

Environmental Improvement Policy through the obligation of post-tin mining reclamation in the islands of Bangka Belitung

by Dwi Haryadi

Submission date: 23-May-2023 08:30PM (UTC+0700)

Submission ID: 2100058677

File name: Haryadi_2023_IOP_Conf._Ser._Earth_Environ._Sci._1175_012021.pdf (340.19K)

Word count: 2496

Character count: 14536

PAPER · OPEN ACCESS

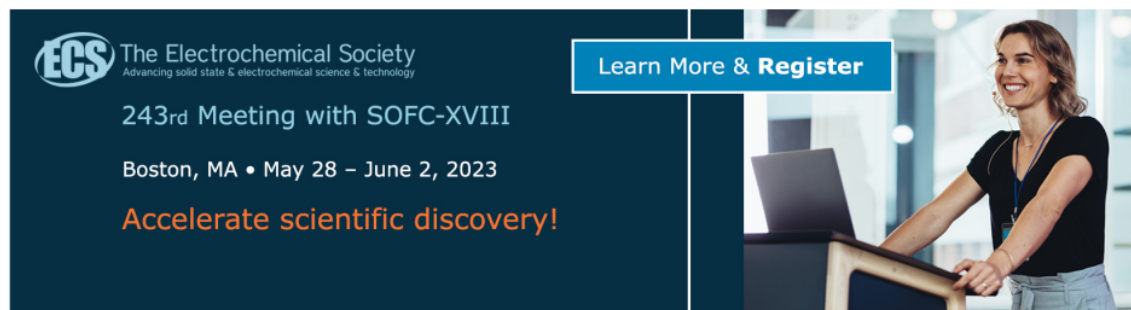
Environmental Improvement Policy through the obligation of post-tin mining reclamation in the islands of Bangka Belitung

To cite this article: D Haryadi *et al* 2023 *IOP Conf. Ser.: Earth Environ. Sci.* **1175** 012021

View the [article online](#) for updates and enhancements.

You may also like

- [Measurement of sustainable development in Bangka Belitung Islands Province](#)
A K Putri, A Wulandari and M F Akbar
- [Tin Mining in Bangka Belitung Islands and Its Impact on the Reputation of Geographical Indication: A Policymakers Perspective](#)
Darwance, Dwi Haryadi, Rafiq Sari et al.
- [Between Natural Tourism, the Booming of Laskar Pelangi Film, and the Image of Environmental Damage: Measuring the Perception of Regional Tourist on Bangka Belitung Tourism](#)
I Ibrahim, N Zukhri and R Rendy



The advertisement features a dark blue background on the left with the ECS logo and text, and a photograph of a woman at a laptop on the right. A blue button with white text is overlaid on the image.

ECS The Electrochemical Society
Advancing solid state & electrochemical science & technology

243rd Meeting with SOFC-XVIII
Boston, MA • May 28 – June 2, 2023
Accelerate scientific discovery!

Learn More & Register

Environmental Improvement Policy through the obligation of post-tin mining reclamation in the islands of Bangka Belitung

D Haryadi^{1*}, Ibrahim², Darwance¹

¹Law Department, Bangka Belitung University, Indonesia

²Political Science Department, Bangka Belitung University, Indonesia

*E-mail: dwi83belitong@gmail.com

Abstract. Reclamation obligation is one way to ensure environmentally sound mining activities. Nevertheless, Bangka Belitung islands, which have been excavated for tin since 3 centuries ago, leave environmental problems behind due to poorly implemented reclamation obligations. Generally, Law Number 4 of 2009 on Minerals and Coal threatens this negligence with administrative sanctions such as written warnings, partial or complete suspension of permits, and even revocation. However, after almost 10 years in effect, these punishments have yet to be very effective in promoting reclamation optimization, including in Bangka Belitung. Therefore, a criminalization policy was implemented through the amendment of Law Number 3 of 2020 for the act of failure to perform reclamation and/or post-mining obligations and for not placing reclamation guarantees and/or post-mining guarantees with the punishment of imprisonment, fines, and additional criminal charges. Consequently, this normative study focuses on criminalization and its conditions, alongside the formulation of sanctions and punishments as part of criminal law policies. The formulation stage has a strategic role because it is the basis and initial indicator for judicial and executive policy implementation effectiveness.

1. Introduction

Tin is the longest-mined material in Indonesia, whose history is traceable to the times of the Sriwijaya kingdom, the Dutch VOC, the British, the Dutch East Indies Government, Japanese occupations, and Indonesian Independence [1]. Jariq Cornelis Mollema stated that tin mining started in ancient times, evidenced by several discoveries of ceramic pieces and human tools at a depth of 8 feet, especially on Belitung Island [2].

After more than three centuries of serving the world, Bangka Belitung is a portrait of the country's failure to manage tin resources, marked by adverse impacts, including environmental problems [3, 4]. The practice of coming, digging, and going has become a typical portrait of mining closures in Indonesia [5]. For instance, PT Timah Tbk, which dominated the onshore Mining Business Permit (IUP), had an area of 16,765.49 hectares from 1992-2020, with a reclamation realization of 15,329.85 hectares. This means that 1,435.64 hectares have yet to be reclaimed [6].

Although various laws and technical rules have regulated the reclamation obligation, many factors influence the implementation, making it ineffective. One of these factors is the imposition of



administrative sanctions, which have been incapable of forcing mining companies to fulfill their reclamation obligations [7]. Therefore, the criminalization policy is an essential and strategic issue for violations of reclamation obligations to facilitate the efforts of bringing environmentally sound mining and the dream of sustainable development into reality. This policy is accommodated in the Mineral and Coal Law amendments of 2020 and will be the focus of this study. The major issues discussed herein are the nature of shifting from administrative sanctions to criminalization and the extent to which the formulation of criminal acts and the threat of criminal sanctions are effective in arresting companies who fail to perform their reclamation obligations in Bangka Belitung.

Previous research on reclamation policies has been done as published in a journal in 2022 entitled Study on the Implementation of Ex-Coal Mining Land Reclamation Policies Based on The Ministerial Decree of Energy and Mineral Resources (ESDM) No. 1827K/30/MEM/2018 [8]. However, the study focuses on technical policies only. In addition, several other studies also mainly discussed the implementation of reclamation in several companies. Therefore, we can say that this research paper brings up a novelty.

2. Methodology

This is normative legal research using a statutory approach [9], and the positive law inventory was implemented by comprehensively identifying, correcting, and organizing norms. The main data source uses secondary data comprising primary, secondary, and tertiary legal materials [10].

Formulation theories and criminalization signs were the basis for reviewing the criminalization policy of failing to fulfill reclamation obligations stipulated in the criminal provisions of Law Number 3 of 2020 concerning Minerals and Coal.

3. Results and Discussion

Politics of environmental law and regulations concerning tin mining in Bangka Belitung from central to regional levels have revealed suboptimal results in promoting post-mining and reclamation obligations [11,12]. At the same time, ecological issues have always been strategic in the development planning documents to overcome environmental damages due to mining activities in all regencies and cities in the Bangka Belitung Islands [13].

3.1. Continued Dominance of Administrative Policy

The Mineral and Coal Law Number 4 of 2009 regulates the threat of administrative sanctions for mining permit holders who fail to fulfill reclamation obligations. These may be given through written warnings, temporary suspension of some or all exploration activities or production operations, and the revocation of Mining Business Permits (IUP), People Mining Permit (IPR), or Special Mining Business Permit (IUPK). However, for more than 10 years, the obligations have yet to be maximized, leading to the application of a criminalization approach through Law Number 3 of 2020 to materialize the goal of better environmental management.

However, if we look closer, the shift from the policy of administrative sanctions to criminalization is not very significant. The regulation in Article 96, which requires the management and monitoring of the mining environment including reclamation and post-mining obligations, has remained the same, as the available sanctions are still administrative. Similarly, the obligations stipulated in Article 99 paragraphs (1), (3), and (4) are still subject to administrative sanctions. These obligations include preparing and submitting reclamation and post-mining plans, fulfilling the balance between the land to be cleared and that already reclaimed, and managing the final ex-mining pit with the most expansive limit, according to legislative provisions.

Also, the absence of sanctions for overlooking Article 99 paragraph (2) regarding the obligation to implement reclamation and post-mining obligations based on land designation raises questions. Suppose the interpretation falls within the qualifications of Article 161B, which is failure to implement reclamation or post-mining obligations. In that case, it is undoubtedly incorrect because this provision applies to revoked IUP/IUPK. Meanwhile, Article 99 paragraph (2) relates to the

context of reclamation by active IUP/IUPK holders. Furthermore, the obligations to provide and place the guarantee funds referred to in Article 100 paragraph (1) are unchanged and remain subject to administrative sanctions only, although the act falls within the qualification in Article 161B, which is punishable as a criminal offense. Therefore, there is one act that is threatened with multiple sanctions. Lawmakers seem unable to prioritize which approach is more effective.

3.2. Criminalization of Former IUP/IUPK Holders

Acts that are criminalized in the amendments to the mineral and coal laws as regulated in the criminal provisions of Article 161B are available in Table 1 below.

Table 1. Criminalization Formulation in Article 161B

Subject	Elements of Act	Basic Penalty	Additional Penalties
Former or revoked IUP or IUPK holders	Fail to perform: (a) Reclamation and Post-mining obligations; (b) Placement of guarantee funds	Imprisonment for a maximum of 5 years and a fine of not more than IDR 100,000,000,000.00	Payment of funds is required to implement the Reclamation and Post-mining obligations

In addition to the additional penalties above, Article 164 also provides an additional alternative punishment for the perpetrators of violation of Article No. 161B in the forms of criminal confiscation of goods used in committing a crime, deprivation of profits derived from criminal acts, and/or the obligation to pay the costs incurred as a result of the crime.

Based on Table 1, imprisonment or fines are only applicable to former permit holders who remain fail to perform their reclamation and post-mining obligations or place guarantee funds after the revocation or expiration of their IUP/IUPK. In contrast, failure to fulfill reclamation obligations when the IUP/IUPK is still active will only receive administrative sanctions. Whereas according to the definition of reclamation stated in the general provisions, it is part of the obligations that must be performed throughout the mining business. The criminalization policy, however, only applies to former IUP/IUPK holders.

The lawmakers formulate this crime only to provide criminal sanctions against former IUP/IUPK holders, not active IUP/IUPK holders. Meanwhile, to realize environmentally sound mining, we really hope that environmental improvements accompany the tin exploitation in Bangka Belitung through various alternative reclamation activities. However, the reclamation obligations for active IUP/IUPK are not optimally implemented; hence there should be a more assertive approach through a criminalization policy and not just the application of administrative sanctions.

The community hates criminalization criteria in the form of such acts because it causes harm and brings in victims. Therefore, a balance between criminalization costs and the achieved results, without burdening law enforcement and endangering the community [14], has been fulfilled for active IUP/IUPK holders who do not perform their reclamation obligation to receive threats of criminal punishment.

3.3. The Bangka Belitung Mandatory Reclamation

Fulfilling the reclamation obligation in Bangka Belitung due to tin mining remains a big task, and data shows that thousands of hectares of cleared lands still need to be reclaimed. Therefore, although administrative sanctions dominate the latest regulations, the law is expected to be enforced in a strict, non-selective, and sustainable manner. Administrative sanctions generally comprise written warnings, fines, temporary suspension of some or all the activities, and the revocation of IUP, IUPK, IPR, SIPB, or IUP for Sales. Nevertheless, strict implementation of these sanctions will be an effective preventive measure for forcing reclamation to be performed. In addition, law enforcers should impose maximum basic and additional penalties as a form of repressive effort for violators of Article 161B.

4. Conclusions

The administrative sanction approach, in fact, still dominates the new policy against failure to fulfill reclamation obligations. Meanwhile, the criminalization policy only targets former IUP/IUPK holders who refuse to perform their reclamation and post-mining obligations or place guarantee funds. This policy will impact the fulfillment of tin mining reclamation obligations in Bangka Belitung, which are still not entirely fulfilled so far. Furthermore, the administrative sanctions law, which is still a priority and believed to be an effective weapon to force reclamation obligation, must be firmly and consistently enforced by the central and regional governments. Finally, the existing criminalization policy may be the last resort to force the implementation of reclamation.

Acknowledgments

The authors thank the Directorate of Higher Education, Ministry of Education, Culture, Research, and Technology, for funding the study and publication. The authors also thank the Institute for Research and Community Service (LPPM) of Bangka Belitung University for their assistance.

References

- [1] Sujitno S 2005 (*The Impact of the Presence of Indonesian Tin Throughout History*) Dampak Kehadiran Timah Indonesia Sepanjang Sejarah (Jakarta: Cempaka Publishing) p 7
- [2] Kurniawan W 2018 (*Belitung Tin Mine From Time to Time (Volume 1)*) Tambang Timah Belitung Dari Masa ke Masa (Jilid 1) (Yogyakarta: Garudhawaca) p 2
- [3] Susilo J, Maemunah S 2009 (*Three Centuries of Serving the World: A Portrait of the Bangka Belitung Tin Mine*) Tiga Abad Melayani Dunia: Potret Tambang Timah Bangka Belitung (Jakarta: JATAM) pp iii-v
- [4] Ibrahim, Haryadi D, Wahyudin N 2018 From Charm To Sorrow: The Dark Portrait Of Tin Mining In Bangka Belitung, Indonesia *PEOPLE: International Journal of Social Sciences* **4** (1) 360-382
- [5] Paripurno ET, Siregar H, O'Neil I, Punuh J, Nurhidayati, Kuswardono T 2009 (*Come, Dig and Go: A Portrait of Mine Closure in Indonesia*) Datang, Gali dan Pergi: Potret Penutupan Tambang di Indonesia (Jakarta: JATAM) p 47
- [6] Syahrudin H 2021 (Implementation of ex-mining land reclamation in the Bangka Belitung Islands Province through a Whole of Government approach) Pelaksanaan Reklamasi lahan bekas tambang di Provinsi Kepulauan Bangka Belitung Melalui pendekatan Whole of Government *Journal of Public Policy and Applied Administration* **3** (1) 25-44
- [7] Haryadi D, Darwance, Salfutra RD Integrative Law Enforcement about Tin Mining Reclamation Responsibility at Bangka Belitung Island 2018 *1st SRICOENV E3S Web of Conferences* **68** pp 1-8
- [8] Setiawan A, Suhartoyo H, Barchia F, Susatya A, Brata B 2022 *Study Of Implementation Of Used Land Reclamation Policy Coal Mining Based On ESDM Ministerial Decree 1827k/30/Mem/2018*, *Journal of Naturalists: Research Journal of Natural Resources and Environmental Management* **11** (1) 76-84 <https://doi.org/10.31186/naturalis.11.1.21161>
- [9] Marzuki P M 2005 *Penelitian Hukum* (Jakarta: Kencana) p 96
- [10] Abdurrahman M 2009 (*Sociology and Legal Research Methods*) *Sosiologi dan Metode Penelitian Hukum* (Malang: UMM Press) pp 128-129
- [11] Haryadi D, Ibrahim, Darwance 2020 Environmental Regulations (its Identification and Downstream Implementation in Bangka Belitung) *IOP Conference Series: Earth and Environmental Science* **241** pp 1-4
- [12] Haryadi D, Ibrahim, Darwance 2020 Politics of environmental law in relation to mining in Bangka Belitung: A mapping *IOP Conference Series: Earth and Environmental Science* **599** pp 1-5
- [13] Haryadi D, Ibrahim, Darwance 2021 Strategic Ecological Issues: Environmental Problems in a

Perspective of Regional Development in Bangka Belitung *E3S Web of Conferences* **241** pp 1-4

- [14] Arief BN 2008 (*Anthology of Criminal Law Policy: (Development of Drafting the New Criminal Code Concept)*) *Bunga Rampai Kebijakan Hukum Pidana: (Perkembangan Penyusunan Konsep KUHP Baru)* (Jakarta: *Kencana*) p 29

Environmental Improvement Policy through the obligation of post-tin mining reclamation in the islands of Bangka Belitung

ORIGINALITY REPORT

6%
SIMILARITY INDEX

9%
INTERNET SOURCES

8%
PUBLICATIONS

6%
STUDENT PAPERS

PRIMARY SOURCES

1

Submitted to Universitas Sebelas Maret
Student Paper

6%

Exclude quotes On

Exclude bibliography On

Exclude matches < 3%



Table of contents

Volume 1175

2023

◀ Previous issue Next issue ▶

The 2nd International Conference on Mining and Environmental Technology 17/08/2022 - 19/08/2022 Online

Accepted papers received: 21 April 2023

Published online: 18 May 2023

Open all abstracts

Preface

OPEN ACCESS 011001

Preface

+ Open abstract  View article  PDF

OPEN ACCESS 011002

Peer Review Statement

+ Open abstract  View article  PDF

The 2nd International Conference on Mining and Environmental Technology

OPEN ACCESS 012001

Utilization of low-density emulsion to increase blasting efficiency and safety environment

J F Lubis and R H Handayana

+ Open abstract  View article  PDF

OPEN ACCESS 012002

Study of Flyrock to Reduce Safe Radius from 500 m to 300 m on Blasting Quarry at PT Vale Indonesia, Sorowako, Luwu Timur, South Sulawesi

M R Eko, R H Haris, J Lubis and N P Deri

+ Open abstract  View article  PDF

OPEN ACCESS 012003

An Analysis of Blasthole Condition towards Toxic Fumes Generation from Blasting

Activities in Surface Mine

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.



P N Hartami, Y Maulana, T T Purwiyono, E J Tuheteru, D H Kusumo, D Putra and M Burhannudinnur

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012004

Progress evaluation of limestone mine in PT. Panca Mitra Makmur using drone to achieve june-july 2021 production target

L S Marliani, B Himawan and A B Nugraha

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012005

Aquifer Geometry Identification and Determination of Aquifer Storage and Recovery (ASR) in Bandung

F Agustin, C I Abdullah, D Herlina, M F Akhyar, R Amukti, B Himawan and R N Adiputra

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012006

An Analysis of Single Slope Stability at Pemenang Road Using Bishop Method

N A Putri, Azwalanas, Ahamid, Harditia, Alpiana and Hidayati

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012007

Analysis of Andesite Rock Slope Stability with Bishop Method

M A Maodin, Faryansah, S D Ariadi, G S Verlandi, Alpiana and Hidayati

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012008

The effect of physical properties of sandstone on the compression strength of rock

K Shulhin, B Aprillah, Alpiana, D Rahmawati, A A Salsabila and M Iqbal

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012009

Analysis of Slope Stability Using Applied Research Methods A Case Study at Taman Ayu Gerung Village, Gerung District, West Lombok Regency, West Nusa Tenggara Province

M Yusuf, D Helmalia, P Ramadhoan, Zubaidin, Alpiana and Hidayati

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS


012010

Slope Stability Analysis Using Bishop Method and Slide 2D Software at Sand Stone Mining in Sedau Village, Narmada District, Lombok Barat Regency

M Gunawan, Hidayati and R Adam

[+ Open abstract](#) [View article](#) [PDF](#)
This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy.



-
- OPEN ACCESS** 012011
The comparison of physical and mechanical properties of sand in Sedau and Obel-Obel Village
M F Firaz and Isfanari
[+ Open abstract](#) [View article](#) [PDF](#)
-
- OPEN ACCESS** 012012
Biomass potential as an alternative resource for valuable products in the perspective of environmental sustainability and a circular economy system
S Martini, D Kharismadewi, Mardwita and Y R Ginting
[+ Open abstract](#) [View article](#) [PDF](#)
-
- OPEN ACCESS** 012013
Research on The Impact of Ciliwung River Water on The Surrounding Environment in The DKI Jakarta Area
J R Rajagukguk and D A Pranoto
[+ Open abstract](#) [View article](#) [PDF](#)
-
- OPEN ACCESS** 012014
Spectral And Fractal Analysis of Volcanic Tremor at Ijen Volcano, Indonesia
A Wildani, S Maryanto, D R Santoso and H Triastuty
[+ Open abstract](#) [View article](#) [PDF](#)
-
- OPEN ACCESS** 012015
Contribution of Obi Island Reducing the Carbon Footprint in the Transport Sector
TH Gultom, D Nugraha, Sugiyarno and M Iqbal
[+ Open abstract](#) [View article](#) [PDF](#)
-
- OPEN ACCESS** 012016
Geochemical Characterization of Pit Wall Rocks: A Preliminary Step in Predicting the Water Quality of Pit Lake
G J Kusuma, E J Tuheteru, A Badhurahman, K Pranoto, Y Palinggi, H S Wahyudi, G R Pratama and R S Gautama
[+ Open abstract](#) [View article](#) [PDF](#)
-
- OPEN ACCESS** 012017
Strategies on Degraded Lake Management for Sustainable Environmental Ecosystem in Lake Limboto, Gorontalo
O Sumule, R F Sitompul, S Sriharti and H W Retno
[+ Open abstract](#) [View article](#) [PDF](#)
-
- OPEN ACCESS** 012018
This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our Privacy and Cookies policy. 

3D inversion modelling of gravity and geomagnetic in the coastal aquifer of the Mandalika Lombok

A Taurida Alaydrus, A Susilo, S Minardi, A Naba and T Panji Abraham

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012019

Utilization of fly ash and bottom ash for tailings stabilization

M C N Deni and T Kurniasari

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012020

Mercury Reduction on Gold Extraction in Artisanal and Small-Scale Gold Mining. A Case Study in Pelangan Village, West Nusa Tenggara Province, Indonesia

D Rahmawati, J S Adiansyah, B F A Matrani and H I Johari

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012021

Environmental Improvement Policy through the obligation of post-tin mining reclamation in the islands of Bangka Belitung

D Haryadi, Ibrahim and Darwance

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012022

The Impact of Sand Mining on Socio-Economic and Environmental Sectors: A Case Study on Sedau Village, Narmada District, West Lombok Regency, Indonesia

I Saputra, Ferry, D Rahmawati, S S Aulia and H Sidik

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012023

Legal Protection for the Community Around the Sand Mining In Ijobalit Village, East Lombok Regency

W Hartati, Alpiana and Ariyanto

[+ Open abstract](#) [View article](#) [PDF](#)

OPEN ACCESS

012024

The Impact of Sand Mining on the Socio-economic Community

F Susanti, S A P Lestari and R F A Nugraha

[+ Open abstract](#) [View article](#) [PDF](#)

JOURNAL LINKS

[Journal home](#)

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).



Information for organizers

Information for authors

Contact us

Reprint services from Curran Associates

This site uses cookies. By continuing to use this site you agree to our use of cookies. To find out more, see our [Privacy and Cookies policy](#).

