional Government in accordance with its authority and to consult with the House of Representatives of the Republic of Indonesia. Article 8 and Article 9 of Law No. 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining.

The responsibilities or authorities of the local government contained in the amendment to Law Number 3 of 2020 include the following: 1) The provisions of Article 17 are amended to read as follows: (1) The Regional Government (governor) is authorized to determine the area and boundaries of the Mining Business Permit Area (WIUP) for Mineral Metals and Coal WIUP which will then be determined by the Minister. In the Metal Mineral WIUP and Coal WIUP that have been determined, the Central Government and Regional Governments will guarantee the issuance of other licenses necessary in the context of the implementation of Mining Business activities in the Metal Mineral WIUP and Coal WIUP that have been determined as long as they meet the requirements in accordance with the provisions of laws and regulations. (Article 17 and Article 17B of Law Number 3 of 2020); 2) The Central Government and Regional Governments are responsible for ensuring that there are no changes in the use of space and areas in the People's Mining Area (WPR) that have been determined; 3) The Central Government and Regional Governments guarantee that there will be no changes in the use of space and areas in the WIUPK Special Mining Business License Area that has been determined and then the Central Government and Regional Governments guarantee the issuance of other permits that are necessary in the context of the implementation of Mining Business activities in the WIUPK that have been determined as long as they have met the requirements in accordance with the provisions of laws and regulations. (Article 31A of Law Number 3 of 2020); 4) The Central Government can delegate the authority to grant mining business licenses to the provincial Regional Government in accordance with the provisions of laws and regulations; 5) In the context of Coal Development and/or Utilization, the Government may assign to state research institutions, regional research institutions, state-owned enterprises, regional-owned enterprises, or private business entities to conduct Investigation and Research and/or project development activities in the assignment area. SOEs, regionally-owned enterprises, or private business entities that have conducted Investigations and Research and/or activities in the context of project development in the assignment area get the right to match bids in the WIUP or WIUPK Coal auction. (Article 104A of Law Number 3 of 2020); 6) Holders of Mining Business Permits (IUP and Special Mining Business Permits (IUPK) are required to prepare community development and empowerment programs. Holders are obliged to allocate funds for the implementation of community development and empowerment programs whose minimum amount is set by the Minister. The preparation of IUP and IUPK programs is consulted with the Minister, Regional Government, and the community. (Article 108 of Law Number 3 Year); 7) The Central Government and Regional Governments guarantee that there will be no change in the use of space and areas as referred to in paragraph (1) in the WIUP, WIUPK, or WPR that has been granted permits. (Article 172B paragraph (2) of Law Number 3 of 2020).

Departing from the explanation above, and the fact that the existence of natural resources is actually in the Regency/City area, as well as the many rules related to inharmonious mining management, unclear division of regional authority, and multiple interpretations,

plus the threat of massive environmental damage, the researcher argues that the Regency/City government needs to immediately make regional regulations related to fair management of the mining environment.

Fahrul Indrajaya added that the next strategy in managing the mining environment is to carry out land revegetation activities and of course rely on the role of the community and the local government and related agencies (such as the DLHK Office and the Energy and Mineral Resources Office). The types of plants that can be used for land revegetation around the location of former mining activities. The development of mining areas ensures that there is no environmental damage through the concept of reclamation in post-mining land management and area management with mining purposes and preserving river drainage and land governance. In addition to phytoremediation and revegetation, it is also necessary to have socialization activities about the impact of PETI activities on the environment to the local community so that illegal gold mining activities are no longer carried out by the community. The form of socialization that can be provided is in the form of counseling activities to the community regarding the impact of illegal gold mining activities.<sup>33</sup>

Abdul Kahar added, to avoid natural damage due to mining activities in Indonesia, it should remain guided by good *mining practices* which consist of five things, namely, environmental protection, namely, minimizing negative impacts on the surrounding natural environment including waste management, second, safety and health, third, community involvement, fourth reclamation and rehabilitation and fifth transparency, and fifth transparency and accountability. The five principles of good mining rules are designed and compiled by the Government to ensure that mining activities take place responsibly, sustainably, and minimize their negative impact on the environment and society, including reclamation activities aimed at restoring land affected by mining to a condition as close as possible to its original condition.<sup>34</sup>

Furthermore, the 1945 Constitution states that a good and healthy environment is a human right and constitutional right for every Indonesian citizen. Therefore, the state, government, and all stakeholders are obliged to protect and manage the environment in the implementation of sustainable development so that Indonesia's environment can continue to be a source and support for life for the Indonesian people and other living things.<sup>35</sup>

The Unitary State of the Republic of Indonesia is located at the crossroads between two continents and two oceans with a tropical climate and weather and seasons that produce high value natural conditions. In addition, Indonesia has the second longest coastline in the world with a large population. Indonesia has a wealth of biodiversity and abundant natural resources. This wealth needs to be protected and managed in an integrated and integrated environmental protection and management system between the sea, land, and air environments based on the archipelago's insights.<sup>36</sup>

Indonesia is also in a very vulnerable position to the impacts of climate change. These impacts include declining food production, disruption of water availability, the spread of pests and plant diseases as well as human diseases, rising sea levels, the sinking of small

---

<sup>33</sup> Fahrul Indrajaya, "Environmental Management Strategy at People's Mining Locations in Petuk Barunai Village, Rakumpit District, Palangka Raya City", *Technical Journal*, 6, no. 1 (2022), p. 64.

<sup>34</sup> <https://www.esdm.go.id/id/media-center/arsip-berita/pengelolaan-pertambangan-harus-perhatikan-aspek-lingkungan>, accessed on June 30, 2025.

<sup>35</sup> See in the explanation of Law of the Republic of Indonesia Number 32 of 2009 concerning Environmental Protection and Management.

<sup>36</sup> *Ibid.*

islands, and the extinction of biodiversity.<sup>37</sup> The availability of natural resources in quantity or quality is uneven, while development activities require increasing natural resources. Development activities also contain the risk of pollution and environmental damage. This condition can result in a decrease in carrying capacity, carrying capacity, and environmental productivity, which ultimately becomes a social burden.<sup>38</sup>

Therefore, Indonesia's environment must be protected and managed properly based on the principles of state responsibility, the principle of sustainability, and the principle of justice. In addition, environmental management must be able to provide economic, social, and cultural benefits based on the principles of prudence, environmental democracy, decentralization, as well as recognition and appreciation of local wisdom and environmental wisdom.<sup>39</sup>

Environmental protection and management requires the development of an integrated system in the form of national policies for environmental protection and management that must be implemented in accordance with principles and consequences from the central to the regions.<sup>40</sup> The use of natural resources must be in harmony, harmony, and balance with the function of the environment. As a consequence, development policies, plans, and/or programs must be imbued with the obligation to preserve the environment and realize sustainable development goals.<sup>41</sup>

Based on the explanation above, Law 32 of 2009 concerning PPLH requires the Government and local governments to make a strategic environmental assessment (KLHS) to ensure that the principles of sustainable development have become the basis and integrated in the development of a region and/or policies, plans, and/or programs. In other words, the results of the KLHS must be used as the basis for policies, plans and/or development programs in a region.<sup>42</sup>

If the results of the KLHS state that the carrying capacity and carrying capacity have been exceeded, the policy, plan, and/or development program must be improved in accordance with the recommendations of the KLHS and all efforts and/or activities that have exceeded the carrying capacity and carrying capacity of the environment are no longer allowed. Science and technology have improved the quality of life and changed people's lifestyles.<sup>43</sup>

The use of chemical-based products has increased the production of hazardous and toxic waste materials. This requires the development of a safe disposal system with little risk to the environment, health, and survival of humans and other living beings.<sup>44</sup> In addition to producing products that are beneficial to society, industrialization also has an impact, among others, the production of hazardous and toxic waste materials, which if disposed of into environmental media can threaten the environment, health, and survival of humans and other living things.<sup>45</sup>

By realizing this, hazardous and toxic materials and their waste need to be protected and managed properly. The territory of the Unitary State of the Republic of Indonesia must be free from the disposal of hazardous and toxic waste from outside the territory of Indonesia.

---

<sup>37</sup> *Ibid.*

<sup>38</sup> *Ibid.*

<sup>39</sup> *Ibid.*

<sup>40</sup> *Ibid.*

<sup>41</sup> *Ibid.*

<sup>42</sup> *Ibid.*

<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.*

<sup>45</sup> *Ibid.*



Realizing the potential negative impacts caused as a consequence of development, early impact control efforts continue to be developed.<sup>46</sup>

Environmental impact analysis (EIA) is one of the preemptive tools for environmental management that continues to be strengthened through increasing accountability in the implementation of EIA preparation by requiring licenses for EIA assessors and the implementation of certification for EIA document compilers, as well as by clarifying legal sanctions for violators in the field of EIA.<sup>47</sup>

EIA is also one of the main requirements in obtaining an environmental permit that must be owned before obtaining a business license. Preventive efforts in the context of controlling environmental impacts need to be carried out by making maximum use of monitoring and licensing instruments. In the event that pollution and environmental damage have occurred, it is necessary to carry out repressive efforts in the form of effective, consequential, and consistent law enforcement against pollution and environmental damage that has occurred.<sup>48</sup>

In this regard, it is necessary to develop a clear, firm, and comprehensive legal system for environmental protection and management to ensure legal certainty as a basis for the protection and management of natural resources and other development activities.<sup>49</sup> The PPLH Law also utilizes various legal provisions, both administrative law, civil law, and criminal law. Civil law provisions include the settlement of environmental disputes out of court and in court. Environmental dispute resolution in court includes lawsuits by group representatives, lawsuits by environmental organizations, or government lawsuits.<sup>50</sup>

Through this method, it is hoped that in addition to having a deterrent effect, it will also increase the awareness of all stakeholders about how important environmental protection and management is for the lives of current and future generations.<sup>51</sup> Criminal law enforcement in the PPLH Law introduces the threat of minimum punishment in addition to the maximum, expansion of evidence, criminalization for violations of quality standards, integration of criminal law enforcement, and regulation of corporate crimes. Environmental criminal law enforcement still pays attention to the principle of *ultimum remedium* which requires the implementation of criminal law enforcement as a last resort after the implementation of administrative law enforcement is considered unsuccessful. The application of the principle of *ultimum remedium* only applies to certain formal crimes, namely criminalization of violations of wastewater quality, emissions, and disturbance standards.<sup>52</sup>

In addition, the PPLH Law gives broad authority to the Minister to carry out all government authority in the field of environmental protection and management and coordinate with other agencies. Through this Law, the Government also gives very broad authority to local governments in protecting and managing the environment in their respective regions which is not regulated in Law Number 23 of 1997 concerning Environmental Management.<sup>53</sup>

---

<sup>46</sup> *Ibid.*

<sup>47</sup> *Ibid.*

<sup>48</sup> *Ibid.*

<sup>49</sup> *Ibid.*

<sup>50</sup> *Ibid.*

<sup>51</sup> *Ibid.*

<sup>52</sup> *Ibid.*

<sup>53</sup> *Ibid.*

Therefore, institutions that have a workload based on this Law are not enough just an organization that determines and coordinates the implementation of policies, but an organization with a portfolio of determining, implementing, and supervising environmental protection and management policies is needed.<sup>54</sup> In addition, this institution is also expected to have the scope of authority to supervise natural resources for conservation purposes. To ensure the implementation of the main tasks and functions of the institution, funding support is needed from the adequate state revenue and expenditure budget for the Government and adequate regional revenue and expenditure budgets for local governments.<sup>55</sup>

Another reason for the formation of local regulations in Buru Regency, Maluku Province is that in reality, the use of mercury and cyanide harmful substances in the illegal mining of Mount Botak which is circulating and sold freely by individuals who deliberately for personal interests and enriching themselves and groups results in environmental damage and water pollution without obtaining management permits from the Central Government as well as the Provincial Governments of Maluku and Buru Regency South.<sup>56</sup>

As a regulator and supervisor, the Government seems to allow the free circulation of mercury and cyanide without any supervision, especially in the Trading System of Hazardous and Toxic Materials (B3) in the Bald Mountains. Never has a single miner been allowed to use mercury as a material to process the separation of gold from the ground.<sup>57</sup> The illegal mining of the bald mountain in Buru Regency has been operating since 2011 and was closed from 2018 to 2020. At that time, on October 17, 2018, the sweep of the PETI was carried out on Wednesday led directly by the Maluku Police Chief Inspector General Royke Lumowa. Royke was accompanied by a number of officials, including Buru Regent Ramly I Umasugi. This closure is the umpteenth time since the mine operated seven years ago.<sup>58</sup>

After being closed more than 20 times, the miner always returns. "We risked everything. There should be no traitors. There should be no enemies in the blanket," said Royke while at the top of Mount Baltak which is already in the form of a basin. Royke realized that the closure was carried out amid pessimism and public distrust. The emergence of public attitudes is because they consider solving the problem of Mount Botak to be difficult. Many interests are suspected to be playing there, from the regions to Jakarta. There are also many officials who are suspected of profiting from the persistence of illegal mining.<sup>59</sup>

In 2023 to 2024 and early 2025 the barren mountain mine in Buru Regency will be operational again but the mining process is carried out illegally, the mining process is carried out traditionally using equipment made by the miner in the form of a trombole or grinder and a tub or immersion device, The mining process starts from excavation to the process of separating gold from the ground so as to produce pure gold that is ready to be sold to the market.<sup>60</sup>

The separation process carried out by these illegal miners uses cyanide and mercury liquids or the local community consumes it with silver iar. One of the online media in Maluku contained hundreds of cartons containing cyanide successfully smuggled into

---

<sup>54</sup> *Ibid.*

<sup>55</sup> *Ibid.*

<sup>56</sup> [https://ombudsman.go.id/search?q=gunung+botak.file:///C:/Users/Administrator/Downloads/Merkuri Bisa Masuk Ke Gunung Botak.pdf](https://ombudsman.go.id/search?q=gunung+botak.file:///C:/Users/Administrator/Downloads/Merkuri%20Bisa%20Masuk%20Ke%20Gunung%20Botak.pdf). Retrieved August 10, 2025.

<sup>57</sup> *Ibid.*

<sup>58</sup> *Ibid.*

<sup>59</sup> *Ibid.*

<sup>60</sup> *Ibid.*

Namlea, Buru Regency. In total, 150 cartons were loaded in a large truck through the Ambon - Namlea Ferry port. It is suspected that the smuggling of hazardous and toxic materials (B3) of the type cyanide in large quantities is related to illegal gold mining activities in the Mount Botak area. Fortunately, the cyanide loaded truck was found by the police during a raid at the Namlea Ferry Pier, Buru Regency. Based on the truck driver's statement, this dangerous cargo was loaded from a container at the Port of Ambon and was planned to be taken to the location of the Mount Botak gold mine. However, the driver admitted that he did not know the exact contents of the truck he was carrying.<sup>61</sup>

In 2018 the Maluku Ombudsman conducted an investigation on illegal mining on the bald mountain of Buru Regency, one of our focuses is to seek information from miners and the community on how this mercury is freely sold by the community and is very freely owned by the PETI, as well as its entry route. A lot of information we received is: a) Mercury enters the namlea through small ships (wooden ships) under the pretext of buying livestock but inside it contains mercury and cyanide materials; b) Mercury enters through sea toll lanes, loaded with containers, etc; c) Mercury entered through the PELNI ship voyage carried by the passengers The team at that time had bought one (1) kg of mercury/silver water at a price of Rp. 7,000,000, we also had a discussion with the loading and unloading personnel at Namlea Port that many people brought from outside on passenger ships when asked if it was mercury goods if they bought it outside from which area they did not know.<sup>62</sup>

Article 238 (1) of Government Regulation of the Republic of Indonesia Number 101 of 2014 (Government Regulation No. 101 of 2014) concerning the Management of Hazardous and Toxic Waste Materials states that the Minister, governor, or regent/mayor in accordance with his authority shall supervise the compliance of: a) Every person who produces B3 Waste, B3 Waste Collector, B3 Waste Transporter, B3 Waste Utilizer, B3 Waste Processor, B3 Waste Processor, and/or B3 Waste Dumper; and b) Any Person who commits Dumping (Disposal) of B3 Waste, against the provisions of this Government Regulation.<sup>63</sup>

Furthermore, Article 238 paragraph (2) of Government Regulation No. 101 of 2014 regulates related to carrying out supervision as intended in paragraph (1), Ministers, governors, or regents/mayors determine PPLH and/or PPLHD who are functional officials. And Article 239 Supervision as referred to in Article 238 is carried out by: a). Minister, for B3 Waste Management permits issued by the Minister and Dumping (Disposal) of B3 Waste; b). the governor, for a B3 Waste Management permit for B3 Waste Collection activities on a provincial scale; and c). regent/mayor, for B3 Waste Management permits for B3 Waste Storage and B3 Waste Collection activities at the district/city scale.<sup>64</sup>

If mercury is a dangerous and toxic material that is currently used by illegal cross-sections on the Baltak mountain, Buru Island has been from 2011 to 2018 and then continued in 2023 to 2024. Have the environment such as water, soil, and sea (marine life) also been protected? According to the results of research by Yusthinus T Male (*Department of Chemistry, Faculty of Mathematics and Natural Science, University of Pattimura-Indonesia*). In November 2011, gold mining activities in Mount Botak, Buru Island have been increasing and have used mercury as the main ingredient in the extraction process. The use of mercury in gold mining on Mount Botak is carried out freely by the miners (community), so that the mercury waste that is thrown away together is distributed to the environment. With the spread of gold

---

<sup>61</sup> *Ibid.*

<sup>62</sup> *Ibid.*

<sup>63</sup> *Ibid.*

<sup>64</sup> *Ibid.*

mining areas in wastewater waters, it allows mercury to accumulate in the human body through the food chain.<sup>65</sup>

Male's research aims to determine the accumulation of mercury in the hair of the people of Kaeli Village. The research methods used are surveys and analysis. In this study, observation, field sampling and laboratory analysis were used. The results showed that the concentration of mercury analyzed in the hair of villagers was 0.10-3.25 ppm. Based on the results of the analysis, the concentration of mercury in the hair of the villagers has exceeded the mercury quality standard, which is 0.05 ppm.<sup>66</sup>

Currently, the Maluku Public expects a lot from the new government, both Maluku Province, Buru Regency and the police regarding the handling of hazardous and toxic materials B3, especially mercury which is currently widely and massively circulating on the bald mountain. However, the incident in Minamata City, Japan did not occur in Buru Regency, especially Kaiyei Bay.<sup>67</sup>

Reporting from Kompas, that the National Police Criminal Investigation Agency has determined that PT. Prima Indo Persada as a suspect in the case of alleged environmental pollution around the location of the illegal gold mine of Mount Botak, Buru Island, Maluku. Police stated that the company used cyanide to process gold. Treatment waste is dumped into the wild so that it pollutes the environment.<sup>68</sup>

The alleged environmental pollution was obtained by investigators after several times processing the crime scene. A number of facts were found such as companies using cyanide to process gold, processing is carried out openly, and processing waste is dumped into the open air. In addition, the company in question does not have a gold processing permit, does not carry out the proper treatment of hazardous material waste, and does not have a temporary disposal site.<sup>69</sup>

As a result of the waste disposal, Roem continued, the area around the treatment, precisely Wamsait Hamlet, Dava Village, Walata District, Buru Regency, was polluted. Locals reported that their cattle died suddenly. Several cows belonging to residents died after drinking water suspected of being contaminated with cyanide. In that case, investigators examined 13 company employees, two employees from the Buru Regency Environmental Service, six employees from several agencies in Maluku Province, and five experts from a number of competent institutions. The determination of the suspect against the corporation was charged with violating Law No. 32 of 2009 concerning Environmental Protection and Management.<sup>70</sup>

In a different case, the Head of the Public Relations and Legal Information Section of the Maluku High Prosecutor's Office, Sammy Sapulette, said that the case of illegal mining in Mount Botak, which was delegated from the police to the prosecutor, was being processed. The public prosecutor will immediately bring the case to trial. This is the first case of unlicensed mining to be processed in court.<sup>71</sup>

The illegal mining of Mount Botak has been operating since 2011, as many as tens of thousands of people have ventured into the location. They process gold using mercury and

---

<sup>65</sup> *Ibid.*

<sup>66</sup> *Ibid.*

<sup>67</sup> *Ibid.*

<sup>68</sup> <https://www.kompas.id/artikel/korporasi-diduga-terlibat-pencemaran-di-pulau-buru/amp>, accessed on August 10, 2025.

<sup>69</sup> *Ibid.*

<sup>70</sup> *Ibid.*

<sup>71</sup> *Ibid.*



cyanide. In October 2018, Maluku Police Chief Inspector General Royke Lumowa led the closure of the site. The Maluku Provincial Government appreciates the steps taken by law enforcement in dealing with the mining problem on Mount Botak, which is considered by the public to be a tangled thread that is difficult to define.<sup>72</sup>

Environmental management is important to do, because environmental damage will be a threat to humans. In its implementation as contained in article 2 of the 2009 UUPPLH, environmental management consists of 14 principles and with various approaches. The approaches that can be highlighted in Indonesia are the socio-cultural approach, the education/training approach, and the technological approach, the Administrative, Legal and Regulatory approach.<sup>73</sup>

The success of environmental management depends on cooperation between the government and the community, it cannot be just one party. As the meaning of Article 33 of the 1945 Constitution which does not just provide instructions on the structure of the economy and the authority of the state to regulate economic activities, but reflects ideals, a belief that is firmly held and fought for consistently by government leaders for the welfare of their people.

## CONCLUSION

The form of legal rules related to the equitable management of the mining environment in Indonesia in the future should contain material that contains the following elements: a) integrity of environmental management; b) clarity of authority between the central and regional governments; c) strengthening environmental control efforts; d) Strengthening of instruments for the prevention of pollution and/or environmental damage, which includes strategic environmental assessment instruments, spatial planning, environmental quality standards, environmental damage standard criteria, EIA, environmental management efforts and environmental monitoring efforts, licensing, environmental economic instruments, environment-based laws and regulations, environment-based budgets, environmental risk analysis, and other instruments in accordance with the development of science and technology; e) the utilization of licensing as a control instrument; f) the utilization of ecosystem approaches; g) certainty in responding to and anticipating global environmental developments; h) strengthening environmental democracy through access to information, access to participation, and access to justice as well as strengthening people's rights in environmental protection and management; i) Enforcement of civil, administrative, and criminal laws more clearly; j) Strengthening institutions for more effective and responsive environmental supervision and management; and k) strengthening the authority of environmental supervisory officials and environmental civil servant investigators.

## REFERENCE

Bambang Sunggono, *Legal Research Methodology*, Jakarta: Rajawali Pres, 2011.

Bryan A. Garner, *Balck's Law Dictionary*, Ninth Edition, United States of America: Thomson Reuters, 2009.

---

<sup>72</sup> *Ibid.*

<sup>73</sup> Muhammad Alrizky Ekiawan, "Environmental Management in Indonesian Legal Norms", *Jurnal Rechten: Legal Research and Human Rights* 5, no. 2 (2023): p. 41.

- Fahrul Indrajaya, "Environmental Management Strategy at People's Mining Locations in Petuk Barunai Village, Rakumpit District, Palangka Raya City", *Technical Journal*, 6, no. 1 (2022).
- Hasbullah F. Sjawie, *Board of Directors of Limited Liability and Corporate Criminal Liability*. Jakarta: Gold. 2017.
- <https://www.esdm.go.id/id/media-center/arsip-berita/pengelolaan-pertambangan-harus-perhatikan-aspek-lingkungan>.
- [https://ombudsman.go.id/search?q=gunung+botak.file:///C:/Users/Administrator/Downloads/Merkuri\\_Bisa\\_Masuk\\_Ke\\_Gunung\\_Botak.pdf](https://ombudsman.go.id/search?q=gunung+botak.file:///C:/Users/Administrator/Downloads/Merkuri_Bisa_Masuk_Ke_Gunung_Botak.pdf).
- <https://www.kompas.id/artikel/korporasi-diduga-terlibat-pencemaran-di-pulau-buru/amp>.
- Immanuel Kant, *Critique of Practical Reason*, The Liberal Arts Press, New York. Nurhadi (Translator), 2005, *Criticism of Paktis' Intelligence*, Student Library, Print I, Yogyakarta, 1956.
- Kotan Y. Stefanus, Archipelago as a Special Regional Government Unit, *Journal of Legal Dynamics* 11, no. 1 (2011).
- Marhaeni Ria Siombo, "Local Government Responsibility for Environmental Damage in Relation to Licensing Authority in the Forestry and Mining Sector", *Journal of Legal Dynamics*, 14, no. 3 (2014): p. 400-404.
- Muhammad Alrizky Ekiawan, "Environmental Management in Indonesian Legal Norms", *Jurnal Rechten: Legal Research and Human Rights* 5, no. 2 (2023).
- Muhammad Irham, et al., *Constitutional Law*, Bandung: Manggu Makmur Tanjung Lestari Publisher, 2023.
- Peter Mahmud Marzuki, *Legal Research*, Jakarta: Kencana Prenada Media Group, 2006.
- Practical law or positive law is legal knowledge in everyday life, especially in the context of resolving legal cases or disputes. Practical law involves the analysis and application of applicable laws to solve a particular problem or case. Carl Joachim Friedrich, 1969, *The Philosophy of Law in Historical Perspective*, The University of Chicago Press. Raisul Muttaqien (translator), *Philosophy of Law in Historical Perspective*, Print VII, Nusa Media Publisher, Bandung, 2010.
- WALHI Position Paper, *Real Threat of the Omnibus Law*, Indonesian Forum for the Environment (WALHI), 2021.
- Zainal Abidin, *Introduction to Western Philosophy*, Jakarta: RajaGrafindo Persada, 2011.