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THE RELATIONSHIP BETWEEN ENVIRONMENTAL LAW ENFORCEMENT RELATED TO ENVIRONMENTAL DEGRADATION AND TIN MINING ISSUE IN BANGKA BELITUNG ISLAND

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ABSTRACT

Bangka Belitung faces very serious environmental problems due to illegal tin mining that give negative impacts to the sustainability of ecosystem and human life. Bangka Belitung is the second largest producer of tin in the world and tin mining in Bangka Belitung has been exploited since long time ago (hundred years). Tin mining activity basically increase the wealth of the community but it decreases the environmental stability inshore & offshore. Taking a case study approach, this study was conducted using qualitative method by reviewing and analyzing various legal instrument and information related to tin mining, the environmental problem, & the community engagement. Besides that, this study addresses the following research questions: What is the background issues relating the case between tin mining and environmental degradation in Bangka Belitung? How do tin mining activity give influence to this environmental degradation? How far is the commitment of enforcing the environmental law in this case in line with the commitment of the society? The result concluded that there's effort to provide the environmental law from exploration to post mining reclamation, as well as the the community engagement. But the implementation is not enough and need more commitment of enforcing the environmental law that give the major environmental degradation in Bangka Belitung Area. The implementation of the law itself need to be supervised by external party and the enforcement need to be increased as well as the coordination between stakeholders to support the Sustainable Development Goals in Indonesia especially in Bangka Belitung.

1.INTRODUCTION

One of the issues that need to be studied academically to find an academic answer is the issue of tin mining and environmental impacts as a result of mineral exploration in Bangka Belitung island. In general, mining and environmental damage are two things that cannot be separated from each other. In fact, the more tin exported, resulted in the higher rate of environmental damage from the mining.

The environmental damage caused by mining actually originates from the activity of mining without reclamation that has the relation with law enforcement. Normatively, there are many regulations governing post-mining obligations, for example Law No. 4 of

2009 concerning Minerals and Coal or local legal products (PERDA) No. 6 of 2001 concerning community mining in Bangka regency regulated in Chapter XIII regarding management of the mining and reclamation, explicitly it states that "IUP (mining business permit) holders, IUPR (mining business holder for society) and Contractors of The Mining Business must carry out environmental management and monitoring as well as reclamation of ex-mining land which is carried out in accordance with the approved EIA (Environmental Impact Assessment)."

In addition, in the same provisions in the third part of article 43 paragraph (1) article 50 which requires a reclamation guarantee (Deposit Refund System (Peter Bohm, 1982) stated that there must be deposited to the Bank as a form of commitment of IUP holders, or in other words before conducting tin exploration, holders of IUP and IUPR must guarantee a certain amount of money to the bank as a form of post-exploration reclamation commitment. (AG Wibisana, 2006)

The meaning of the word Obligatory in PERDA Number 6 of 2001 has implications for the absolute obligation that must be fulfilled by every holder of IUP and IUPR. But, in fact there are almost no IUP and IUPR holders who implement the provisions in Bangka Regency about PERDA Number 6 of 2001. One of the empirical facts is that in 2019 the Bangka Belitung Islands Province lost 200,000 HA of forest (Republika: 2019). Furthermore, the law is a tool to limit the sporadic actions of illegal miners in Bangka Belitung because the law can be positioned as social tools in an effort to minimize environmental damage due to human actions (Linus J. & Mc. Manaman, 2013). Theoretically the issue of law enforcement itself can be influenced by 3 important aspects. First, legal culture, legal substance, legal structure (Friedman, 1975).

Therefore this study specifically examines the relationship between environmental law enforcement and tin mining issues as well as the community participation in Bangka Belitung. This is important because it is difficult to find the study analysis about this aspect from mining issue in this place. The objectives are (i) to examine the background issues relating the case between tin mining and environmental degradation in Bangka Belitung, (ii) to gain the information about how do tin mining activity give influence to this environmental degradation (iii) to determine how far is the commitment of enforcing the environmental law in this case. This will fill an important information about the implementation of law enforcement related to tin mining and the environmental degradation caused by mining activity in Bangka Belitung. Specifically, an understanding and research of this issue is urgent and necessary in order to maintain this area so that effective strategies can be implemented to support Sustainable Development Goals in Indonesia especially in Bangka Belitung.

2. LITERATURE REVIEW

Bangka Belitung is the province which is the largest tin producers in the world since the Dutch colonial era. The discovery of tin began in the 18th century. Tin is spread along the land and waters of Bangka Belitung. Tin commodity from Bangka Belitung contributed significantly to the country's foreign exchange and regional economy.

Historically over 200 years ago, tin exploration in Bangka Belitung had been carried out, or in other words tin exploration in Bangka Belitung had passed several periods of leadership. Starting from the empire of Palembang, switching to the hands of the VOC, the old order under the leadership of president Sukarno, then the transition of Soeharto's leadership, continue to the reformation era (Erwiza, 2009) to the present (post-reformation).

After independence on August 1976, PT Timah (Tin Company) was established as a state company engaged in mining, industry, trade, transportation and services related to mining businesses on the island of Bangka. In carrying out its duties and functions, PT Timah as the state authority was granted a mining business permit (IUP) of 515,980 hectares with details of 331,580 hectares on land, and 184,400 hectares of area of IUP at sea. The historical fact shows the true investment in environmental damage in Bangka Belitung Island began 200 years ago.

The monetary crisis in 1998 had a serious impact on the local economy, the prices of the main commodities of the community which at that time relied on the agricultural sector experienced a significant decline due to market prices that experienced a downward trend, including the prices of pepper, rubber, and palm, while the mining sector controlled by two large companies at that time which experienced a positive trend.

Two years after the reformation and the opening of the regional autonomy, the people of Bangka and Belitung were able to separate from the Southern Sumatra region. This desire arises as a form of development injustice between Bangka, Belitung and Palembang, as well as the existence of structural dominance in the government, so that the "native" people hardly have a place in the bureaucracy.

The struggle of Bangka Belitung people to separate themselves from the Southern Sumatra region was later being reality after the signing of law No. 27 of 2000 concerning the establishment of Bangka Belitung Province. Besides that, the position of Bangka Belitung as a new province is getting stronger with the legal basis of regional government contained in law No. 22 of 1999 although it was not stated explicitly in the law, stated that all matters that were not regulated by the central government were under the authority of the regional government.

Normatively, these two laws legitimize the full authority of regional administration to govern its own government, including the regulation of natural resource management. As a new province, the dynamics of local life are arranged in such a way to include the issue of the main commodity prices of Bangka Belitung people who are getting slumped down where the tin prices is high. The birth of regional regulation that regulate the tin management/natural resource management in Bangka give impacts on social and environment.

3. METHODOLOGY

This research is a descriptive explanatory research in qualitative method. A descriptive study sets out to collect, organizes and summarizes information about the matter being studied, while an explanatory study is on the other hand, sets out to explain and account for the descriptive information. Description is a more restricted purposed than explanation. (Keith Punch, 2016).

Furthermore, the data collection method was being done by having interview section to illegal mining worker and short interview with legal mining company in Bangka Belitung as well as gaining the information through discussion (attended by representative of mining company and other stakeholders). The data analysis has been using qualitative approach.

4. RESULTS AND DISCUSSION

The Complexity of Tin Mining, Learning and Understanding from History

The instability of prices and efforts to meet economic needs become the most basic reason for Bangka Belitung people to switch from farmers to miners. Although at that time there was no legal basis that allowed people to carry out tin exploration activities. This condition was then exacerbated after the ministry of trade and industry issued a trade system deregulation No. 146/1999 which stated that tin was not included in strategic mining commodities (Gusnely, 2016)

Urge after pressure and efforts to accommodate the wishes of the community in economic uncertainty especially in the Bangka regency pushed the district government to make regional regulation No. 6 of 2001 on general mining.

The birth of this regional regulation indicates several important issues. First, this initiative was considered as a progressive step by Bangka regency, providing legal certainty (legalizing mining activities) of the people while the provincial government had not yet issued the regulations, on one side this policy was very risky because it could trigger the same demands in other regency areas. Second, the policies as outlined in the regulations implicitly can have a major impact on environmental damage even though the regulation states post-mining reclamation obligations. Third, the concepts of mining of the people and corporations that are regulated in the local regulations actually have very principal differences, especially with regard to reclamation accountability. Fourth, there is no restriction (zoning) on the division of mining areas, meaning that both corporations and individuals can explore without seeing boundaries or zones that automatically impact on the destruction of terrestrial and marine ecosystems due to mining. Fifth, there is no explicit legal responsibility stated if the IUP/IUPR holder does not carry out their obligations after exploration which of course has a negative impact on environmental sustainability.

As explained above, Perda No. 6 of 2001 issued by Bangka government has had enormous social and environmental impacts. This mining activity give opportunity to the society to open the illegal tin mining or unconventional tin mining.

The fact that even though it was issued only in Bangka regency, the exodus of agrarian communities became miners in almost all regions of the district, it is clear from the data released by the statistical center of Bangka Belitung Province.

High tin prices between 2002-2006 (Andi wijaya, 2019) forced the community to conduct unconventional mining activities (TI) outside the established production permit area, even within just four years mining activities had encroached on production forest areas, village forests, forests protected, and resident's house.

Uncontrolled mining activities that violate the rule of law then became the legal basis for the police to take action, at least in 2006 Bangka Belitung regional police force forcibly closed 84 community mines, confiscated mining equipment, arrested dozens of residents and closed down the smelter industry (Kompas, 2008), but the government action has taken firm action by the community. The climax was on 5th October 2006 that took place the first anarchist action in the history of the pacific islands. This action came to be known as "gray october." (Erwiza erman, 2010)

For the people of Bangka Belitung, when and where the initial discovery of tin mining is not so important. A note that immediately appeared in their memories, from the beginning local residents did not get enough access to enjoy the results of the economic value of natural resources contained in the the earth where they stand (Kompas, 2008).

The Environmental Issues, the Reclamation Effort, and Community Participation

Tin mining activity in Bangka Belitung consist of legal and illegal mining. The legal mining is conducted by big mining company which is PT Timah Tbk, and the illegal mining (TI) is conducted by the society without having the legal permit from government and there's no payment for royalty. The illegal mining become the majority and has high percentage after the issue of regulation No 6 of 2001. TI mostly give the negative impacts for environment because there are no reclamation for post-mining activity. They just leave the area and try to find another new location and explore the tin. Moreover, the recovery of major environmental damage need high funding and long time.

The characteristic of TI is the non-environmental friendly mining activity. It can be in the land, river, and ocean. The land TI make a hole (Its called *lubang camoy*) in the land and suck the tin ore by a machine. When it finished, they move to another location without doing reclamation. And that land will become a pool which is called *Kolong*. The ocean/river TI use a boat or pontoon to put the machine. Generally they do the mining activity in shallow water not far from the beach area, and it is spreading around the island. This act disturb the tourism sector especially beach area because it can cause the sedimentation and kill the coral reef. As we know that coral reef need the sun light for photosynthesis, but they receive less sun light due to the sedimentation from TI. Beside that, the sedimentation decrease the plankton in the sea which is the food for many kinds of fish (as information, the number of TI in the ocean can reach 1000 pontoon in one area). This phenomenon also happen in the river, when the river biota cannot live in the kind of ecosystem which has high sedimentation.

The area of productive land (for agriculture activity) decrease because of the increasing number of TI, and sometime they open it around the protected forest (Zulkarnaen, 2005). The changing of soil structure happen in ex-mining area and cannot be used like its normal function. The TI activity usually happen around ex-mining area of PT Timah in the beginning. They believe that there are a lot of remaining tin ore in that area. But later, when it become more difficult to find tin ore, they explore another land such as protected forest and other restricted area without obey the government regulation. Furthermore, they do the mining activity in the reclamation area of PT Timah. Actually, the land that has been recovered by reclamation should be given to the government so the government has responsibility to protect the recovered land.

The legal company (PT Timah) stated that they want to support Sustainable development Goals by doing the good mining practice, and having balance between economy, social, and environment. The company has the reclamation plan for ex-mining area and has done several reclamation preject in Bangka Belitung. Such as doing revegetation using particular suitable plant (*Acacia mangium*, auri, sengon, rubber, lamtoro, angsana, cashew and bamboo) that can live in ex-mining land. One of the masterplan is located in Air Jangkang. The reclamation also has goals to restore the land in order it can be used as the normal function. Reclamation process begin with the closure of the hole in the land. If the goal is for revegetation, they have to wait until 2 years to plant the trees. In offshore mining, they built the apartment for the fish and monitor the condition of water.

Based on data from Kurniawan Kemas Ridwan paper (2005), PT Timah carried out several reclamation program to return the baseline condition of ex-mining area and overcome the problem such as land fertility, dryness, flooding, etc. Unfortunately, the program did not provide optimal results due to the issue with illegal mining that explore the tin ore in their reclamation area.

Beside that, PT Timah also has another reclamation site such in Pemali Village in exmining land that invite the local society to participate. Where PT Timah allocate the funding to maximize the utilization of the land by planting several types of plant that has the economic benefit. The local society also take part on that project by take care of the plant and the site. The monitoring responsibility is given to that society, and they also get the economic benefit from the plant on that reclamation site. This is important because local society play important role for this project. It has the relation with the community engagement & environmental theory which is Participatory-Based Environmental Management.

But as an addition, the company should give the opportunity to the society to take part on the planning process to give their insights. As proposed by Costa and Ferrao (2010), allowing the society to set the agenda/plan can improve the economic and environmental performance.

The unique way about the participation process is the age of the society to take part. There are not only the old people but also the youth who take part in this process. It is in line with the statement from Cristens & Zeldins (2011) that the political, environment, and the economical system become more complex and interrelated, so the need of young people to take part on this case is increase. Young people can be a potential contributors to the well being of community (Flanagan, 2003). The engagement of young community are capable to facilitate the community development (Zeldin, 2004b).

Rules Perspectives; responsibility of Legal and illegal mining on sustainable environment

Mining regulations that are explicitly regulated in Law Number 4 of 2009 concerning *Minerba* (Mineral & coal) basically require the upstream and downstream centralization of mineral and coal mining in Indonesia. However, at the level of implementation the legislators failed to translate the objective conditions of the mining areas which differ from one another. It is supported by the statement from Kurniawan Kemas Ridwan (2005) that the government is failure to anticipate the implementation of clear laws and regulations to control illegal mining resulted in the creation of many new illegal *kolong*. Harmonization of national policies through this regulation triggers conflicts of interest between the government as the licensor, the mining entrepreneur and the community as illegal mining agents.

The true philosophical design of the *MINERBA* Law expressly states that the objectives of the management of minerals and coal must be in accordance with the principles of benefits, sustainable and environmental friendly, national alignments by maintaining domestic needs and supporting national and local economies, and ensuring legal certainty. However, the fact that the commitment to form this law needs to be questioned because there is almost no unity of vision between good tin mining governance, the concept of environmental friendly mining and the guarantee of legal mining for the community.

This goal is then important to be realized in various technical regulations below it, including efforts to begin solve the problem of illegal mining both preventive and repressive, along with efforts to improve the governance of tin mining from various sectors.

The emergence of Regulation of the Minister of Trade No. 32 of 2013 which regulates that tin to be exported must be verified before loading and its sales must be traded through a one-door tin market, which is certainly a step forward to increase state revenues, improve the quality of tin exports, minimize illegal mining and more or less have an impact on reduced environmental damage that has been unclear who should be responsible.

In normative substance (Firedman), there are many regulations governing mining and post-mining (reclamation) obligations. For example as follows:

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TABLE 1. Regulations on mining and post-mining governance

No	Regulation	Provisions	Remarks			
1	Law Number 4 of 2009 concerning Mineral and Coal Mining	Article 99 paragraph (1) (2)	Obligation of the Reclamation Plan, Reclamation in accordance with the designation (condition)			
		Article 100 paragraph (1)	Reclamation guarantee			
2	Law Number 32 of 2009 concerning Environmental Protection and Management	-	Environmental protection and management, sustainable development			
3	Government Regulation Number 23 Year 2010 concerning Implementation of Mineral and Coal Mining Business Activities jo Government Regulation Number 8 Year 2018 concerning Fifth Amendment to Government Regulation Number 23 Year 2010 concerning Implementation of Mineral and Coal Mining Business Activities	Article 25 alphabet(b) number 4	Post-mining reclamation plan			
4		Article 5 paragraph (3) alphabet h	Guidelines for preparing a reclamation report			

5	Government Regulation Number 27 of 2012 concerning Environmental Permits	Article 71 Paragraph (1)	Environmental Permit (EIA), EIA documents, and administrative sanctions for holders of IUP and IUPR			
6	Government Regulation Number 78 Year 2010 concerning Reclamation and Post-Mining	-	Reclamation Principle			
7	Minister of Energy and Mineral Resources Regulation No. 11 of 2018 concerning Procedures for Granting Areas, Licensing and Reporting on Mineral and Coal Mining Activities as amended several times, the latest by Minister of Energy and Mineral Resources Regulation No. 51 of 2018 concerning Second Amendment to Ministerial Regulation Energy and Mineral Resources Number 11 of 2018 concerning Procedures for Granting Areas, Licensing and Reporting on Mineral and Coal Mining Activities		Granting of area permits, and reporting on mineral and coal mining business activities			
8	Minister of Energy and Mineral Resources Regulation Number 25 Year 2018 concerning Mineral and Coal Mining Businesses		IUP production			
9	Regional Regulation Number 6 of 2001 concerning Mining	Article 49 paragraph (1)	Obligation of Reclamation			
			Deposit refund system			

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					Article paragrap	50 h(1)				
10	Regional Number concerning Mineral Mi	g Mai	of nagem	_	-		Reclamation permits, guarantees, p	IUPR,	ements, Reclam g guarant	

Source: Indonesia Regulations (1999-2018)

When referring to the 10 regulations stated above, in the ideal level of mining arrangements, especially tin mining, it does not only talk about exploration and control of illegal mines, but explicitly these 10 laws focus on aspects of mining governance as well as post-mining reclamation obligations. This means that in terms of legal substance, it is very detailed and good in the effort to achieve environmental friendly mining.

The existence of the pros and cons of various regulations related to governance of tin must be seen clearly because there are many interested parties in it, ranging from the mining community to investors and local elites, as well as national and even international investors. Of course, many agree that tin governance continues to be improved leading to good mining practices, environmental friendly and concern about the welfare of the community. But there is people who want tin governance to remain tangled by leaving a legacy of environmental damage and the interests of the short-term profit of some people.

5. CONCLUSION

The environmental damage by tin mining activity in Bangka Belitung started from the emergence of Government regulation in Bangka Regency Perda No 6 of 2001 that allow the society to do the tin mining activity individually. The first goal was to boost the local economy for the society when the prices of local commodity (pepper, rubber, etc) was too low. Then, it increase the total number of illegal tin mining (without reclamation) inshore and offshore which give negative impact to the environment. Such as the lost of the productive land for agriculture area, and also the sedimentation that kill the coral reef & influence the fish in the ocean as well as the tourism sector. There are no reclamation process conducted by the illegal tin mining, where most of them do not have the legal permit from the government. The illegal mining also open the mining area in the area of reclamation that have been done by PT Timah. And it make the environmental damage worse. The legal company (PT Timah) has done the reclamation program such as doing revegetation in several area in Bangka Belitung but it still need more effort to optimalized the program and need long-term monitoring. PT Timah also implement the Participatory-Based Environmental Management where they work together with the local society in the monitoring process in the reclamation site. In term of the rules perspective, the government

shows the effort to provide the law related to mining activities including exploration, controls of illegal mining, and post mining process like reclamation. But it still need more commitment to enforce it because the implementation of the law still not really strict that caused the emergence of new *kolong* in Bangka Belitung. Therefore, the involvement from external sector is needed to supervise the enforcement of environmental law related to mining activities in Bangka Belitung as well as the coordination between stakeholders.

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REFERENCES

- <u>Bangkapos.com</u> dengan judul Tambang Berwawasan Lingkungan, diakses dalam https://bangka.tribunnews.com/2013/11/21/tambang-berwawasan-lingkungan.
- Christens, B. D., & Zeldin, S. (2011). Community engagement. *Encyclopedia of adolescence. New York: Springer*.
- Costa, I., & Ferrão, P. (2010). A case study of industrial symbiosis development using a middle-out approach. *Journal of Cleaner Production*, *18*(10-11), 984-992.
- Danzon, Patricia & Bohm, Peter. (1982). Deposit-Refund Systems: Theory and Application to Environmental, Conservation, and Consumer Policy. Journal of Policy Analysis and Management J POLICY ANAL MANAG. 2. 10.2307/3323696.

- Erwiza Erman (2010), Aktor, Akses Dan Politik Lingkungan Di Pertambangan Timah Bangka, Ed.XXXVI no. 2, 71-101
- Flanagan, C. (2003). Developmental roots of political engagement. PS: Political Science and Politics, 36(2),257–261.
- Friedman, L. (1975). *Legal System, The: A Social Science Perspective*. Russell Sage Foundation. Retrieved from http://www.jstor.org/stable/10.7758/9781610442282
- Gusnelly, (2014). Model Tanggung Jawab Sosial Inisiasi Masyarakat dalam buku Yaumidin (editor), 2014, Model Sinergi Kemitraan Tanggung Jawab Sosial Perusahaan, Jakarta : PT. Gading Inti Prima.
- Kompas (2008) Dendam sejarah di Medan Konflik, https://nasional.kompas.com/read/2008/11/21/01505328/about.html?page=all.
- Kurniawan, K. R. (2005). The Post-Crisis Indonesian Tin Town. *The International Journal of Environmental, Cultural, Economic & Social Sustainability, 1.*
- Mc Manaman, Linus J. (2013). "Social Engineering: The Legal Philosophy of Roscoe Pound," St. John's Law Review: Vol. 33: Iss. 1, Article 1
- Punch, Keith. (2016). developing effective research proposals, third edition, university of Western Australia
- Wibisana, A.G. (2006). "Three Principles of Environmental Law: The Polluter-Pays Principle, the Principle of Prevention, and the Precautionary Principle". Dalam: M. Faure dan N. Niessen (eds.). Environmental Law in Development: Lessons .from the Indonesian Experience. Cheltenham: Edward Elgar
- Zeldin, S. (2004b). Youth as agents of adult and commu-nity development: Mapping the processes and out-comes of youth engaged in organizationalgovernance. Applied Developmental Science, 8(2),75–90. doi:10.1207/s1532480xads0802_2.
- Zulkarnain, I. (2005). Konflik di kawasan pertambangan timah Bangka Belitung: persoalan dan alternatif solusi. Lembaga Ilmu Pengetahuan Indonesia.

Regulations

- Undang-Undang Nomor 27 tahun 2000 tentang Pembentukan Provinsi Kepulauan Bangka Belitung
- Undang-undang Nomor 22 tahun 1999 tentang pemerintahan Daerah
- Undang-Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral dan Batubara (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 4, Tambahan Lembaran Negara Republik Indonesia Nomor 4959);
- Undang-Undang Nomor 32 Tahun 2009 tentang Perlindungan dan Pengelolaan Lingkungan Hidup (Lembaran Negara Republik Indonesia Tahun 2009 Nomor 140);
- Peraturan Pemerintah Nomor 23 Tahun 2010 tentang Pelaksanaan Kegiatan Usaha Pertambangan Mineral dan Batubara (Lembaran Negara Republik Indonesia Tahun 2010 Nomor 29, Tambahan Lembaran Negara Republik Indonesia Nomor 5111) sebagaimana telah beberapa kali diubah terakhir dengan Peraturan Pemerintah Nomor 8 Tahun 2018 tentang perubahan Kelima atas Peraturan Pemerintah Nomor 23 Tahun 2010 tentang Pelaksanaan Kegiatan Usaha Pertambangan Mineral dan Batubara (Lembaran Negara Republik Indonesia Tahun 2018 Nomor 28, Tambahan Lembaran Negara Republik Indonesia Nomor 6186);
- Peraturan Pemerintah Nomor 55 Tahun 2010 tentang Pembinaan dan Pengelolaan Pengawasan Penyelenggaraan Usaha Pertambangan Mineral dan Batubara (Lembaran Negara Republik Indonesia Tahun 2010 Nomor 85, Tambahan Lembaran Negara Republik Indonesia Nomor 5142);
- Peraturan Pemerintah Nomor 27 tahun 2012 tentang Izin Lingkungan (Lembaran Negara Republik Indonesia tahun 2012 Nomor 48);
- Peraturan Pemerintah Nomor 78 Tahun 2010 tentang Reklamasi dan Pascatambang (Lembaran Negara Republik Indonesia Tahun 2010 Nomor 138, Tambahan Lembaran Negara Republik Indonesia Nomor 5172);
- Peraturan Daerah Nomor 7 Tahun 2014 tentang Pengelolaan Pertambangan Mineral (Lembaran Daerah Provinsi Kepulauan Bangka Belitung Tahun 2014 Nomor 4 Seri E);
- Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 11 Tahun 2018 tentang Tata Cara Pemberian Wilayah, Perizinan dan Pelaporan Pada Kegiatan Pertambangan Mineral Dan Batubara (Berita Negara Republik Indonesia Tahun 2018 Nomor 295) sebagaimana telah diubah beberapa kali terakhir dengan Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 51 Tahun 2018 tentang Perubahan Kedua atas Peraturan Menteri Energi dan Sumber Daya Mineral Nomor 11 Tahun 2018 tentang

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Tata Cara Pemberian Wilayah, Perizinan dan Pelaporan Pada Kegiatan Pertambangan Mineral Dan Batubara (Berita Negara Republik Indonesia Tahun 2018 Nomor 1592); Keputusan Menteri Industri dan Perdagangan no. 146/MPP/Keop/4/Tahun 1999