

The Application of the Longest Criminal Sanction for Illegal Miners for Environmental Conservation in the Bangka Belitung Islands Province

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Abstract The Bangka Belitung Islands Province is one of the largest tin producers in Indonesia, where tin mining activities in the province are mostly carried out without permits or illegally. This not only occurs on land and at sea but has also encroached into protected forests, production forests, residential areas, and river basins, leading to various negative impacts in various sectors, such as environmental damage and financial losses for the state. According to Law Number 03 of 2020 concerning Amendments to Law Number 04 of 2009 concerning Mineral and Coal Mining, there are criminal sanctions and fines that can be imposed on illegal mining operators, whether they are illegal mining companies or individuals. It is hoped that these sanctions will serve as a deterrent to illegal miners, thereby putting an end to illegal tin mining in Bangka Belitung, and in turn, stopping environmental degradation for the better preservation of the environment for future generations. The type of research used in this paper is normative juridical because it refers to the applicable legal regulations found in statutory laws and regulations.

Keywords: Tin Mining, Environmental Damage, Conservation, Maximum Sentence

1 Introduction

Bangka Belitung is the largest tin-producing region in the Republic of Indonesia, accounting for 90% of the total tin production in the country. The Bangka Belitung Islands Province is often referred to as the tin belt of Southeast Asia, stretching from mainland Thailand, Malaysia, the Riau Islands to the Bangka Belitung Islands.[1] In this region, mining activities are not limited to land and sea but have also encroached into protected forests, production forests, and even residential areas. On land, tin mining is carried out by mining companies or individuals within the Mining Business License (Izin Usaha Pertambangan or IUP) areas owned by PT Timah Tbk, which cover 482 IUPs with a total land area of 862,761 hectares. Offshore tin mining is conducted using Trailing Suction Hopper Dredgers (TSHD) and Cutter Suction Dredgers (CSD), operating at depths ranging from 15 to 50 meters below sea level and having the capacity to excavate over 3.5 million cubic meters of material each month[2]

The mining sector plays a significant role in Indonesia's economy as a major source of foreign exchange.[3] However, various issues have arisen within the mining industry. As is well known, carrying out mining activities in Indonesia requires obtaining a Mining Business License (Izin Usaha Pertambangan or IUP). An IUP is a formal statement or approval that allows its holder to engage in mining activities. Mining business, which encompasses activities ranging from general investigation, exploration, feasibility studies, construction, mining, processing, and refining to transportation and sales, as well as post-mining activities.[4]

One of the prominent issues within the Bangka Belitung Islands Province is the prevalence of Unconventional Tin Mining (UTM). Local Regulation No. 3 of 2004 concerning General Mining Business Management, specifically Article 29, introduced opportunities for the emergence of community-based mining that could only be undertaken by individuals who held mining permits. With this regulation in place, local residents were permitted to exploit tin mines as long as they acquired the necessary permits, leading to the emergence of Unconventional Tin Mining (UTM) activities conducted without permits, causing environmental damage.[5]

Since the enactment of regulations regarding mining governance, Unconventional Tin Mining (UTM), also known as illegal tin mining, has become increasingly widespread. Local communities began to engage in unconventional tin mining activities, resulting in the emergence of tin-seeking industries in various areas.[6] Illegal tin mining became more rampant following the issuance of Decree of the Minister of Trade No. 144/MPP/Kep/4/1999 dated April 22, 1999, categorizing tin as a non-monitored commodity and removing its status as a strategic commodity, thereby allowing anyone to export tin freely. Consequently, the Minister of Trade's decree led to the proliferation of illegal tin mining activities.[7] In response to this situation, the government deemed it necessary to establish a legislative framework aimed at addressing violations and criminal activities within the mining sector, particularly in the tin mining sector.

The Provincial Government of the Bangka Belitung Islands has enacted Regional Regulation No. 7 of 2014 concerning Mineral Mining Management as part of its efforts to combat illegal tin mining. The central government has also passed laws governing tin mining, particularly in Law No. 4 of 2009 concerning Minerals and Coal Mining.[8]

The Provincial Police of the Bangka Belitung Islands (Polda Kepulauan Bangka Belitung) conducted an operation to crack down on Illegal Mining Activities (Operasi Penertiban Tambang Ilegal or PETI) starting from August 1, 2023, until August 12, 2023. During this operation, the Regional Police of the Bangka Belitung Islands, along with their personnel, successfully apprehended a total of 46 individuals who were involved in illegal tin mining activities in prohibited areas without the proper authorization. The majority of these illegal tin miners were operating within Mining Business License (Izin Usaha Pertambangan or IUP) areas that were not under their ownership. These areas included protected forests, coastal regions, and Watershed Areas (Daerah Aliran Sungai or DAS).[9]

The extensive tin mining activities have had a significant impact on the development of the Bangka Belitung Islands Province and its residents. This impact extends to various aspects, including public health and the environment. At present, within the Bangka Belitung Islands Province, mining activities are not limited to land and sea but have also encroached into protected forests and production forests. These mining activities are conducted by companies or individuals, both with and without proper mining licenses, in accordance with the prevailing

laws and regulations. As a result, the areas previously used for tin mining have transformed into quartz sand lands, containing 93% quartz sand. This transformation has led to a decline in organic matter and nutrient content, making it challenging to cultivate crops. Consequently, the province of Bangka Belitung has suffered from biophysical damage.[10]

Illegal mining is defined as mining or excavation activities carried out by individuals or companies without the necessary permits and without adhering to the principles of good mining practice.[11] Furthermore, Unlicensed Mining Activities (Pertambangan Tanpa Izin or PETI) refer to mining activities conducted by individuals, groups, or legal entities that do not possess the required permits from relevant governmental bodies, as stipulated by the applicable laws and regulations. Artisanal mining, although limited in scale due to the size of the mining operations, does not exempt it from the requirement of obtaining proper authorization from the government. While artisanal mining may involve traditional methods, the environmental consequences can be significant if the mining areas are not well regulated. In English terminology, unlicensed mining activities are commonly referred to as "illegal mining." In terminological terms, "illegal mining" consists of two words: "illegal," which means unlawful, prohibited, or contrary to the law, and "mining," which refers to the extraction of valuable metals from the earth or rocks.[12]

The definition of illegal mining is a criminal act related to mining activities conducted by individuals, groups, or legal entities that operate without the necessary permits from government agencies, as required by the relevant legal framework. These actions are subject to criminal sanctions for anyone who, due to their actions, violates such prohibitions.[13]

Presently, there are more than 12,000 abandoned tin mining pits in the Bangka Belitung Islands Province that have been left without reclamation efforts by mining companies and individuals. This situation raises concerns over the potential threat to the residents of the Bangka Belitung Islands Province, as well as the suspicion of radiation-related health risks. Currently, these abandoned mining pits, often referred to as former mining pits or "kolong eks tambang," have been neglected and have transformed into water reservoirs. These pits are frequently used by the community for various purposes, including recreational activities, such as swimming. However, such usage poses significant risks to the safety and health of the community.

The abandoned mining pits can serve as transitional habitats for reptiles, including crocodiles, snakes, and others. Moreover, they can become breeding grounds for mosquito larvae. These conditions not only endanger public safety but also have adverse environmental consequences and the potential for disasters. This situation is exacerbated by the prevalence of illegal mining activities that need to be regulated and addressed by law enforcement agencies.

In accordance with Law Number 03 of 2020 concerning Amendments to Law Number 04 of 2009 concerning Minerals and Coal Mining, the law explicitly addresses criminal sanctions against illegal miners. It states that "Any person who conducts mining operations without a Mining Business License (IUP), Mining Area Business License (IPR), or Special Mining Business License (IUPK) as referred to in Article 37, Article 40 paragraph (3), Article 48, Article 67 paragraph (1), Article 74 paragraph (1), or paragraph (5) shall be subject to imprisonment for up to 10 (ten) years and a fine of up to Rp 10,000,000,000.00 (ten billion Rupiah). The Mining Law not only recognizes the crime of illegal mining but also specifies various other criminal offenses primarily aimed at mining entrepreneurs, including.[10]

1. The criminal act of conducting mining without a license.
2. The criminal act of providing false data in reports.
3. The criminal act of unauthorized exploration.
4. The criminal act as a holder of an IUP.
5. The criminal act of mining commodity laundering.
6. The criminal act of obstructing mining activities.
7. The criminal act related to the abuse of authority by the authorizing official.
8. The corporate entity as the perpetrator of the crime.

Penalties in criminal law include primary penalties and additional penalties. In light of these considerations, questions arise regarding the application of the longest possible criminal sanctions by Law Enforcement Officers against illegal miners in the Bangka Belitung Islands Province. The existing sanctions have ranged from 3 (three) months to 1 (one) year and 6 (six) months. Therefore, it is essential to evaluate whether imposing the longest possible criminal penalties is feasible to deter illegal tin mining activities, both by companies and individuals, and prevent further environmental damage due to illegal mining, while preserving the environment in the Bangka Belitung Islands Province.

Given the background above, the author seeks to delve further into the relevance of applying the longest possible criminal sanctions to illegal tin mining within the Bangka Belitung Islands Province. The study also examines the measures that need to be taken to preserve the environment following illegal mining activities in the province. The aim of this paper is to analyze the application of the longest criminal penalties for illegal miners and how to promote environmental preservation following illegal tin mining in the Bangka Belitung Islands Province.

2 Method

Research methodology is a system and process that is essential in any research and scientific development. Research is an effort or work to rediscover something, undertaken using a specific method with great care, in a systematic and thorough manner, aimed at addressing and resolving particular issues. Legal research is a scientific activity based on specific methods, systematics, and distinct reasoning. It aims to study one or more specific legal phenomena by means of analysis.[14] In addition, an in-depth examination of these legal facts is conducted to seek solutions to the problems that arise within the relevant context. As a scientific research, the research activities range from data collection to data analysis, all carried out in accordance with scientific principles.[15]

The research type employed in this paper is normative jurisprudence since it refers to the applicable legal regulations contained in legislation.[16] Normative jurisprudence involves conducting research through the analysis of secondary data and legal materials, including primary legal sources and secondary legal sources.[17] Furthermore, normative jurisprudence is a scientific research procedure aimed at discovering the truth based on scholarly logic as viewed from a normative perspective (principles, doctrines, rules, and regulations) found within legislation and court decisions. The narrative developed is based on credible secondary sources from books, journals, scholarly articles, and information from reputable online sources, all of which can be academically justified to produce a competent, comprehensive, and credible discussion.

3 Result and Discussion

3.1 Relevance of Imposing the Longest Criminal Sentence on Illegal Miners

Law enforcement involves the entirety of activities carried out by law enforcement officers to uphold the law, justice, and the protection of human dignity and rights, as well as to maintain order, peace, and legal certainty in accordance with the 1945 Constitution.[18] Law enforcement related to protecting the public from crimes is inherently connected with the issue of criminal law enforcement.[19] The purpose of establishing criminal law is one facet of criminal policy, known as "social defense," aimed at safeguarding the community.

According to Barda Nawawi, there are four aspects of public protection that should also receive attention in criminal law enforcement:[18]

- a. The community requires protection against antisocial acts that harm and endanger society. From this aspect, it is reasonable for law enforcement to focus on crime prevention.
- b. The community needs protection against the dangerous nature of individuals. Thus, it is also reasonable for criminal law enforcement to aim at reforming the wrongdoer, attempting to change and influence their behavior to become law-abiding and valuable members of society.
- c. The community also requires protection against the misuse of sanctions or reactions from law enforcement and the general public. Hence, criminal law enforcement should prevent arbitrary actions or behaviors outside the law.
- d. The community needs protection against the disruption of balance or harmony among various interests and values that are disturbed by crimes.

Therefore, it is also reasonable for criminal law enforcement to address conflicts arising from criminal acts, restore balance, and bring peace to society. Conceptually, the essence and meaning of law enforcement lie in harmonizing the relationship between values articulated in established rules and manifesting them in action as the final stage in the process. This is done to create, maintain, and defend peace in social life. Law serves as protection for humans, and it must be enforced to safeguard human interests. Its enforcement can occur peacefully and normally, but violations can also lead to law enforcement.[20] Rationable laws must be upheld, and this enforcement makes the law a reality. Three elements must be considered in law enforcement:[21]

- a. Legal certainty (rechtssicherheit)
- b. Utility (zweckmassigkeit)
- c. Justice (gerechtigheit).

Law enforcement is carried out preventively and repressively.[22] Preventive law enforcement aims to prevent legal violations by members of the public and is generally the responsibility of executive bodies and the police. Repressive law enforcement is carried out when preventive efforts have not succeeded in preventing legal violations. In this case, law enforcement is conducted repressively by judicial enforcement agencies.[23] Repressive law enforcement, at its operational level, involves multiple separate organizations that operate within the framework of law enforcement. The first stage of repressive law enforcement begins with the police,

followed by the prosecution, then proceeds to the judiciary, and concludes with correctional

NAME	DEMANDS	VERDICT
Ruslan Alias Lan Bin Romadi	6 (six) months minus the period of arrest and temporary detention that has been served and a fine of Rp. 1.000.000,- (one million rupiah) subsidair 1 (one) month confinement	3 (three) months 10 (ten) days and a fine of Rp3,000,000.00 (three million rupiah) provided that if the fine is not paid it is replaced by imprisonment for 1 (one) month;
MULYONO alias YON bin MUHAMAD ZAYADI	6 (six) months minus the period of arrest and/or detention already served; impose a fine on the Defendant of Rp1,000,000.00 (one million rupiah) subsidair 1 (one) month of confinement;	4 (four) months and a fine of Rp1,000,000.00 (One million rupiah) provided that if the fine is not paid it is replaced by imprisonment for 1 (one) month
ZALILAH Alias RIZAL bin SAAT	6 (Six) months minus the period of arrest and/or detention that has been served; Imposing a fine on the defendant of Rp.1.000.000,- (one million rupiah) water subsidy 1 (one) month of confinement	4 (four) months and a fine of Rp1,000,000.00 (one million rupiah) provided that if the fine is not paid it is replaced by imprisonment for 1 (one) month
MARJUI Alias MARZUKI Bin YUSUF	1 (one) year imprisonment and a fine of Rp. 5,000,000 (five million rupiah) subsidair 1 (one) month imprisonment with a reduction while the defendant is in custody and with an order that the defendant remain in detention	6 (six) months and a fine of Rp5,000,000.00 (five million rupiah) provided that if the fine is not paid it is replaced by imprisonment for 1 (one) month
KAERONI Alias RONI Bin NASRI	1 (one) year imprisonment and a fine of Rp. 5,000,000 (five million rupiah) subsidair 1 (one) month imprisonment with a reduction while the defendant is in custody and with an order that the	6 (six) months and a fine of Rp5,000,000.00 (five million rupiah) provided that if the fine is not paid it is replaced by imprisonment for 1 (one) month

	defendant remain in detention.	
Jairi Saputra Alias Abin Anak Dari Ahyung	1 (one) year and 6 (six) months is reduced while the defendant is in detention and a fine of Rp. 10.000.000,- (ten million rupiah) subsidair 3 (three) months imprisonment and with an order the defendant remains detained.	2 (two) years and a fine of Rp10,000,000.00 (Ten million rupiah) provided that if the fine is not paid it is replaced by imprisonment for 3 (Three) Months;

institutions.[24]

As is known, the characteristic of criminal punishment under the Criminal Code (KUHP) is still oriented toward the act itself. The implication is that if an act fulfills the elements of a criminal offense, it is almost certain to be punishable. The theoretical justification for punishment is based on retributive justice, which seeks to resolve cases by imposing punishments.[25] According to Article 1 Paragraph 1 of Law No. 3 of 2020 on the Amendment of Law No. 4 of 2009 concerning Mineral and Coal Mining, mining is defined as one or more phases of activities for the management and exploitation of minerals or coal, including general investigation, exploration, feasibility studies, construction, mining, processing and refining, transportation and sales, as well as post-mining activities.[26]

Mining activities come with a very high risk. Fatal mining accidents are significant, especially among informal tin miners, both on land and at sea. On land, these accidents are often due to landslides caused by accumulated overburden, burying the miners. Sea-based mining accidents occur because divers use inadequate diving equipment, often improvised, without meeting safety standards.

Furthermore, the difficulty in obtaining mining permits by companies or individuals due to not meeting the necessary requirements contributes to an increase in illegal mining activities. These illegal miners often have no accountability to the state.

Based on data from the Case Tracking Information System (SIPP), in the jurisdiction of the Koba District Court in 2022 to 2023, several cases of illegal mining were prosecuted, and they often resulted in low criminal penalties:

The problem at hand concerns the relevance of applying sanctions in the form of criminal punishment and fines to illegal miners in order to combat this criminal activity. Given the current situation, where the imposition of criminal sanctions on illegal miners is very low, typically ranging from 3 months to 6 months, and occasionally up to 1 year and 6 months, without the application of the maximum penalty of 10 years of imprisonment and a fine of Rp 100,000,000, it raises the question of whether these penalties are effective in deterring illegal mining activities.

Another obstacle affecting the enforcement of the law against illegal tin mining is the absence of a minimum punishment stipulated in the 2009 Mining Law. The law primarily

addresses the maximum penalties. This has an impact on the demands made by the public prosecutor and the verdicts issued by the judges. Without a minimum penalty, public prosecutors and judges may choose to impose lower penalties, potentially failing to create a deterrent effect on those engaged in illegal tin mining.[8]

Insufficient knowledge within the local communities can also pose a significant challenge.[27] Without adequate knowledge, people's skills are limited. When individuals have limited education and skills, they may continue to engage in tin mining because it is the only livelihood they know. This, in turn, is closely related to economic factors, as they rely on the one skill they possess to support their families.[8]

Several measures are envisioned to curb the prevalence of illegal tin mining in the Bangka Belitung Islands. These measures require the collaboration of various stakeholders, including government authorities, private enterprises, law enforcement agencies, and the general public.

They encompass both Penal and Non-Penal Efforts. Penal efforts involve the use of sanctions or criminal penalties in regulating society through legislation. Various measures related to criminal law can be employed to prevent future instances of illegal tin mining. These could include amending regulations related to illegal tin mining to reduce ambiguities in their interpretation by law enforcement officers. By specifying the criminal penalties and fines to be imposed on illegal miners, it is hoped that this will have a deterrent effect on both current and potential offenders. This, in turn, could help put an end to the practice of illegal tin mining in the Bangka Belitung Islands, mitigating the worsening environmental damage resulting from these activities.

The state has established regulations regarding mining activities, requiring permits such as IUP (Mining Business Permit), IUPK (Mining Business License for Small-Scale Mining), IUPK as a Continuation of the Contract Agreement, IPR (Mining Area Permit), and SIPB (Special Mining Business License). These permits are available to both business entities (companies) and individuals, with IPR typically being granted to individual miners. Undertaking sand tin mining without the necessary IUP exploration and/or IUP Production Operation permits from the Minister or Governor, as per their respective authority, is prohibited.

In addressing illegal tin mining in Bangka Belitung, non-penal efforts should aim to educate and rehabilitate the local population, thus eliminating the need for illegal mining activities. Several non-penal measures can be taken to eradicate illegal tin mining practices in the Bangka Belitung Province. One of the most effective approaches is to improve the welfare of the local population. As previously mentioned, tin is a key sector in Bangka Belitung that drives other industries. By promoting other sectors such as agriculture, animal husbandry, farming, and even tourism, the local community can have alternative sources of income, reducing their dependence on tin mining for livelihoods.

According to the Law Number 03 of 2020, which amends Law Number 04 of 2009 regarding Mineral and Coal Mining, anyone engaging in mining activities without the

required permits (IUP, IPR, or IUPK as specified in Article 37, Article 40 paragraph (3), Article 48, Article 67 paragraph (1), Article 74 paragraph (1), or paragraph (5)) is subject to a maximum prison sentence of 10 years and a fine of up to IDR 100,000,000,000 (one hundred billion rupiahs). This provision is highly relevant to be applied to illegal tin miners in the Bangka Belitung Islands, as it entails imposing the maximum criminal penalty and fines. This can create a deterrent effect on illegal miners and help halt illegal tin mining activities in the province.

In combating illegal tin mining in Bangka Belitung, non-penal efforts should involve nurturing and educating the local population to address the conditions that drive them to engage in illegal mining. Various non-penal measures can be implemented to eradicate illegal tin mining practices in the province. These measures may include providing knowledge and awareness campaigns about the dangers and impacts of illegal mining, offering vocational training that expands beyond mining activities to areas like agriculture and small and medium-sized enterprises (UMKM), and boosting the overall welfare of the community. As previously explained, tin is a prominent sector in Bangka Belitung that plays a pivotal role in the local economy. By diversifying income sources through sectors like agriculture, animal husbandry, farming, and tourism, the community can reduce its reliance on tin mining as the primary source of income.

3.2 The Relevance of Maximum Penalties for Environmental Conservation in Bangka Belitung

Environmental preservation has become a crucial issue that must be addressed to combat climate change and global warming. Sustainable development is the need of the hour to safeguard our planet from the impacts of industrialization. According to Law Number 32 of 2009 concerning Environmental Protection and Management, environmental conservation is defined as a series of efforts to preserve the sustainability of the environment's carrying capacity and resilience.

The objectives of environmental conservation, as stipulated in Article 3 of Law Number 32 of 2009 concerning Environmental Protection and Management, include:

1. Protecting the territory of the Unitary State of the Republic of Indonesia from environmental pollution and/or damage.
2. Ensuring the safety, health, and lives of human beings.
3. Ensuring the survival of living creatures and the preservation of ecosystems.
4. Maintaining the functionality of the environment.
5. Achieving harmony, congruence, and balance in the environment.
6. Ensuring the justice of both current and future generations.
7. Ensuring the fulfillment and protection of environmental rights as part of human rights.
8. Wise control of natural resource utilization.
9. Realizing sustainable development.
10. Anticipating global environmental concerns.

The rampant illegal tin mining activities in the Bangka Belitung Islands have the potential to cause losses in various sectors, including state finances and environmental damage. The state loses approximately IDR 2.5 trillion each year due to the numerous tin miners operating without

Mining Business Permits (Izin Usaha Pertambangan). Hence, the Supreme Audit Agency of the Republic of Indonesia (BPKP) believes that there is a need to reform the governance of the domestic tin industry, given the potential for state losses. This should be addressed by relevant stakeholders and law enforcement agencies.

One form of environmental damage occurring in post-mining areas is the instability of soil temperature and humidity, which slows down plant growth. Other damages include elevated soil temperature that disrupts root activities through respiration processes and excessive water evaporation by roots, leading to protein transformation and inhibited enzyme function.

In the author's opinion, the most effective solution for environmental preservation in the Bangka Belitung Islands post-illegal mining is the implementation of Environmental Taxes for mining companies and individuals to control environmental damage, the regulation of illegal miners to ensure accountability for environmental damage and national revenue, and the post-mining reclamation in line with the Presidential Regulation Number 78 of 2010 regarding Post-Mining Reclamation. This regulation outlines the need to promptly close mined pits to restore them to their original state. However, for mined pits that have not been reclaimed, it is recommended that PT Timah Tbk, as the holder of the Mining Business Permit in the Bangka Belitung Islands, collaborate with local governments and law enforcement agencies to install no-entry signs in abandoned mining pit areas. This step would facilitate accurate data collection on potential environmental damage and prevent unwanted incidents that could have severe negative impacts on the environment, the state, and the community. This way, sustainable development in the Bangka Belitung Islands can proceed smoothly.

To prevent further increases in potential environmental damage and financial losses incurred due to illegal mining activities, PT Timah Tbk, the holder of Mining Business Permits (IUP) in the Bangka Belitung Islands, needs to implement internal reforms. This involves establishing stringent partnerships to minimize the diversion of tin sand to other entities. This approach aims to avoid potential financial losses for the state. Additionally, strong legal actions should be taken against illegal miners who extract tin without clear accountability.

Under Law Number 3 of 2020, amending Law Number 4 of 2009 concerning Mineral and Coal Mining, anyone involved in mining activities without the required Mining Business Permits (IUP), Mining Business Work Permits (IPR), or Special Mining Business Permits (IUPK), as stipulated in Article 158, is subject to imprisonment for up to ten years and a fine of up to IDR 100,000,000,000 (one hundred billion Indonesian Rupiah).

Criminalization in mining law is not arbitrary, and individuals can be subject to punishment when they meet specific criteria. As Muladi pointed out, these criteria include:[28]

- a) The ability to be held responsible.
- b) A mental connection between the individual and the act, which can be intentional (Dolus) or due to negligence (culpa).
- c) The absence of any justification or excuse for the wrongful act.

By enforcing maximum criminal penalties for illegal tin miners, it is hoped that this will deter both current and potential offenders, ultimately leading to the cessation of illegal tin mining activities in the Bangka Belitung Islands.

4 Conclusion

First, the application of the maximum criminal penalties for illegal tin miners in the Bangka Belitung Islands is highly relevant. This is because it has the potential to deter current and potential offenders, particularly illegal tin miners. Additionally, it can put an end to the practice of illegal tin mining in the region. This is regulated under Law Number 3 of 2020, amending Law Number 4 of 2009 concerning Mineral and Coal Mining, specifically in Article 158, which states that "anyone involved in mining activities without the required Mining Business Permits (IUP), Mining Business Work Permits (IPR), or Special Mining Business Permits (IUPK), as stipulated in Article 37, Article 40 paragraph (3), Article 48, Article 67 paragraph (1), Article 74 paragraph (1) or paragraph (5) is subject to imprisonment for up to ten years and a fine of up to IDR 100,000,000,000 (one hundred billion Indonesian Rupiah)."

Second, the best solution for environmental preservation in the Bangka Belitung Islands after illegal tin mining is to implement an Environmental Tax for mining companies and individuals to control environmental damage. It involves raising awareness about the dangers and impacts of illegal mining among the local population. Furthermore, it requires the regulation and enforcement of illegal mining activities through a collaborative effort between the government and law enforcement agencies, with the support of the entire community. PT Timah Tbk, as the holder of the Tin Mining Business Permit (IUP) in the Bangka Belitung Islands, needs to collaborate with its partners, whether they are companies or individuals, to carry out reclamation programs. These programs aim to restore former mining sites to their original state as per Presidential Regulation Number 78 of 2010 regarding Post-Mining Reclamation. It mandates the closure of abandoned mining pits. For those pits that have not undergone reclamation, it is advisable for the relevant authorities, including local governments and law enforcement agencies, to work together with PT Timah to install "No Entry" signs in these areas to facilitate accurate data collection, assess potential environmental damage, and prevent unwanted consequences. This approach ultimately contributes to the sustainable development of the Bangka Belitung Islands.

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