

**The Compulsion of Environmental and Mining laws in South Africa: Tools
to curb illegal mining in South Africa**

Submitted by

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Declaration

I declare that the Mini dissertation hereby submitted to the University of Limpopo, for the degree of Master of Laws in Development and Management Law has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged

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DEDICATION

I dedicate this research to my mother, my late father Micheal Nkalanga, my supervisor and God. I thank you wholeheartedly.

Abstract

Illegal mining, often called illicit mining, is an activity that involves the process of expropriating minerals from the environment, in a manner that does not comply with the law. And in South Africa, that is termed 'zama-zama'. It has in the past years escalated in such a way that the President had to deploy the South African National Defence Force (SANDF), indicating that this is no ordinary crime, but a crime that affects the economy, people's lives, and livelihoods.

It does however extend deeper in that illegal mining is connected to other crimes such as gang crimes, rape, and murder. These will be discussed in this research and indicate real life reported cases of such crimes in the illegal mining sphere. This study will further investigate the three categories of persons who are potentially the main causes or facilitators of illegal mining, and further provide how they facilitate or cause illegal mining.

The study will further examine how the existing mining and environmental laws, such as inter alia, the Mineral & Petroleum Resources Development Act & National Environmental Management Act may be compelled by the judiciary to ensure that these laws are complied with in order to curb illegal mining in South Africa.

In conclusion, this research will seek to propose what it believes to be applicable and practical recommendations in this regard.

In order to properly report on the findings of this research, real life illegal mining activities and related matters thereto, this research will give a study on the mines community of Burgersfort, which is an area in the northern part of South Africa, in the Limpopo province. This area is predominantly occupied by mines and has been under tremendous reported illicit activities and attacks.

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LIST OF ABBREVIATED TERMS

EIA	Environmental Impact Assessment
EMP	Environmental Management Act
GIATOC	Global Initiative Against Transnational Organized Crime
MHSA	Mine Health and Safety Act
MPRDA	Mineral and Petroleum Resources Act
NEMA	National Environmental Management Act
NPA	National Parks Act.
NWA	National Water Act
OHSA	Occupational Health and Safety Act
PAJA	Promotion of Administrative Justice Act
SANDF	South African National Defence Force
SLP	Social and Labour Plans

Chapter 1: Introduction and Background of the Topic

1.1 INTRODUCTION

This study introduces this topic in order to determine ways in which existing mining laws may effectively be implemented and employed by relevant authorities in an effort to curb illegal mining in South Africa. Accordingly, De Greef opined that:

when the country's mining industry collapsed, a criminal economy grew in its place, with thousands of men climbing into some of the deepest shafts in the world, searching for leftover gold.¹

The study centralizes on the submissions of De Greef, in that criminal syndicates have established networks in the mining sector of South Africa, going beyond restricted areas, to extract and expropriate minerals in closed mining sites. However, illegal mining is not only targeted at closed mines but also operational ones.

Illegal mining is one of the illegal activities that have grown exponentially in South Africa over the past years. Illegal mining activities in South Africa are not only committed by South African nationals but are mostly conducted by foreign nationals, who are infiltrating the mining shafts to extract minerals underground, in a manner that contradicts the prescriptions of the South African law.²

In light of this submission, this study will therefore, in a detailed and articulated manner establish effective measures which the government may employ in ensuring that the existing mining laws are effectively implemented and enforced in an attempt to eradicate illegal mining practices in South Africa. A civil war is an existential threat in the mining industry in South Africa because of illegal miners. This is because, the findings of the latest study by the Global Initiative Against Transnational Organized Crime (GIATOC) have revealed that illegal mining gangs are notorious, especially illegal gold-mining gangs. They are armed militias warring over turf, both underground and at surface level, carrying out raids and executions.³

These raids turn out to be violent as authorities often find clusters of fatalities with traces of harm on their throats.⁴ South Africa has over 6 100 derelict, vacant, or abandoned mines some of which are old and whose owners are unknown.⁵ This proves

¹De Greef K, 'The Dystopian Underworld of South Africa's Illegal Gold Mines' (2023) *The New Yorker*.

²Bell T. 'Inside Labour, Zama Zamas are the Product of Gross Exploitation' (2023) <[³ De Greef K, 'The Dystopian Underworld of South Africa's Illegal Gold Mines' \(2023\) *The New Yorker*.](https://www.news24.com/fin24/economy/inside-labour-zama-zamas-are-the-product-of-gross-exploitation-20230812#:~:text=And%20while%20many%2C%20even%20most,helped%20destroy%20subsistence%20peasant%20livelihoods.> accessed 20 March 2024.</p></div><div data-bbox=)

⁴ *Ibid*.

⁵ Luzipho S, 'Derelict and Ownerless Mines: DMR Progress Report' (2017) Parliamentary Monitoring Group.

that most mining rights holders have failed to honour their obligations to rehabilitate or close these mines.⁶ As such, the mining sites remain open, and illegal miners see it as a chance to go in and extract any mineral that might be left over.

In South Africa illegal mining is often taken lightly by ordinary people as this is evident in that illegal mining is infamously known as 'Zama Zama' in South African vernacular, which loosely translates as 'taking chances.' This perception by South Africans is unacceptable because it has been established that illegal mining does not stand as a crime on its own but is linked to other criminal offenses such as money laundering, bribery, gang rape, corruption by officials as well as weapons trafficking and other forms of recognized organized crime.⁷

It does not stop with these aggravating crimes but goes further to devastating incidents such as underground gas explosions that claim the lives of those who are underground during the illegal mining operations and those residing near the mining sites. A practical example is the disused mine in Welkom that killed 31 illegal miners.⁸ Furthermore, it was reported that a handful of people died in another gas explosion in an informal Boksburg town connected to illicit mining activity.⁹

In light of this submission, this study will determine whether the current measure that has been employed by the government of South Africa, which is the deployment of the military force to curb illegal mining is a proper measure in this regard.

1.2 PROBLEM STATEMENT

1.2.1 The background of the problem

The Constitution of South Africa,¹⁰ the Mineral and Petroleum Resources Development Act,¹¹ and the National Environmental Management Act¹² are the primary sources of law that regulate the mining industry in South Africa respectively, together with other policies such as the Social and Labour Plans. In light of this submission, this study proposes ways in which these laws can effectively be enforced and executed by the

⁶ SANews, 'Fight Against Illegal Mining Yielding Results' (2023) <https://www.defenceweb.co.za/governance/governance-governance/fight-against-illegal-mining-yielding-results-ramaphosa/#:~:text=%E2%80%9COur%20efforts%20to%20end%20illegal,%2C%E2%80%9D%20the%20President%20said> accessed 09 March 2024.

⁷ *Ibid.*

⁸ Mogomotsi Magome, 'South Africa says 31 illegal Miners Believed Killed in Explosion in May, Only Now Coming to Light' (2023) <<https://apnews.com/article/south-africa-illegal-miners-dead-lesotho-methane-93875afb4370f1b241ed4485ef693a23>> accessed 09 March 2024.

⁹ *Ibid.*

¹⁰ The Constitution of the Republic of South Africa, 1996 (herein referred to as the Constitution).

¹¹ Mineral and Petroleum Resources Development MPRDA (thereafter the MPRDA).

¹² National Environmental Management Act 107 of 1998 (thereafter NEMA).

relevant authorities (state organs) to curb illegal mining in South Africa. This is so because this study submits that non-compliance, and lack of proper implementation, enforcement, and execution of mining laws by both mining rights holders and relevant government officials have created opportunities for illegal miners to engage in the crime of illegal mining.

1.2.2 Context of the research problem

The research problem of this study interrogates the lack of effective enforcement of mining laws by the relevant authorities. Thus, this has led to the rise of illegal mining activities all over South Africa. To indicate that illegal mining has escalated out of control, President Ramaphosa has recently deployed the South African National Defence Force (SANDF) to work in collaboration with the South African Police Service (SAPS) to fight illegal mining

In South Africa today, indications are that failure to effectively enforce and implement the mining laws exacerbates the chances of tax and revenue collections as well as for economic growth. The SANDF gets deployed to deal with crimes that the government views as an imminent threat to the country and its economy. Ostensibly, the study is proactively attempting to provide ways in which mining laws can be implemented to curb these crimes and also minimise the escalation of illegal mining.

1.3 RESEARCH METHODOLOGY

This study will use the qualitative method of data collection in dealing with the research problem and answering the research questions. Qualitative was chosen because the study aims to gather and analyze non-numerical data and an understanding of social realities, mostly grounded on theory. A desktop engagement will be of real significance to address the research area and the problem. The intended purpose will be to justify the submissions made by using a desktop study with the use of case law, books, legislation, and other legal instruments that are jurisprudential to the topic.

1.4 LITERATURE REVIEW

This study will do a literature review on different aspects. It reviews the works of scholars who have submitted on mining and environmental laws. It further looks into the contemporary submissions made for the implementation of laws relating to illegal mining in South Africa.

The study links up with the mining sector's literature as it greatly contributes to the wealth of South Africa. Ostensibly, mining is a very important activity in South Africa. This submission is supported or rather collaborated by Mkhize, as he stated that illegal mining operations are pervasive in the mining sector, despite being recognized as a

significant contributor to the economy of South Africa.¹³ It is therefore an issue worthy of prioritizing when such an industry is under attack by these law breakers. Mkhize further submitted that the lack of proper research on illegal mining exacerbates the issue to some extent.¹⁴

This study is precisely what Mkhize has elaborated in his work, in that until a study on mining laws is properly analysed and implemented, illegal mining will perpetuate. This study further provides recommendations on how the mining laws may be effectively implemented to curb illegal mining using international instruments.

This study submits that the issue of illegal mining has been rising exponentially in the past years all over the world, South Africa not being an exception to the statistics. This view is supported by the submissions made by Geldenhuys and Flynn, as they submitted that illegal mining has been a long-standing issue in South Africa, with various syndicates which are often involved in illicit activities.¹⁵ As a result, the mine shafts should be treated as crime scenes, and mine communities be given protection and alerted so that they are on the lookout for any suspicious activities.

Khan made submissions in his legal writing that when illegal mining occurs within a mining area, a mining right holder's best course of action is to file an application for an interdict against the illegal miner's operation with the court having jurisdiction in that mining community. This should be a remedy that is ideally sought as a last resort.¹⁶ This study also dissents from Khan's submission in this regard and this is because an interdict should ideally be given first preference when it comes to combating illegal mining activities, particularly where the details and whereabouts of the illegal miners are known unto the mining right holder. Interdict would be legally enforceable and binding to any possible illegal mining to immediately stop the illegal mining activity. This view was also held in the case of *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others*.¹⁷

According to the MPRDA, anyone in possession of a prospecting or mining right, a retention or mining permit, or reconnaissance permission must, to the extent that it is reasonably possible, make sure that the environment impacted by these activities is restored to its predetermined or natural state, or to a land use that complies with the widely recognized concept of sustainable development.¹⁸ This is in support of the view

¹³ Mkhize MC, 'Developing an Integrated Model for Quelling Illegal Mining in South Africa' [Mini Dissertation at the University of Limpopo, 2017].

¹⁴ *Ibid.*

¹⁵ Geldenhuys K & Flynn BH, 'International Syndicates & Illegal Mining in South Africa' (2024) *Sabinet African Journal*.

¹⁶ Muhammad K, 'Dealing with Illegal Miners' (2017) *Sabinet African Journals*.

¹⁷ *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others* (1488/17) [2018] ZANCHC 21 (20 April 2018).

¹⁸ Section 38(1)(d) of MPRDA.

shared by Makua that the minister should not be hesitant in withdrawing or revoking any mining company's permits if they are operating unlawfully.¹⁹

It has been established that mining right holders still fail to comply with mining laws and their implementation, therefore leaving the mining sites prone to illegal miners.²⁰ This research ultimately calls for the revocation of mining rights permits and licenses from the mining rights holders. Furthermore, the idea is to have the legislature impose a hefty penalty and possible imprisonment of those who infringe any mining laws. Particularly, mining rights holders who fail to follow statutory requirements when it comes to mine closure must be punished. This is considering the fact that the National Environmental Management Act (NEMA) has provided the mining sector's rehabilitation programmes and permissible funding vehicles.²¹

Kgoale shared the sentiments that the main problem is that most black South Africans continue to be excluded and impoverished. He added by saying that they revolt by demanding radical socio-economic transformation and benefaction from mineral resources, as their primary means of surviving.²² This research concurs with Kgoale's sentiments and further submits that the people of South Africa may be resorting to illegal mining as a way of radically demanding what they believe is statutorily theirs. This is considering the undertakings of the preamble of the MPRDA which provides that the mineral and petroleum resources of South Africa belong to the people of South Africa, and the state holds it in custody thereof.

Shibambu made submissions that among the laws that were proposed is the Mine Health and Safety Act 29 of 1996,²³ which advocates for the thorough implementation of safety and health standards using a variety of methods, including monitoring systems, inspections, and the obligations of employers and employees to recognize risks, remove obstacles, and reduce the risk to the health and safety of mine workers.²⁴ Considering Shibambu's submission, this research establishes the viewpoint that illegal miners maximize the risk to their health and safety, as they do not follow the provisions of the MHSA.

According to Madalane, the viewpoint is that like many other nations, South Africa faces numerous environmental issues driven by mining. These issues are primarily

¹⁹ Makua PM, 'Legal Analysis of the Impact and Consequences of Environmental Degradation in Mining Communities in South Africa' [Mini Dissertation submitted at the University of Limpopo, 2017].

²⁰ Broughton T, 'Mines are Failing Limpopo Communities, Says Scathing Report' (2022) *GoundUp*.

²¹ Wealthsmiths S, 'Customized mining rehabilitation solution. <https://www.sanlam.com/productcatalog/SanlamFundFactSheets/SanlamFundFactSheets/SI_Institutional%20Environmental%20Rehabilitation%20Brochure.pdf> accessed 11 March 2024.

²² Kgoale TP, 'Transformative Mineral Resources Beneficiation Legislation: An impetus for Socio-Economic Transformation and Poverty Alleviation in South Africa' [Mini dissertation submitted at the University of Limpopo, 2019].

²³ Mine Health and Safety Act 29 of 1996 (herein referred to as MHSA).

²⁴ Shibambu ON, 'Implementation and Enforcement of Safety Standards In The Mining Industry In South Africa: Challenges and prospects' [Mini dissertation submitted at the University of Limpopo, 2017].

brought on by, inter alia, abandoned mining areas that are not rehabilitated, insufficient environmental impact assessments post mine closure, insufficient funding for rehabilitation, and a lack of supervision and monitoring processes post mine closure.²⁵

Therefore, this study concurs with the views of Madalane in that if mining right holders could properly follow due processes when mining operations cease and closed, the mining sites would be properly rehabilitated to their pre-determined state or a state that conforms to the principles of sustainable development, as prescribed by the Minerals and Petroleum Resources Development Act.²⁶

The practices of illegal mining may be curbed if mining right holders follow the requirement as provided in section 38(1)(d) of the MPRDA,²⁷ which provides for sustainable development. However, because of non-compliance and failure to employ this requirement, it is easier for illegal miners to go into the mining sites and illegally extract the mineral resources. This would be because the mining sites would not have been closed and sealed.

An ignorant perspective is dominant in the eyes of ordinary people. The said perspective is that those who are in pursuit of 'leftover' minerals in closed mines are innocently trying their luck and might, as the proverb says 'hit gold'. This research adopts the view of Mafunganyika when she stated that in environmental legislation, participation by the public is essential because it guarantees that the public is informed about development projects that can have negative environmental repercussions on their surroundings.²⁸ This demonstrates how the lack of public participation by mining rights holders contributes towards the ignorant opinions that mining communities have regarding illegal mining. This is because mining communities are uninformed, as such, they remain in the dark about mining-related issues and the repercussions of illegal mining.²⁹

This study further submits that the ignorant perspective that ordinary people have can be changed. This can be achieved through a collaboration between mining right holders and government officials, by holding general awareness meetings in host communities in an effort to educate the members of the public about the dangers of mining and illegal mining thereof.

²⁵ Madalane T, 'The Obligation to Rehabilitate Mining Areas: Post Mining Activities' [Mini dissertation submitted at the University of Limpopo, 2012].

²⁶ Section 38(1)(d) of the MPRDA.

²⁷ *Ibid.*

²⁸ Mafunganyika DG, 'The Right to Development Versus Environmental Protection in South Africa' [Mini dissertation submitted at the University of Limpopo, 2009].

²⁹ Rall K & Pejan R, 'We Know Our Lives are in Danger: Environment of Fear in South Africa's Mining-Affected Communities' (2019) Human Rights Watch.

1.5 RESEARCH AIMS AND OBJECTIVES

1.5.1 Aim

The aim of the study is to establish ways in which mining laws may be effectively implemented and enforced by the government and the mining rights holders to combat the continuity of illegal mining activities in South Africa.

1.5.2 Objectives

This study outlines existing mining laws that are deemed to be improperly implemented. This is to determine whether non-compliance with the laws leads to the possible creation of loopholes that grant illegal miners the opportunity to conduct their operations. Furthermore, this study will determine and evaluate the government's regular deployment of SANDF as an appropriate measure to curb illegal mining. Moreover, what consequences underlie this deployment and if there is a more effective approach in this regard. Ultimately this study shall propose practical recommendations that can be employed by the mining rights holders, the judiciary, the executive, and possibly the legislature to curb illegal mining.

1.6 RESEARCH QUESTIONS

The study has the following questions to answer:

- What are the effective ways that can be used to ensure that existing environmental and mining laws are fully utilised to curb and resolve the illegal mining crisis?
- How section 24 of the Constitution can effectively be implemented by mining companies to prevent and reduce the chances of illegal mining?
- Whether the deployment of the SANDF to work in collaboration with SAPS to fight illegal mining is an effective approach by the state in trying to curb illegal mining, rather than enforcing and implementing the existing laws?
- Whether the failure to comply with mining laws by relevant officials should be attributable as an offence?

1.7 SIGNIFICANCE OF THE STUDY

This study outlines effective ways which may be employed by the government to ensure the proper and effective enforcement and implementation of existing mining laws, in an effort to curb the rising illegal mining trend. This study's significance lies in its ability to generate and grant the state a direction on how the existing mining laws may be better enforced and implemented for the effective regulation of the mining industry and prevention of illegal mining thereof.

1.8 CHAPTERISATION

CHAPTER 1: will deal with the introduction and background on the study wherein the context of the research topic will be demonstrated and unpacked for ease of clarity and what is to follow. This will include making this study elaborative on the basis upon which it will be discussed.

CHAPTER 2: will deal with the legislation and policy framework for the implementation of environmental and mining laws in South Africa.

CHAPTER 3: will deal with the judicial intervention on the non-compliance with environmental and mining laws to curb illegal mining.

CHAPTER 4: will deal with the impact of illegal mining on the efforts employed to sustain the economy and development

CHAPTER 5: Conclusion and recommendations of the study

Chapter 2: The Legislation and Policy Framework on the Implementation of Environmental and Mining Laws in South Africa.

2.1 Introduction

The South African legislature has managed to incorporate into law, various legislation that seek to protect and regulate the mining sector. There are two primary legislations that provide for mining of mineral and petroleum resources in South Africa. Furthermore, they guarantee that mining operations are conducted in a sustainable manner, that is in a manner that does not cause harm to the environment. These laws are the Mineral and Petroleum Resources Development Act (MPRDA),³⁰ and the National Environmental Management Act (NEMA).³¹

Therefore, based on the above two laws, this study aims to demonstrate how the South Africa's mining industry poses health and safety risks to the environment, employees and mining communities. As such, the South African legislature has put in place extensive mine health and safety laws and regulations with the goal of safeguarding the safety and health interests of the affected people. Furthermore, this is aimed at ensuring sustainable mining practices to reduce the mining hazards.³² Hence, the enactment of the Mine Health and Safety Act (MHSA).³³

There are other laws in addition to the above-mentioned, which include the National Environmental Management: Waste Act,³⁴ and the National Water Act.³⁵ These laws are additional pertinent laws that offer additional guidelines for mining companies regarding environmental protection and rehabilitation criteria. The obligations of mining rights holders regarding environmental impact assessments, environmental authorizations, and mine closure planning are outlined in the Minerals and Petroleum Resources Development Act and the Environmental Management Regulations.³⁶

Considering the submissions above, this study will demarcate and analyze each of the laws and policies which are regulating the mining industry or at least are applicable to the activities there. Furthermore, the study will set out how the non-compliance with these laws and policies leads to the indirect facilitation of illegal mining. Ultimately, this study submits viable ways which may be undertaken to compel compliance with these laws through enforcement by the relevant authorities, in attempt to curb illegal mining in South Africa.

³⁰ MPRDA.

³¹ NEMA.

³² Barter H, 'Comprehensive Guide to Mine Health and Safety Law in South Africa: Protecting Workers and the Environment' (2024) *Barter McKellar*.

³³ Mine Health and Safety Act (thereafter MHSA).

³⁴ NEMA.

³⁵ National Water Act 36 of 1998 (thereafter NWA).

³⁶ Barter H, 'Mine Rehabilitation Law in South Africa: A Comprehensive Guide to Environmental Sustainability in Mining Operations' (2024) *Barter McKellar*.

2.2 Applicable laws and policies

As already mentioned above, the relevant laws and policies directly affecting the mining industry's activities must be unpacked to give flesh to the existing challenges associated with illegal mining in South Africa. Therefore, it is critical to touch on these laws as they apply.

2.2.1. The Mineral and Petroleum Resources Development Act: the rehabilitation and related activities process

The MPRDA is one of the main laws that regulate the mining sector, it is important to state its significance in curbing illegal activities. As such, this study submits that by referring to the pertinent provisions within it, the MPRDA should be used as one of the instruments to stop illegal mining in South Africa. The MPRDA has specified the conditions and steps that must be taken in order to acquire, preserve, and transfer mining rights. Moreover, it imposes financial, social, and environmental obligations on holders of mining rights.³⁷ These obligations serve as guidelines that cautions mining rights holders to act in accordance with the law. Hence this study submits that noncompliance with the obligations set out in the MPRDA should be regarded as illegal mining.

Furthermore in South Africa, the process of mine rehabilitation plays a critical role in guaranteeing that mining activities are sustainably and environmentally friendly.³⁸ The legislature provide for this by holding mining rights holders accountable for any pollution, ecological degradation, or harm to the environment resulting from their mining, prospecting, or reconnaissance activities. This includes activities that take place both inside and outside the borders of the area that is covered by the right, permit, or licence in question.³⁹

Ultimately, in light of the rehabilitation provision as incorporated in section 38 of the MPRDA, this study submits that its effective compulsion upon mining right holders would be highly beneficial in curbing illegal mining. This is because when complied with, the rehabilitation provision will ensure that the mining sites are completely sealed upon the completion of mining operations. As such, there is also an emphasis on the need for concurrent rehabilitation as required by the annual rehabilitation plan.⁴⁰ This initiative will therefor reduce illegal mining. This will make it very difficult for illegal miners to access completed and alienated mining operations. This is because currently, illegal miners are having an easy access to the mining sites since majority of them are left unsealed by the mining companies that conducted mining operations

³⁷ Hayes E, 'Spotlight: Mining Law in South Africa' (2022) *The Mining Review*.

³⁸ Section 38(1)(d) of MPRDA.

³⁹ Section 38(1)(e) of MPRDA.

⁴⁰ Wright C, 'Final Rehabilitation, Decommissioning and Closure Plan; Annual Rehabilitation Plan and Closure Quantum and Risk Assessment for the Mining Areas of Emalahleni, Ophondweni and Mahujini' (2024) *III Tendele Mining*.

there. Furthermore, the ease of access to these sites is also facilitated by certain police officers, security personnel and some mine employees by allegedly taking bribes from illegal miners in exchange of giving them access to the mining facilities and equipment.⁴¹

The government and relevant stakeholders ought to establish guidelines which must be implemented to help mining rights holders to effectively carry out safe mine closure.⁴² This contribution by the relevant stakeholders will indicate their significant role in the mining industry. The MPRDA should be amendment of the to include a provision that will impose hefty punishment on those who do not comply with the mining laws and regulations. In this way, mining rights holders will take the rehabilitation process seriously.⁴³ Thus, reducing chances of them, as authorised miners from being engaged in any form of illegal mining.

According to this study, the legislature and the department, in consultation with section 43 of the MPRDA, developed some policies over the years with the intention of implementing mine rehabilitation after closure because the MPRDA does not contain explicit provisions on how the rehabilitation process should be carried out. The enactment of the rehabilitation policies will boost efforts to ensure that rehabilitation is done, although there are still those sites that are left unattended. This is because the rehabilitation policy and guidelines are critical in curbing illegal mining as established above. Barter provided some of the rehabilitation practices that can be incorporated into the policy ⁴⁴

The implementation of eco-friendly equipment and processes, will ensure that local communities thrive, and using lower-impact mining techniques are applied in conjunction with regulatory requirements, mined land can be effectively rehabilitated.⁴⁵ Ecosystems, water supplies, and biodiversity can be restored. It is the responsibility of mine operators to develop and implement plans for mine closure, making financial arrangements, interacting with stakeholders, and keeping an eye on

⁴¹ Williams TG, 'Illegal Mining's Effects on the Sustainability of a South-African Gold Mine' [Mini dissertation submitted at the University of Northwest, 2019].

⁴² Tanner P, 'Guidelines for the Rehabilitation of Mined Land' (2007) *Chamber of Mines of South Africa/Coaltech*.

⁴³ Zöe Almano, 'The Rehabilitation and Closure of Mines: A Failure in the Protection of Human Rights' [Dissertation submitted at the University of Cape Town, 2022].

⁴⁴ Barter H, 'Mine Rehabilitation Law in South Africa: A Comprehensive Guide to Environmental Sustainability in Mining Operations' <<https://www.bartermckellar.law/mining-law-explained/mine-rehabilitation-law-in-south-africa-a-comprehensive-guide-to-environmental-sustainability-in-mining-operations#:~:text=Implementing%20progressive%20rehabilitation%20measures%20during,establishment%20of%20natural%20ecosystems>> accessed 19 June 2024.

⁴⁵ Nichols M, '5 Ways to Make Mining More Sustainable' (2020) < <https://empoweringpumps.com/5-ways-to-make-mining-more-sustainable/> > accessed 01 July 2024.

how well rehabilitation efforts are working.⁴⁶ Mining operations may protect local people, contribute to environmental sustainability, and ensure the long-term viability of South Africa's mining industry by prioritising mine rehabilitation and adhering to best practices.⁴⁷ These practices are, *inter alia*,⁴⁸

This mining sector and local communities must coexist together to ensure sustainable mining practices are achievable and that the environment is protected.⁴⁹ This study submits that this is important because in the event that there is harmonious coexistence relationship between the three factors, illegal mining can be curbed. This is also because, the mine community would be enjoying the benefits of corporate social responsibility,⁵⁰ thus they will indirectly feel indebted to the mining company operating on their land. In light of the above submission, it can be established that the mining community would also take part in the collaboration to fight illegal mining.⁵¹ They would want their community to be 'illegal mining free', as their way of showing

⁴⁶ Mpanza M, Adam E & Raesa Moolla, 'A Critical Review of the Impact of South Africa's Mine Closure Policy and the Winding-up Process of Mining Companies' (2021) *The Journal for Interdisciplinary Study in Sothorn Africa*.

⁴⁷ Barter H, 'Mine Rehabilitation Law in South Africa: A Comprehensive Guide to Environmental Sustainability in Mining Operations' (2024) *Barter McKellar*.

⁴⁸ a. Early and ongoing interaction is necessary in order to guarantee that the planning and rehabilitation process for mine closure takes into account the opinions of stakeholders, such as local communities, governmental bodies, and environmental organizations—early and ongoing interaction is necessary.

b. Creating thorough mine closure plans that are grounded in reliable scientific knowledge and take into consideration the unique social and environmental circumstances of the site.

c. Throughout the mine's operating phase, gradual rehabilitation techniques such as soil stabilisation, re-vegetation, and water management will be used to reduce erosion, safeguard water quality, and encourage the restoration of natural ecosystems.

d. Regular and systematic monitoring programmes are used to track and assess the efficacy of rehabilitation procedures. The monitoring results are then used to inform necessary modifications to the rehabilitation activities.

e. Ensuring that there is sufficient funding allocated for mine closure and that it is continually assessed in order to pay for the costs of rehabilitation efforts, including continuing land maintenance and monitoring.

f. Encouraging the use of native, sustainable plant species for re-vegetation and utilising cutting-edge methods like ecological engineering and bio-remediation to bring the mined land's ecological functionality back.

g. Landscaping, mulching, and sedimentation ponds are examples of efficient erosion control techniques that can be used to stop soil erosion and safeguard water quality both during and after mine closure.

h. To guarantee my workers' active involvement and dedication to the rehabilitation process, comprehensive education and awareness campaigns about the requirements and techniques of mine rehabilitation, and best practices should be provided.

i. Partnering to share expertise, innovate, and conduct study in order to continuously enhance mine rehabilitation techniques with stakeholders, professionals, and study institutes.

⁴⁹ Satija P, 'Mining Industry Must Rediscover Equity, Environmental Harmony' (2024) <<https://www.policycircle.org/opinion/mining-industry-sustainability/>> accessed 1 July 2024.

⁵⁰ Mohammad Y, Bascompta m, Sanmiquel L, Vintró C, 'Corporate Social Responsibility and Economic Growth in the Mining Industry' (2023) *Elsevier*.

⁵¹ Nadine J, 'Better Resources, Collaboration Required to Tackle Mine Security as Illegal Mining Spikes' (2023) *Creamer Media's Mining Weekly*.

appreciation to the mining company. This is also because they will know that the mineral and petroleum resources of South Africa belong to them as the people of South Africa,⁵² hence they will protect such resources from being illegal mined.

Some companies have employed the strategies of working with the relevant stakeholders, such as host communities, in order to curb illegal mining. Accordingly, the Pan African Resources have submitted that:

The company uses advanced security technology and collaboration with authorities to combat illegal mining. For the company, fighting illegal miners is part of its sustainability efforts. It helps the company to protect its mineral resources to deliver long-term value for investors. It also helps the company to ensure responsible mining practices that benefit its legitimate stakeholders across the board.⁵³

The MPRDA further lays expectations that prior to the Minister approving the environmental management plan or program in accordance with section 39(4), the applicant of a prospecting right, mining right, or mining permit must make the required financial provision for the management or rehabilitation of adverse environmental impacts.⁵⁴

This is a very good governmental initiative that the legislature provides. This mandates the Minister to take an active role to ensure that the mining sites are rehabilitated. This is an effective measure employed by the government to effectively curb illegal mining. This duty of the Minister shows the government's will in dealing with illegal mining.

The MPRDA also provides the consequences thereto, for the failure to adhere to the above-mentioned requirement. This is owing to the MPRDA's explicit provision that, upon written notice to the holder of a prospecting right, mining right, or mining permit, the Minister may use all or a portion of the financial provision contemplated in subsection (1) to rehabilitate or manage any negative environmental impact in question if the holder is unable to undertake such rehabilitation or to manage any such impact.⁵⁵

The MPRDA also provides restrictions on mining rights holders on specific land that they are not allowed to conduct mining related activities. This is by virtue of the act providing that subject to section 20 of the National Parks Act,⁵⁶ and subsection (2), no prospecting right, mining right, mining permit, or reconnaissance license may be granted for property that is part of a residential area;⁵⁷ any public railroad, road, or

⁵² Section 3(1) of MPRDA.

⁵³ Pan African Resources, 'Par's Innovative Approach Against Illegal Mining' (2024) <<https://www.panafricanresources.com/illegal-mining/>> accessed 01 July 2024.

⁵⁴ Section 41(1) of MPRDA.

⁵⁵ Section 41(2) of MPRDA.

⁵⁶ National Parks Act 57 of 1976 (thereafter NPA).

⁵⁷ Section 48(1)(a) of MPRDA.

graveyard;⁵⁸ any land that is reserved under another law or utilized for public or governmental purposes;⁵⁹ or places that the Minister designated by publishing a notice in the Gazette according to section.⁶⁰

Considering the submissions made above, it can be established that a proactive measure has been taken, which serves as an important precaution to curbing illegal mining. This is because, should mining be allowed to take place even on residential areas, the likelihood on the occurrence of illegal mining would be increased. This will be because the residence of those areas would feel a sense of entitlement if they were to find out that there are minerals on the land they live in, thus decide that they should mine such minerals on their own. Leading them to engage in illegal mining conducts. An example, is that of the situation in the Burgersfort community in the greater Limpopo province, in which it was reported that:

Illegal chrome miners have left huge holes and trenches in the village, after extracting chrome. Community members say the holes pose a danger to the residents and their livestock.⁶¹

2.2.2 Mine Health and Safety Act

The health and safety standards for mining operations in South Africa are outlined by the Mine Health and Safety Act.⁶² In order to protect the environment, communities, and workers, mining rights holders must abide with the MHSA.⁶³ The MHSA outlines rules for safe mining operations and lays out the obligations of mine owners, employers, and contractors. The Mine Health and Safety Council (MHSC), which is tasked with regulating the application of mine health and safety laws, is also established by the Act.⁶⁴

The Mine Health and safety Act: Mine Health and Safety Regulations,⁶⁵for example, offer comprehensive standards on a range of mining operations, including ventilation control devices,⁶⁶ ground control, explosives, and machinery.⁶⁷ These regulations are in addition to the MHSA. The handling of hazardous materials in mines is covered by other laws, such as the Occupational Health and Safety Act (Hazardous Biological

⁵⁸ Section 48(1)(b) of MPRDA.

⁵⁹ Section 48(1)(c) of MPRDA.

⁶⁰ Section 48(1)(d) of MPRDA.

⁶¹ Motau K, 'Illegal Mining Poses a Danger to Community in Burgersfort' (2023) <https://www.youtube.com/watch?v=9Sj_tq35x8s> accessed 02 July 2024.

⁶² Mine Health and Safety Act. (thereafter MHSA)

⁶³ Barter H, 'Understanding Mining Rights in South Africa: Requirements, Regulations and Compliance' (2024) *Barter McKellar*.

⁶⁴ Section 41 of MHSA

⁶⁵ MHSA.

⁶⁶ Rule 9.1(3) of MHSA.

⁶⁷ Chapter 8 of MHSA.

Agents Regulations).⁶⁸ These rules must be followed; failure to do so may result in harsh consequences, such as fines and jail time.⁶⁹

The above provisions are very important in the context of illegal mining. This is because it shows that failure to comply with the mining regulations constitutes acts of illegal mining, hence the attachment of penalties. It is believed that mining right holders would know that the absence of compliance with these rules would mean an act of illegality.⁷⁰ As such enforcement of these rules and the attachment of the penalties curbs illegal mining that may be indirectly committed by mining rights holders.

To guarantee the greatest level of health and safety standards, mine companies are urged to use best practices in addition to the necessary compliance with the Mine Health and Safety Act⁷¹ and its regulations. This study submits that the best practices may be interpreted to mean ethical practices, in the context of illegal mining. As a result of this discussion, best practices may be attributed to mining right holders acting ethically, by avoiding and eradicating any element of illegality. This provision may be interpreted as the legislature encouraging mining right holders to act ethically which will lead them to acting legally.

Mining right holders may contribute to sustainable mining practices and promote a safe working environment by adopting efficient emergency response plans, communicating with stakeholders, conducting risk assessments, and offering extensive training. Setting mine health and safety as a top priority not only protects employees but also guarantees the long-term sustainability of South Africa's mining sector while preserving the local community and environment.⁷²

To protect the environment and the health and safety of its employees, mining right holders in South Africa are urged to adopt best practices. Among the suggested best practices are:⁷³

⁶⁸ Occupational Health and Safety Act 85 of 1993 (thereafter OHSA).

⁶⁹ Section 18 of OHSA.

⁷⁰ *Chamber of Mines of South Africa v Minister of Mineral Resources and Others* (41661/2015) [2018] ZAGPPHC 8; [2018] 2 All SA 391 (GP); 2018 (4) SA 581 (GP) (4 April 2018).

⁷¹ MHSA.

⁷² Mohapi G & Zarske R, 'Health and Safety in South African Mines: A Best Practice Report' (2018) *Competence Center Mineral Resources Southern African–German Chamber of Commerce and Industry*.

⁷³ 1. Regular audits, recording of key performance indicators, and identification of opportunities for improvement are all part of the process of evaluating the health and safety performance of mines.

2. Taking part in ongoing programmes for training and education for employees, including refresher courses, to make that employees are aware of mining health and safety protocols.

3. Establishing effective lines of communication between employees, supervisors, and relevant parties in order to promote a safety culture and encourage the reporting of incidents and hazards.

4. Utilizing automation and remotely operated machinery to reduce the likelihood of workers being exposed to dangerous situations, as well as integrating cutting-edge technologies into practice, including real-time monitoring systems, to detect and halt potential dangers immediately.

This study submits that the employment of these practices will infuse the principle of good governance among mining right holders, as such, eradicating any possible imminent threat of internal illegal mining practices that may be caused by mining right holders.

2.2.3. National Environmental Management Act

The South African regulatory framework for environmental management mandates that mining activities have environmental impact assessments, environmental authorizations, and environmental management plans,⁷⁴ which is provided by NEMA.⁷⁵

NEMA has incorporated within it, provisions that particularly deal with the compliance, enforcement and protection of the rules and regulations encompassed within it. ⁷⁶This provision should be of outmost importance to mining right holders, seeing that it also applies to them. This is by virtue of mining being an activity that occurs on land. This study submits that the compliance and effective enforcement of these rules would ultimately curb illegal mining.

NEMA provides that:

Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring or insofar as such harm to the environment is authorized by law or cannot reasonably be avoided or stopped, to minimize and rectify such pollution or degradation of the environment.⁷⁷

This provision clearly instructs mining rights holders to remedy any damage that might have been caused by the mining activity to the environment.

As a result, the study submits that the effective compliance with this provision would curb illegal mining. This is because, as mentioned in subsequent paragraphs, illegal mining may also be caused by the noncompliance of mining regulations. Consequently,

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5. Maintaining regular contact with industry associations, regulators, and other relevant parties to be informed about changes to mine health and safety laws, market trends, and industry best practices.
 6. Executing extensive and regular risk assessments, which ought to incorporate geotechnical assessments, in order to identify the dangers and put appropriate precautions in place, such as fortifying unstable ground, improving ventilation systems, and installing sufficient warning and signage systems.
 7. Developing comprehensive plans for emergency response, practicing them frequently, and making sure that all employees understand the protocols and know what to do in the event of an emergency.
 8. Fostering a culture where risks, near-misses, and incidents are reported and handled without fear of retaliation and putting in place efficient systems for incident reporting and investigation to find the source of problems and carry out corrective measures.
 9. Interacting on a regular basis with stakeholders, the local community, and the appropriate authorities to resolve issues, encourage openness, and guarantee that mining operations do not adversely affect the environment or the health, safety, and well-being of nearby communities.

⁷⁴ Barter H, 'Understanding Mining Rights in South Africa: Requirements, Regulations and Compliance' (2024) *Barter McKellar*.

⁷⁵ NEMA.

⁷⁶ Chapter 7 of NEMA.

⁷⁷ Section 28(1) of NEMA.

this means that failure of the mining right holders to give due consideration to this provision would amount to illegal mining. While effectively complying, it would curb illegal mining.

The legislature undertook to further provide measures which should be taken to ensure the compliance of the above-mentioned obligations. These measures may include to investigate, access and evaluate the impact on the environment.⁷⁸ It also provides for the informing and educating of employees about the environmental risks of their work and the way their duties must be carried out to prevent serious pollution or environmental deterioration.⁷⁹

Other measures that the Act proposes are the cessation, modification or controlling of any activity or process causing the pollution or degradation.⁸⁰ Furthermore, containing or stopping the flow of contaminants or the factor that causes deterioration.⁸¹ Ultimately, the Act provides for the elimination of any sources of pollution or degradation,⁸² as well addressing the consequences of pollution or deterioration.⁸³

2.2.4. The 2017 Mining Charter

The Review Broad-Based Black Economic Empowerment Charter for the South African Mining and Minerals Industry, 2018, is the full name the 2017 Mining Charter. This policy intended to outline the goals of Black Economic Empowerment and the mining industry's transformation.⁸⁴

The Charter lays forth goals for historically disadvantaged South Africans' (HDSAs') involvement in the country's mining sector.⁸⁵ The required percentage of black ownership in mining enterprises is now 30% of 26% under the new Mining Charter. The Minister of Mineral Resources stated that businesses have a whole year to reach the new 30% goal. A new prospecting right must contain a minimum shareholding of 50% plus one Black person, including voting rights, according to the Charter. Additionally, it stipulates that 30% of a new mining right must be owned by Black people, with the 30% shareholding being distributed in a particular way among employees, communities, and business owners. Additionally, it mandates that mining

⁷⁸ Section 28(3)(a) of NEMA.

⁷⁹ Section 28(3)(b) of NEMA.

⁸⁰ Section 28(3)(c) of NEMA.

⁸¹ Section 28(3)(d) of NEMA.

⁸² Section 28(3)(e) of NEMA.

⁸³ Section 28(3)(f) of NEMA.

⁸⁴ Maolusi L & Malesa G, 'Policy and Regulatory Framework for South Africa's Mining Industry' 2019 *Simmons & Simmons*.

⁸⁵ Kapdi N, 'South African Mining Charter 2017 (2017) <<https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.dentons.com/en/insights/newsletters/2017/june/29/south-africa-newsletter/south-africa-newsletter-june-edition/south-african-mining-charter-2017&ved=2ahUKewjZw6jpyZWGAxVuhv0HHcT3Ba4QFnoECCIQAQ&usq=AOvVaw15yaLFq7v5May45JVqGuI->> accessed 18 May 2024.

companies use 80 percent black-owned businesses for services and 70 percent black-owned businesses for commodities.

Furthermore, the Charter mandates that businesses with headquarters in South Africa analyze all mineral samples. Lastly, it stipulates that 25% of black female representation on mining firm boards must consist of half of black board members. The Precious Metals Act and the Diamonds Act are now governed by the Charter. The terms of the Charter must be considered when deciding whether to award a license under either of these Acts.⁸⁶

The above-mentioned intentions of the mining charter play a significant role in this regard because illegal mining is predominantly committed by the Black class of the society.⁸⁷ This study submits that this is an indication that the goals of the mining charter are only in paper and not necessarily practiced. This is because if Black people received the benefits encompassed in the mining charter, they would not be impoverished as the situation stands today, having to turn to illegal mining. This shows that illegal mining is not a crime of passion, but a cry for help by Black people.⁸⁸ Should the provisions of the mining charter be fully implemented and complied with, illegal mining would be curbed in South Africa.⁸⁹ Additionally, amendments should also be made in the mining charter, to give Black people a higher stake in the mining industry. This is because the Black population is the majority class in the country, hence they need more representation, resources and power.⁹⁰

2.2.5 National Water Act

The National Water Act (NWA),⁹¹ acknowledges that water is a limited and sporadically distributed national resource that is a part of a single, interdependent cycle and occurs in several forms. It acknowledges that while water is a natural resource that belongs to everyone, historically discriminatory policies and practices have made it difficult for everyone to use and have fair access to water resources. This is due to a submission that argues that the ongoing fight for underprivileged communities to have access to

⁸⁶ UN Trade & Development 'Government Adopted Mining Charter 2017 Which raises black Ownership Threshold for Mining Firms, (2017) <[⁸⁷ Erasmus C, 'The Dark Face of South Africa's Illegal mining' \(2023\) *The East African*.](https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://investmentpolicy.unctad.org/investment-policy-monitor/asures/3097/south-africa-government-adopted-mining-charter-2017-which-raises-black-ownership-threshold-for-mining-firms&ved=2ahUKEwjZw6jpyZWGAXVuhv0HHcT3Ba4QFnoECBQAw&usq=AOvVaw16bhYpO4mqSqx1RPJOedrd.> accessed 17 May 2024.</p></div><div data-bbox=)

⁸⁸ Guest Contributor, 'Urgent Measures Needed to Counter Illegal Mining' (2023) *Mining Review Africa*.

⁸⁹ Mkhize MC 'Reappraising Illegal Artisanal Mining in South Africa' (2017) *SciELO SA*.

⁹⁰ Canham H, Williams R, 'Being Black, Middle Class and the Object of Two Gazes' (2017) *JSTOR*.

⁹¹ NWA.

water not only amounts to water apartheid but also violates the principles of equality and nondiscrimination found in human rights agreements.⁹²

Mining and quarrying might have unfavorable effects if undertaken incorrectly. Improper handling of polluted water disposal can lead to severe penalties and irreversible damage to a business's image.⁹³ The environmental effects of improper water disposal, which can severely harm nearby species due to chemical pollution, are more concerning. However, with the right precautions, mining and quarrying can have a less detrimental effect on the environment, your company's finances, and its reputation.⁹⁴

To safeguard water resources, these regulations provide guidelines for mining operations. They forbid mining and associated activities in designated water conservation zones and demand notification of new mining operations. Everyone in charge of a mine is required to take specific actions to confine contaminated water and to take reasonable precautions to avoid water pollution and anomalies in water flow. The removal of sand and alluvial materials from a river is subject to specific regulations.⁹⁵

The NWA sets out precautionary measure which should be undertaken by mining right holders to conduct mining activities in a way that does not cause harm to the water resources. The NWA stipulates that anyone in charge of a mine or related activity must take reasonable precautions to stop substances that pollute water resources or water containing waste from getting into them, either naturally or through seepage. They must also keep or gather these materials for later use, evaporation, purification, or disposal in accordance with the NWA.⁹⁶

All water systems, including residue deposits, must be planned, altered, located, built, and maintained by mining rights holders in order to prevent pollution of any water resources through their operation or use and to limit the likelihood of harming stream or riparian habitat through sedimentation, erosion, vegetation disturbance, or changes in flow characteristics.⁹⁷ They must further reduce the amount of surface water or floodwater that enters mine workings, opencast workings, other workings, or

⁹² Jegede AO, 'Water 'Apartheid' and the Significance of Human Rights Principles of Affirmative Action in South Africa' (2021) *MDPI*.

⁹³ Atlantic Pumps Admin: Four Types Of Water Pollution Caused By Mining And How Atlantic Pumps Can Help Reduce This' (2021)<<https://atlanticpumps.co.uk/blogs/news/four-types-of-water-pollution-caused-by-mining-and-how-atlantic-pumps-can-help-reduce-this>. > accessed 19 May 2024.

⁹⁴ Atlantic Pumps Admin: Four Types Of Water Pollution Caused By Mining And How Atlantic Pumps Can Help Reduce This. (2021)< <https://atlanticpumps.co.uk/blogs/news/four-types-of-water-pollution-caused-by-mining-and-how-atlantic-pumps-can-help-reduce-this>.> accessed 19 May 2024.

⁹⁵ Act 36 of 1998: Regulations: Use of water for mining and related activities aimed at the protection of water resources (No. R. 77 of 2010).

⁹⁶ Section 7(a) of NWA.

⁹⁷ Section 7(b) of NWA.

underground caverns by using subsiding ground, sinkholes, outcrop excavations, audits, entrances, or other apertures, as well as fractured or fissured formations.⁹⁸

Mining right holders must also ensure that any dam, residue deposit, stockpile, or other facility used for the removal or storage of mineral tailings, slimes, ash, or other hydraulically transported substances is designed, modified, built, maintained, and used in a way that ensures that any water or waste inside it, or failure within it, won't cause the structure to fail or undermine its stability.⁹⁹

Furthermore, they must provide sustainable barrier dams, evaporation dams, or any other practical measures to stop this material or substance from entering and contaminating any water resources to prohibit materials from eroding or leaching from any residues that are piled up from any place and contain materials or substances that have been eroded or leached there.¹⁰⁰

The NWA also provides that they must make sure that, to the extent possible, all water used in mining or other activities is recycled. Additionally, any sump, pump installation, catchment dam, or other impoundment used for recycling water must be built with enough capacity and design to prevent the spilling, seepage, or release of waste-containing water at any time.¹⁰¹

It further provides that any water system must be kept clear of any object or barrier that could reduce its effectiveness.¹⁰² Ultimately, they must cause all domestic waste, including wash-water, which cannot be disposed of in a municipality sewage system, to be disposed of in terms of an authorization under the NWA.¹⁰³ The NWA also places a negative duty on employees in ensuring protection of the environment during the course of mining activities, for those who work in mines.

The NWA provides that no one is subject to criminal or civil liability, dismissal, or disciplinary action. discriminated against or subjected to harassment because they declined to do a task if they did so in good faith and with a reasonable belief that the task would pose an immediate and significant risk to the environment at the time of the refusal.¹⁰⁴

When an employee refuses to undertake work in accordance with subsection (1), he or she must notify the employer as soon as it is practically possible, either in person or by a representative, of the refusal and provide justification.¹⁰⁵ Whether or not the

⁹⁸ Section 7(c) of NWA.

⁹⁹ Section 7(d) of NWA.

¹⁰⁰ Section 7(e) of NWA.

¹⁰¹ Section 7(f) of NWA.

¹⁰² Section 7(g) of NWA.

¹⁰³ Section 7(h) of NWA.

¹⁰⁴ Section 29(1) of NWA.

¹⁰⁵ Section 29(2) of NWA.

individual refusing to work has utilized up all relevant internal or external channels or taken any appropriate action to address the issue is irrelevant to subsection (1).¹⁰⁶

No individual may take advantage of someone else or attempt to take advantage of someone else for not exercising their right under subsection (1).¹⁰⁷ A person who has exercised or plans to exercise his or her right under subsection (1) may not be threatened with any of the actions listed in subsection (1).¹⁰⁸

Considering the above provision, this study submits that the effective enforcement of this provision will not only provide for sustainable mining but will also ensure that mining rights holders follow the mining regulations as stated and eliminate any chance of illegal mining that may be caused from their side as authorized miners. Furthermore, the compulsion of the NWA provision, and possible imprisonment of those who grossly contravene the NWA's provision will curb illegal mining. This is because people do not treat water as a scarce natural resource, particularly illegal miners. This is in line with the report that illegal miners frequently treat materials containing gold using excessive amounts of water.¹⁰⁹ Furthermore, reprocessing tailings assists in mining site rehabilitation to lessen air and water pollution.

2.2.6. Social and Labor Plans

Owners of mining rights are required to draft and implement Social and Labour Plans (SLPs) outlining their responsibilities and contributions to social development and labor practices in the mining region. This includes clauses pertaining to local employment, skill development, community involvement, and environmental management.

A mining company's application for a mining license must include a Social and Labour Plan (SLP), according to the Minerals and Petroleum Resources Development Act (MPRDA, 2002). SLPs then must coordinate with the Integrated Development Plans (IDPs), which are five-year strategic plans at the local level. The main goal is to enable local governments and mining firms to work together to benefit communities from mining.¹¹⁰

A SLP must include, among other things, a procurement progression plan, employment equity statistics, career progression, mentorship, internship, and bursary programs, infrastructure, and poverty eradication projects in accordance with the applicable Integrated Development Plan in order to achieve historically disadvantaged South African participation in management, and plans to improve human resources.

¹⁰⁶ Section 29(3) of NWA.

¹⁰⁷ Section 29(4) of NWA.

¹⁰⁸ Section 29(5) of NWA.

¹⁰⁹ Pan African Resources, 'Par's Innovative Approach Against Illegal Mining' (2024) < <https://www.panafricanresources.com/illegal-mining/> > accessed 01 July 2024.

¹¹⁰ Van der Watt P & Marais L, 'Implementing social and labour plans in South Africa: Reflections on collaborative planning in the mining industry' (2021) *Resources Policy*.

SLPs from the majority of mining firms can be obtained by request or through their websites. Every five years, these SLPs are issued.¹¹¹

This study submits that the compliance with of these provisions will ensure progression, efficiency and sustainability in the mining industry. This is because not only will the mining right holders be benefiting from it, but also the mine communities will be positively impacted. Through employment of initiatives such as, inter alia, bursaries, infrastructure and internship. However, the noncompliance of this provision should be considered a punishable offence, frown upon by the courts. This is because it is this little issues that when left unaddressed may lead to even bigger problems. This may be in the event that when the mining right holders fail to comply with the requirements in the social and labour plans, the mine community will feel deprived of their benefits. Consequently, by virtue of being aggrieved by this, they turn to illegal mining initiatives since they know that they are going to get financial benefits from it. As such, compliance and enforcement of social and labour plans may curb illegal mining.

A mining business can only get a mining license if the Department of Mineral Resources and Energy (DMR) authorizes the SLP, as per the Mineral and Petroleum Resource Development Act.¹¹² The SLP's goals are to transform the mining industry, guarantee that mining companies contribute to the socioeconomic development of the areas in which they operate, and advance the social and economic welfare of all South Africans, with a focus on the historically disadvantaged.¹¹³ Approval requires alignment with the local municipality's strategic plan or Integrated Development Plan (IDP). Cooperation between local governments and mining firms has become essential.

Despite their length and complexity, SLPs are neither a must-have nor the administrative "bibles" that keep things running smoothly. The legally mandated goals and contents of SLPs make it clear that, when it comes to social and labour issues, they are the main framework that governs how mining companies interact with host communities, historically underprivileged groups, communities affected by mining, and the general public.¹¹⁴

2.2.7. Environmental Impact Assessment (EIA)

Due to the potential for significant environmental harm from mining operations, EIAs are required as part of the application process for mining rights. The potential

¹¹¹ Webber Wentzel, 'SLPs – Seriously Lacking Promotion, Sensibly Leading to Problems' (2024). <<https://www.polity.org.za/article/slps-seriously-lacking-promotion-sensibly-leading-to-problems-2024-05-30>>. > accessed on 30 May 2024.

¹¹² MPRDA.

¹¹³ Webber Wentzel, 'SLPs – Seriously Lacking Promotion, Sensibly Leading to Problems' (2024). <<https://www.polity.org.za/article/slps-seriously-lacking-promotion-sensibly-leading-to-problems-2024-05-30>>. > accessed on 30 May 2024.

¹¹⁴ *Ibid.*

environmental impacts of mining operations are assessed by EIAs, which then recommend mitigation measures to lessen or eliminate such effects.¹¹⁵

Environmental impact assessments, or EIAs, are under increasing pressure to shift from their conventional focus to producing more sustainable results on a global scale. Another country where the EIA system appears to have embraced the idea of sustainability is South Africa.¹¹⁶

There is a lot of debate over whether environmental impact assessments (EIAs) are accomplishing their goals because of their widespread use as a proactive environmental management tool. EIA "effectiveness" has been used to gauge this, especially as the emphasis of discussion has moved from procedural implementation issues to the more important goals of EIA and its function in broader decision-making forums.¹¹⁷

This study submits that in the context of illegal mining, the significant objectives of EIA and its role in larger decision-making settings should incorporate measures on how illegal mining negatively affects the environment and how such may be mitigated. This can be done by including a provision in the Environmental Impact Assessment that will state that if illegal mining has resulted in environmental damage, and the damaged environment has not been properly rehabilitated by the previous mining company, then it is the mining right holder who should be liable for the repairs of the environmental damage caused.

2.2.8. Promotion of Justice Administration Act

The Promotion of Justice Administration Act,¹¹⁸ is a legislation that gives effect to the constitutional right of right of access to just administrative action.¹¹⁹ Section 3(1) of PAJA particularly stipulates that a just procedure must be followed for any administrative decision that significantly and detrimentally impacts someone's rights or reasonable expectations. As such, considering this provision, it can be submitted that PAJA can be used to curb illegal mining. This is the view that the Department of Mineral Resources does not include public participation when it authorizes the sale of mining site, by bigger companies to smaller ones. As such, these transactions take place away from the public eye and creates a space whereby such decision can escape public scrutiny and accountability.¹²⁰

¹¹⁵Namin FS et al, 'Environmental Impact Assessment of Mining Activities. A New Approach for Mining Methods Selection' (2011) *Gospodarka Surowcami Mineralnymi - Mineral Resources Management*.

¹¹⁶Morris-Saunders A & Retief F, 'Walking the Sustainability Assessment Talk — Progressing the Practice of Environmental Impact Assessment (EIA)' (2012). *Environmental Impact Assessment Review*.

¹¹⁷Jay S, 'Environmental Impact Assessment: Retrospect and Prospect' (2007) *Environmental Impact Assessment Review*.

¹¹⁸ Promotion of Access to Justice Act 3 of 2000 (thereafter PAJA).

¹¹⁹ Section 33 of the Constitution.

¹²⁰ Zöe Almano, 'The Rehabilitation and Closure of Mines: A Failure in the Protection of Human Rights' [Dissertation submitted at the University of Cape Town, 2022].

This is procedurally flawed because in most cases, these smaller companies often do not have the capability or will to fulfil the mining rehabilitation obligations passed down to them when they possess mining rights.¹²¹ As such, in light of this submission, this study submits that PAJA should be compelled upon mining right holders, in order to curb illegal mining that may result from the sale of the mine to smaller companies who may not have the necessary funds to rehabilitate the mining site.

2.3 Conclusion

According to the above findings, this study concludes that the failure to comply with mining regulations should also be considered illegal mining, rather than just mining without the proper authorization. Considering the clarification provided by the previous submission, this study suggests that the above-mentioned actions constitute of elements of illegal mining since they violate mining rules and regulations.

As such, considering this submission, the study submits and calls for the amendment of the mining legislations, particularly the MPRDA and NEMA. The proposed amendment should be provisions that clearly set out and define what illegal mining is, and the elements of illegal mining thereto. This is because this study submits that the ambiguity laid down by the lack of a clear definition of what illegal mining is, perpetuates the commission of activities that constitute of illegal mining. Such as conducts committed by mining rights holders who fail to comply with mining rules and regulations. Ultimately, the amendment and compulsion of the mining rules and regulations would affectively curb illegal mining, as submitted above.

Chapter 3: The Judicial Intervention on the Non-compliance With Environmental and Mining Laws to Curb Illegal Mining.

3.1 Introduction

Illegal mining has been an issue of growing concern in South Africa in the past years.¹²² As established in Chapter 2 above, South Africa does not lack legislation for sustainable mining practices. However, there are still obstacles in the way of sustainable mining. The enforcement of such laws is the primary obstacle.¹²³ As a result of this, this study will conduct a review on how South Africa's judicial authority has been in the resolution of illegal mining related cases. Therefore, this study demonstrates how the courts have developed jurisprudence around mining law over the years. Ultimately, this study further determines how the judgements by courts

¹²¹ *Ibid.*

¹²²Gerard P, 'Illegal Mining: The Problem is Bigger than You Think' (2024) <<https://www.miningreview.com/southern-africa/illegal-mining-the-problem-is-bigger-than-you-think/?amp>> accessed 8 July 2024.

¹²³ Muswaka L, 'An Analysis of the Legislative Framework concerning Sustainable Mining in South Africa' (2017) *Saffli*.

create precedents that contribute towards curbing illegal mining in South Africa. This is because this study submits that it is through the effective and critical enforcement, together with the compulsion of the existing mining and environmental laws by the courts that illegal mining can possibly be curbed in South Africa.

3.2. The Position of the Court on Artisanal and Small-scale Miners Contributing Towards Illegal Mining.

Occasionally, artisanal and small-scale miners are viewed as one, and their names are often used interchangeably. However, this study submits that these are two different categories of people. A distinction is drawn that small-scale miners usually have a formal mining title and run larger, more automated operations, whereas artisanal miners are usually people or community members involved in some small-scale manual mineral extraction process without a legal mining title.¹²⁴

Accordingly, the legal position between these two groups is that the MPRDA¹²⁵ demands that any large-scale or small-scale mining must be licensed to do mineral extraction. Obtaining a mining license, right or permit is the only legal route an aspiring small-scale miner can follow to be legally recognized as a small-scale miner.¹²⁶

A lot of South Africans who were previously underprivileged are now considering small-scale mining as a means of earning a living. The government has, through the former Department of Minerals and Energy now the Department of Mineral Resources, established the Directorate of Small-Scale Mining to develop and address the challenges faced by the small-scale mining sector.¹²⁷

Integration of South African small-scale miners into the larger mining community and streamlining of the industry into the mainstream economy are crucial. As a result, this will show that the South African government is actively taking serious measures to promote the development of this sector.¹²⁸

The above are efforts that the government has adopted to deal with small scale mining. Although authorization is necessary, small-scale miners who wish to operate lawfully face significant obstacles due to the knowledge, ability, and financial resources

¹²⁴Mwanderingana E, Jingzhong Y, 'Mining what is not mine: Artisanal gold mining in Gwanda, Zimbabwe' (2023) *The Extractive Industries and Society*.

¹²⁵ MPRDA.

¹²⁶ Bester V & Uys T 'Artisanal Mining and its Drivers in the South African context' (2023) *The Extractive Industries and Society*.

¹²⁷ Ledwaba P & Nhlengetwa K, 'When Policy is not Enough: Prospects and Challenges of Artisanal and Small-Scale Mining in South Africa' (2015) *African Journals Online*.

¹²⁸Department of Mineral resources, 'Small Scale Mining'. < <https://www.dmre.gov.za/mining-minerals-energy-policy-development/operating-mines/small-scale-mining#:~:text=The%20government%20has%2C%20through%20the,the%20small%2Dscale%20mining%20sector.> > accessed 26 July 2024.

needed to fulfill the various requirements for getting a mining permit.¹²⁹ This is by virtue of small-scale miners not having enough financial means that will allow them to have the start-up capital for mining, and buying or even leasing the required tools and machinery to conduct the mining activities in a safe and healthy manner. Additionally, these small-scale miners end up resorting to conducting mining without the relevant authorizations. Thus, this makes their operations to be illegal since they are mining in abandoned or decommissioned mines, without the need to obtain proper authorizations required by law.¹³⁰

Furthermore, in dealing with issues of artisanal and small-scale miners, the case of *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others*,¹³¹ outlined the approach used by the courts in this regard. In this case, the court held that that the problem faced by the respondents, no matter how sympathetic the court may be to their economic plight and frustrations at the relevant authorities' failure to facilitate the regularisation of their operations, non-compliance with statutory provisions or the law cannot be condoned. Therefore, the main issue was that the respondents were conducting illegal mining activities which cannot be condoned by a discretionary refusal of the relief sought.¹³²

In light of this judgment furnished by the court on the case of *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others*, this study submits that instead of uprightly granting the relief sought as the final interdict which might leave the respondents with no other means of survival, the court ought to have tried to find a way in which the appellant and the respondents could resolve the matter amicably. This could include the appellant officially creating job opportunities for the respondents. This could have been done by following the prescribed procedure as set out in the MPRDA.

Furthermore, this could be initiated by applying for the mining permit, and upon its approval, employ the respondents to work in the site in question as officially employed mine workers of the appellant. This is because the respondents had already claimed that they are engaged in these activities as means of survival. As such, in considering their claim, the prohibition of the respondents from entering the site in question does not curb illegal mining. Rather this restriction might cause the respondents to be aggrieved and further resort to violently gain access to the site and continue to conduct illegal mining for their survival.

¹²⁹ A.A. DebrahI; I. WatsonI; D.P.O. QuansahII, 'Comparison Between Artisanal and Small - Scale Mining in Ghana and South Africa: Lessons Learnt and Ways Forward' (2014) *SciEloSA*.

¹³⁰ Bester V & Uys T 'Artisanal Mining and its Drivers in the South African context' (2023) *The Extractive Industries and Society*.

¹³¹ *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others* (1488/17) [2018] ZANHC 21 (20 April 2018).

¹³² *Laskey & Another v Showzone CC & Others 2007 (2) SA 48 (CPD)*.

However, the position could have been different in the event that the respondents showed the intention of owning their own mining companies. In the event that artisanal miners wish to be their own bosses, they would have to follow the proper channels of obtaining due and prescribed legal authority. This is because the law allows everyone in South Africa to apply for any minerals right or permit in relation to any land, provided that the land in question does not have the same mining right or mining permit against it.¹³³ However, historically disadvantaged persons, are given the right of first preference in the event that there are similar competing applications in the same land.¹³⁴

This would mean that if their application is successful, they would then have limited real right in the land in question.¹³⁵ This is because the real right will be in the possession of the owner of the land. Ultimately, this study further determines how the judgements by courts create precedents that contribute towards curbing illegal mining in South Africa.

3.3 How the Courts have provided precedents on non-Compliance with the applicable Law

Non-compliance with environmental rules is common. It is common across all programs and industry types.¹³⁶ In the context of mining, non-compliance leads to illegal mining. This is the type of illegal mining that this study defines as the mining activities that are carried out by mining rights holders who fail to comply with the prescribed environmental and mining laws.

This study submits that the case of *Bengwenyama Minerals (Pty) Ltd v Genorah Resource*¹³⁷ validates submissions made by the study. This is by virtue of the case providing that non-compliance with mining laws and regulations must to be deemed as illegal mining.¹³⁸ This is because this case has demonstrated how the non-compliance with the mining and environmental rules and regulations may be dealt with. Particularly the partial consultative measure that was employed by the respondent when applying for the prospecting right which infringed with the provision of the MPRDA.¹³⁹ Thus, the consultative measure employed by Genorah Resources (Pty) Ltd was substantively and procedurally flawed. This is by virtue of the representative of Genorah Resources (Pty) Ltd having failed to properly engage and

¹³³ Section 9(1) of MPRDA.

¹³⁴ Section 9(2) of MPRDA.

¹³⁵ Section 5(1) of MPRDA.

¹³⁶ Giles C, 'Noncompliance with Environmental Rules Is Worse Than You Think' (2022) *Oxford University Press*.

¹³⁷ *Bengwenyama Minerals (PTY) LTD v Genorah Resources (Pty) Ltd* 2010 JDR 1446 (CC).

¹³⁸ Snijman P, 'When Mines Break Environmental Laws: How to Use Criminal Prosecution to Enforce Environmental Rights' Centre for Environmental Rights (2013) *Center for Environmental Rights*.

¹³⁹ Section 10 of MPRDA.

consult with the mine community during the application of the prospecting right as prescribed by the MPRDA.¹⁴⁰

This indicates that there was no public participation as required by the MPRDA.¹⁴¹ As a result, in ruling against this, the court contributed towards creation of jurisprudence that will contribute in curbing illegal mining in the country. This is because the applicants of any minerals right, be it a mining right,¹⁴² prospecting right,¹⁴³ exploration right,¹⁴⁴ reconnaissance right,¹⁴⁵ reconnaissance permit¹⁴⁶ and production right¹⁴⁷ will now know the significance of public participation by virtue of this judgement. The consultative requirement imposed under MPRDA also provides an opportunity for the mining communities to outline how they expect to receive assistance with social security needs such as benefitting from the mine operations. This is because the law requires that any accrued benefits be discussed during the consultation process, as set out in the MPRDA.¹⁴⁸ The consultative process also allows the interested and affected parties to state their objections, observations and also expectations from the proposed mining operations.

Additionally, in the case of *Maledu and Others v Itereleng Bakgatla Mineral Resources (Pty) Limited and Another*,¹⁴⁹ the importance of consultation was emphasised. The court made an emphasis that prior to the implementation of any major decisions that may potentially affect the interested and affected parties, the state must direct the mining right holders to consult with the parties concerned. This was after the mining right holder obtained an eviction order from the High court that prevented the Lesetlheng Community from entering, remaining or conducting farming operations on the farm. As a result, a conflict of interest arose between the mine community and the mine company which disturbed the mine community's right to use and enjoyment of their farm.

Considering the above case, this study submits that the ruling of the court has shown that the consultation process does not cease upon approval of the mineral right or permit. This makes it easier for mining communities to hold mining companies accountable for any activity that does not comply with the law or any activity that contradicts with what was initially agreed upon. This is another way that the court

¹⁴⁰ Section 16(4)(b) of MPRDA.

¹⁴¹ Section 16(4) of MPRDA.

¹⁴² Section 22(4)(b) of MPRDA.

¹⁴³ Section 16(4)(b) of MPRDA.

¹⁴⁴ Section 79(4)(a) of MPRDA.

¹⁴⁵ Section 15(1) of MPRDA.

¹⁴⁶ Section 74(4)(b) of MPRDA.

¹⁴⁷ Section 83(4)(a) of MPRDA.

¹⁴⁸ Section 1(b)(i) of MPRDA.

¹⁴⁹ *Maledu and Others v Itereleng Bakgatla Mineral Resources (Pty) Limited and Another* (CCT265/17) [2018] ZACC 41; 2019 (1) BCLR 53 (CC); 2019 (2) SA 1 (CC) (25 October 2018).

tried to take precautionary measures to prevent illegal mining that may be caused by mining right holders through non-compliance with the law.

3.4 Court Enforcing Precautionary Statutory Measures that May Contribute Towards Curbing Potential Illegal Mining.

South Africa has well drafted environmental and mining laws. However, what is lacking is the proper implementation and compulsion of these laws by the court and other relevant state organs. This implementation and compulsion must be done to curb illegal mining in the country. In the *Bengwenyama Minerals (Pty) Ltd v Genorah Resources (Pty) Ltd case*¹⁵⁰ the court enforced a statutory provision which this study submits to be functioning as a precautionary measure in curbing potential illegal mining in the country. The enforced statutory provision is section 104 of the MPRDA.¹⁵¹ This section provides a preferential right to mine communities by giving them an opportunity to submit an application to prospect or mine in the name of the community concerned.

This study submits that a generous interpretation ought to be employed in the application and interpretation of section 104 of MPRDA.¹⁵² This is because this study submits that due consideration ought to be given to a wider social and historical framework in which a specific law functions, along with the reason it was passed and the conditions it aims to address. This position was emphasized in the case of *Department of Land Affairs v Goedgelegen Tropical Fruits (Pty) Ltd*.¹⁵³ In this case, it was emphasized that a generous construction must be preferred over a merely textual or legalistic one. This should be done to provide claimants with the maximum level of protection under their constitutional rights. It was further alluded that when looking for the goal, it is acceptable to pinpoint the problem that has to be fixed. In light of this, it is necessary and beneficial to give careful consideration to the legislation's social and historical context.

Therefore, awarding section 104 of the MPRDA a generous interpretation will ensure that not only are historically imbalances rectified, but potential future land imbalances that may also facilitate illegal mining may be curbed. This is because this study submits that the court in the Bengwenyama case created jurisprudence that is able to address issues of illegal mining. This by virtue of the court having ruled in favour of the applicants being given the right of first preference. This contributes towards curbing illegal mining because when mine communities are given the right of first preference they will not feel ousted in their own land as compared to when an outsider is given the right.

¹⁵⁰ *Bengwenyama Minerals (PTY) LTD v Genorah Resources (Pty) Ltd* 2010 JDR 1446 (CC).

¹⁵¹ MPRDA.

¹⁵² MPRDA.

¹⁵³ *Department of Land Affairs v Goedgelegen Tropical Fruits (Pty) Ltd* [2007] ZACC 12.

Consequently, if the mine community is successful in their application they would employ community members to work in the mine. Thus reducing the chances of the members of the mine community being engaged in illegal mining in any form. This study draws reference from the mine community of Burgersfort where it is the members of the mine communities who conduct illegal mining operations.¹⁵⁴ This is particularly because they feel aggrieved that they are not benefitting from the mining activities that are taking place in their area. Furthermore, this study submits that the blessing that comes from having minerals in one's land has turned into a curse for most mine communities. This is because of the high infestation of illegal mining operations that threaten the lives of those who live in the mine community.

Further, the case of *Bareki & Another v Gencor Ltd & Others*¹⁵⁵ also provides a precautionary statutory measure that the courts have enforced and which may contribute in curbing illegal mining. This is through the interpretation and application of section 28 of NEMA.¹⁵⁶ This study acknowledges the amendments that were made in section 28 of NEMA,¹⁵⁷ post the judgment in this case. As such, this study submits that the legislature, through this case has contributed towards curbing illegal mining. This is because the issues raised in this case showed that the retrospective application of the law is necessary to remedy past injustices.

Ultimately, mining rights holder who are involved in illegal mining operations as a result of not complying with the applicable mining laws and regulation must be held accountable for their actions. Our courts have also made practical steps that may be taken to overcome or minimize illegal mining, for instance in the above case of *De Beers*.

3.5 Courts' Reluctance in punishing illegal mining offenders: An indirect advancement of illegal mining

The South African government has employed various measures and operations to curb illegal mining in south Africa. This is evident by the existence of operations such as the operation *vala umgodi*. This operation has led to the arrest and detention of 35 suspects in the month of July in the Northern Cape province.¹⁵⁸ Furthermore, four thousand and sixty-seven individuals were detained on a variety of offenses relating

¹⁵⁴Sizwe sama Yende, 'Limpopo villagers try to thwart mining operations' (2023) *CityPress*.

¹⁵⁵ *Bareki & Another v Gencor Ltd & Others* 2006 (1) SA 432 (T).

¹⁵⁶ NEMA.

¹⁵⁷ National Environmental Laws Amendment Bill 66 of 2008.

¹⁵⁸ South African Government, 'Police Nabs Thirty Five Suspects During Operation Vala Umgodi in the Northern Cape' <
https://www.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://www.gov.za/news/media-statements/police-nabs-thirty-five-suspects-during-operation-vala-umgodi-northern-cape&ved=2ahUKEwiCsKuDn4yIAxXX_AIHHWKrAigQFnoECBkQAO&usq=AOvVaw2edcd2W5pCagUmGzbbtQxj > accessed 18 August 2024.

to illicit mining between April and August of 2023. This was through the effectiveness of operation prosper.¹⁵⁹

It is evident that these operations have proven to be successful. This study submits that these arrests are establishing assumptions that illegal miners do not work in isolation but rather they work in a group. This is because several illegal miners who have been detained before are regularly found to be working in numbers.¹⁶⁰ As a result, this study further submits that cases of illegal mining must be treated the same by our courts like any other crime.

The judgment passed by the court in the case of *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others* also proved to be significant in this regard.¹⁶¹ In this case, the court reasoned that without a doubt, a criminal prosecution may be a suitable alternative remedy in some circumstances. In *casu* however, there are more than 800 illegal miners that have been identified. The challenges of charging and prosecuting so many people, as well as the unavoidably long delays in bringing such prosecutions to a close, are difficult to overlook, even if one ignores the applicants' claims that De Beers failed to succeed through the criminal justice system. In the meantime, the applicants lose a significant amount of money every day. Criminal prosecution, in my opinion, would not be a remedy in these situations that would provide as much protection as an interdict.

In light of this reasoning by the court in this case, this study submits that it is this type of reasoning and ruling that may award illegal miners a legal defence on the basis of the precedent set by the case. This study submits that the reason given by the court has formulated a substantively flawed jurisprudence. This is because the reasoning furnished seeks to establish that there is a defence in numbers or majority. This is by virtue of the court submitting that:

'one can hardly ignore the difficulties inherent in charging and prosecuting such a large number of people together with the inevitable lengthy delays in bringing such prosecutions to finality'.¹⁶²

Although the case of *De Beers* above is not solely on illegal mining, it emits some directions on how our authorities and the courts are in future suppose to deal with illegal mining. Additionally, as the MPRDA is not direct about issues of *zama zamas*, it

¹⁵⁹ South African Police Services, 'JCPS Ministers Cluster Briefing Statement on the Progress on Combatting Organised Crime Including Illegal Mining in the Country' <<https://www.saps.gov.za/newsroom/msspeechdetail.php?nid=49528>> accessed 10 August 2024.

¹⁶⁰ *Chaba and Others v S (A190/2017) [2019] ZAFSHC 108; [2019] 3 All SA 103 (FB) (22 March 2019)*.

¹⁶¹ *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others (1488/17) [2018] ZANHC 21 (20 April 2018)*.

¹⁶² *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others 1488/17) [2018] ZANHC 21 (20 April 2018)*.

is however, adamant that illegal mining should not be permitted to proceed in whatever form.¹⁶³

3.6 Court of Public Opinion Contributing Towards Curbing Illegal Mining

The mining laws of South Africa has integrated the concerns and contributions of the broader public being the court of public opinion in curbing any potential illegal mining threats. There are various provisions in the MPRDA¹⁶⁴ that give effect to the right to be consulted. Firstly, section 10 of the MPRDA call upon interested and affected persons to submit their comments regarding an application within 30 days.¹⁶⁵ Secondly, the MPRDA provides that if the Regional Manager accepts the application, the Regional Manager must, within 14 days from the date of acceptance notify the applicant to consult with the land owner or lawful occupier and any other affected party and submit the result of the consultation within 30 days from the date of the notice.¹⁶⁶

Subsequently, the MPRDA provides that if the Regional Manager accepts the application, then the applicant must be notified of such. Furthermore, within 180 days of the notice date, the applicant must consult with all parties who may be interested or affected.¹⁶⁷

Ultimately, according to the MPRDA, no one may prospect for, remove, mine, carry out technical assistance, conduct reconnaissance, search for and produce any mineral or petroleum, or begin any related work on any area without first notifying and conferring with the landowner or the land's legal occupant..¹⁶⁸

In light of the above provisions, the study submits that the legislature was intending to give the court of public opinion, being the interested and affected parties a chance to voice out their concerns and contribution towards the proposed mining activities. As such, this study submits that this contributes towards curbing illegal. This is because the court of public opinion through these consultative measures will be able to hold the mining rights holder accountable for any non-compliance which may result in illegal mining operations.

The case of *Mineral Development, Gauteng Region & Another v Save the Vaal Environment (Pty) Ltd*¹⁶⁹ outlines the powers and contribution of the of the court of public opinion in curbing illegal mining. In this case it was held that the objects of

¹⁶³ See section 5A of the MPRDA (as amended).

¹⁶⁴ MPRDA.

¹⁶⁵ Section 10(1)(b) of MPRDA.

¹⁶⁶ Section 16(4)(b) of MPRDA.

¹⁶⁷ Section 22(4)(b) of MPRDA.

¹⁶⁸ Section 5(4)(c) of MPRDA.

¹⁶⁹ *Mineral Development, Gauteng Region & Another v Save the Vaal Environment (Pty) Ltd* [1996] 1 All SA 2004 (T).

section 9 and 39 of the Minerals Act¹⁷⁰ differed. Additionally, the issuance of a section 9 license allowed the holder to request a waiver of the requirement to submit an environmental management program or to start mining with the Director's temporary approval.

An objector would be put in danger in these situations, supporting the idea that the *audi alteram partem* rule ought to be used at the section 9 stage. Accordingly, when a mining license application was submitted under section 9, the *audi alteram partem* rule was in effect. Objectors need not be given a formal hearing, but they should be informed about the application at the very least. After being given the chance to express their complaints in writing, the appellants attempted to reverse the Witwatersrand Local Division's ruling that the Director had granted the mining license without giving Save a chance to object.

Considering this judgement furnished by the court in the above case, this study submits that jurisprudence has been created. Such jurisprudence indirectly contributes towards the curbing of illegal mining in South Africa. This is because the application of the *audi alteram partem* rule¹⁷¹ in relation to section 9 of the Minerals Act¹⁷² shows the importance of a fair administrative process when making mining and environmental decisions.

The adoption of the *audi alteram partem* rule in this regard indicates that the opinions and concerns of the mine community are given due cognisance. As such, this measure contributes in curbing illegal mining because as indicated in the Save the Vaal environment case, the mine community raises relevant environmental issues. Such issues have to do with the protection of the environment of the mine community. Since mining applicants may be financially invested in the land concerned and further not give due regard to any underlying environmental factors. Consequently, when the mine community is consulted they will know that they should protect their environment as they are constitutionally entitled to a safe and clean environment.¹⁷³

The mine community will therefore consider any harm that may be caused by the proposed mining activities on their land. As a result, the mining right applicants will be stopped from commencing with the mining operations after it has been established that such operations would cause irreparable harm to the environment. This is because the principle of sustainability¹⁷⁴ should be at the core of the mining operations.

¹⁷⁰ Minerals Act 50 of 1991 (thereafter MA).

¹⁷¹A Latin Phrase which Defines Fundamental Legal Principle in which Each Party is Entitled to a Fair Hearing and Given the Opportunity to Respond to Evidence Against Them.

¹⁷² Section 9 of MA.

¹⁷³ Section 24 of the Constitution.

¹⁷⁴ Section 37(2) of NEMA

Ultimately, this study submits that when environmental protection¹⁷⁵ is not considered when granting a mining license, such license and any operations that will flow from the granting of such a license should be deemed as illegal mining.

Furthermore, this study submits that application of the *audi alteram partem* rule also gives effect to the principle of environmental justice.¹⁷⁶ According to this concept, environmental justice must be sought in order to prevent negative environmental effects from being dispersed in a way that unfairly discriminates against anyone, especially those who are vulnerable and disadvantaged. As such, mine communities such as the Vaal Community would be subjected to environmental injustice if not consulted. Ultimately, this would amount to illegal mining as defined in this study. Consequently, this shows that the concerns and comments of the court of public opinion contributes towards curbing illegal mining.

3.7 Instances Where Courts Consider All Relevant Factors and Rights of Persons Involved in Illegal Mining

The *Chaba and Others v S*¹⁷⁷ case showed the importance of considering all relevant factors as well as joining any person that may be directly or indirectly linked to illegal mining. In this case the court held that an implicit agreement among the appellants was manifested in the construction of the illegal refinery plants and the fact that ore had been extracted already. As such, this is a laborious effort requiring collaboration. Furthermore, the names of some illegal miners were found in documentation seized on site. Following a similar line of argumentation, the court rejected the challenge of an established common purpose and enterprise organization of the appellants.

Furthermore, on the second basis of their appeal, the court denied this argument of appeal based on the fact that the ore encountered had already been extracted and prepared for future transport. As such, this showed that the group was capable of removing extracted ore from the mining premises. Ultimately, the court argued that the extracted but not encountered ore would amount to a quantity of 2481 tons. This making it significant enough to not be overlooked. Hence, unlikely to still reside within the premises of the mine. Paperwork seized on the illegal mining site further documented that extracted ore had previously been sold to an outside buyer.

Furthermore, on the third argument submitted on appeal, the court found it unlikely that any of the arrested coming out of the shaft had any other business in mine than participating in the ongoing illegal mining operation. Consequently, the appeal was rejected.

¹⁷⁵ Section 12 of MPRDA.

¹⁷⁶ Section 2(4)(c) of MPRDA.

¹⁷⁷ *Chaba and Others v S* (A190/2017) [2019] ZAFSHC 108; [2019] 3 All SA 103 (FB) (22 March 2019).

This study establishes that the approach by the court indicates that all person who may be linked to illegal mining must have their involvement established and prosecuted in the court of law. This should be done to determine each suspects involvement in the illegal mining activity. In the event that their contribution is determined, they ought to be convicted depending on the extent of their involvement

This study submits that with reference to this case, the court ruled justly in all aspects of the appeal. This is because all the documents that were ceased from the illegal mining site were admitted as documentary evidence. This is because the documentary evidence did not only prove the existence of illegal mining operations within Masimong Gold Mine, but it ultimately established the identities of those involved in the illegal mining operations. This on its own is irrefutable proof.

Furthermore, this study submits that the arrest, prosecution and sentencing of Lovemore Chaba Mlambo who was arrested outside the premises indicates that the courts also takes into account any person who might have any involvement in illegal mining operations. This indicates that this is done regardless of whether the involvement in the illegal mining operations is directly or indirectly. This validates the submission made in the previous chapter of this study that illegal mining should not be deemed as the conducts committed by those who go into the mining shafts to extract mineral resources but should also include those who are involved in any aspect of the illegal mining operations. As a result, this study submits that this case has contributed towards the creation of jurisprudence that will be used to curb illegal mining in South Africa.

The inclusion of state organs who may be involved directly or indirectly in the illegal mining operation is of paramount importance. This is because these are state official who facilitate the contravention of the law instead of upholding the law thereof. This has been submitted in the article by Leornard that corruption is still a major concern in the country with mining being identified as one of the high-risk sectors. In recent years, the nation has had a number of high-profile internal corruption scandals and allegations. This includes, but is not limited to, contracts awarded as a result of enticement, special connections, or officials with economic interests linked to the highest levels of government. Since dishonest government officials are appointed every five to ten years, there are concerns about how much money they can make while in service.¹⁷⁸

The Hawks as South Africa's elite police fraud investigation raided the Department of Mineral Resources offices in 2011 surrounding a corruption investigation over the

¹⁷⁸ Leornard L, 'Mining Corporations, Democratic Meddling, and Environmental Justice in South Africa' (2018) *Community and Urban Sociology*.

alleged issuance of rights to Imperial Crown Trading's.¹⁷⁹ It was also submitted that in other cases, coal mining firms that have partners in political and economic empowerment have also benefited from these connections when submitting mining applications. As a result, local community organizations and civic society have charged that the Department of Mineral Resources favors mining applications with political ties.¹⁸⁰ This indicates that government officials in illegal mining cases ought to be investigated thoroughly in order to establish whether there has been any involvement of state organs in facilitating the illegal mining operations.

3.8 Conclusion

Illegal mining threatens the principle of sustainable development. This is because during the course of the illegal mining operations, environmental issues are not considered. Subsequently, this infringes on the Constitutionally protected right to a clean environment.¹⁸¹ As a result of these submissions, this study submits that the compulsion of the existing environmental and mining laws ought to be vigorously implemented by the courts. This should be done through promoting and advancing these laws when deciding cases that relate to mining and the environment. This is ensure that irrefutable jurisprudence that will assist in curbing illegal mining is created.

This study therefore submits that many principles, inter alia, environmental justice,¹⁸² environmental protection¹⁸³ and sustainable development¹⁸⁴ are often infringed by mining rights holder during the course of mining operations.¹⁸⁵ Although tracking down illegal miners might be one way to curb illegal mining, enforcement of the law remains crucial. Eliminating unlawful mining should be a shared priority by all parties involved. Minerals rights holders are required to abide by laws that the government enacts and puts into effect. This should be done regardless of the fact that the government has the primary duty to implement the law.¹⁸⁶

Ultimately, this study submits that when interpreting the applicable laws our courts ought to factors that may influence or propel illegal mining by mining companies. For

¹⁷⁹Mzwakali, Sobantu, 'Mining in South Africa: Radical Resistance.' (2017) < <https://www.opendemocracy.net/en/mining-in-south-africa-radical-resistance/> > accessed 24 August 2024.

¹⁸⁰ Pillay D, 'The Stunted Growth of South Africa's Developmental State Discourse. *Africanus*' (2007) *Sabinet*.

¹⁸¹ Section 24 of the Constitution.

¹⁸² Section 2(4)(c) of NEMA.

¹⁸³ Section 12(c) of NEMA

¹⁸⁴ Section 2(4)(a) of NEMA.

¹⁸⁵ Muswaka L, 'An Analysis of the Legislative Framework Concerning Sustainable Mining in South Africa' (2017) *Saffli*.

¹⁸⁶ Ntuli L, 'Addressing the Rise of Illegal Mining in SA: Enforcing Laws and Adopting Tracing Mechanisms' [Dissertation submitted at the University of Cape Town, 2018].

instance in the case of *Harmony Gold Mine Company Limited v CCMA and Others*.¹⁸⁷ The court had to look at circumstances that were presented and which allegedly allowed illegal mining. The employers must ensure that the use of the operational systems in their operations do not contradict the mandate imposed under legislation and policy. For instance, in this case one of the employees clocking card was allegedly used by an illegal miner to exist the underground. Dishonesty was however not ruled out as it was considered as part of misconduct on the part of the employee.

Chapter 4: Illegal Mining on the Efforts Employed to Sustain the Economy and Development: Capita Selecta

4.1 Introduction

Post gaining its independence, South Africa is developing itself as an independent state and creates laws to promote its existence and interests. This is evident in the continuous existence of various development projects and programs such as the Reconstruction and Development Programme (RDP).¹⁸⁸ However, South Africa's economic growth viewpoint, which is described in the National Growth Plan (NDP) and emphasizes the need to eradicate poverty and reduce inequality, is further threatened by illegal mining activities.¹⁸⁹ This is because the problem of illegal mining is escalating, such that it is encroaching on the mine communities and endangering the mine communities' safety. This is problematic because this issue is no longer limited to remote, closed, and inactive mines.

4.2 Impact on the Economy

The government and the mining industry suffer significant financial losses as a result of illicit mining, which is estimated to cost over R70 billion a year in gold alone.¹⁹⁰ This shows that illegal mining is threatening the efforts employed by the government to regulate small-scale or artisan mining. This is in line with the African Mining Vision's (AMV) action plan which was adopted by African heads of state in 2009.¹⁹¹ The aforementioned action plan calls for the establishment of a mining industry that

¹⁸⁷ *Harmony Gold Mine company Limited v CCMA and OTHERS* (JR1457/19) 2023.

¹⁸⁸ Corder C, 'The Reconstruction and Development Programme: Success or Failure' (1997) *Social Indicators Research*.

¹⁸⁹ Comet Inga Dyan, 'South Africa's Stolen Gold: A Legal Analysis of the Impact of Illegal Mining on South Africa's national security' [Dissertation submitted at the University of Cape Town, 2022].

¹⁹⁰ Augustine C, 'Illegal Mining' (2024) <
<https://illegal.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://illegal.gov.za/blog/illegal-mining%23:~:text=%3DThe%2520cost%2520of%2520illegal%2520mining,and%2520health%2520of%2520surrounding%2520communities.&ved=2ahUKewi5tbGA9aiHAX48rsIHTVeCtoQFnoECA8QBQ&usg=AOvVaw1BU3PrKrsTYAnx81qhP0Ge> > accessed 15 July 2024.

¹⁹¹ Kojo B & Akong C, 'The African Mining Vision: Perspective on Mineral Resource Development in Africa' (2017) *Africa Journals Online*.

capitalizes on small-scale and artisanal mining's potential to promote integrated and sustainable rural socioeconomic development.¹⁹² This initiative is further aimed at the creation of job opportunities for the people of South Africa.

This study submits that the continuous existence of illegal miners threatens this initiative because these small-scale miners are confused to be illegal miners, as was established in the case of *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others*.¹⁹³ Furthermore, small scale artisanal miners are recognised, by virtue of AMV to conduct their activities while illegal miners conduct their activities without any due authorisation. The regulation of small-scale artisanal miners is to ensure that there is responsible extraction of minerals and petroleum resources in the country. Furthermore, this promotes transformation and protects the environment, communities and employees as the current legislation was put in place exactly for this reason.¹⁹⁴

The recognition of artisanal and small-scale miners post-1994 was initially seen as a potential avenue for socio-economic development and empowerment for historically disadvantaged individuals.¹⁹⁵ However, this optimistic view has been overshadowed by the emergence of a widespread of illegal miners across South Africa. The economic impact of illegal mining is staggering. As a result, operating mines face losses of up to R7 billion rand annually.¹⁹⁶

Illegal mining activities have since also threatened the ease of safe mines closure. For instance, a mining company in the East Rand has had to seal numerous shaft entrances repeatedly at a huge expense as illegal miners would repeatedly reopen the cement slab.¹⁹⁷ This has caused mining companies to carry a significant cost for repairs and continuous maintenance when required to do so.

Illegal mining also costed the industry and fiscus more than an estimated R20 billion a year in lost sales, taxes and royalties.¹⁹⁸ Furthermore, illegal mining has led to the theft of copper, electricity cables, dragline cables, diesel, and materials.¹⁹⁹ This has led to prejudice towards the economy and posed the risk to mine infrastructure. There

¹⁹² Morrison-Saunders, 'Planning for Artisanal and Small-scale Mining During EIA: Exploring the Potential' (2015) *Science Direct*.

¹⁹³ *De Beers Consolidated Mines (Pty) Ltd v Seekoei and Others* (1488/17) [2018] ZANHC 21 (20 April 2018).

¹⁹⁴ Strydom E, 'Illegal Mining' (2016) *Integrated Annual Review*.

¹⁹⁵ Mantashe GS, 'Artisanal and Small-Scale Mining Policy' (2021) *Energy and Resources Mineral of Department*.

¹⁹⁶ Panchia Y, 'Unearthing a Crisis: South Africa's Battle Against Illegal Mining' (2023) *Mining Review*.

¹⁹⁷ Heath GJ, 'The Location, Hazard Assessment and Sealing of Unsafe Mine Opening in the Central Witwatersrand Gold Mining Basin' (2009) *Core*.

¹⁹⁸ Shangase M, 'Youth and Women Participation in Extractive Industries: A Cooperatives Approach to Artisanal and Small-scale Mining (ASM)' (2022) *Institute for Global African Affairs*.

¹⁹⁹ Ilan Solomons, 'Illegal Mining a Substantial Burden on South African Economy, Warns Sibanye' (2017) *Mining weekly*.

has also been a significant increase in security costs and costs related to unnecessary mine operation stoppages.

Illegal mining pose a risk to the country's national security, revenue, export earnings, and procurement losses jeopardize industry stability and impede economic recovery. As a result, this industry revenue is now lost to international syndicates.²⁰⁰ This massive economic leakage undermines the legal mining sector and further deprives the South African economy of crucial revenue streams, impacting exports, taxes, and royalties.²⁰¹

Foreign investors have lost confidence in South Africa's ability to control and manage the extent of illegal mining and the trafficking of precious metals.²⁰² Additionally, the theft of national strategic assets and resources has a negative impact on economic growth and development, which in turn causes government losses. As a result, business revenue is endangering the long-term viability of mines and their secondary industries.²⁰³ Furthermore, illegal mining has proven to be an economic catastrophe. This is evident in the interview by Lieutenant-General Godfrey Lebeya, who is the leader of the SABC Hawks, when he stated that if illegal mining is not addressed, it will continue to present a serious risk to the prospects for economic progress in South Africa.²⁰⁴ Below follows a discussion on how illegal mining affects certain economic aspects.

4.2.1 Loss of Revenue on the Government

South Africa is one of the biggest economies which continue to lose revenue because of illegal mining. While legitimate mining businesses pay taxes, royalties, and fees for their operations, illegal miners do not.²⁰⁵ The revenue is necessary for government initiatives, the construction of infrastructure, healthcare, and education. If illegal miners disregard the law, minerals which are sold in the black market with no profit to the state, are untraceable.²⁰⁶

²⁰⁰ Abel Mputing, 'National Assembly Debates Impacts of Illegal Mining in South Africa Participate in Parliament' (2022) < <https://illegal.parliament.gov.za/news/national-assembly-debates-impact-illegal-mining-south-africa> > accessed 15 July 2024.

²⁰¹ Panchia Y, 'Unearthing a crisis: South Africa's Battle Against Illegal Mining' (2023) *Mining Review*.

²⁰² Schouwstra R, 'Strengthening the Security and Integrity of the Precious Metals Supply Chain' (2016) *United Nations Interregional Crime and Justice Research Institute*.

²⁰³ Reward Utete, 'Re-imagining the Complexities Faced by Rural Entrepreneurs in South Africa: Implications for Local Economic Development in the post COVID-19 Pandemic period' (2024) *Science Direct*.

²⁰⁴ Masilela P, 'Illegal Mining Threatens South Africa's Economy' (2024). *Mining Review Africa*.

²⁰⁵ South African Revenue Services, 'Mineral and Petroleum Resource Royalty' (2024) < <https://illegal.sars.gov.za/types-of-tax/mineral-and-petroleum-resource-royalty/> > accessed 25 September 2024.

²⁰⁶ Yuliya Z, 'Responding to Illegal Mining and Trafficking in Metals and Minerals: A Guide to Good Legislative Practices' (2023) *United Nations Office on Drugs and Crime*.

According to the Chamber of Mines, illegal mining costs South Africa billions of rand every year.²⁰⁷ The government's capacity to pay for social programs and other necessities is weakened by this revenue loss, which keeps the nation's poverty levels and inequality very high.²⁰⁸ Criminal syndicates who operate illegal mining trade hide revenue that is meant for economic development in the country. Consequently, this undermines the public's confidence in the nation's governance and law enforcement agencies.

4.2.2 Undermining Formal Mining

The formal mining sector, which makes a substantial economic contribution to South Africa is threatened by illegal mining. Thousands of people are employed in the mining industry, which also contributes significantly to the Gross Domestic Product(GDP) of the nation.²⁰⁹ On the other hand, illegal mining risks the mining equipment from being stolen, puts the lives of genuine miners in danger, and creates hazardous working conditions, and further interferes with normal operations.²¹⁰ The loss of minerals from illegal mining also makes lawful enterprises less competitive.²¹¹ This deters investment in the industry, which lowers growth and profitability. Both domestic and foreign investors are hesitant to place money in an industry where crime is rife with uncontrollable illegal activities.

4.2.3 Impact on Employment

The loss of jobs in formal mining industry is indirectly caused by the illegal mining trade. Due to illegal competition, legitimate mining companies may have to cut their staff or cease operations entirely, as their profitability is negatively impacted.²¹²

While illegal mining puts employees in danger, it also directly jeopardizes the jobs in the mining industry. Illegal miners frequently break into mines that are in use, endangering both the lives of formal miners and them.²¹³ Following these occurrences, mining companies would temporarily suspend operations, which would result in job losses and pay reductions for formal employees. The capacity of legal mining businesses to maintain employment is further hampered by the hazardous conditions

²⁰⁷ Solomons, S 'Illegal gold mining in South Africa Worth over R7 billion a Year' (2017) *Mining Review Africa*.

²⁰⁸ Dabla-Norris E, 'Causes and Consequences of Income Inequality: A Global Perspective' (2015) *International Monetary Fund*.

²⁰⁹ Khubana T & Rootman C, 'Antecedents of Shared Value: Perceptions within the South African Mining industry' (2022) *SciELO SA*.

²¹⁰ Asuamah Samuel, 'Digging Deeper: The Impact of Illegal Mining on Economic Growth and Development in Ghana' (2023) *Research Gate*.

²¹¹ Domenico Marino, 'The Competition Between Legal and Illegal Firms in the Market: Theoretical Models and Empirical Evidence' (2023) *Science Direct*.

²¹² University of Cape Town, 'Illegal mining: the Problem and Possible Solutions' (2016) *Mineral Law in Africa*.

²¹³ Martin A, 'The Dark World of the Zama Zamas' (2019) *Enact*.

generated by illegal mining operations, which also raises insurance rates and operating expenses.²¹⁴

4.2.4 Promotion of Organized Crime and Corruption

Organized crime syndicates that prey on the weak and partake in a variety of illegal activities, including money laundering, drug trafficking, and human trafficking, frequently oversee the illegal mining industry. These criminal networks not only threaten the mining industry, but they also fuel pervasive corruption in government and law enforcement.

The institutional frameworks of South Africa are weakened by organized crime's involvement in illegal mining because law enforcement officers may be coerced or threatened into not reporting unlawful activities.²¹⁵ Government agency corruption makes it even more difficult to regulate and control unlawful mining, which allows the issue to continue and worsen. Consequently, there is a negative feedback loop that reduces the competitiveness of the formal mining industry and erodes the rule of law, deterring both foreign and domestic investment in the nation.²¹⁶

4.2.5 Impact on Infrastructure

Roads, trains, and water systems are some of the few infrastructure projects severely harmed by illegal mining.²¹⁷ Shafts and tunnels collapsing are a common result of illegal miners using improvised tunnels and equipment to access mines that are either closed down or still in use.²¹⁸ The collapse have the potential to spread beyond the mining area, harming nearby infrastructure and raising upkeep costs for mining firms and local governments.

In addition, illegal miners frequently steal water and energy from authorized mining operations, further taxing public utilities.²¹⁹ For instance, theft of electricity from the national grid drives up the price of electricity for lawful users. This has proven to fuel up the load shedding crisis, which in turn has a detrimental impact on the economy as a whole.²²⁰

²¹⁴ Karolia-Hussain F & Fourie E, 'The Relevance and Impact of South African Labour Law in the Mining Sector: a Fourth Industrial Revolution perspective' (2021) *SciELO SA*.

²¹⁵ Ragolane M, 'Challenges Faced by the government in addressing organised crime in South Africa: a Policy Framework Analysis' (2024) *Research Gate*.

²¹⁶Yeboah A, Samuel, 'Digging Deeper: The Impact of Illegal Mining on Economic Growth and Development in Ghana' (2023) *Munich Personal RePEc Archive*.

²¹⁷ Laurance W, 'Reducing the Global Environmental Impacts of Rapid Infrastructure Expansion' (2015) *Science Direct*.

²¹⁸ De Greef K, 'The Dystopian Underworld of South Africa's Illegal Gold Mines' (2023) *The New Yorker*.

²¹⁹ Kazapoe RW, 'Relationship Between Small-scale Gold Mining Activities and Water Use in Ghana: A Review of Policy Documents Aimed at Protecting Water Bodies in Mining Communities' (2023) *Science Direct*.

²²⁰ Mlambo V, 'Living in the Dark: Load Shedding and South Africa's Quest for Inclusive Development' (2023) *Research Gate*.

4.2.6 Impact on Foreign Investment

Foreign investment has traditionally been drawn to South Africa's mining industry, but the growth of illegal mining has put prospective investors on the defensive. Foreign businesses find the illegal mining industry less appealing due to the hazards involved, which include violence, infrastructure damage, and theft of minerals.²²¹ Thus, they fear assets might be targeted or that their operations might be affected, and investors are more likely to steer clear of areas where illegal mining is common.

Furthermore, the unpredictability brought on by illegal mining adds to the notion that South Africa is an unsafe place to invest.²²² Investors have access to various States with more secure and stable mining environments on the international market. South Africa runs the risk of losing out on major foreign direct investment as illegal mining grows.²²³ This kind of investment is essential for infrastructure development, job creation, and economic growth.

4.3 Impact of Illegal Mining Agricultural Relations

Illegal mining jeopardizes the mining industry's sustainability and has an impact on the environment as a whole.²²⁴ This is evident in that illegal miners frequently employ incredibly harmful refining techniques and materials, endangering their health in the process.²²⁵ While the damaged pipelines contaminate the environment, this study submits that illegal water usage and wastage also occurs during illegal mining operations.²²⁶ The processes used during illegal mining operations creates a great risk for mining sustainability. It has also been noted that sinkholes are created due to water pipeline spiking.²²⁷ Furthermore, underground fires and explosions that lead to mercury contamination of environment have since been noted and has resulted from

²²¹Handelsman SD, 'Human Rights in the Minerals Industry' (2002) *Mining, Minerals and Sustainable Development*.

²²²Matshusa K, 'Exploring Strategies for Management of Disasters Associated with Illegal Gold Mining in Abandoned Mines: A Case Study of Ekurhuleni Metropolitan Municipality' (2022) *National Library of Medicine*.

²²³ Ngozo T, 'Illicit Financial Flows in the Mining Industry in South Africa' (2014) *Oxfam South Africa*.

²²⁴ Augustine Calvin, 'Illegal Mining' (2024) <
<https://illegal.google.com/url?sa=t&source=web&rct=j&opi=89978449&url=https://illegal.gov.za/blog/illegal-mining%23:~:text=3DThe%2520cost%2520of%2520illegal%2520mining,and%2520health%2520of%2520surrounding%2520communities.&ved=2ahUKewi5tbGA9aiHAX48rsIHTVeCtoQFnoECA8QBQ&usq=AOvVaw1BU3PrKrsTYAnx81qhP0Ge> > accessed 15 July 2024.

²²⁵ Van Vuuren RJ, 'Illegal Mining and Power Blackouts – The Last Nails in SA's coffin?' (2023) *Mining Review Africa*.

²²⁶ Ashton P, 'An Overview of the Impact of Mining and Mineral Processing Operating on Water Resources and Water Quality in the Zambezi, Limpopo and Olifants' (2001) *Mining, Minerals and Sustainable Development (Southern Africa)*.

²²⁷ Ngcobo TA, 'The Risks Associated With Mines in Dolomitic Compartments' (2006) *Southern Africa Institute of Mining and Metallurgy*.

illegal mining operations.²²⁸ Furthermore, this results in the risks involved in excavating and reopening sealed and restored shafts.²²⁹

Illegal miners extract gold using dangerous refining techniques and substances like mercury. These extraction techniques unintentionally cause river siltation, water body pollution, cyanide and mercury pollution, biodiversity loss, and river diversion.²³⁰ In addition, the illegal mining activities include disturbing excavation, which causes soil erosion around pipes. This increases the likelihood of sinkholes and seriously compromises the stability of our infrastructure as well as the safety requirements for repairs.²³¹

The ecology may suffer grave and long-lasting effects from illegal mining. Its effects are wide-ranging, affecting many facets of ecosystems, biodiversity, and local communities' well-being. Illegal mining syndicates take advantage of the surge in precious metal prices without considering the substantial environmental damage that their operations cause.²³²

Illegal mining causes serious risks to air quality, fragile ecosystems, surface and groundwater resources, and human life and health in addition to the immediate risks. The air, the ground, microorganisms, plant and animal life can all be impacted by these unexplained operations. The Federation for a Sustainable Environment received an invitation to collaborate with the Hawks on the 16th of May 2023. This collaboration was regarding an operation to combat illicit mining activities in Zuurbekom, a residential and agricultural area on the West Rand of Gauteng.²³³ The Hawks' operation's results provided insight into the risks and hazards connected to illicit mining. The key environmental impacts of illegal mining include, but are not limited to the following:

4.3.1 Deforestation and habitat destruction

Since accessing mineral reserves through illegal mining frequently necessitates removing huge tracts of forest. Ecosystems are disrupted and biodiversity is lost as a result of this destruction.²³⁴ Plant and animal species may become extinct or be displaced as a result of habitat loss.

4.3.2 Water Pollution

²²⁸ Munnik V, 'The Social and Environmental Consequences of Coal Mining in South Africa' (2010) *Environmental Monitoring Group*.

²²⁹ Elize S, 'Illegal Mining' (2016) *Integrated Annual Review*.

²³⁰ Mkhize MC 'New Interventions and Sustainable Solutions: Reappraising Illegal Artisanal Mining in South Africa' (2017) *SA Crime Quarterly*.

²³¹ Gerard P, 'Illegal Mining: the Problem is Bigger than you Think' (2024) *Mining Review Africa*.

²³² Geldenhuys K, 'Illegal Mining: A Danger for People and the Environment' (2024) *Sabinet*.

²³³ Liefferink M, 'Illegal mining can have devastating impact on ecosystems' (2023) *IOL*.

²³⁴ Shanmukha NT, 'Biodiversity Loss Due to Mining Activities' (2024) *Research Gate*.

Other serious environmental problem brought on by illegal mining is water pollution. Illegal miners usually employ dangerous chemicals like cyanide and mercury to separate valuable commodities like gold from ore in their quest to obtain minerals.²³⁵ These substances frequently end up in underground water supplies, rivers, and streams, poisoning the water that both people and wildlife depend on.

Marine life, amphibians and other animals that depend on clean water to exist may perish in aquatic habitats as a result of contaminated water sources. Additionally, contaminated water can harm entire river systems and the communities that depend on them for sanitation, agriculture and drinking water.²³⁶ This can happen even outside of the immediate mining sites. Human health is seriously at risk from the high concentrations of harmful compounds in these water sources, including skin disorders, chronic illnesses and poisoning.²³⁷

4.3.4 Air Pollution

Large volumes of rock must be crushed and processed throughout the mining process, which produces dust that the wind might carry to nearby locations.²³⁸ When inhaled by humans or animals, the dust's hazardous particles, such as silica and heavy metals can impair respiratory systems.²³⁹ Mercury vapor is especially hazardous because it may spread over great distances and land in bodies of water, where it turns into methylmercury, an extremely poisonous substance that builds up in fish and other aquatic life.²⁴⁰ This study submits that the air quality is reduced by illegal mining, as such, immediate government intervention is required to combat this issue.

4.3.5 Land Degradation and Soil Erosion

Land degradation is one of the most direct effects of unlawful mining on the ecosystem. Illegal miners frequently work in uncontrolled or abandoned mining regions, taking little consideration for the harm they inflict to the environment while they collect minerals.²⁴¹ Particularly when it comes to open-pit mining, which involves clearing enormous tracts of land and without trying to replenish the soil, the result is

²³⁵Bugmann A, 'Understanding the Persistence of Mercury Use Among Artisanal Gold Miners in Burkina Faso' (2022) *Science Direct*.

²³⁶ Wear SL, 'Sewage Pollution, Declining Ecosystem Health, and Cross-sector Collaboration' (2021) *Science Direct*.

²³⁷ Shetty SS, 'Environmental Pollutants and their Effects on Human Health' (2023) *Science Direct*.

²³⁸Agboola O, 'A Review on the Impact of Mining Operation: Monitoring, Assessment and Management' (2020) *Science Direct*.

²³⁹Mitra S, 'Impact of Heavy Metals on the Environment and Human Health: Novel Therapeutic Insights to Counter the Toxicity' (2022) *Science Direct*.

²⁴⁰ Rosenfeld P & Feng L, 'Mercury, BPA, and Pesticides in Food' (2011) *Science Direct*.

²⁴¹ Ndlazi S, 'Alone in the Dark': How the Current Mining and Minerals Legal Regime Continues to Fail Artisanal and Small-scale Miners in South Africa' (2021) *SciELOSA*.

severe landscape scarring.²⁴² This causes the soil structure to become unstable and disturbs the natural vegetation, increasing the likelihood of erosion on the area.

Furthermore, illegal mining leads to soil erosion, which further lowers the fertility of the ground and has an adverse effect on natural habitats and agriculture. In some places, long-term desertification results from the lack of topsoil, which hinders vegetation's ability of regrowth.²⁴³ This damages the local ecosystems and interferes with livelihoods.

4.3.6 Biodiversity Loss

A substantial loss of biodiversity results from the combined consequences of illegal mining-related air pollution, water pollution, deforestation, and land degradation.²⁴⁴ On the other hand, unlawful mining endangers these species by contaminating their water sources, ruining their habitats, and destroying the food chain.

The loss of biodiversity affects both human populations and ecosystems in profound ways.²⁴⁵ Essential services like clean water and air, agricultural pollination, and climate management are provided by healthy ecosystems. These services are jeopardized when biodiversity is diminished, which lowers the standard of living for those who depend on them. Furthermore, the extinction of a species can upset food chains and cause additional ecological imbalances, which increases the susceptibility of ecosystems to environmental stresses like climate change.²⁴⁶

4.3.7 Long-term Environmental Damage

The long-term environmental harm that illegal mining produces is one of the most worrying aspects of the practice. Illegal miners frequently abandon sites after extracting the rich minerals, in contrast to regulated mining enterprises, which are obligated to restore mining sites after closure.²⁴⁷ There have been no attempts to repair the ecology, and these deserted locations are left in a degraded state. Illegal mining can leave behind irreversible environmental effects in certain circumstances, and repairs may take decades or even centuries.²⁴⁸

²⁴²Carrick P, 'Restoring Degraded Landscapes in Lowland Namaqualand: Lessons from the Mining Experience and from Regional Ecological Dynamics' (2007) *Science Direct*.

²⁴³ G. Wang & G.S. Jenkins, 'Deserts and Desertification' (2003). *Science Direct*.

²⁴⁴ Obeng EA, 'Impact of Illegal Mining Activities on Forest Ecosystem Services: Local Communities' Attitudes and Willingness to Participate in Restoration Activities in Ghana' (2019) *Science Direct*.

²⁴⁵ Elisha OA, 'The Loss of Biodiversity and Ecosystems: A Threat to the Functioning of our Planet, Economy and Human Society' (2020) *Research Gate*.

²⁴⁶ Ramona A, 'Climate Change and Emerging Food Safety Issues: A Review' (2021) *Journal of Food Protection*.

²⁴⁷ Adam E, 'A Critical Review of the Impact of South Africa's Mine Closure Policy and the Winding-up Process of Mining Companies' (2021) *Research Gate*.

²⁴⁸Widana A, 'Environmental Impacts of the Mining Industry: A Literature Review' (2019) *Research Gate*.

4. Social Impacts

Illegal mining destroys the social fabric of mining communities and causes fear, coercion, human rights abuses, prostitution, and substance abuse.²⁴⁹ Several mining incidents in recent years related to illegal mining are, *inter alia*, risks of interruption of electricity supply through theft of copper cables to underground workings.²⁵⁰ Also poses threats to employees, booby traps, tampering with mine equipment.²⁵¹ Illegal mining and illegal migration are intimately connected.²⁵² It can also be submitted that local communities do not report these illegal miners either out of fear or financial benefits. Local communities have established secondary informal businesses supplying food, liquor, and sex workers to illegal miners underground at exorbitant prices.²⁵³ Furthermore, there is an inherent risk that is borne by local communities (especially children) and livestock. This is where perimeter fences are broken by illegal miners to gain access to old mine shafts and tailings dumps. Resultantly, these illegal activities have a negative impact on the safety and health of surrounding communities.

Illegal mining is often seen as a way to escape poverty. In South Africa, the unemployment rate is high, and many people are struggling to make ends meet. As such, illegal mining can offer a quicker way to make money, even though it is dangerous and illegal.²⁵⁴

Illegal mining overlooks the laws and regulations put in place to protect the environment and people. It puts nearby communities at risk, as well as unauthorized miners and authorized mining operations. Thirty-one illegal miners from Lesotho perished tragically in May 2023 when a methane gas explosion occurred in a ventilation shaft at the shuttered Virginia mine in the Free State.²⁵⁵ The extremely explosive greenhouse gas methane, which is frequently found in underground mines, seriously jeopardizes the health and safety of mineworkers.²⁵⁶

Another example is the incident of three miners who worked at the Lily Mine in Barberton, Solomon Nyirenda, Yvonne Mnisi, and Pretty Nkambule who lost their lives

²⁴⁹ Elize S, 'Illegal Mining' (2016) *Integrated Annual Review*.

²⁵⁰ Jenni Irish-Qhobosheane, 'South Africa's Illicit Copper Economy' (2023). *Global Initiative Against Transitional Organized Crime*.

²⁵¹ Elize S, 'Illegal Mining' (2016) *Integrated Annual Review*.

²⁵² Mputing A, 'National Assembly Debates Impacts of Illegal Mining in South Africa Participate in Parliament' (2022) < <https://illegal.parliament.gov.za/news/national-assembly-debates-impact-illegal-mining-south-africa> > accessed 15 July 2024.

²⁵³ Dyan CI, 'South Africa's Stolen Gold: A Legal Analysis of the Impact of Illegal Mining on South Africa's National security' [Dissertation submitted at the University of Cape Town, 2022].

²⁵⁴ Rondganger L, 'Boksburg gas leak tragedy: The deadly dangers of illegal mining in South Africa' (2023) *IOL*.

²⁵⁵ Pijoo I, '31 Suspected Illegal Miners Believed to be Dead at Welkom mine' (2023) *News 24*.

²⁵⁶ Geldenhuys K, 'Illegal mining :A Danger for People and the Environment' (2024) *Sabinet*.

after a part of the mine collapsed on February 2016.²⁵⁷ Magistrate Annemarie van der Merwe presented her findings in October 2023, stating that the main reason for the collapse of the crown pillar was illicit mining inside of it.²⁵⁸ Furthermore, according to a July 2023 report, a suspected nitrous oxide leak from a cylinder in Boksburg's Angelo informal settlement claimed the life of seventeen people, three of whom were children.²⁵⁹

4.5 Legal Impacts of Illegal Mining

The legal and political systems in South Africa are also challenged by illegal mining. In many mining areas, the absence of clear regulations and enforcement allows unlawful operations to thrive.²⁶⁰ Although the government has made an effort to stop illegal mining, these efforts are hampered by corruption in law enforcement and frequently uneven enforcement. International crime syndicates' involvement in the illegal mining sector also makes the job of law enforcement more difficult and fuels political unrest.²⁶¹

Additionally, since the formal mining sector contributes significantly to South Africa's economy, illegal mining damages it. Illegal mineral mining and sales make lawful companies less competitive, which results in job losses and a decline in investment in the industry.²⁶² Consequently, this impacts the wider economy and diminishes the government's capacity to adequately oversee and control the mining sector solutions that address the root causes of illegal mining.

4.5.1 Strain on the Criminal Justice System

Illegal mining significantly impacts South Africa's criminal justice system. This is because authorities must allocate considerable resources to investigating and prosecuting illegal miners. These activities often involve violent clashes between miners, law enforcement, and private security, leading to increased crime rates in mining areas.²⁶³ Furthermore, prosecutions are challenging due to the involvement of organized crime syndicates that provide protection and financing to illegal miners. As a result, South African Police Service (SAPS) and the judiciary are frequently overwhelmed by the complexity of these operations, especially as illegal miners are

²⁵⁷ News Room, 'Government Commemorates Four Years of the Lily Mine Incident' (2020) < <https://www.dmre.gov.za/news-room/post/1842/government-commemorates-four-years-of-the-lily-mine-incident> > accessed 30 September 2024.

²⁵⁸ *Van Der Merwe v S* (BA10/2022) [2022] ZAMPMHC 9; 2023 (1) SACR 94 (ML) (29 July 2022).

²⁵⁹ McCain N and Seleka N, 'Three Children Among 16 People Killed in Boksburg Gas Leak' (2023) *News24*.

²⁶⁰ Ofosu G, 'Ban Mining, Ban Dining? Re(examining) the Policy and Practice of 'Militarised Conservationism' on ASM Operations' (2024) *The Extractive Industries and Society*.

²⁶¹ Bueger C, 'Blue Crime: Conceptualising Transnational Organised Crime at Sea' (2020). *Marine Policy*.

²⁶² Samuel Y, 'Unearthing the Impacts: Illegal Mining's Toll on Formal Employment and Job Creation' (2023) *Munich Personal RePEc Archive*.

²⁶³ Brugger F, 'Salafist Violence and Artisanal Mining: Evidence from Burkina Faso' (2023) *Science Direct*.

typically not South African nationals, complicating legal proceedings and deportations.²⁶⁴

4.5.2 Violation of Mining Laws

South Africa's legal framework for mining is extensive as it is primarily governed by the MPRDA.²⁶⁵ The Act requires individuals or companies to obtain licenses before engaging in any mining activities²⁶⁶. However, illegal mining violates this provision of the MPRDA and other relevant legislation, including environmental laws such as the NEMA²⁶⁷. As a result, the government faces challenges in enforcing these laws, particularly in areas where the regulatory authorities lack the required resources or face corruption.

4.5.3 Human Rights Violations

Illegal miners often operate under dangerous conditions without proper safety measures, violating basic human rights. Accidents in illegal mines frequently result in fatalities due to collapsed shafts, underground explosions, and exposure to hazardous substances.²⁶⁸ These incidents expose the state's failure to protect individuals involved in mining activities, whether legal or illegal.²⁶⁹ Moreover, many illegal miners are exploited by syndicates, forced to work for minimal pay under conditions tantamount to modern slavery. As a result, the South Africa's legal system is frequently called upon to address these violations, but prosecutions and protections are hindered by the miners' fear of reprisal from syndicates.²⁷⁰

4.5.4 Environmental Degradation and Legal Accountability

Illegal mining causes significant environmental damage, including water pollution, soil erosion, and destruction of the biodiversity. These activities violate various environmental regulations, but the state struggles to hold perpetrators accountable due to the clandestine nature of illegal mining.²⁷¹ This indicates that the enforcement of environmental laws is weak, particularly in remote areas where illegal mining is

²⁶⁴Muntingh L and Dereymaeker M, 'Understanding Impunity in the South African Law Enforcement Agencies' (2013) *Dullah Omar Institute*.

²⁶⁵ MPRDA.

²⁶⁶ Section 9 of MPRDA.

²⁶⁷ NEMA.

²⁶⁸Bonsu J, 'A Systemic Study of Mining Accident Causality: An Analysis of 91 Mining Accidents from a Platinum Mine in South Africa' (2017) *SciELO SA*.

²⁶⁹Ndlazi S, "'Alone in the Dark": How the Current Mining and Minerals Legal Regime Continues to Fail Artisanal and Small-scale Miners in South Africa' (2021) *SciELO SA*.

²⁷⁰February J & Mirzoyev S, 'Commissions, Corruption and State Capture: Charting the Way Forward for South Africa' (2024) *African perspectives Global insights*.

²⁷¹ Calvin Augustine, 'Illegal Mining' (2024). < <https://www.gov.za/blog/illegal-mining> > accessed 01 October 2024.

most prevalent.²⁷² Furthermore, the lack of accountability does not only damage the ecosystems but also places an additional legal burden on companies that are operating legally. This is because mine companies are often blamed unfairly for environmental degradation caused by illegal miners.

4.6 Political Impacts of Illegal Mining

4.6.1 Erosion of State Authority

The widespread presence of illegal mining in South Africa undermines the government's authority, particularly in mining regions where law enforcement is weak.²⁷³ Illegal mining operations are often controlled by well-organized criminal syndicates, some of which have ties to corrupt officials. As a result, this erodes public trust in the state's ability to govern effectively. Furthermore, illegal miners operate with impunity in certain areas, thus, citizens lose confidence in the government's ability to regulate the economy and protect its resources.²⁷⁴ This loss of confidence in the government can lead to political instability, especially in areas where the state is perceived as being incapable of controlling its resources or enforcing the law.

4.6.2 Corruption and Governance Issues

Illegal mining fosters corruption within local and national government, especially within regulatory bodies responsible for mining licenses and environmental enforcement.²⁷⁵ Bribery and illicit deals between illegal miners, syndicates, and corrupt officials allows illegal mining operations to operate smoothly. The resulting corruption undermines governance and weakens institutions meant to uphold South African law.²⁷⁶ Additionally, corruption facilitates illegal cross-border trading of minerals, depriving the country of revenue. This threatens political stability and further diminishes South Africa's global reputation as a country governed by the rule of law.

4.6.7 Political Tension and Social Unrest

Illegal mining is a source of political tension, particularly in communities that depend on mining for their livelihoods. The presence of illegal miners often leads to conflicts between local communities and illegal miners, with violence and protests becoming common.²⁷⁷ These conflicts are exacerbated by socio-economic inequalities,

²⁷²Espin J, 'Environmental Crimes in Extractive Activities: Explanations for Low Enforcement Effectiveness in the Case of Illegal Gold Mining in Madre de Dios, Peru' (2021) *Science Direct*.

²⁷³Budhram T, 'Corruption in South Africa: The Demise of a Nation? New and Improved Strategies to Combat Corruption' (2018) *South African Journal of Criminal Justice*.

²⁷⁴ N Mokoale, 'Strengthening South African Anti-Corruption Institutions to Safeguarding Democracy: Self Serving Governance System' [Dissertation submitted at the University of Limpopo, 2020].

²⁷⁵Mlambo V, 'Governance and Corruption in South Africa's Public Sector: The Road Ahead' (2023) *Research Gate*.

²⁷⁶Matshela K, 'Impediments to the Prevention of Corruption in the Department of Home Affairs: The Case of the Counter Corruption Unit' (2023) *Sabinet*.

²⁷⁷Bezzola S, 'CSR and Local Conflicts in African Mining Communities' (2022) *Science Direct*.

unemployment, and poverty, which create a breeding ground for illegal mining activities.²⁷⁸ These opposing viewpoints can lead to political polarization and further destabilization. Consequently, this will lead to civil war in the country.

4.7 Conclusion

Illegal mining in South Africa creates major legal and political concerns. It undermines the rule of law, strains the criminal justice system and contributes to environmental degradation. Politically, it fosters corruption, weakens governance, and causes tensions in mining communities, leading to social unrest. While the government has made efforts to address the problem, including law enforcement interventions and potential policy reforms, the complexity of illegal mining requires a multi-faceted approach that addresses both the immediate criminal elements and the underlying socio-economic drivers of the problem.

Chapter 5: Conclusion and Recommendations

5.1 Conclusion

This study submits on and acknowledges the reactive measures that have been employed by the government in combating illegal mining in the country. This is in light of the effectiveness and successful implementation of these measures. These governmental measures are, *inter alia*, the deployment of the South African National Defense Force (SANDF) in the year 2023. This deployment has proven to be successful in light of the arrests of illegal miners that have been made since such deployment was made by the president of the Republic of South Africa. In addition to this measure, this study submits other measures that can be employed by the government of the Republic, in collaboration with the mining right holders, employees of mines as well as the mine communities. This collaboration gives effect to the system of democracy, because the government would be working together with the relevant stakeholder. Thus, giving effect to the Constitution.²⁷⁹

The reality is that South African law does not expressly address illegal mining. This is in light of the MPRDA²⁸⁰ not providing a clear definition of what constitutes illegal mining.

²⁷⁸Banchirigah SM, 'How Have Reforms Fuelled the Expansion of Artisanal Mining? Evidence from Sub-Saharan Africa' (2006) *Science Direct*.

²⁷⁹ Section 57(1)(b) of the Constitution.

²⁸⁰ MPRDA.

Thus, there currently exist no elements of the crime of illegal mining within the bounds of the South African legislative framework. Hence, this legislative gap makes the effort of combating illegal mining more difficult.²⁸¹ This is because those who are arrested for illegal mining related offences cannot face charges of illegal mining, because such charge does not expressly exist within the South African mining legislation being the MPRDA.²⁸²

Ultimately, the judiciary should also partake in the compulsion of legislation in order to curb illegal mining. This compulsion can be done through the effective imposition of harsh penalties to mining right holders who fail to comply with the law. This is particularly with reference to the compulsion of the rehabilitation provision post mining.²⁸³ This is because, despite illegal miners attacking operational mines, they are primarily heavily invested in unused and closed mines. Thus, the judiciary ought to impose severe punishment on mining right holders who fail to adequately comply with the rehabilitation provision. This is to deter mining right holders from facilitating illegal mining, by failing to properly rehabilitate the mines post operations. Furthermore, mining right holders ought to take accountability by properly sealing off the mining shaft post operation, to limit the chances of illegal mining.

5.2 Recommendations

Illegal miners often escape punishment for the crimes they commit because they are detained and charged with trespassing and unlawful possession of minerals. Thus, in light of this submission, this study recommends for the amendment of the MPRDA.²⁸⁴ This amendment relates to the insertion of a provision that will provide for an express definition of what constitutes the offence of illegal mining, as well as the punishment attached to the commission of the offence thereto.

Alternatively, another measure to curb illegal mining is the enforcement of stricter laws and regulations. Governments must strengthen mining laws, ensuring that mining licenses are only issued following environmental impact assessments and strict adherence to sustainability criteria. To combat illegal mining, governments can increase the penalties for environmental damage and illegal operations, making it a less attractive option. Furthermore, enhanced surveillance, combined with increased

²⁸¹ James Wellsted, 'Combating Illegal Mining' (2022). <
>
<https://reports.sibanyestillwater.com/2022/download/ssw-FS22-combatting-illegal-mining.pdf>

Accessed 12 October 2024.

²⁸² MPRDA.

²⁸³ Section 38(1)(d) of MPRDA.

²⁸⁴ *Ibid.*

coordination between environmental protection agencies, law enforcement, and the judiciary, is essential.²⁸⁵

Given the current state of unemployment and the lack of effective mine closure and rehabilitation measures, it is fairly possible that illegal miners would persist in their efforts to extract minerals illegally. This study further recommends that legalizing and regulating artisanal mining, which would enable illegal miners to apply for permits to conduct their operations would be a solution to the problem of illegal mining. This is the method used in many African nations, notably Zimbabwe to what is known as artisanal mining.²⁸⁶ It may further be submitted that regulating artisanal mining is a better idea than ineffectively trying to outlaw the activity, especially as a way to possibly weaken the control that organized gangs have on the mining industry.

Illegal mining often leaves behind significant environmental damage, including open pits, contaminated water bodies, and degraded land. To restore these areas, governments and environmental organizations must implement rehabilitation programs. These programs should include reforestation, water treatment to remove pollutants like mercury and cyanide, and land reclamation efforts to prevent erosion.²⁸⁷ Environmental bonds or funds paid by legal mining companies can be used to finance these rehabilitation projects.²⁸⁸ This not only restores ecosystems but also deters illegal miners from exploiting vulnerable areas.

Technological advancements can play a crucial role in reducing illegal mining activities. Remote sensing technologies, such as satellite monitoring, can help detect illegal mining operations early, allowing authorities to intervene before severe environmental damage occurs.²⁸⁹ Additionally, blockchain technology could be applied to trace the supply chain of minerals, ensuring that only legally sourced materials enter the market. Using drones for aerial surveillance of vulnerable areas and sensors to monitor water and air quality around mining sites can also help authorities control illegal mining more effectively.²⁹⁰

Furthermore, communities living near illegal mining operations often participate in illegal mining activities due to a lack of alternative economic opportunities.

²⁸⁵Zulu E, 'Challenges and Advocated Solutions for Environmental Protection Legislation for Building Infrastructure Projects in Developing Countries: Evidence from Zambia' (2022). *Science Direct*.

²⁸⁶ Richard Cramer, 'Illegal mining: the Problem and Possible Solutions' [Dissertation submitted at the University of Cape Town, 2016].

²⁸⁷Hu Y, 'Influence of Mining and Vegetation Restoration on Soil Properties in the Eastern Margin of the Qinghai-Tibet Plateau' (2020). *National Library of Medicine*.

²⁸⁸ Tambo O, 'Financial Provisioning for Rehabilitation and Mine Closure: A study of South African platinum and coal mining companies' (2018) *Intellidex*.

²⁸⁹Koruyan K, 'Remote Sensing in Management of Mining Land and Proximate Habitat' (2012). *SciELO SA*.

²⁹⁰ Loots M, Grobbelaar S, and van der Lingen E. 'A Review of Remote-sensing Unmanned Aerial Vehicles in the Mining Industry' (2022) *Journal of the Southern African Institute of Mining and Metallurgy*.

Consequently, providing these communities with sustainable livelihood options is a crucial measure to curb illegal mining. Governments and non-governmental organizations can work to introduce alternative income-generating activities such as agriculture, eco-tourism or small-scale legal mining with proper regulations. Additionally, the study recommends the spreading of awareness on illegal mining and its impact on the environment. This may foster community-led conservation efforts and reduce participation in these activities.

Investing more money in monitoring systems and other security measures is necessary to combat illegal mining. Although these expenses have the potential to negatively affect the mine company's short-term financial performance, they do lay the groundwork for its long-term success, security, and asset preservation.²⁹¹ Thus, this study further submits that any extra expenditures that mining right holders may accrue to combat illegal mining is worth it, in proportion to the vast wealth that will accrue to them during the operation of the mine.

Furthermore, combating illegal mining on a global scale requires cooperation between countries, particularly those involved in the mining supply chain. Exporting and importing countries must collaborate to establish protocols that trace the origin of minerals. This will help prevent illegally mined resources from entering legitimate markets. Governments and industry groups can create certification schemes to ensure that only legally sourced minerals can be traded in global markets.²⁹²

A good example is the Kimberley Process, which aims to eliminate the trade in conflict diamonds.²⁹³ It provides a model for similar frameworks in the gold, cobalt, and other mineral markets. Resultantly, strengthening these systems would help reduce illegal mining by cutting off its access to international buyers, thereby weakening its economic base.

Financial penalties can be an effective deterrent to illegal mining operations. Governments should impose heavy fines on companies or individuals caught engaging in illegal mining, with higher penalties for repeat offenders. These penalties should extend beyond miners to include traders and middlemen who deal in illegally sourced minerals, as they contribute to sustaining the illegal mining economy.²⁹⁴

²⁹¹ Pan African Resources, 'Par's Innovative Approach Against Illegal Mining' (2024) < <https://www.panafricanresources.com/illegal-mining/#:~:text=Tackling%20illegal%20mining%20activities%20requires,and%20protection%20of%20its%20assets.> > accessed 13 October 2024.

²⁹²Borsky S & Leiter AM, 'International Trade in Rough Diamonds and the Kimberley Process Certification Scheme' (2022) *ScienceDirect*.

²⁹³ *Ibid.*

²⁹⁴Adu-Baffour F, Daum T & Birner T, 'Governance Challenges of Small-scale Gold Mining in Ghana: Insights from a Process Net-map Study' (2021) *Science Direct*.

On the other hand, legal mining operations can be incentivized by reducing taxes or offering grants for sustainable practices. Government programs that reward environmentally friendly mining or investment in local infrastructure can encourage legal operators to set a positive example. Tax breaks for companies that invest in environmentally sound equipment, mine reclamation, or community development projects would also promote legal mining.²⁹⁵

Many illegal miners operate outside the formal economy because of unfair market pricing structures in the legal mining industry. To curb illegal mining, governments and international bodies can implement fair trade systems for minerals. This can be implemented by ensuring that artisanal miners receive a fair price for their minerals, particularly for precious metals like gold, the incentives for participating in illegal operations diminish.²⁹⁶

Additionally, providing local miners with better market access, both nationally and internationally can encourage them to operate legally. Fair trade certifications and transparent pricing mechanisms would ensure that miners receive equitable compensation for their work, increasing their willingness to comply with regulations.

This study further submits that addressing illegal mining requires a multi-faceted approach that includes strong enforcement of laws, environmental rehabilitation, community involvement, and technological innovation. With the right mix of these strategies, the environmental impacts of illegal mining can be minimized, contributing to a more sustainable mining sector. Effective collaboration between governments, environmental organizations, and local communities is key to ensuring these measures have a lasting impact. Ultimately, the implementation of these measures may diminish the economic appeal of illegal mining and foster a more sustainable and regulated mining sector.

²⁹⁵Thambi M, 'Mining Companies Attain Relief Through Deductions on Infrastructure Relating to Social and Labour Plans: a Case of the Cart Before the Horse?' (2019) *SciELO SA*.

²⁹⁶Laing T & Pinto AN, 'Artisanal and Small-scale Mining and the Low-carbon Transition: Challenges and Opportunities' (2023) *Science Direct*.

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