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# Legal Review of Environmental Law Concerning Illegal Sand Mining

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#### **ABSTRACT**

This research aims to analyze the regulations, enforcement, and legal sanctions related to illegal sand mining in Batam City. Additionally, the study seeks to assess the environmental impact of illegal sand mining activities and evaluate the efforts made by the Batam City Government and law enforcement authorities in combating illegal sand mining practices. A normative juridical approach, particularly the statute approach, is employed in this research. The research methodology involves data collection, examination of legal regulations, doctrines, juridical aspects, and societal norms. The results indicate that authorities with jurisdiction should anticipate potential issues and environmental damage arising from illegal sand mining. Therefore, the protection of the environment and natural resources needs to be strengthened to ensure the safety of Batam City residents. The Batam City Government is expected to take decisive measures to halt illegal sand mining, including the implementation of criminal sanctions and confiscation of tools used by illegal actors in accordance with applicable regulations.

Keywords	Batam City; Illegal Mining; Legal Overview		
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#### **PRELIMINARY**

Indonesia is the world's largest archipelagic state, strategically located with a total of 16,771 officially recorded islands <sup>1</sup>. These islands are spread across 33 provinces, spanning from Sabang to Merauke, covering a total area of 1.91 million square kilometers <sup>2</sup>. Indonesia possesses abundant natural resources, including petroleum, coal, copper, gold, and tin. However, the dependency on mining activities has led to the creation of massive pits, land

<sup>&</sup>lt;sup>1</sup> Direktorat Pendayagunaan Pesisi Dan Pulau – Pulau Kecil. <a href="https://kkp.go.id/djprl/p4k/page/4270-jumlah-pulau">https://kkp.go.id/djprl/p4k/page/4270-jumlah-pulau</a> Diakses pada tanggal 17 Februari 2022.

<sup>&</sup>lt;sup>2</sup> Rahma Aulia Adenisia (2020). Potensi Sumber Daya Alam dalam Mengembangkan Sektor Pariwisata di Indonesia. *Jurnal Nasional Pariwisata*, 12 (1). 1-8.

degradation, and deforestation, resulting in numerous adverse impacts <sup>3</sup>. Sand mining also holds considerable economic value and potential. Utilizing the wealth contained in the archipelago's soil is considered a right of every Indonesian citizen, as stated in Article 33, Paragraphs (2) and (3) of the 1945 Constitution, emphasizing that crucial branches of production vital to the state and essential for the well-being of the people should be under state control. Similarly, land, water, and natural resources within the state's jurisdiction are to be utilized to the fullest extent for the prosperity and welfare of the population.

The concept of mining is defined in Article 1, Paragraph (1) of Law Number 4 of 2009 on Mineral and Coal Mining as "part or all of the stages of activities in the context of research, management, and exploitation of minerals or coal, including general exploration, feasibility studies, construction, mining, management and refining, transportation and sales, as well as post-mining activities" 4. Sand mining, like other mining activities, is subject to regulations and laws that must be adhered to by all mining operators. Mining activities are governed by Law Number 4 of 2009 on Mineral and Coal Mining; hence, engaging in mining activities requires an Mining Business License (IUP). Miners are obligated to obtain IUP, IUPR, IUPK licenses before commencing mining operations. Unfortunately, many individuals engage in mining activities without the necessary permits, leading to environmental damage in the mining areas. Consequently, those engaging in mining activities without mining permits can be categorized as illegal miners 5. Since the issuance of Law Number 4 of 2009 on Mineral and Coal Mining, the government has accommodated mineral and coal mining activities carried out by the community by issuing Community Mining Permits (IPR) within a mining area. According to Article 10, Paragraph 1 of Law Number 4 of 2009, a Community Mining Permit (IPR) is a permit to conduct mining activities within a Community Mining Area (WPR) with limited investment. The procedure for issuing a Community Mining Permit (IPR) is outlined in Article 67 of Law Number 4 of 2009, which includes: 1) the regent/mayor granting IPR primarily to local residents, whether individuals or community groups and cooperatives; 2) the regent/mayor may delegate the authority to issue IPR as mentioned in paragraph (1) to the sub-district head in accordance with the provisions of the regulations; and 3) to obtain IPR as stated in paragraph (1), the applicant must submit a request letter to the regent/mayor.

A permit will be issued for a period of 5 (five) years and may be extended after the initial permit expires. In accordance with Law Number 4 of 2009 concerning Mineral and Coal Mining, there are articles regulating criminal acts directed at businesses engaging in mining activities without the required permit: 1) the criminal act of conducting mining without a permit (Article 158) and 2) the criminal act of exploitation without the right (Article 160)<sup>6</sup>. Considering the significant number of orders from various sectors, mine workers have a substantial opportunity to improve their economic status, as the orders for sand, including those from trucks, contribute to the income of mine workers<sup>7</sup>. The system used in this sand mine is group-based and rotational; each group responsible for loading sand into the truck consists of 4 individuals, and the wage received by the miners for one truck is Rp. 100,000,-, which is then divided among the 4 individuals, resulting in Rp. 25,000,-per person. If there are 10 trucks ordering sand in a day, the sand miners can earn Rp.

<sup>&</sup>lt;sup>3</sup> Maslihatin Zulfa Maya, Fauzy Qudsi Moh(2016). Konservasi Sumberdaya Alam Tambang Marmer Dalam Tinjauan Pesfektif Islam (Studi Kasus PT. Industri Marmer Indonesia Tulung Agung Kecamatan Besuk). *Jurnal Ekonomi Syariah*. *3*(11). 1-13.

<sup>&</sup>lt;sup>4</sup> Ariyanti Oktafia Dwi, Ramadhan Muhammad, Murdomo.Js(. Pengekana Hukum Pidana Terhadap pelaku pertambangan pasir secara ilegal. *Jambura law review*, 2(1).30-47

<sup>&</sup>lt;sup>5</sup> Rusnama Agus, Sri I Nyoman, Widiati Putu Ayu Ida, Sugiartha Gede I Nyoman (2019). Sanksi Pidana Pertambangan Pasir Tanpa Isi (Studi Putusan Nomor 120/Pid.sus/2017/PN Gin),1(3). 384-389.

<sup>&</sup>lt;sup>6</sup> Pratama Wisnu Nicodemus, Ismunarno (2016). Pertanggung jawaban pidana bagi pelaku penambangan tanpa izin pertambangan rakyat (IPR) Undang – Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral Dan BatuBara (Studi Kasusu Penambangan Ilegal Bahan Batu Akik di Kabupaten Kebumen), 5 (2). 245-253.

<sup>&</sup>lt;sup>7</sup> Akbar Muhammad, Said Zainal, Rusnaena(2019). Implikasi Penambangan Pasir Dalam Meningkatkan. Perekonomian Masyarakat Padaidi Kabupaten Pinrang. *Jurnal manajemen dan perbankkan syariah*. 1(2).60-68.

250,000,- in a single working day. Thus, the income for sand miners in 30 working days is Rp. 7,500,000,-, which represents their monthly salary 8.

The Riau Islands Province (Kepri) is one of the provinces based on islands. A province based on islands means it has less land area compared to the total marine area. Kepri Province itself has a composition of 4% land area and 96% marine area. With a total area of 241,215 m^2, the province's topography consists of clusters of islands separated by the sea<sup>9</sup>. Kepri Province consists of 5 (five) districts, namely Bintan, Karimun, Anambas, Lingga, Natuna, and 2 (two) cities, namely Batam and Tanjung Pinang. Geographically, Batam City is strategically located on the international maritime route between 0°25'29" N-1°15'00" N and 103°34'35" E-104°26'04" E. Batam City covers an area of 3,990.00 km^2 (399,000 ha), including land and sea<sup>10</sup>. In terms of geography, Batam City has an extensive coastline, creating the potential for abundant natural resources, particularly sand. This has led to the emergence of illegal miners, causing environmental damage and giving rise to various issues such as water pollution, soil structure degradation, and undeniable erosion.

Environmental damage caused by exploitation also occurs in Mata Ikan Village Bay, Sambu Subdistrict, Nongsa District, Batam City. One of the reasons for the large-scale sand mining is the increasing population and the difficult economic conditions, leading to sand mining. The illegal sand mining, replacing the traditional livelihoods of the local population, initially as traditional fishermen, opted to open illegal sand mines in their residential areas as a mining activity for mineral resource C (sand), without considering the consequences for the surrounding environment<sup>11</sup>. The impacts of sand mining can be both positive and negative. On the positive side, the illegal sand mining increases the income of the surrounding community, contributing to the rise in their welfare. However, the inevitable consequence of this positive aspect is environmental damage, leading to conflicts that require the awareness of all parties involved.

In addition to the environmental impacts of illegal sand mining, there is also a loss of human life, exemplified by an 11-year-old child who drowned in a pond resulting from an abandoned illegal sand mining pit and was found lifeless<sup>12</sup>. Apart from causing fatalities, the workers in the mining industry also risk their lives. According to the testimony of one mining worker, a colleague tasked with shooting water into the cliffs to extract sand was hit by soil due to the lack of safety equipment and insufficient knowledge, fortunately without causing fatalities<sup>13</sup>. In an effort to preserve the natural resources in Batam City and protect the entire community from the environmental impacts of illegal sand mining, it is imperative for oversight from authorities, particularly the Environmental Agency and the Batam City Government, to enforce regulations and assist the community in engaging in mining activities that comply with established guidelines.

# **METHOD**

This research was conducted in the Old Village of Teluk Mata Ikan, Sambu Subdistrict, Nongsa. The research methodology employed in this journal is the normative juridical research method using a statutory approach. Normative juridical research is a research methodology based on data collection, examination of legal regulations, doctrines, juridical

<sup>&</sup>lt;sup>8</sup> Wawancara dengan (ayi), 12 Februari 2022 di Teluk mata Ikan Nongsa.

<sup>&</sup>lt;sup>9</sup> Ginting Mulianta Ari.(2013).Kendala Pembangunan Provinsi Daerah Kepulauan : Studi Kasus Provinsi Kepulauan Riau. *Jurnal Politica*. 4 (1). 49-75.

<sup>&</sup>lt;sup>10</sup> Fikri Elanda, Joko Tri.(2012). Kondisi Dan Upaya Strategis Penanganan Sanitasi Di Kota Batam *Condition and Efforts Management Strategy of Sanitation In Batam City*. Jurnak Kesehatan Lingkungan Indonesia.11(1). 43-53.

<sup>&</sup>lt;sup>11</sup> Ariadica Aqila Anggie, Sutrisno Endang, Dimyati (2020). Reposisi Kebijakan Pemulihan Lingkungan Hidup Terhadap Penambangan Ilegal Galian C. *Hukum Responsif*. 11(2). 73-85.

<sup>&</sup>lt;sup>12</sup> Catatan Kelam Kolam Galian Paisir Di Nongsa Batam,'Jangan Sampai Makan Korban Lagi'. TribunBatam. <a href="https://batam.tribunnews.com/2021/07/16/catatan-kelam-kolam-galian-pasir-di-nongsa-batam-jangan-sampai-makan-korban-lagi">https://batam.tribunnews.com/2021/07/16/catatan-kelam-kolam-galian-pasir-di-nongsa-batam-jangan-sampai-makan-korban-lagi</a>. Diakses Pada Tanggal 08 Februari 2022.

<sup>&</sup>lt;sup>13</sup> Wawancara dengan (ayi), 12 Februari 2022 di Teluk mata Ikan Nongsa.

principles, and societal normative rules<sup>14</sup>. The statutory approach is a research method that involves examining the existence of positive rules or ius constitutum and their relevance using the state constitution. On the other hand, the conceptual approach methodology is a research method directed towards the existence of legal doctrines, principles, and expert approaches, utilizing all legal knowledge to serve as a fundamental guide in interpreting legal events occurring in the present with respect to both published and unpublished historical data, such as decisions, journals, articles, and websites<sup>15</sup>.

#### RESULT AND DISCUSSION

### **Legal Study on Environmental Aspects of Sand Mining**

The development of environmental law is significantly influenced by the characteristics of nature and the environment, one of which is the interconnectedness of natural components. Moreover, while there are positive aspects, there are also negative consequences when disturbances or damages occur in a component, as it will impact the entire system<sup>16</sup>. To ensure a decent life for its citizens, the government explicitly regulates in Article 28(h) Paragraph 1 of the 1945 Constitution which states that "every person has the right to live in physical and spiritual well-being, reside in a place, and obtain a good and healthy environment, as well as the right to attain health." The well-being of the society is determined by the state through the control and management of the environment. Therefore, the government plays a crucial role in controlling environmental activities.

Based on the Preamble of the 1945 Constitution, it is explicitly stated that the establishment of the state and government aims to promote the common welfare. To achieve this common welfare, the government is appointed as the executive body to control the environment and natural resources. In Law No. 32 of 2009 concerning Environmental Protection and Management (UUPPLH), Article 1 Paragraph (2) defines environmental management as systematic and integrated efforts to preserve the functions of the environment and prevent pollution and/or environmental damage, including planning, utilization, control, maintenance, supervision, and law enforcement.

Law No. 32 of 2009 concerning Environmental Protection and Management (UUPPLH) elucidates that government officials at both central and regional levels, relevant to environmental protection and management, have the authority and duty to supervise. This supervision ensures that businesses and activities comply with the prevailing laws and regulations<sup>17</sup>. Article 73 of UUPPLH states, "The Minister may oversee the compliance of business or activity owners whose environmental permits are issued by regional governments if the government deems serious violations in the field of environmental protection and management<sup>18</sup>." Furthermore, Article 74 of UUPPLH explains that: 1) In accordance with Article 71 paragraph (3), environmental supervisory officials have the authority to: a) Conduct monitoring; b) Request information; c) Make copies of documents and/or create necessary records; d) Enter specific premises; e) Take photographs; f) Create audiovisual recordings; g) Collect samples; h) Inspect equipment; i) Inspect installations and/or transportation devices; and/or; j) Halt specific violations. 2) In the execution of their duties, environmental supervisory officials may coordinate with civil servant investigators. 3) Business and/or activity operators are prohibited from obstructing the execution of the duties of environmental supervisory officials<sup>19</sup>.

<sup>&</sup>lt;sup>14</sup> Ibarus, IZ.(2013). Analisis filosofi tentang peta konseptual ilmu hukum normative dan penelitian hukum sosiologis. *Jurnal dinamika hukum*, *13*(2), *307-318*, *hlm. 309*.

<sup>15</sup> *lbid*, hlm.13.

<sup>&</sup>lt;sup>16</sup> Mcnaughton.S.J & Wolf Larry L. (1998). Ekologi Umum Ahili Bahasa Dari General Ecology, Yogyakarta. Gajah Mada Press

<sup>&</sup>lt;sup>17</sup> Butar Butar Franky(2010). Penegakan Hukum Linkungan di Bidang Pertambangan. Yudika. 25(2), 151-168.

<sup>&</sup>lt;sup>18</sup> UU.No. 32 Tahun 2009 tentang Pelindungan dan Pengelolaan Lingkungan Hidup

<sup>&</sup>lt;sup>19</sup> UU.No. 32 Tahun 2009 tentang Pelindungan dan Pengelolaan Lingkungan Hidup

In the enforcement of environmental law, there is a close relationship between the capabilities of state officials and the compliance of the community with the prevailing regulations. Law enforcement is not limited solely to criminal law. The enforcement of law involves various instruments, such as administrative instruments by administrative officials or the government, civil instruments by the aggrieved party either individually or collectively, and even by the community or the state itself for public interest<sup>20</sup>. Furthermore, in accordance with Law Number 4 of 2009 concerning Environmental Protection and Management (UUPLH), Article 158 stipulates that "any person who conducts mining without a permit as referred to in Article 35 shall be criminally punished with a maximum imprisonment of 5 (five) years and a fine of up to IDR 100,000,000,000.00 (One Hundred Billion Rupiah)<sup>21</sup>."

# The Implementation of Law Enforcement Against Illegal Sand Miners in the Mata Ikan Bay, Batam City

Batam City is a small island located in the administrative region of the Riau Islands Province. Commencing with the issuance of Presidential Decree Number 74 of 1971 (Presidential Decree) regarding the Development of Batam City, Batam has since been recognized as our industrial hub. This decision was made with the aim of transforming Batam City into a center of economic growth in the industrial sector, driven by its highly strategic location as one of the busiest international trade routes in the world. The increasing population density in Indonesia is bound to have a significant impact on the needs of the residents, ranging from clothing, food, shelter, and more. The magnitude of these societal needs may also contribute to the extensive exploitation of natural resources to meet the growing demands without consideration for the environmental consequences of such large-scale exploitation, including the exploitation to fulfill the needs of Batam City residents<sup>22</sup>.

In realizing the aspiration to make Batam City an industrial and tourism zone, tangible results have been achieved, evident in the economic growth and the influx of foreign investments into Batam City, even during the Covid-19 pandemic. To meet the needs of infrastructure in Batam City, such as the development of an area designated for industry, residential areas, and other facilities, it is imperative for Batam City to have a steady supply of construction materials, including sand. The high cost of sand transportation by barge, approximately IDR 1,000,000 (One Million Rupiah) per truck carrying about 4 m^3 of sand, has led to the emergence of numerous illegal sand miners in Batam City. Many business owners in the development sector in Batam City prefer to use sand from illegal mines, priced at a more affordable IDR 500,000 per truck carrying about 4 m^3 of sand. The increasing demand for this washed sand has given rise to certain individuals exploiting this business opportunity to accumulate personal wealth, neglecting the environmental impact on Batam City.

Examining the definition of mining as explained in Article 1 paragraph (1) of Law Number 4 of 2009 concerning Mining and Coal,<sup>23</sup>"mining is all or part of the stages of activities in the framework of research, management, and utilization of minerals or coal, including general investigation, exploration, feasibility study, construction, mining, management and purification, transportation and sales, as well as post-mining activities." Further clarification on the definition of mineral mining in Article 1 paragraph (4) is provided: <sup>24</sup>"mineral mining is the mining of a collection of minerals in the form of ore or rock, excluding geothermal heat, oil and natural gas, as well as groundwater." Mining activities conducted without the necessary permits and legal authorization from competent

<sup>&</sup>lt;sup>20</sup> Rizkiana Hajeng Dyah Rahmi (2012). Pengelolaan Usaha Penambangan Bahan Galian Golongan C di Desa Darmakradenan Kecamatan Ajibarang Kabupaten Banyumas.

<sup>&</sup>lt;sup>21</sup> Undang – Undang Nomor 4 Tahun 2009 tentang Perlindungan Dan Pengelolaan Lingkungan Hidup

<sup>&</sup>lt;sup>22</sup> Tambang Pasir Ilegal Marak di Kota Batam, antara News kepri online. <a href="https://www.antaranews.com/berita/474773/tambang-pasir-ilegal-marak-di-batam">https://www.antaranews.com/berita/474773/tambang-pasir-ilegal-marak-di-batam</a>. Diakses Pada tanggal 08 februari 2022

<sup>&</sup>lt;sup>23</sup> Undang – Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral Dan Batu Bara

<sup>&</sup>lt;sup>24</sup> Undang – Undang Nomor 4 Tahun 2009 tentang Pertambangan Mineral Dan Batu Bara

authorities can be deemed illegal and may result in severe sanctions for violators. The issuance of mining permits benefits both the community as managers and the local government. Legalizing mining activities through proper permits not only legitimizes these operations but also becomes a source of revenue for the local government.

Viewed from Law Number 4 of 2009 Regarding Environmental Protection and Management (UUPPLH) in Article 158, which states, "any person who engages in mining without a permit as referred to in Article 35 is subject to imprisonment for a maximum of 5 (five) years and a fine of up to IDR 100,000,000,000.00 (One Hundred Billion Rupiah)<sup>25</sup>." It can be interpreted that anyone engaged in sand mining without legal impediment is permitted, and for anyone conducting sand mining without the required authorization from the competent authority, such mining activities can be categorized as illegal, and severe sanctions can be imposed, namely imprisonment for a maximum of 5 years and a fine of IDR 100,000,000,000.00 (One Hundred Billion Rupiah).

In the discourse addressing the increasing prevalence of illegal sand mining in the city of Batam, the City Government of Batam has issued Regional Regulations, including: 1) Regional Regulation of Batam City No. 8 of 2003 concerning Control of Pollution and Destruction of the Environment, in Chapter 3, Article 13 stipulates that in the effort to protect the environment, the city government is obliged to protect coastal areas, seas, forests, mangrove forests, city forests, lakes, sites, land, hills, water, and air quality<sup>26</sup>. 2) Regional Regulation of Batam City No. 2 of 2004 concerning the Spatial Planning Plan of Batam City 2004-2014, in Chapter 3, Article 5 (d) mentions that the arrangement of land use in protected areas on land and in the sea is organized to maintain the balance and sustainability of the environment, the sustainability of land and water resources, and others in Batam City<sup>27</sup>. In Article 11 paragraph c number 4, it is explained that "material substitution arises for the purpose of coastal development with marine sand material taken from miningworthy zones in the sea of Batam City and other areas in accordance with prevailing laws and regulations<sup>28</sup>." In Article 11 paragraph c number 5, it is explained that "sand mining activities in the sea of Batam City can be carried out in the western, northern, and eastern sea areas of Batam Island in mining-worthy zones in accordance with prevailing laws and regulations, with attention to ecosystem sustainability and the environment<sup>29</sup>. 1) The City Regulation of Batam No. 16 of 2007 concerning Public Order in Article 21 letter f stipulates that "any person is prohibited from engaging in illegal mining activities. 2) Furthermore, City Regulation of Batam No. 02 of 2013 regarding the Long-Term Development Plan for the Batam City Area 2005 - 2025 explicitly prohibits any form of mining activity in Batam. However, the sand mining activity persists and has even proliferated as a new economic source for the residents of Batam. This is due to the high demand for sand, and it also serves as a significant source of employment. Unfortunately, this prohibition has not been adhered to by certain individuals who continue illegal sand mining activities in Batam.

The Batam City Government, along with local leadership institutions, has issued decisions prohibiting illegal sand mining in Batam since 2010. Enforcement operations were conducted throughout the years 2010 to 2022. Despite repeated law enforcement efforts and the identification of two illegal sand mining entrepreneurs as suspects, the illegal sand mining activities persist without deterrent effects. The local government of Batam hopes that conducting raids on illegal land sand transport vehicles will effectively contribute to closing down these illegal mining operations<sup>30</sup>. This sand mining activity raises legal issues, as it contradicts the provisions of Law No. 4 of 2009 concerning Mineral and Coal Mining,

<sup>&</sup>lt;sup>25</sup> Undang – Undang Nomor 4 Tahun 2009 tentang Perlindungan Dan Pengelolaan Lingkungan Hidup

<sup>&</sup>lt;sup>26</sup> Perda Kota Batam No8 Tahun 2003 tentang Pengandalian Pencemaran dan Perusakaan

<sup>&</sup>lt;sup>27</sup> Perda Kota Batam No 2 Tahun 2004 Tentang Rencana Tata Ruang Wilayah Kota Batam 2004-2014

<sup>28</sup> Ibid

<sup>29</sup> Ibid

<sup>30</sup> PENERTIBAN PERTAMBANGAN PASIR ILEGAL.

specifically in Articles 66 to 73 regarding licensing and the requirements for community mining permits. According to the law, engaging in mining activities necessitates compliance with both technical and administrative requirements. However, in practice, the community involved in sand mining lacks the necessary permits, both technically and administratively. Consequently, when the legal framework governing mining activities is not adhered to, such activities are categorized as illegal or unauthorized.

In the context of Regional Regulation of Batam City Number 02 of 2013 concerning the Long-Term Development Plan for the Batam City Area 2005 - 2025, the regulation explicitly prohibits any form of mining activities in Batam City. However, sand mining activities persist and have proliferated as a new economic source for the residents of Batam. This is attributed to the high demand for sand, which also creates employment opportunities. Regrettably, the sand miners in Batam seem to overlook and neglect the equilibrium of the environment, the sustainability of groundwater resources, and other environmental aspects in the city. In 2013, the Mayor of Batam, K.H. Ahmad Dahlan, emphatically issued a statement prohibiting sand mining activities throughout the Batam City area. This prohibition was grounded in the potential environmental degradation and the associated health risks and disasters for the people of Batam<sup>31</sup>. However, the ban imposed by the mayor has not been adhered to by the sand miners, who continue their mining activities in Batam.

According to a survey conducted by the Environmental Agency of Batam City (BAPEDAL), approximately 42 hectares of land in the Batam City area designated for land sand mining have been recorded as damaged. The survey results reveal that about five operational sand mining sites are causing environmental degradation. These locations include Tembesi, Tanjung Piayu, Kampung Jabi, Kampung Margong Batu Besar, and Panglong Batu Besar. In response to this issue, Mayor Ahmad Dahlan asserted that the Batam City Government will not remain silent in the face of the actions of these illegal sand miners, emphasizing that it is crucial for the future of Batam City<sup>32</sup>.

In preventing the exacerbation of environmental damage caused by mining activities, the Batam City Government, specifically the Environmental Agency of Batam City, takes enforcement measures against sand mining. The Batam City Environmental Agency conducts raids with a joint team comprising members of the Kepulauan Riau Regional Police, the Indonesian National Army (TNI), the Regional Police Force, and the Supervision and Security Unit. These raids involve the sealing of sand mining sites and the confiscation of equipment used for sand mining activities<sup>33</sup>. However, after the raid conducted by the Environmental Impact Management Agency (Bapedal) and the joint team, these mining activities resume.

The sand mining activities appear to be treated lackadaisically, with an apparent sense of impunity. Particularly in the Nongsa and Batu Besar regions, there is a notable presence of sand trucks engaging in mining activities without adequate intervention. Every day, numerous sand transport trucks pass by the Kepulauan Riau Regional Police office. Moreover, there is one sand mining site located approximately 100 meters from the Bhayangkara Batam Hospital, seemingly left unattended. Many residents are distressed by the existence of these sand mines as the environment continues to deteriorate due to the impacts of illegal sand mining. There is a growing fear that this may lead to hazards and disasters resulting from environmental degradation. Despite these concerns, there is a perceived lack of decisive action from both the government and relevant authorities. Even tourist areas or resort accommodations have raised complaints and grievances to the Batam City Government regarding the pollution of coastal areas caused by sand mining activities.

<sup>&</sup>lt;sup>31</sup> Walikota Tegas Larang Penambangan Pair , Antara News Kepri Online. <a href="https://kepri.antaranews.com/berita/27452/wali-kota-batam-tegaskan-larangan-penambangan-pasir">https://kepri.antaranews.com/berita/27452/wali-kota-batam-tegaskan-larangan-penambangan-pasir</a> . Diakses Pada 03 Februari 2022

<sup>&</sup>lt;sup>32</sup> Penambangan Pasir Ilegal Rusak 42 Hektar Lahan Di Batam, <a href="https://www.medcom.id/nasional/daerah/Zke4RM8b-penambang-pasir-ilegal-rusak-42-ha-lahan-di-batam">https://www.medcom.id/nasional/daerah/Zke4RM8b-penambang-pasir-ilegal-rusak-42-ha-lahan-di-batam</a>. Diakses Pada 03 Februari 2022

Petugas Gerebek Tambang Pair Ilegal di Kawasan KKOP Hang Nadim, Batam.Kepripedia. <a href="https://kumparan.com/kepripedia/petugas-gerebek-tambang-pasir-ilegal-di-kawasan-kkop-hang-nadim-batam-lvCNmiHGO64/full">https://kumparan.com/kepripedia/petugas-gerebek-tambang-pasir-ilegal-di-kawasan-kkop-hang-nadim-batam-lvCNmiHGO64/full</a>. Diakses Pada 03 Februari 2022

However, there has yet to be a substantial response or serious measures taken to address this issue.

Throughout the year 2020, the Batam District Court has rendered judgments in three cases involving illegal sand miners in Batam City. During law enforcement operations conducted by law enforcement agencies, these individuals were unable to produce mining permits. The illegal sand miners were charged with violations of Law Number 4 of 2009 on Mineral and Coal Mining. Detailed explanations regarding these individuals can be found in the table below.

**Table 1.** Illegal Sand Miners Who Have Been Criminally Convicted by The Batam State Court in 2020

No	Miner's Name	Case Number	Chronolgy and Verdict	
1	Nurbetti dan Samijo	Case Number 345/Crim.Sus/2020/PN.Btm dated July 13, 2020.	Chronology  The arrest of Nurbetti was carried out by the Criminal Investigation Unit of Poresta Barelang on Tuesday, February 4, 2022, at approximately 19:30 WIB at a sand mine near PT.Citra Laut Teduh, Batu Besar Village, Nongsa District. Nurbetti was designated by the authorities because he was the owner of the sand mine, while Samijo was detained due to his role as a sand mine machine operator. From the arrest of the two defendants, the Criminal Investigation Unit of Poresta Barelang obtained evidence in the form of: 1) 1 (One) long hose with a size of 2 (two) inches and a length of approximately 5 (five) meters; 2) 2 (two) black and brown combination snail pumps; 3) 3 (three) pipes of varying lengths and different colors, white in color; 4) 2 (two) Dongfeng 24 PK black diesel engines; 5) Sand results from dredging, approximately 4 (four) cubic	
			meters.  Verdict	
			The panel of judges at the District Court (PN) Batam sentenced Nurbetti and Samijo, two illegal sand miners near PT.Citra Lautan Teduh, Batu Besar Village, Nongsa District, to 2 years and 6 months in prison and a fine of IDR 1,000,000,000 (one billion) subsidiary to 6 (six) months of imprisonment.	

Hermanto	Case Number 682/Pid.Sus/2020/PN Btm	Chronology  On April 28, 2020, at 13:00 WIB, the BP Batam Security and Environmental Protection Unit, led
	682/P10.Sus/2020/PN Btm	BP Batam Security and
		by the Head of Environmental and Forest Security, conducted routine patrols at the Duriangkang and Tembesi reservoirs. During the patrol, the BP Batam Security and Environmental Protection Unit discovered an illegal sand mining operation and apprehended two suspects responsible for the illegal sand mining. The items seized as a result of the operation included: 1) 1 (one) unit of a Hyundai PC220/9S excavator in yellow color; 2) 3 (three) Valaron white pipes of various sizes; 3) 1 (one) blue-colored hose with a diameter of 4 inches; 4) 1 (one) Dongfeng or Jiangdong engine with a capacity of 30 HP; 5) 2 (two) cubic meters of sand from the mining activity.
		Verdict
		The court declares that the defendant has been proven guilty of the offense of "intentionally providing means for engaging in the criminal activity of mining without an IUP, IPR, or IUPK," violating Article 158, and imposes a sentence of 8 (eight) months imprisonment and a fine of IDR 500,000,000 (Five Hundred Million Rupiah), with an alternative of 3 (three) months imprisonment.
Johanes Yanto alias Anguan	Case Number 482/Pid.Sus/2020PN Btm	Chronology  The defendant, together with Mr. Taufik, initiated a mining business involving soil excavation/cutting located on Hang Jebat Road, intersection of Symphony Land housing estate, Batu Besar Village, Nongsa Subdistrict, Batam City. As a result of surveillance, evidence was discovered, including: 1) 1 (one) Kobelco SK 07 N2 yellow excavator; 2) 1 (one) Sumitomo SH 200 yellow
	•	,

	N2 blue excavator; 4) 1 (one) dynamic blue Kobelco SK 07 N2 excavator; 5) 1 (one) green Hino Dutro dump truck.	
	Verdict	
	For the defendant's actions, the panel of judges imposed a prison sentence of 1 (one) year and a fine of IDR 500,000,000 (Five Hundred Million Rupiah), subsidiary to 3 (three) months imprisonment.	

**Source**: Batam District Court

In regulating and imposing sanctions against illegal sand miners, the regulation regarding criminal provisions in the mining sector is stipulated in Law No. 4 of 2009 concerning Mineral and Coal Mining, among others: Article 37, which states, "IUP is granted by: a) Regent/mayor if the WIUP is within a district/city; b) Governor if the WIUP is across districts/cities within one province after obtaining recommendations from the local regent/mayor in accordance with the provisions of laws and regulations; and c) Minister if it is across provinces after obtaining recommendations from the governor and local regent/mayor in accordance with the provisions of laws and regulations<sup>34</sup>. Article 40 paragraph (3) states, "The holder of an IUP intending to explore other minerals as referred to in paragraph (2) must apply for a new IUP to the minister, governor, regent/mayor according to their authority"<sup>35</sup>.

Article 48 states, "IUP for production operation is granted by: a) Regent/mayor if the mining location, processing and refining location, and port are within a district/city; b) Governor if the mining location is within a different district/city after obtaining recommendations from the local regent/mayor in accordance with the provisions of laws and regulations; and c) Minister if the mining location, processing and refining location, after obtaining recommendations from the governor and local regent/mayor in accordance with the provisions of laws and regulations<sup>36</sup>."

Article 67; 1) The Regent/Mayor grants the Right to Utilize Land (IPR), especially to local residents, whether individuals or community groups and/or cooperatives. 2) The Regent/Mayor may delegate the authority to implement the granting of IPR as referred to in paragraph (1) to the sub-district head in accordance with the provisions of the legislation. 3) To obtain the IPR as referred to in paragraph (1), an application must be submitted to the Regent/Mayor<sup>37</sup>. Article 74; 1) The Special Mining Business License (IUPK) is granted by the minister, taking into account regional interests. 2) The IUPK as referred to in paragraph (1) is for metallic minerals or coal within 1 (one) Work Area for Special Mining Business License (WIUPK). 3) The development of the IUPK as referred to in paragraph (1) that discovers other minerals within the WIUPK under management is given priority to exploit them. 4) Developers of IUPK intending to exploit other minerals as referred to in paragraph (2) must submit a new IUPK application to the Minister. 5) The holder of the IUPK as referred to in paragraph (2) may express disinterest in exploiting the other discovered minerals. 6) The holder of the IUPK not interested in exploiting other minerals as referred to in paragraph (4) must ensure that these minerals are not utilized by others. 7) The IUPK for other minerals as referred to in paragraph (4) and paragraph (5) may be granted to others by the Minister<sup>38</sup>. Article 158; "Anyone who engages in mining without a permit as referred to in Article 35 is

36 Ibid

 $<sup>^{\</sup>rm 34}$  Undang – Udang No. 4 Tahun 2009 tentang Pertambangan Mineral dan Batubara

<sup>35</sup> Ibid

<sup>37</sup> Ibid

<sup>38</sup> Ibid

criminally liable, with a maximum prison sentence of 5 (five) years and a fine of up to IDR 100,000,000,000.00 (One Hundred Billion Rupiah)<sup>39</sup>." Article 159 "Holders of IUP, IPR, or IUPK who intentionally provide false reports as referred to in Article 43 paragraph (1), Article 70 Letter e, Article 81 paragraph (1), Article 105 paragraph (4), Article 105 paragraph (4), Article 110, or Article 111 paragraph (1) are criminally liable, with a maximum prison sentence of 10 (ten) years and a fine of up to IDR 10,000,000,000 (Ten Billion Rupiah)<sup>40</sup>."

In enforcing criminal law in the field of mining, especially in sand mining, the most crucial component is the community. Therefore, it is essential for public awareness in the law enforcement process, and it is not only the duty and responsibility of law enforcement officers but the responsibility of the entire community to create a harmonious life and reduce illegal activities in the field of sand mining.

## What Are The Obstacles to Law Enforcement Against Illegal Sand Miners in Batam City

In the pursuit of legal enforcement against illegal sand mining in the city of Batam, several local regulations pertaining to sand mining and legislative enactments governing the existing regulations on sand mining have been established. However, in the implementation, various factors hinder the legal enforcement of illegal sand mining. These factors include:

#### **Social Factors**

1. The minimal awareness of the society towards the law is a critical issue

According to expert Soerjono Soekanto, legal awareness and compliance are inseparable from the indicators of legal literacy. These indicators influence the extent of legal consciousness. Consequently, legal awareness involves abstract concepts within the human psyche, concerning the harmony between desired order and tranquility. Soerjono Soekanto identifies factors influencing legal awareness, including: a) knowledge of regulations; b) understanding the content of legal regulations; c) attitudes towards regulations; d) patterns of legal behavior<sup>41</sup>.

In this context, a lack of understanding of the law and administrative processes poses a significant obstacle in addressing the problem of illegal sand mining. The adherence to the Regional Regulation of Batam City No. 2 of 2004 concerning the Spatial Planning Plan of Batam City 2004-2014, Article 11 letter c number 5 states that "sea sand mining activities in Batam City can be carried out in the west, north, and east sea areas of Batam Island in suitable mining zones according to prevailing laws and regulations, while considering the sustainability of ecosystems and the environment<sup>42</sup>." Due to insufficient understanding of legal aspects and management practices in conducting mining activities, it is essential to provide guidance, supervision, and cessation of all types of illegal sand mining activities in protected and dangerous zones.

#### 2. Financial Factor

The Financial factor is one of the fundamental aspects in engaging in unlawful activities. Due to the increasingly sophisticated and advanced technological developments, there is a growing demand for necessities required by individuals. This drives the community to seize opportunities to illegally mine sand in order to accumulate wealth, without considering the consequences for the future.

3. Lack of Public Knowledge and Its Impact on the Environment 3. Lack of Public Knowledge and Its Impact on the Environment

While sand miners benefit economically from their activities, numerous hazards loom in the future, including: a) High levels of erosion caused by excavated pits from sand mining; b) The formation of cliffs resulting from miners filling these cliffs with water to process into sand, making them susceptible to landslides at any time; c) Insufficient water infiltration areas.

<sup>39</sup> Ibid

<sup>40</sup> Ibid

<sup>&</sup>lt;sup>41</sup> Soerjono Soekanto, Kesadaran Hukum dan Kepatuhan Hukum, CV.Rajawali, Jakarta, 1982, hlm. 159.

<sup>&</sup>lt;sup>42</sup> Pasal 11 Huruf c angka 5 Perda Kota Batam No 2 Tahun 2004 Tentang Rencana Tata Ruang Wilayah Kota Batam 2004-2014

#### **Factors in Law Enforcement**

Law enforcement is a crucial factor in fostering legal violations. According to Lawrence Meir Friedman, the success or failure of law enforcement depends on: a) Legal substitution; b) Legal structure/institutional law; c) Legal culture. The weakness in law enforcement is identified as one of the contributing factors to the increasing prevalence of illegal sand mining activities. The inadequacy in monitoring sand mining operations has resulted in the proliferation of this illicit business. This is attributed to the low rate of resolution of mining permit cases.

#### **CLOSING**

Based on the discussion of the existing issues, it can be concluded that the illegal sand mining in the city of Batam constitutes a violation of Article 159 of Law No. 4 of 2009 concerning Mineral and Coal Mining. Additionally, the lack of information dissemination regarding Regional Regulations of Batam City, Article 11 Letter c Number 5, Regulation of Batam City No. 2 of 2004 concerning the Spatial Planning Plan of Batam City 2004-2014, which allows sand mining but subject to applicable conditions, further compounds the situation. Challenges faced by the parties involved include, firstly, the insufficient awareness of the community regarding the existing ecosystem in the environment. Secondly, the increasing economic needs drive individuals to resort to any means necessary to meet their livelihood requirements. Lastly, the lack of knowledge among the public about the legality required to engage in mining activities adds another layer of complexity to the issue.

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