MINERAL LAW
IN AFRICA

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THE OUTLOOK ON THE EXTRACTIVES UPSTREAM INVESTMENT IN SOUTH AFRICA:
THE ENVIRONMENTAL GOVERNANCE ISSUE

by

Nondumiso Nokukhanya Msezane (NTMNOK003)

Submitted to **The University of Cape Town** in fulfilment of the requirements for the degree MPhil in the Law of Mineral and Petroleum Extraction and Use Faculty of Law, University of Cape Town

Date of Submission: January 2023

Supervisor: Professor Hanri Mostert
Co-supervisor: Dr Richard Henry Cramer
Co-supervisor: Dr Bernard Kengni
Department of Private Law, University of Cape Town

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ACKNOWLEDGEMENTS AND DEDICATION

My sincere appreciation to Prof Hanri Mostert, Dr Richard Cramer and Dr Bernard Kengni for their guidance and patience with me throughout this journey.

Dear God of my ancestors, thank you. I am grateful for the foundation laid by those who came before me. To my family, you are amazing.

This paper was written under the auspices of the DST/NRF SARChI Research Chair: Mineral Law in Africa. The views and opinions expressed here are the author's own and should not be attributed to the DST/NRF SARChI Research Chair: Mineral Law in Africa or the University of Cape Town.

ABSTRACT

Though endowed with natural resources, South Africa's upstream investment continues to deteriorate. This is partly due to the depleting reserves and the country's policy perception, which ranks South Africa as a high-risk upstream investment destination. This study focused on the country's policy perception zooming in on the environmental governance of the extractives sector.

Environmental governance in South Africa was fragmented. The fragmentation occurred in policies, institutions and, ultimately, governance. The consequences of this fragmentation were regulatory duplication and inconsistencies between the regulatory institutions, which manifested in delays and uncertainty, negatively impacting South Africa's competitiveness in investment. The industry's One Environmental System (OES) was effected to eradicate this fragmentation. However, this study demonstrates through case studies that the OES implementation was haphazard, creating uncertainty, amplifying the lack of cooperative governance and introducing compromised environmental management compliance through the competent authority for the industry environmental authorisations.

This study finds that policy design, implementation strategies, and environmental regulatory coordination are vital to a country's competitiveness. It argues that these elements will promote competitiveness and stimulate innovation to develop new pollution-saving technologies that offset compliance costs and improve environmental and economic performance leading to sustainable development. The study concludes with the solutions to South Africa's OES system by referring to the Organisation for Economic Co-operation and Development's (OECD) integrated environmental permitting guidelines.

Abbreviations	
FDI	Foreign Direct Investment
OES	One Environmental System
DMRE	Department of Mineral Resources and Energy
DFFE	Department of Forestry, Fisheries and Environment
DWS	Department of Water and Sanitation
HDSA	Historically Disadvantaged South Africans
OECD	Organisation for Economic Co-operation and Development
MPRDA	Mineral and Petroleum Resources Development Act
NEMA	National Environmental Management Act
NEM: WA	National Environmental Management Act: Waste Act
EMP	Environmental Management Plan
EMPr	Environmental Management Programme
EA	Environmental Authorisation
ERA	Environmental Risk Assessment
ER	Exploration Right
RoD	Record of Decision
EMRI	Environmental Mineral Resources Inspectors
EMI	Environmental Management Inspectors
CRR	Comment and Response Report
SCRR	Supplementary Comment and Response Report
PASA	Petroleum Agency of South Africa
REMDEC	Regional Mining Development and Environmental Committee
CEC	Coordination of the Environmental Committee
IPIC	Interdepartmental Project Implementation Committee
CER	Centre of Environmental Rights
LUPO	Land Use Planning Ordinance, 1985
FRP	Financial Provision Regulations, 2015
TCP	Technical Cooperation Permits
IPPC	Integrated Pollution Prevention and Control
EECCA	Eastern Europe, Caucasus, and Central Asia
BAT	Best Available Techniques
MoU	Memorandum of Understanding

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CHAPTER 1: INTRODUCTION

1 Introduction

The extractives industry forms a vital part of a country's economy.[1] Resource-rich countries benefit from foreign direct investment (FDI) through resource extraction.[2] FDI contributes to state revenue, infrastructure development, manufacturing, local economic stimulation, and skills transfer.[3] Therefore, resource-rich countries compete for FDI. Competition for FDI is amplified in developing countries where competitiveness depends on a favourable regulatory regime and resource endowment.[4]

Clear laws and associated administrative processes characterise a favourable regulatory framework for investment.[5] A good regulatory framework provides a predictable business environment.[6] Predictability is critical in the extractives sector because of its long-term nature.[7] Changes in the regulatory framework bring uncertainty that threatens the investment's ultimate recovery.[8] Accordingly, resource countries aim to provide investment protection through a stable and favourable regulatory system.[9]

A relationship exists between a country's attractiveness to investors and environmental regulations.[10] First, resource countries with stringent environmental regulations are perceived to deter investment because the increased costs related to environmental compliance may compromise the profitability of

[1] Onyekachi C 'Balancing the need for investment and environmental protection: A case study of The Gambia.' (LLM thesis University of Pretoria, 2021) 26.
[2] World Bank 'Digging beneath the Surface: An exploration of the Net Benefits of Mining in Southern Africa' (2019) 10 *World Bank.*
[3] Mbonambi N 'A critical analysis of the legal environment for mining in South Africa: Its implications on the inflow of foreign investment into the sector' (LLM thesis University of Pretoria, 2013) 9.
[4] Mausing H 'The effectiveness of the tenth schedule tax regime to attract and retain foreign investment: The current issues and uncertainties experienced within the tenth schedule tax regime and a comparison between the incentives provided by the tenth schedule and those provided by the Ghana oil and gas tax regime' (Master of Commerce thesis University of Cape Town, 2016) 10.
[5] Maake N 'Towards a one environmental system in the extractives industries in South Africa: A critical analysis of its implementation date, which may disturb its successful facilitation and exacerbate legal uncertainty in the industry' (LLM thesis University of Pretoria, 2018) 47.
[6] Wilkerson A 'Competition and Regulation in the Gold Industry: An American Perspective' (2010) William & Mary Law School Scholarship Repository Publications 15.
[7] Söderholm K et al. 'Environmental regulation and competitiveness in the mining industry: Permitting processes with special focus on Finland, Sweden and Russia' (2015) Resource Policy 43.
[8] Ibid.
[9] Tienhaara K 'Mineral Investment and the regulation of the environment in developing countries: lessons from Ghana' (2006) International Environmental Agreements: Law and Economics 6, page 373.
[10] Soderholm P, A Kristin Bergquist et al 'The political economy of industrial pollution control: environmental regulation in Swedish industry for five decades (2021) Journal of Environmental Planning and Management page 4.

the overall investment.[11] Therefore, developing countries create pollution havens with lax environmental laws to attract investors.[12] Secondly, uncertain environmental permitting decision timeframes also contribute to an investment decision, where countries without established licensing periods are less competitive because they impose project unpredictability.[13] The issue is worsened by legislative uncertainty, complex environmental regulation, and fragmented administration process.[14] Countries with an integrated environmental permitting system rank higher as investment destinations.[15]

Before the One Environmental System (OES) in South Africa, mining companies had to comply with three Acts when applying for a licence. First, the Mineral and Petroleum Resources Development Act, 28 of 2002 (MPRDA), required an Environmental Management Programme (EMPr).[16] Secondly, an Environmental Authorisation for a listed activity under the National Environmental Management Act, 107 of 1998 (NEMA) was needed.[17] Thirdly, a water licence would be required under the National Water Act 36 of 1998.[18] This fragmentation resulted in delayed regulatory decisions, duplication and inconsistencies leading to non-compliance with all three Acts.[19] Consequently, investors viewed South Africa as a high-risk mining destination with stringent environmental regulations associated with high compliance costs.[20] In 2014, the (OES) was effected to improve South Africa's competitiveness by streamlining the environmental governance for the extractives sector.[21]

[11] Dechezlepre`tre A and M Sato 'The impact of environmental regulations on competitiveness' (2017) page 184 The Review of Environmental Economics and Policy volume 11, number 2.
[12] Ibid.
[13] Wyatt, C., McCurdy, T. '2013 Ranking of Countries for Mining Investment: 'Where Not to Invest' (2013) in Söderholm K et al. 'Environmental regulation and competitiveness in the mining industry: Permitting processes with special focus on Finland, Sweden and Russia' (2015) Resource Policy 43.
[14] Ibid.
[15] Ibid.
[16] Section 16(4)(a) MPRDA.
[17] Department of Environmental Affairs and Tourism 'Listing of activities and competent authorities identified in terms of section 24 and 24D of the National Environmental Management Act, 1998' Government Notice No. R. 386 of 2006 listing 8,9
[18] The National Water Act of 1998 requires authorisation for water use outside of Schedule 1 of the Act.
[19] Department of Mineral Resources "One environmental system: One system, with many challenges" (2018) Portfolio Committee on Environmental Affairs Meeting slide 8.
[20] Ibid.
[21] Department of Mineral Resources, Environmental Affairs and Water Affairs "Government's One Environmental System Commences" (2014) in Government's One Environmental System commences | Department of Environmental Affairs (dffe.gov.za), accessed in January 2023.

2 Background and Context

The Fraser Institute Survey of Mining Companies ranks jurisdictions' competitiveness for investment.[22] The ranking is based on the country's mineral potential and the policy perception index.[23] The policy perception index is relevant to this study, which looks at the country's political stability, regulatory framework, and security of tenure.[24] In 2009, before the implementation of the OES, South Africa achieved a PPI score of 26 percent, ranking its policy perception at 61 out of 72 countries, putting it at the bottom 11 mining destinations.[25] Thus, South Africa was compromised compared to other developing countries. For example, Botswana achieved 68 percent in PPI, ranking 7 out of 72 countries.[26] Therefore, South Africa's competitiveness required attention.

In response to South Africa's negative policy perception, in 2010, the mining stakeholders[27] completed a declaration on the Strategy for Sustainable Growth and Meaningful Transformation of South Africa's Mining Industry.[28] The strategy's objective was to improve the country's competitiveness, encourage investment, and drive transformation.[29] The mining stakeholders identified that the negative perception of South Africa's regulatory framework impacted the competitiveness of FDI negatively.[30] In response to the regulatory framework, the stakeholders agreed to complete the following, (i) harmonise the extractives regulatory framework, (ii) consider a single authority for environmental regulations and (iii) promote cooperative and harmonised governance between the Department of Mineral Resources (DMR) and other governing bodies.[31]

To further address South Africa's competitiveness and align with the strategy, the Ministers of Mineral Resources (DMR), now Mineral Resources and Energy (DMRE) and Environmental Affairs (DEA), now Forestry, Fisheries and Environment (DFFE), agreed on the principle of an integrated environmental permitting system.[32] In 2012 the Director Generals of DMRE and DFFE recommended that the

[22] McMahon F and Cervantes M 'Survey of Mining Companies 2009/2010' (2010), https://www.fraserinstitute.org/sites/default/files/miningsurvey2009-2010.pdf last accessed on 30 March 2022.
[23] Ibid.
[24] Ibid.
[25] Ibid page 6.
[26] Ibid.
[27] The stakeholders involved were the Department of Mineral Resources, National Union of Mineworkers, South African Chamber of Mines, South African Mineral Development Association, Solidarity and UASA – The Union.
[28] South African Government 'Stakeholder's declaration on strategy for sustainable growth and meaningful transformation of South Africa's mining industry' (2010).
[29] Ibid Commitment 1.
[30] Ibid Commitment 6.
[31] Ibid.
[32] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) page 38.

Department of Water and Sanitation (DWS) be part of the agreement.[33] The One Environmental System (OES) came into effect on 8 December 2014.[34]

The OES aimed to harmonise and streamline the administration and environmental regulation of the extractives industry in line with the declaration.[35] As mentioned in the introduction of this chapter, mining companies had to comply with three Acts and different authorities, often leading to non-compliance. For example, an applicant for the right/permit would often proceed with the operations once the MPRDA EMPr is issued, neglecting to complete the NEMA EA.[36] The Department of Environment would sometimes be forced to halt projects because of non-compliance.[37] The latter created a challenging relationship between the two departments indicating a lack of cooperative governance.[38]

Under the OES, a single competent authority is responsible for issuing environmental management permits.[39] The Minister of Mineral Resources and Energy (Minister of Minerals) is the competent authority, and the Minister of Forestry, Fisheries and Environment (Minister of Environment) is the appeals authority.[40] Though the OES's objective was to simplify the administration of the environmental permitting process, the Minister of Minerals' new authority for granting EAs continues to be viewed as "a fox guarding the henhouse" due to conflicting mandates.[41] It is questionable whether the Minister of Minerals can promote green development while sacrificing extractive investment.[42] Meanwhile, the DFFE believes that environmental protection lies within its mandate, and therefore are most competent to carry out this mandate.[43] Accordingly, the cooperative governance between the two departments is compromised.

The introduction of the OES came with challenges, including unclear transitional arrangements and increased environmental costs.[44] First, the EMPR envisaged under the MPRDA is considered the same

[33] Ibid.
[34] Department of Mineral Resources, Environmental Affairs and Water Affairs 'Government's One Environmental System Commences' (2014) in Government's One Environmental System commences | Department of Environmental Affairs (dffe.gov.za), accessed in January 2023.
[35] South African Government (n 28) Commitment 1 and Commitment 6.
[36] Department of Mineral Resources 'One Environmental System: One system, with many challenges' (2018) page 8.
[37] *Mineral Sands Resources (Pty) Ltd v Magistrate for the District of Vredendal, Kroutz No and Others* (18701/16) [2017] ZAWCHC 25 (20 March 2017).
[38] Ibid.
[39] Section 50A(2)(b)(c) of NEMA.
[40] Ibid.
[41] Ashton G 'An example of the impacts of adopting the 'one environmental system' of mining governance: Some lessons in environmental governance from MRC's Tormin mine' in In Good Company: Conversations around Transparency and Accountability in South Africa's Extractives Sector (2017) 2nd Edition page 15 – 23.
[42] Ibid.
[43] Birch G 'National Environmental Management Laws Amendment Bill: Portfolio Committee on Water and Environmental Affairs (2012), The parliamentary monitoring group slide 8.
[44] Business Leadership South Africa in conjunction with Business Unit South Africa 'A review of regulatory challenges and policy uncertainty impeding investment and employment in South Africa' (2017) at 189-190.

as the EA under NEMA.[45] Secondly, the OES was viewed as holding back transformation. Emerging mining companies, especially the Historically Disadvantaged South Africans (HDSAs), are challenged by the increased environmental costs related to contracting Environmental Practitioners to complete the EAs and the associated financial provisions for mining rehabilitation.[46]

This study evaluates the efficiency of the OES. It focuses on whether it has achieved the objective of a harmonious regulatory system that attracts investment. It further evaluates the cooperative governance between the DMRE and the DFFE envisioned in the mining stakeholder's declaration. Lastly, solutions are proposed using the OECD integrated environmental permitting system for issues identified in South Africa.

3 Research Questions

The background outlined the issues leading to South Africa's non-competitiveness as a mining destination. The Fraser Survey indicated that South Africa's policy perception played a significant role in deterring FDI.[47] The survey identified that the fragmented licensing process and regulatory duplication led to ambiguity in legal rules interpretation and convoluted environmental governance resulting in project delays.[48] An integrated environmental permitting system (OES) was identified as a potential solution.[49]

This research aims to determine whether South Africa's perception as a mining destination improved after the OES's introduction. The study builds on the following research questions:

1. Has the OES increased South Africa's competitiveness for FDI?
2. Is the Minister of Minerals the appropriate authority for issuing EAs for mining? Is the regulatory decision timeframe quicker, or have the appeals increased on the environmental authorisations granted by the Minister of Minerals?
3. Has the OES achieved cooperative governance between the DMRE and DFFE?

4 Research Method

The research questions are addressed using case studies, South African legislation, and judicial judgements as the primary sources to determine the OES's effectiveness in deconvoluting the extractive's

[45] Schoeman P 'Transition conundrums in Mining and Environmental Legal Regime' (2019) Warburton Attorneys in https://warburtons.co.za/wp-content/uploads/2020/01/Transitional-Conundrums-in-the-Mining-Environmental-Legal-Regime-February-2019.pdf last accessed on 30 March 2022.
[46] Business Leadership (n 44) 192.
[47] McMahon (n 22).
[48] Ibid.
[49] Department of Environmental Affairs 'Portfolio Committee Colloquium on the One Environmental System' (2018) slide 6.

environmental regulatory framework and promoting competitiveness. The suitability of the DMRE as the competent authority is evaluated by reflecting on its historical practice concerning environmental governance before and after the introduction of the OES. Finally, cooperative governance between the DMRE and DFFE post OES and its impact on extractives investment.

5 Structure

Chapter 1: Introduction

The first chapter introduced the issue of South Africa's competitiveness in the global space as a mining destination. The background of how the One Environmental System was introduced and its objectives of contributing to a harmonised regulatory framework that will improve South Africa's competitiveness have also been Introduced. The critical elements of the OES have also been briefly outlined.

Chapter 2: Legal Framework – The One Environmental System

Chapter two focuses on the legal framework that governs the extractives industry focusing on the OES. The key elements of the OES are discussed in detail. Furthermore, the associated legislative changes that effected the OES are discussed, and the issues they brought about are presented.

Chapter 3: The Realities of the OES

This chapter focuses on the outcomes of the OES to date. The focus is on regulatory certainty and whether the OES has promoted investment. The chapter further elaborates on the ability of the Minister of Minerals to manage its conflicting mandate of promoting extractive investment and fostering green development. Finally, the chapter concludes with a discussion of cooperative governance between the departments responsible for regulating the industry.

Chapter 4: Towards A Competitive Environmental Governance

Chapter four provides recommendations for the policy that is designed to attract FDI. It offers potential solutions to the issues identified in the South African integrated environmental permitting system. Finally, the chapter concludes with a discussion of cooperative governance to harmonise the administration of the permitting process in the industry.

Chapter 5: Conclusion

Chapter five provides concluding notes informed by this research. Furthermore, it summarises the key findings and recommendations.

CHAPTER 2: LEGISLATIVE FRAMEWORK PERTINENT TO THE ONE ENVIRONMENTAL SYSTEM

1 Introduction

The South African natural resources regulatory framework changed remarkably post the democratic elections in 1994.[50] Democratic South Africa saw the enactment of the Constitution of the Republic of South Africa Act of 1996 (the Constitution), the National Environmental Management Act of 1998 (NEMA), the Minerals and Petroleum Resources Development Act of 2002 (MPRDA) and the National Water Act of 1998 (NWA).[51] These pieces of legislation are instrumental in the environmental regulation in the South African extractives industry.

The Constitution, first through section 24, aimed to guarantee South Africans a healthy and safe environment.[52] It puts the responsibility on the state to prevent degradation, conserve and secure sustainable development while promoting economic and social development through legislation.[53] The aforementioned is the cornerstone underlying the development of environmental statutes to regulate adverse environmental impacts.[54] Section 18 of the Constitution also gives effect to procedural rights, including rights to freedom of association,[55] access to information,[56] just administrative action,[57] and access to courts[58] envisaged in the Constitution.[59] These procedural rights are critical in implementing and enforcing environmental rights through other statutes, such as the MPRDA.[60] The state also adopted international environmental principles, including the duty of care and 'polluter pays', which introduce liability for the degradation of the environment.[61] Therefore, compliance and enforcement of environmental law provisions are also included in the South African legislation.[62]

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[50] McLean J and Carrick P 'Environmental management and rehabilitation under the Minerals and Petroleum Resources Development Act: A biodiversity outlook (2007) *South African Journal of Environmental Law and Policy* 188 -189.
[51] Glazewskie J and Ponik S 'Compliance with international environmental standards and expectations: Review of international developments (2000) 211.
[52] Section 24(a) South African Constitution.
[53] Section 24(b) South African Constitution.
[54] Feris L 'Constitutional Environmental Rights: An Under-Utilised Resource' (2008) 24 South African Journal on Human Rights 36.
[55] Section 18 South African Constitution.
[56] Section 32 South African Constitution.
[57] Section 33 South African Constitution.
[58] Section 34 South African Constitution.
[59] Feris (n 54).
[60] Ibid at 37.
[61] Feris (n 54) at 36.
[62] Ibid.

In 2012, The National Development Plan (NDP) was adopted. It is a guiding framework against which all South African policy performance should be measured.[63] The extractives industry could be an enabler in achieving the NDP's objectives through infrastructure development, local economic stimulation and employment.[64] It recognised the poor extractive industry performance between 2004 and 2011 compromised achieving this objective.[65] The deterrent to investment was attributable to policy uncertainty and fragmentation, which compromised South Africa's competitiveness.[66]

The environmental groups and investors raised several issues concerning the OES. These issues include: (i) the Minister of Minerals' delineation of powers, (ii) Concern over the DMRE's ability enforce environmental management compliance and DWS capacity to handle applications within specified timeframes and (iii) the resulting tensions between these departments regarding environmental management of the extractives industry.[67] The long-term life cycle of this industry requires a predictable and stable competitive policy and regulatory environment and the OES aimed to achieve this competitiveness.[68]

Post the implementation of the OES, a media statement released by the Minerals Council of South Africa on 13 April 2022 still indicates that South Africa is a risky mining destination.[69] The statement expressed concern about the downward spiral trend in South Africa's competitiveness, noting the poor ranking the country had an overall ranking in the bottom 10 in 2021.[70] In addition, the statement quoted the delay in processing rights and permits as a challenge, estimating a backlog of 4000 rights/permits.[71]

This chapter discusses the legislative framework regulating the industry environmental governance. It starts by outlining the environmental regulation before the implementation of the One Environmental System (OES) to draw the discourse in the legislation. It elaborates on legislative changes introduced by the implementation of the OES. It concludes with observations on whether the OES has achieved its objectives.

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[63] Business Leadership (n 44) 211.
[64] Department of Mineral Resources 'Contribution of Industrial Minerals to South Africa's economic growth' Report R121 of 2017.
[65] National Planning Commission "National Development Plan 2030 Our future make it work" (2011) 147.
[66] Ibid.
[67] Swanepoel E "Review and analysis of the mine closure and financial provision for the environmental rehabilitation regime in South Africa." (2020) in mine_closure_and_financial_provision.pdf (dtnac4dfluyw8.cloudfront.net), accessed in January 2023, Business Leadership (n 44) at 196.
[68] Ibid.
[69] Minerals Council of South Africa 'South Africa's inclusion in Fraser Institute's ten least attractive mining jurisdictions is an alarming wakeup call that we are moving in the wrong direction' (2022).
[70] Ibid.
[71] Ibid.

2 Environmental Regulation under the MPRDA before the OES

The MPRDA regulates the exploration and development of mineral and petroleum resources.[72] The provisions of the MPRDA are entrenched in the Constitution and affirms the state's obligation to conserve the environment for future generations and sustainable development of natural resources.[73] This affirmation puts the MPRDA in the complex national legislation requiring sustainable development of mineral and petroleum.[74] The MPRDA is committed to achieving equitable access to natural resources, promoting investment and sustainable development.[75]

The sustainable development of natural resources envisioned under the MPRDA is guided by the environmental principles of NEMA, which require that, first, the administration, interpretation and implementation of environmental provisions under the MPRDA are guided by the NEMA principles.[76] Second, the NEMA principles apply to all prospecting and mining operations.[77] Finally, the sustainable development of natural resources per the NEMA principles, integrating social, economic and environmental factors when planning and implementing operations to ensure current and future benefits from the exploitation of natural resources.[78]

Before the One Environmental System (OES) came into effect on 8 December 2014,[79] the environmental management provisions for the extractives industry were provided under sections 39 to 43 of MPRDA.[80] An applicant for reconnaissance, prospecting or exploration and mining or production rights were required to obtain environmental approval before commencing operations.[81] The objective of the EMP was to provide integrated environmental management in pursuit of sustainable development envisaged in Section 23 of NEMA.[82]

2.1 Environmental Management Plan and Environmental Management Programmes

The environmental management process under the MPRDA required that an applicant for a permit or right prepares an environmental management plan (EMP) to assess the impact of the operations on the

[72] Section 3 MPRDA.
[73] Preamble MPRDA.
[74] McLean (n 500) 188.
[75] Section 2 MPRDA.
[76] Section 37(1)(b) MPRDA.
[77] Section 37(1)(a) MPRDA.
[78] Section 37(1)(c) MPRDA.
[79] Effective date for 2013 MPRDA Amendment Bill. The provisions under discussion were part of the MPRDA at its promulgation in 2002.
[80] Section 39 MPRDA.
[81] Section 39 (2) MPRDA.
[82] Section 23 NEMA integrated environmental management.

environment and society.[83] The process began with a scoping phase where the pre-mining state of the environment and socio-economic conditions were identified.[84] During this process, the stakeholders were consulted on the proposed exploitation activities, and their views were incorporated into the final scoping report.[85]

The final scoping report captured undertakings that required an assessment to be completed during the environmental impact assessment phase.[86] The scoping report would be submitted to the Regional Manager within 30 days following the Regional Manager's acceptance of the application.[87] When considering the scoping report, the Regional Manager was required to consult other state organs.[88]

An environmental impact assessment (EIA) report was compiled in the next phase.[89] This phase focused on the nature, duration and extent of the impact resulting from prospecting or mining operations.[90] Included in the EIA report were mitigation measures of the identified significant effects and alternative land use compared to the proposed mining activities.[91] Public consultation was also a requirement, and the comments raised during this process were addressed and reflected in the final report.[92] Finally, the EIA report described the monitoring and management of identified impacts.[93]

The environmental management programme (EMPr) and Environmental Management Plan (EMP) envisaged under section 39 of the Act would be informed and compiled in terms of the EIA report.[94] This information would accompany the objectives and goals of environmental management impact caused by industry operations throughout the project life cycle.[95] In the EMPr, the implementation programme that provides technical and management options for the assessed environmental impact was used to monitor progress against planned activities.[96] The closure objectives formed a critical part of the EMPr because they guided the project design, development and management of environmental impacts.[97] Finally, the EMPr would have a financial provision for rehabilitation post-mining operations.

[83] Section 16(4)(a) and section 22 MPRDA.
[84] Regulation 49(1) MPRD Regulations of 2004.
[85] Ibid.
[86] Regulation 49(1)(g) MPRD Regulations 2004.
[87] Regulation 49(2) MPRD Regulations 2004.
[88] Regulation 49(5) MPRD Regulations 2004.
[89] Regulation 50(a)(b) MPRD Regulations 2004.
[90] Regulation 50(c) MPRD Regulations 2004.
[91] Regulation 50(d) MPRD Regulations 2004.
[92] Regulation 50(f) MPRD Regulations 2004.
[93] Regulation 50(h) MPRD Regulations 2004.
[94] Regulation 49(5) MPRD Regulations 2004.
[95] Section 39 MPRDA and Regulations 49 and 50 of MPRD Regulations 2004.
[96] Regulation 51(b) MPRD Regulations 2004.
[97] McLean (n 500) 201.

In consideration of the submitted EMPr, consultation with government departments and other agencies responsible for administering environmental-related matters was required, and their suggestions were incorporated before the approval of the EMPr.[98] These departments would return their comments on the EMPr under consideration within 60 days.[99] The consultation process facilitated joint decision-making, promoted cooperative governance and fostered sustainable development. The latter was achieved by considering the socio-economic and environmental impact of exploiting natural resources in line with the principles of NEMA.[100]

The EMPr and EMP were the only tools the MPRDA used to manage, monitor and mitigate environmental impacts.[101] Additionally, the MPRDA required that the applicant demonstrate compliance with the approved EMPr for the previous phase when applying for a renewal of the right or permit.[102] In this way, the requirement of compliance with the approved EMPr of the previous phase is viewed as an enforcement mechanism for environmental management imposed by DMRE.

2.2 Financial provision toward environmental rehabilitation

The environmental rehabilitation post extractives operations remains a sensitive issue in South Africa.[103] The problem is associated with the cost of rehabilitating the environment and the social impact when the mines close.[104] The Minerals Council of South Africa estimates rehabilitation at 10 percent of the total mining cost.[105] Furthermore, at mine closure, mining towns become ghost towns, leaving dire consequences on the mining community's economy.[106] Mining companies often neglect their environmental remediation obligations and planning for socio-economic stimulation post-mining operations, leaving a burden of abandoned mines and ghost towns for the government.[107] Accordingly, it is questionable whether the mining industry is a sustainable sector.[108]

[98] Section 40(1) MPRDA.
[99] Section 40(2) MPRDA.
[100] Section 2 (3) NEMA.
[101] Section 39 MPRDA.
[102] Sections 18(3)(c) (prospecting) and 24(3)(d) (mining) MPRDA.
[103] Mmathapelo Lehutso "An Assessment of the Efficacy Of South Africa's Legal Framework in Addressing Key Challenges Related to Liability For Mine Closure and Rehabilitation" (LLM thesis, Pretoria University, 2018) 14.
[104] Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (2013). Mining and Sustainable Development: Managing One to Advance the Other. Geneva IGF.
[105] Chamber of Mines of South Africa and Coaltech Research Association "Guidelines for the rehabilitation of mined land" (2007) 8.
[106] H Cornelissen, I Watson, E Adam and T Malefetse "Challenges and strategies of abandoned mine rehabilitation in South Africa: The case of asbestos mine rehabilitation" (2019) 205 *Journal of Geochemical Exploration* 4.
[107] Miltiadies Milaras The Judicious Use Of Environmental Sustainability Indicators in Support Of Mine Closure In South Africa (MSc thesis, Pretoria University, 2014) 29.
[108] Ibid 30.

The MPRDA required that financial provision for the environmental remediation and socio-economic risks be submitted to the regulator before the EMPr is approved.[109] Additionally, the applicant had to demonstrate their capacity to rehabilitate and manage adverse ecological impacts.[110] The Minister of minerals could only approve the EMPr if these two conditions were met regarding financial provision.[111] The financial provision requirement served as an enforcement tool used by DMRE to ensure that rehabilitation would occur.[112]

The holder was required to obtain a closure certificate at relinquishment or lapsing of the right.[113] The closure certificate application required a closure plan.[114] Included in the closure plan was the summary of the environmental impact risks assessment from the initiation of operations throughout the lifecycle of the project and the associated financial provision.[115] This risk assessment also had the implementation and associated timeframe, responsibilities, monitoring programmes and long-term financial provisions to manage long-term latent results.[116] Furthermore, this risk assessment assured the departments of environment and the department of minerals that environmental risks were considered in the decommissioning plan's financial provision.

The MPRDA had no provisions for the financial provision quantification. In 2005, the DMRE developed guidelines for estimating financial allocation named Guideline Document for the Evaluation of the Quantum of Closure Related Financial Provision Provided by a Mine.[117] These guidelines set a conceptual process to be followed in assessing financial provision.[118] They also included itemised costs required for the project's lifecycle, including post-closure residual environmental impacts.[119] However, these guidelines were not legislated and, therefore, not legally enforceable.

A study initiated by the World Wide Fund in 2012 found gaps in the Department of Minerals guidelines. First, the guidelines were generic and could not be applied to specific mining sites without limitations.[120]

[109] Section 41(1) MPRDA.
[110] Section 39(4)(a)(iii) MPRDA.
[111] Section 39(4)(a) MPRDA.
[112] McLean (n 500) 211.
[113] Section 43 MPRDA.
[114] Regulation 57(1)(a) Regulations 2004.
[115] Regulation 62(d) MPRD Regulations 2004.
[116] Regulation 60(g) MPRD Regulations 2004.
[117] Regulation 54(1) MPRD Regulations 2004.
[118] Department of Mineral Resources 'Guideline Document for the Evaluation of the Quantum of Closure Related Financial Provision Provided by a Mine' (2005).
[119] Regulation 54(1)(a)(b)(c) MPRD Regulations 2004.
[120] H. van Zyl et al. "Rehabilitation and Closure in South African Mining: Discussion Document on Challenges and Recommended Improvements (Summary)" (2012) World Wide Fund South Africa Report Series 3 in Lehutso op cit note 103 at 31.

Secondly, they did not cover the full spectrum of mining, such as subsistence mining.[121] Lastly, the master rates were not adjusted for inflation, leading to underestimated allocation.[122]

Noting the challenges associated with quantifying financial provisions, the MPRDA empowered the Minister of Minerals to appoint an independent assessor should the assessment be unsatisfactory.[123] Furthermore, once the right or permit was granted, the holder had to review the financial allocation towards rehabilitation annually to ensure adequate remediation for future compliance.[124] The financial provision could be a financial institution guarantee, an approved contribution to a trust fund, a deposit to an account specified by the Director-General or another mechanism determined by the Director-General.[125]

2.3 Monitoring and Performance Assessment

The achievement of environmental management in the industry was measured through monitoring and performance assessment. The MPRDA established self-monitoring of rights or permit holders concerning the approved EMPr and proactive reporting of social and environmental impact resulting from their operations.[126] This information was reported annually to the regulator, DMRE, indicating progress on operational activities.[127] The annual report also included the implementation details and compliance with the approved EMPr.[128] The annual reporting was applicable for both prospecting and mining rights/permits.[129] For mining/production rights and mining permits, the annual reporting included information on compliance with the social and labour plan.[130]

The holder was also required to conduct a performance assessment of the EMPr and submit a report.[131] The envisaged report documented the extent of the assessment, the evaluation standards, lessons learned from monitoring the approved EMPr and the performance assessment results.[132] The recommendations of the report informed whether the approved EMPr required an amendment to address non-compliance and deficiencies.[133] Where an EMPr required an amendment, the corresponding

[121] Ibid.
[122] Ibid.
[123] Section 41(4) of the MPRDA.
[124] Section 41(2) of the MPRDA.
[125] Regulation 53(1) of MPRD Regulations 2004.
[126] Section 38(1) of the MPRDA of 2002.
[127] Section 21(1)(b).
[128] Section 21(1)(b); Regulation 8 of MPRD Regulations 2004.
[129] Section 21(1)(b) and 25(2)(h).
[130] Section 25(2)(f).
[131] Regulation 55(1) of MPRD Regulations 2004.
[132] Regulation 55(3)of MPRD Regulations 2004.
[133] Regulation 55(3)(g)of MPRD Regulations 2004.

financial provision for rehabilitation would be updated accordingly.[134] The performance assessment was completed every two years or in line with the timeframe specified in the approved EMPr.[135]

Literature indicates that the DMRE had discretion on the frequency of submitting performance assessment reports.[136] For example, the frequency would be shortened from every two years to annually or biannually.[137] The DMRE used this discretion to enforce compliance in environmentally sensitive areas, however, the authors expressed concern about the enforcement of this obligation because other DMRE offices were not aware of the annual reporting requirement.[138] Accordingly, enforcement was lacking if the regulator was unaware of such obligations. The lack of enforcement combined with self-monitoring of right/permit holders indicated that environmental management compliance and enforcement under the MPRDA may have been deficient.

2.4 Obligations of the holder

The MPRDA held the licence holder responsible for any environmental damage, pollution or degradation resulting from exploitation activities within and outside the license's boundary.[139] NEMA's integrated environmental management objectives informed the MPRDA holder's responsibilities. Section 38(1)(a) required the holder to conduct its operations sustainably following the objectives of integrated environmental management envisaged in Chapter Five of NEMA.[140] Furthermore, the holder was required to follow section 24(7) of NEMA, which provided a procedure to be followed when investigating, quantifying and communicating the potential impact caused by operations.[141] The accountability of environmental degradation was in line with the compliance and enforcement contemplated under Section 28 of NEMA.[142]

The responsibility and duty for environmental management and sustainable development were not limited to the mining company but extended to the holding company's directors. Section 38(2) imposed liability on company directors for any negative impact on the environment resulting from operations conducted by the respective companies.[143] The accountability aligned with the directors' fiduciary responsibilities

[134] Section 41(2) of the MPRDA.
[135] Regulation 55(2)of MPRD Regulations 2004.
[136] McLean (n 500) 208
[137] Ibid.
[138] Ibid.
[139] Section 38(1)(e) of the MPRDA 2002.
[140] Section 38(1)(a).
[141] Section 38(1)(b) of MPRDA 2002.
[142] Section 28 of NEMA 1998.
[143] Section 38(2) of the MPRDA 2002.

under the Companies Act of 1973.[144] The right holder remained liable for environmental rehabilitation until a closure certificate was issued following Section 43 of the MPRDA.[145]

3 Environmental Regulation under NEMA before OES

The National Environmental Management Act of 1998 (NEMA) governs environmental management across all sectors.[146] NEMA principles guided the interpretation, administration, and implementation of environmental requirements in mineral and petroleum exploitation.[147] NEMA succeeded the Environmental Conservation Act (ECA) 73 of 1989. Under the ECA, the first Environmental Impact Assessment (EIA) Regulations were enacted in 1997 for listed activities.[148]

The listed activities that required an EIA were covered under Regulation 1182, while Regulations 1183 and 1184 dealt with the methodology for completing an EIA and the competent authority.[149] Subsequently, in 1998, the guidelines for conducting an EIA were published and used in conjunction with the 1997 Regulations.[150] The extractives industry was not listed under the ECA activities that required an EIA, leaving the environmental regulation to the extractive industry.[151] This self-environmental regulation was only reserved for the industry and demonstrated favouritism between the state and the industry.[152] The ECA was repealed in 1999 when NEMA was effected.

NEMA focused on sustainable development by managing industry impacts on the environment following section 24 of the Constitution.[153] As the environmental legislative framework umbrella, NEMA established principles for decision-making on environmental matters and required cooperative governance.[154] Furthermore, it promoted public participation in environmental governance.[155] Public participation is aligned with Principle 10 of the Rio Declaration on Environment and Development, 1992.[156] Principle 10 states public participation from all concerned citizens will ensure that environmental issues are handled

[144] Ibid.
[145] Section 43 of MPRDA 2002.
[146] Preamble of NEMA of 1998.
[147] Section 37(1) and (2) MPRDA 2002.
[148] William Musodza The One Environmental System: did we get it right? (Master thesis, Witwatersrand University, 2018) 12
[149] H Cockrell 'The quality of Environmental Authorisations in the Mpumalanga Province' (Master Thesis, North-West University, 2018) 4.
[150] Ibid.
[151] Tracy-Lynn Humby 'One environmental system': aligning the laws on the environmental management of mining in South Africa' (2015) 33 *Journal of Energy & Natural Resources Law* 110, 111.
[152] Musodza (n 148) 12.
[153] Section 24 of the Constitution, section 2 of NEMA.
[154] Section 2 of NEMA.
[155] Ibid.
[156] UN Commission on Human Rights, 'Rio Declaration on Environment and Development' Human rights and the environment., 9 March 1994, E/CN.4/RES/1994/65, available at: https://www.refworld.org/docid/3b00f0d528.html, accessed 8 April 2022.

well. It elaborates that concerned citizens must have access to information concerning the environment and that states must create public awareness and encourage participation by making such information available.[157]

NEMA empowered the Minister of Environment to identify activities that cannot commence without Environmental Authorisation. Additionally, the Minister of Environment could identify geographical areas that required approval before listed activities could start.[158] The Minister was also authorised to make regulations for these activities and geographical regions.[159] The 1997 regulations remained in effect until the first mandatory EIA Regulations were enacted under NEMA in 2006.[160]

The 2006 Regulations, through Regulation 387 Listing Notice 2, included the extractive industry activities.[161] However, the competent authority was not designated in the regulations, creating conflict between the Department of Environment and the Department of Minerals.[162] Furthermore, there was also uncertainty on the statutory process that the environmental impact assessment for mining activities would follow NEMA rather than the MPRDA.[163] Consequently, provisions relating to industry activities were briefly suspended because of the dispute between the Department of Environment and that of Minerals on who the competent authority for the industry should be.[164]

The 2006 Regulations also introduced the Basic scoping assessment for activities with minor impact and environmental impact assessment for activities with significant environmental impact with their associated timelines. [165] Furthermore, the roles of the parties involved were outlined, including the independent environmental consultant.[166] More details were also provided on enforcement and administrative procedures for applications.[167] However, the competent authority was not designated in the regulations.[168] Though the 2006 Regulations displayed more emphasis towards sustainable development, their implementation also initiated the conflict between the Department of Minerals and that of the Environment and created uncertainty.

[157] Principle 10 Rio Declaration on Environment and Development.
[158] Section 24(2)(b) NEMA 1998.
[159] Section 24(2)(c) NEMA 1998.
[160] Cockrell (n 149) 4.
[161] Regulation 387 of EIA Regulations of 2006.
[162] Ibid.
[163] McLean (n 500).
[164] Musodza (n 148) 13.
[165] Regulation 9 EIA Regulations of 2006.
[166] Regulation 33 EIA Regulations of 2006.
[167] Regulation 39 EIA Regulations of 2006.
[168] Cockrell (n 149) 6.

In 2010, the 2006 Regulations were amended to recognise environmentally sensitive areas and deal efficiently with low-impact activities.[169] The temporary suspension on provisions relating to the extractives industry activities was lifted, and the updated activities included the extractives industry. In addition, the 2010 EIA regulations validated the requirement to complete an Environmental Management Programme (EMPr) under the MPRDA and obtain Environmental Authorisation under NEMA before completing prospecting activities.[170] Accordingly, there was regulatory duplication.

Furthermore, the dispute on who should be the competent authority for Environmental Authorisation under NEMA in the industry was not resolved.[171] This dispute led to a trying relationship between the Department of Minerals and the Department of Environment, resulting in poor cooperative governance. The legislative uncertainty and regulatory duplication negatively affected South Africa's competitiveness where, investors raised issues concerning lengthy periods associated with obtaining Environmental Authorisations Record of decision[172] The competent authority issue was only resolved when the 2013 EIA regulations were promulgated pursuant to the One Environmental System and included the prospecting and mining activities.[173]

4 Water Use Authorisation before the OES

The industry is one of the largest water consumers.[174] First, daily operations require water for cooling drilling equipment and shaft ventilation.[175] Secondly, wastewater from mining activities contains toxic metals and other pollutants discharged into the environment.[176] Therefore, water consumption and discharge should be regulated, considering the environment and other affected parties.

In South Africa, water use by the industry is regulated by the National Water Act 36 of 1998[177] and regulations on water use for mining and related activities GN 704 (GN 704), 1999.[178] The department of water affairs and sanitation (DWS) administers the NWA and GN 704.[179] The GN 704 introduced

[169] Ibid.
[170] Regulation 3(1) identified activities that cannot start without an environmental authorisation, where Listing 19 relates to prospecting activities. Listing Notice 1: List of Activities and Competent Authorities Identified in terms of Sections 24(2) and 240, Government Gazette Notice 544.
[171] Musodza (n 148).
[172] Business Leadership (n 44)192.
[173] Listing 20 – 21 relating to prospecting, mining, and decommissioning activities. Listing Notice 1: List of Activities and Competent Authorities Identified in terms of Sections 24(2) And 240, Government Gazette Notice 903.
[174] Prosser I, Wolf L, and Littleboy A 'Water in mining and industry' CSIRO (2011) Chapter 10 page 137.
[175] Ibid.
[176] Ibid.
[177] Section 4 of NWA for water use outside of Schedule 1 of the Act.
[178] GN R704 in GG 20119 of 4 June 1999.
[179] Regulation 2(1)(2) Regulations on use of water for mining and related activities aimed at the protection of water resources, 1999.

standards companies, including mining, should adhere to when consuming and disposing of water for water resource protection.[180] In addition, the Mineral and Petroleum Resources Development Act, 28 of 2002 (MPRDA) required that a report documenting monitoring, management, and impact on water quality, surface and groundwater flow be included when preparing an Environmental Management Programme (EMPr).[181] This information informed the requirement of a general waster authorisation use of water or a water use licence (WUL) would be required.[182]

A general water use authorisation under an EMPr could be authorised by the Minister of Minerals where industry activities were concerned.[183] This authorisation applied where the EMPr related to an exploration right.[184] However, in the production phase, the impact on the water resource is considerable.[185] Accordingly, numerous listed activities were triggered under the 2010 EIA regulations and stipulated under section 21 of the NWA.[186]

The Minister of Water and Sanitation issued the IWUL.[187] The authorisation process for the IWUL could take over a year, potentially more prolonged than the mining right application, however, exploitation activities could not start without a WUL.[188] In addition, GN 704 required the holder to notify the DWS of the intent to commence the mining operations 14 days in advance and the EMPr and all its amendments submitted to the DWS.[189] This unpredictable and delayed regulatory decision posed a business risk.[190]

In line with the MPRDA's provision for the application of a closure certificate, there was a requirement to inform DWS of the mining right holder's intention to decommission operations, either permanently or temporarily.[191] Where the latter applies, the department should be notified when the operations resume within 14 days.[192] The water use authorisations also complicated the environmental governance of the

[180] Naudene le Roux 'Environmental Governance, Fragmentation and Sustainability in the Mining Industry' Dissertation Magister Legum in Environmental Law and Governance at the North-West University (2011) 66.
[181] Regulation 2(1)(2) of Regulations on use of water for mining and related activities aimed at the protection of water resources, 1999.
[182] Section 19 (2) National Water Act outlines.
[183] N Mdlalose 'Evaluation of the water use licensing regime of the National Water Act in advancing the protection and conservation of water resources' Master of Laws in ENVIRONMENTAL LAW University of KwaZulu-Natal (2019) 18.
[184] Section 22(3)(a), 4 of the National Water Act, 1998.
[185] Department of Environmental Affairs, Department of Mineral Resources, Chamber of Mines, South African Mining and Biodiversity Forum, and South African National Biodiversity Institute 'Mining and biodiversity guidelines: mainstreaming biodiversity into the mining sector' (2013) 70.
[186] EIA 2010 regulations, Section 21 (a)(b)(f)(g)(j) of the National Water Act, 1998.
[187] Humby (n 151) 125.
[188] Ibid.
[189] Regulation 2(2)(b) Government Notice No. GN704 dated 4 June 1999.
[190] Department of Environmental Affairs, Department of Mineral Resources, Chamber of Mines, South African Mining and Biodiversity Forum, and South African National Biodiversity Institute (n 185) 71.
[191] Regulation 2(2)(b) Government Notice No. GN704 dated 4 June 1999.
[192] Ibid.

industry. In addition, listed activities requiring a WUL to perform remediation could trigger a waste management license requirement.[193]

5 Waste Management Pre-OES

Waste management is regulated by the National Environmental Management: Waste Act (NEMWA) of 2008.[194] This Act is a specific environmental management act under the National Environmental Management Act umbrella.[195] The goal of NEMWA is aligned with NEMA in promoting sustainable development and use of natural resources, preventing pollution, and promoting justifiable economic and social development.[196] The industry must also follow waste management principles and standards under NEMWA, which is the Department of Environmental Affairs.[197] These principles encourage recycling and re-use of waste; however, the overregulation of waste conflicts with these principles.[198]

The overregulation is related to the type of waste material and the landscape where the material would be disposed.[199] For example, the MPRDA required that mining waste management be included in the EMPr.[200] However, this mining waste is accompanied by radio-active material, of which its disposal is regulated under the Hazardous Substances Act and the Nuclear Energy Act.[201] Additionally, waste disposed into or onto land is regulated by NEMWA[202], while waste disposed into the air is regulated by National Environmental Management Quality Act[203] and waste disposed into fresh water[204] is regulated by NWA.[205] Finally, waste disposed into marine water is regulated by the National Environmental Management: Integrated Coastal Management Act, 2008.[206] This overregulation resulted in failure to comply with the relevant statutes and increased administrative burden.[207]

NEMWA classifies, provides standards for waste storage, treatment and disposal for listed waste activities.[208] However, some of the industry waste disposal would require an additional licence, for

[193] Humby (n 151) 125.
[193] Section 53(1) NWA.
[194] Preamble National Environmental Management: Waste Act, 2008.
[195] Business Leadership (n 44)196.
[196] Preamble National Environmental Management: Waste Act, 2008.
[197] le Roux (n 180) 70.
[198] Business Leadership (n 44)196.
[199] Ibid at 196.
[200] Le Roux (n 180) 70.
[201] Section 2 of the Hazardous Substances Act, 1973 and section 2 of the Nuclear Act, 1999.
[202] Preamble NEMWA.
[203] Section 2 of the National Environment Management: Air Quality Act 2004.
[204] Part 5: Controlled activities of NWA.
[205] Business Leadership (n 44) 197.
[206] Chapter 8 of the National Environmental Management: Integrated Coastal Management Act, 2008.
[207] Department of Environmental Affairs, Department of Mineral Resources, Chamber of Mines, South African Mining and Biodiversity Forum, and South African National Biodiversity Institute (n 185), Business Leadership (n 44) 197.
[208] Section 7(1) of NEMWA.

example, to build a tailings dam used to store industry liquid waste require a water use licence under the NWA.[209] Additionally, an EIA would be required under NEMA because it is listed in the EIA regulations.[210] Furthermore, if the waste material to be disposed in the tailings dam, contained hazardous material, authorisation under the Hazardous Substances Act would be required.[211] The result was that applicants would require approvals under NEMWA, NEMA, NWA and Hazardous Substances, over and above the approval for a mining right under the MPRDA administered by separate departments.

Against this background, this fragmented and duplication of the regulatory requirements proved cumbersome and further contributed to non-compliance with NEMA, NEMWA or the NWA and MPRDA.[212] In addition, this fragmentation negatively affected investment, with South Africa as a high-risk investment destination.[213] To rectify this regulatory discourse, the One Environmental System was introduced to streamline the Environmental Authorisations for the extractives sector.

6 One Environmental System

The One Environmental System (OES) came into effect on 8 December 2014.[214] It is an agreement that the Director-Generals (DGs) of Mineral Resources and Environmental Affairs entered into concerning the extractives' environmental management functions.[215] The objective of the OES was to streamline the environmental permitting process for the extractives industry into a single authorisation consolidated under NEMA.[216] This integrated system was intended to foster cooperative governance between the departments of Mineral Resources and Energy (DMRE), Forestry, Fisheries and Environmental (DFFE), and Water and Sanitation (DWS).[217] In addition, it aimed to achieve legal certainty, improving South Africa's policy perception.[218]

6.1 Key features of the OES

The OES was based on three principles. The first principle relates to streamlining the environmental regulation for the extractives industry envisaging single environmental governance for the industry.[219] To

[209] Section 21 NWA.
[210] Listed activity 19 of GN R545.
[211] Section 2 of the Hazardous Substances Act, 1973.
[212] Le Roux (n 180) 13.
[213] McMahon (n 22).
[214] Section 50A NEMA.
[215] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) 39.
[216] Section 50A(2)(a) NEMA; Humby (n 151).
[217] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) 39; Humby (n 151); Bernard Kengni, 'Intergovernmental Relations: One Environmental System' in Louie Van Schalkwyk (ed), Co-ordinating Governance for Mining: Streamlining Systems for Improved Intergovernmental Relations (2019) *Juta.*
[218] Department of Mineral Resources "One Environmental System: One system, with many challenges" (2018) page 8.
[219] Section 50A.

achieve this, one piece of legislation would regulate environmental governance for in the industry, repealing environmental provisions under the MPRDA and consolidating them under to NEMA.[220] In this way, the mineral and petroleum activities will only be subjected to the environmental permitting process governed by NEMA.

The second principle aimed to eliminate the confusion of several authorities implementing different environmental management laws. A single authority would approve environmental permits to harmonise the process authorising the Minister of Minerals as the competent authority responsible for granting EAs for the extractives industry.[221] Accordingly, an applicant for a right or permit will be subjected to a single authority responsible for the approval of access to the right and an environmental permit allowing for the process to run concurrently rather than consecutively.[222] In addition, the Minister of Environment will set environmental governance frameworks and standards.[223] Accordingly, this Minister will be the appeals authority.[224]

The third principle dealt with the alignment of timeframes for licence application from the three Acts, the water use licence under the National Water Act with that of mining or prospecting right (MPRDA) and environmental permits (NEMA) applications.[225] The directors-general agreed to align and synchronise the application processing timeframes to be completed within 300 days.[226] Where appeals arise, an additional 90 days be provided to finalise the process.[227]

6.2 Implementation of the OES

Three options were considered before the OES implementation. The first option identified the DFFE as custodian for all environmental management requirements responsible for developing, granting environmental authorisation, compliance, monitoring, and enforcing the industry's environmental requirements.[228] This option triggered the amendment of the MPRDA, NEMA and NWA.[229]

The second option envisaged keeping the function at DMRE, including the listed activities and moving the appeals to DFFE, however, this option also triggered amendments to the three legislations – MPRDA,

[220] Section 50A (2)(a).
[221] Section 50A (2)(c).
[222] Department of Mineral Resources "Environmental management plan 2016/2020" (2018) 9.
[223] Section 50A (2)(b)(c).
[224] Ibid.
[225] Section 50A (2)(d).
[226] Humby (n 151) 122.
[227] Ibid.
[228] Parliamentary Monitoring Group 'One Environmental System colloquium' (2018) unpublished material presented by the DMRE at the Colloquium on One Environmental System led by the Portfolio Committee on Environmental Affairs (2018) in One Environmental System colloquium | PMG, accessed in December 2022.
[229] Ibid.

NEMA and NWA.[230] In addition, this option would require that the timeframes for the water use license application be aligned.[231] The third option envisaged maintaining the status quo leaving functions within the respective departments but proposed integrating the departments' licensing system and collaboration in considering and granting environmental authorisations, permits or licences.[232]

The Ministers adopted the second option on 26 April 2012 because it incorporated an integrated permitting system and cooperative governance.[233] The DMRE will implement the NEMA concerning listed activities, administering mining social and environmental impacts from mineral and petroleum activities.[234] DMRE will be the sole issuer of Environmental Authorisations and mining waste licenses.[235] An interdepartmental implementation committee and seven task teams were established to facilitate the implementation of option two.[236] The task teams evaluated issues associated with aligning the permitting process and policies.[237]

6.2.1 Legislative Changes to effect the OES

The implementation of option two required the amendment of three legislations, NEMA, NWA, and MPRDA.[238] The revision of these Acts changed the environmental authorisation procedure for the extractives industry activities and the scope of the authorities responsible for environmental management regulation and incorporated some of the environmental management provisions of the MPRDA into NEMA.[239]

The MPRDA was amended in 2008 to remove environmental provisions.[240] In the amended MPRDA of 2008, the provisions that effected the OES were inserted in sections 5A, 38A and 38B. Section 5A makes an EA a precondition to granting a permit or a right.[241] Section 38A identified the Minister of DMRE as

[230] Department of Mineral Resources "Environmental management plan 2016/2020" (2018) 38.
[231] Ibid.
[232] Parliamentary Monitoring Group "One Environmental System colloquium" (2018) unpublished material presented by the DFFE at the Colloquium on One Environmental System led by the Portfolio Committee on Environmental Affairs (2018) in One Environmental System colloquium | PMG, accessed in December 2022.
[233] Department of Mineral Resources "Environmental management plan 2016/2020" (2018) 38.
[234] Section 50A (2)(c).
[235] Ibid.
[236] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) 39.
[237] Ibid.
[238] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) 41.
[239] Le Roux (n 180) 58.
[240] Section 38, 39, 40, 41 and 42 were repealed by the MPRDA 2013.
[241] Section 5A of the MPRDA 2013.

the competent authority responsible for granting Environmental Authorisations for the industry following NEMA.[242] Section 38A further provides that an EA is required before granting a permit or a right.[243]

Section 38B made transitional provisions for existing EMP/EMPR issued under the MPRDA of 2002.[244] For transitional purposes, an EMP/EMPr issued under the MPRDA of 2002 before the NEMA of 2008 came into effect is equivalent to an EA issued by NEMA.[245] The remaining environmental requirements under the MPRDA only relate to the holder's environmental liability when applying for the closure certificate.[246] The amended MPRDA of 2008 was enacted on 19 April 2009 but only came into operation on 7 June 2013.[247]

The amended NEMA of 2008 was enacted on 5 January 2009.[248] First, the amendment Act introduced environmental management provisions for mining activities through section 24N.[249] Secondly, it introduced the OES via section 50A (2) of NEMA.[250] The agreement identified NEMA as the principal Act concerning the regulation of environmental management for the extractives industry and the Minister of Environment as responsible for setting environmental management standards.[251]

The Minister of Minerals is the implementing authority and issues EA for the industry under NEMA and other subordinate legislation.[252] In addition, timeframes for processing and issuing the subject authorisations should be aligned between the Ministers of Environment and Water Affairs.[253] The environmental management provisions in the MPRDA and NEMA were aligned.[254] These provisions included the EA procedure, consultation with state departments, financial provision for environmental rehabilitation, management of residue stockpiles and residue deposits, cost recovery for urgent

[242] Section 38A(1) MPRDA 2013.
[243] Section 38A(2) MPRDA 2013.
[244] Section 38B MPRDA 2013.
[245] Ibid.
[246] Republic of South Africa 'Mineral and Petroleum Resources Development Act of 2008' Gazette No. 32151, No 437, commencement date 7 June 2013.
[247] Ibid.
[248] National Environment Laws Amendment Act 44 of 2008 - Gazette No. 31685, No. 1318. Commencement date : 11 September 2009.
[249] Section 24N of NEMA of 2008.
[250] Section 50A(2) of NEMA.
[251] Ibid.
[252] Section 50(A)(2)(b) and (c). On 2 June 2014, the President published through a Government Gazette 37713 No. 448, the National Environmental Management Laws Amendment Act of 2014 (NEMAA). The aim of the NEMAA was to amend the NEMA and NEMWA in order to achieve concurrence with the OES.
[253] Section 50A(2)(d) NEMA.
[254] South African Law Reform Commission 'Statutory law revision (legislation administered by the Department of Environmental Affairs)' (2015) 22.

rehabilitation instances, and closure certificates.[255] These provisions were inserted in the NEMA of 2009.[256]

Thirdly, the authorisation procedure followed by the extractives industry introduced under the NEMA of 2009 was more robust than the MPRDA procedure; see section 3 above outlining the environmental management, pre-OES.[257] NEMA of 2009 required that the applicant completes an environmental impact assessment for the listed activity before the Minister of Minerals grants an EA.[258] Section 24(4) defined the minimum standards of procedures for environmental impact investigation, assessment, and communication. It further differentiated the process to be completed in prospecting phases, which required a basic assessment report from the environmental impact assessment (EIA) required for the more invasive mining/production phase.[259] In addition, the Act required that the evaluation be completed by an independent environmental practitioner, where previously, under the MPRDA of 2002, the holder could conduct the assessment.[260]

Finally, for public participation, NEMA provisions are more comprehensive and vigorous than the provisions under the MPRDA.[261] The MPRDA of 2002 previously required that an applicant notify and consult with the landowner before commencing mining activities.[262] The NEMA of 1998 required that the landowner provide written consent for land access.[263] To align the public participation provided under the MPRDA of 2002 and NEMA of 1998, the amended NEMA requires that the owner be notified of the intention to commence mining activities and invited to the public participation process for further comment.[264]

NEMA was once again amended in 2013 by the National Environmental Management Laws Second Amendment Act 30 of 2013, and the amendments came into effect in 2014.[265] The amendments were aimed at achieving the OES agreement.[266] Besides the implementing authority given to the Minister of Minerals for EAs under NEMA of 2008, NEMA of 2014 further empowered the Minister of Minerals to

[255] Ibid.
[256] Ibid at 23.
[257] Le Roux (n 180) 58.
[258] Section 24N(1) of NEMA of 2008.
[259] Section 24(4)(a) and (b).
[260] Le Roux (n 180) 69.
[261] Ibid at 67.
[262] Section 5(4)(c) MPRDA of 2002. This provision was also repealed by the MPRDA 2013.
[263] Le Roux (n 180) 67.
[264] Ibid at 67.
[265] South African Law Reform Commission 'Statutory law revision (legislation administered by the Department of Environmental Affairs)' (2015) 23.
[266] Humby (n 151) 122.

appoint environmental mineral resource inspectors (EMRI) within DMRE for compliance monitoring and enforcement and issue waste licences for industry activities.[267]

While the power entrusted to the Minister of Minerals concerning environmental protection and compliance raised concerns, relief was provided by the National Environmental Management Laws Second Amendment Act 30 of 2013, which empowered the Minister of Environmental Affairs to direct the environmental management inspectors (EMI) where compliance and enforcement are lacking.[268] In this amendment, the Minister of Environmental Affairs was also empowered to make regulations for the Act.[269] This authorisation was welcomed following the *Minister of Mineral Resources v Stern* where there was confusion as to who had the authority to make regulations for environmental protection for the industry. [270] The court found that the Minister of Minerals no longer had the power to make such regulations following the introduction of the OES, where the provision giving the Minister of Minerals to make regulations under the MPRDA relating to such was repealed.[271]

The National Environmental Management Act: Waste Act (NEMWA) of 2008 was also amended by the National Environmental Management Laws Second Amendment Act 30 of 2013.[272] Included in the NEMWA were provisions for treating mining residues and stockpiles deposits.[273] NEMAWA required a waste management licence to create residue stockpiles.[274] Furthermore, an independent environmental practitioner must complete an EIA process and be subjected to public participation to obtain a waste management licence.[275]

The insertion of these provisions under NEMWA indicated commitment toward sustainable development. The industry was aggrieved by the increased financial burden and further delays in projects associated with completing an EIA and the time for securing the waste licence, while previously, this process was included in the MPRDA EMPr.[276]

[267] South African Law Reform Commission 'Statutory law revision (legislation administered by the Department of Environmental Affairs)' (2015) 26.
[268] Humby (n 151) 122.
[269] Ibid.
[270] Minister of Mineral Resources v Stern & others (1369/2017) and Treasure the Karoo Action Group & another v Department of Mineral Resources & others (790/2018) [2019].
[271] Ibid.
[272] South African Law Reform Commission 'Statutory law revision (legislation administered by the Department of Environmental Affairs)' (2015) 26.
[273] Ibid.
[274] Business Leadership (n 44) 196.
[275] Ibid at 196.
[276] Business Leadership (n 44) 197.

6.2.2 Scope of Environmental Management Authorities for the Industry

The OES was to be implemented in three phases. During the initial phase of 18 months, starting from 7 June 2013 to 7 December 2014, the status quo was to remain in place for environmental provisions in the MPRDA and NEMA.[277] The second phase would begin on 8 December 2014 to 8 June 2016 where the Minister of Minerals will be the temporary competent authority after the MPRDA of 2008 becomes effective and the Minister of Environment the appeals authority for the industry.[278]

In the final phase, the power to grant EAs will revert to the DFFE.[279] The final phase did not occur because the National Environmental Management Laws Amendment Act of 2014 repealed section 13 of the NEMA of 2008, which provided for the competent authority to revert to DFFE.[280] Therefore, no provision allowed for the third phase to occur.[281] The Minister of Minerals remained the competent authority for granting EAs for the industry. Furthermore, the Minister of Minerals is authorised to issue waste management licenses for industry activities.[282] This authority also applies in the rehabilitation and remediation phases.[283]

A power struggle arose between the departments of environmental affairs and of minerals regarding authority over environmental management authorisations.[284] This turf-war, accompanied by the restructuring at the DMRE, further compromised the implementation of the OES, in that the interdepartmental implementing committee (IPIC) meetings were neglected, resulting in terminating preparations of the DMRE to take over the compliance and enforcement functions.[285] Additionally, post-OES implementation, there was no monitoring of challenges because of the deteriorated joint committees leading to divergent views on regulatory requirements.[286]

Scholars raised the potential for conflict of interest, where the DMRE plays the referee and the player.[287] The Minister of Minerals' mandate is to promote economic development in the extractives industry and,

[277] Birch (n 43) 2.
[278] Ibid.
[279] Section 13 and 14 NEMA 2008.
[280] Birch (n 43) 3.
[281] Ibid.
[282] South African Law Reform Commission 'Statutory law revision (legislation administered by the Department of Environmental Affairs)' (2015) 26.
[283] Section 43(1B) NEMWA.
[284] Humby (n 151) 187.
[285] Ibid
[286] Parliamentary Monitoring Group 'One Environmental System colloquium' (2018) unpublished material presented by the DFFE at the Colloquium on One Environmental System led by the Portfolio Committee on Environmental Affairs (2018) in One Environmental System colloquium | PMG, accessed in December 2022.
[287] Humby (n 151); Centre for Environmental Rights 'ZERO HOUR: Poor governance in mining and violation of environmental rights in Mpumalanga' (2016).

at the same wavelength, consider environmental protection at the expense of mining investment.[288] On the same wavelength, the extractives industry enjoys the privilege of self-regulation concerning environmental management.[289] However, if competent authority reverts to the Minister of Environmental Affairs, the following consequences would result, first, the stringent and rigorous environmental regulation focus might adversely affect mining investment, secondly, the streamlined permitting system would not exist, (3) initiation of legislative amendments and (4) the expertise for mining permitting which rests with the DMRE would require to be transferred to the DFFE.[290]

The role of the Minister of Environmental Affairs is limited to being the competent authority for appeals against granted environmental authorisations by the Minister of Minerals.[291] The appeal suspends activities to be completed under environmental approval by the Minister of Minerals.[292] This suspension indicates a dedication to sustainable development, as exploration activities for rights granted under the MPRDA prevailed until the appeal was resolved and in this way, the value of the appeal was questionable.[293] The Minister of Minerals may lift the suspension contemplated under section 43(7) of NEMA at his discretion while the appeal is pending.[294] The latter further indicates the power dynamics between the Ministers of Minerals and the Environment.

The considerable discretionary power of the Minister of Minerals is also illustrated in Section 47(CB)(2) of NEMA, which provides that the appeal must be submitted within 30 days of the Environmental Authorisation.[295] The Minister has discretionary powers to condone the prescribed timeframe for exceptional circumstances.[296] In considering the condonation, circumstances surrounding the revision of timeframes and potential prejudice that the Minister of Minerals or the applicant may suffer must be presented due to the extension of the timeframes.[297]

In addition to being the appeal authority, the Minister of Environmental Affairs may exercise its powers to prohibit granting an EA for the listed activity by the Minister of Minerals in environmentally protected and

[288] Centre for Environmental Rights 'ZERO HOUR: Poor governance in mining and violation of environmental rights in Mpumalanga" (2016) 20.
[289] Musodza (n 148) 12.
[290] Parliamentary Monitoring Group 'One Environmental System colloquium' (2018) unpublished material presented by the DFFE at the Colloquium on One Environmental System led by the Portfolio Committee on Environmental Affairs (2018) in One Environmental System colloquium | PMG, accessed in December 2022.
[291] Section 50A(2)(c).
[292] Section 43(7) NEMA of 2014.
[293] Humby (n 151) 113.
[294] Section 43(9).
[295] Section 47(CB)(2) NEMA 2014.
[296] Section 47(CB)(1) NEMA 2014.
[297] Section 47(CB)(3) NEMA.

conservation areas.[298] Following the latter, the Minister of Minerals must refuse any further EA applications relating to such prohibition.[299] Other unresolved EA applications for the respective Gazette prohibition should be deemed as withdrawn.[300]

The Minister of Water Affairs is empowered by section 41(5) of the National Water Act to be the licensing authority for water licence applications related to the industry.[301] The Minister must synchronise the water licence application by aligning and integrating it with the EA application, as prescribed under NEMA for the respective exploration or production right specified under the MPRDA.[302] The Minister is empowered by section 41(6) of the NWA to be the appeals authority for the water application licence, resulting from the synchronised process contemplated in section 41(5).[303]

6.2.3 Environmental Compliance and Enforcement under the OES

Environmental compliance and enforcement are vital in ensuring adherence to statutory requirements and fulfilling environmental obligations under licences.[304] Before the OES, the environmental management inspectors were responsible for enforcing provisions under NEMA and SEMAs.[305] Furthermore, these inspectors are empowered to investigate any suspicion regarding a potential breach of the law.[306] Such is only applicable within the area of the environmental management inspectors mandate.[307] The inspectorate operates within the national, provincial and local spheres of government.[308]

The OES saw the establishment of the environmental mineral resource inspectors.[309] The environmental mineral resource inspectors took over the responsibilities of the environmental management inspectors (from Environmental Affairs) for environmental compliance and enforcement in the mining sector.[310] The Minister of Minerals is empowered to appoint the environmental mineral resource inspectors.[311] In the spirit of sustainable development and cooperative governance, the environmental management inspectors can take over the functions of the environmental mineral resource inspectors where they fall

[298] Section 24(2A)(a) NEMA.
[299] Section 24(2A)(b)(i) NEMA.
[300] Section 24(2A)(b)(ii) NEMA.
[301] Section 41(5) NWA.
[302] Section 41 (5)(a)(b) NWA.
[303] Section 41(6) NWA.
[304] Shamila Mpinga 'Advancing the effective implementation of the one environmental system for mining through cooperative environmental governance' (LLM Thesis, Cape Town University, 2020) 18.
[305] Section 31G NEMA.
[306] Section 31H of NEMA.
[307] Section 31H(1) NEMA.
[308] Mpinga (n 304) 18.
[309] Section 31BB of NEMA.
[310] Section 31C(2A) NEMA.
[311] Section 31BB NEMA.

short.[312] Concurrence between the Minister of Minerals and Environmental Affairs should be obtained before taking over the mandates to avoid conflict.[313]

The mandates between environmental management inspectors and environmental mineral resource inspectors often conflict, where environmental management inspectors identify mining companies committing illegal activities.[314] This conflict is evident in the *Mineral Sand Resources v Magistrate for the District of Vredendal.*[315] In this case, the environmental management inspectors suspected illegal activities and took over the environmental mineral resource inspectors mandate without concurrence between the Ministers of Minerals and Environmental Affairs and obtained an interdict which suspended mining activities.[316] In litigation, the judge found that the environmental compliance and enforcement for mining operations were outside of the scope of environmental management inspectors and the interdict was suspended and "illegal mining activities" prevailed.[317]

The non-concurrence between the two departments indicates failure to effect cooperative governance. This failure allowed for illegal mining activities to continue, which was detrimental to the environment. Equally, the investment was also impacted, by delays imposed by the interdict.

7 Conclusion

The OES aimed to streamline environmental regulation, eliminating duplication that caused legislative uncertainty of the extractives industry. However, its implementation came with its own challenges. The implementation of the OES was haphazard and it introduced legislative uncertainty between 2008 and 2013, when the MPRDA, NEMA and NWA amendments were presented. The NEMA amendments were enacted in 2009, while the corresponding amendments in the MPRDA only came to effect in 2013. This misalignment in the promulgation of the two Acts further complicated the environmental governance of the industry, creating confusion as to whether the industry must comply with environmental management requirements provided for under the MPRDA or NEMA.

The most contentious change brought about by the OES relates to the appointment of the DMRE to implement environmental regulations for the industry. This issue is driven by the ongoing turf war in environmental regulation introduced by the NEMA EIA regulations in 2007. These regulations implied statutory process change from mining companies following the MPRDA environmental process to NEMA. Furthermore, it is perceived that DMRE's new mandate under the OES might compromise environmental compliance. Chapter 3 unpacks this further by examining whether the OES has achieved its objectives.

[312] Section 31D(4) NEMA.
[313] Section 31D(4) NEMA.
[314] Mineral Sands Resources supra note 37 para 98.
[315] Ibid para 25.
[316] Ibid para 314.
[317] Ibid.

CHAPTER 3: THE SHORTCOMINGS OF THE ONE ENVIRONMENTAL SYSTEM

1 Introduction

This chapter evaluates whether the OES has achieved its objective of streamlining the environmental governance in the extractives industry (industry). The option adopted in implementing the OES aimed to achieve an integrated permitting system that would promote the constitutional principle of cooperative governance between the related regulating departments.[318] It was envisaged that achieving these objectives would improve South Africa's reputation as a high-risk investment destination due to its policy perception.[319]

The chapter begins with examining whether the OES has removed regulatory duplication and uncertainty. It follows with the country's industry investment status post the OES implementation. It evaluates the potential impact of the Minister of Minerals and Energy's (Minister of Minerals) expanded scope of granting environmental authorisations for the industry. It concludes by evaluating cooperative governance between the Departments of Mineral Resources and Energy (DMRE) and Fisheries, Forestry and Environment (DFFE).

2 Regulatory Certainty: Environmental Management Programme issued under the MPRDA versus Environmental Authorisation issued under NEMA

Before the OES, under the MPRDA, mining companies were required to submit an Environmental Management Programme (EMPr) before starting industry activities.[320] In addition to this EMPr, NEMA required an Environmental Authorisation (EA) for listed activities for the industry.[321] To transition to the OES, there were transitional arrangements applicable to mining companies affected by the legislative amendments.[322] Research indicates that these transitional arrangements were unclear, further propagating uncertainty and non-compliance with environmental laws.[323] Of major concern is the status of the EMPr issued under the MPRDA versus an EA issued under NEMA.

[318] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) 39.
[319] Ibid.
[320] Section 39 MPRDA.
[321] Section 24 NEMA.
[322] Regulation 54 of 2014 EIA Regulations.
[323] Mineral Sands Resources supra note 37, Minister of Mineral Resources v Stern supra note 270.

The transitioning provision, section 38B of MPRDA (2008) stated that an EMPr issued under the MPRDA before the OES effect was to be regarded as having been approved in terms of NEMA.[324] This provision created confusion since an additional authorisation was required for listed activities under NEMA, even if the MPRDA EMPr was in place.[325] Thus, it was unclear whether the EMPr issued under the MPRDA replaced the requirement for EA under NEMA.[326] This confusion was illustrated in the case of *Mineral Sands Resources (Pty) Ltd vs Magistrate for the District of Vredendal, Kroutz No and others; Boarder Deep Sea Angling vs Minister of Mineral Resources and Energy and Sustaining The Wild Coast NPC v Minister of Mineral Resources and Energy* .[327]

2.1. Mineral Sands Resources (Pty) Ltd vs Magistrate for the District of Vredendal, Kroutz NO and Others[328]

Mineral Sands Resources (MSR) operates the Tormin mine situated about 360km north of Cape Town on the west coast of South Africa, mining high-grade heavy minerals.[329] Following several complaints about illegal mining, the DFFE issued an interdict, which halted mining operations leading to litigation. Several issues were raised in litigation, but relevant to this section is the failure to comply with the approved MPRDA EMPr and obtain an EA under NEMA for listed activities due to the introduction of the OES.[330]

The EMPr and EA set out the conditions of the mining area. First, the distance to the toe of the cliff was required to be at least 10m aimed to safeguard the possible collapse of the cliff, which MSR violated by mining on the cliff, which subsequently collapsed.[331] The mechanism of conducting operations, and waste disposal, were also dishonoured. The EMPr specified that the tailings would be transported by Articulated Dump Trucks (ADT) without installing a pipeline to return the tailings to the beach and amending the EA.[332]

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[324] Section 38B of the MPRDA 2008 and Section 12(4) of NEMA 2008 'An environmental management plan or programme approved in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002); immediately before the date on which this Act came into operation must be regarded as having been approved in terms of the principal Act as amended by this Act.'
[325] Section 24 NEMA.
[326] Schoeman (n 45).
[327] *Mineral Sands Resources (Pty) Ltd v Magistrate for the District of Vredendal, Kroutz No and Others* (18701/16) [2017] ZAWCHC 25 (20 March 2017); *Border Deep Sea Angling Association and Others v Minister of Mineral Resources and Energy and Others* (3865/2021) [2021]; *Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (3491/2021) [2021].
[328] *Mineral Sands Resources (Pty) Ltd v Magistrate for the District of Vredendal, Kroutz No and Others* (18701/16) [2017] ZAWCHC 25 (20 March 2017).
[329] Ibid at 16.
[330] Ibid.
[331] Ashton (n 41) 18; Mineral Sands Resources supra note 37
[332] Ibid

In July 2014, responding to illegal mining activities at the Tormin mine complaints, the DMRE instructed MSR to apply for the EMPR and EA amendments.[333] The changes included the expansion of the mining area[334] and the construction of access roads.[335] The EMPr and EA amendment applications were still pending when the OES came into effect on 8 December 2014.[336] The DMRE approved the EMPr amendment application in April 2015, even though environmental management provisions were already repealed under the MPRDA when the OES came into effect.[337]

The DMRE believed that environmental management provisions under the MPRDA remain in force for applications already submitted before the OES came into effect.[338] When the MPRDA EMPr amendment was approved, MSR believed that the NEMA EA amendment application was no longer a requirement following the introduction of the OES.[339] Consequently, MSR did not continue with the NEMA EA amendment application for installing mineral processing plants, which lapsed after six months.[340]

Accordingly, there was uncertainty with the interpretation of the statutory provisions that gave effect to the OES. Clarification on whether the MPRDA EMPr is deemed a NEMA EA was sought during this case.[341] The court assessed section 12(4) of the NEMA Amendment to provide clarity. Section 12(4) provides that "[t]he effect of s 12(4) [of Act 62 of 2008] is that a [MPRDA EMPr] approved before 8 December 2014 is to be regarded as an EMP approved in terms of s 24N of NEMA."[342]

The court indicated that before the effective date of OES, there was a requirement for both MPRDA EMPr and NEMA EA as per *Maccsand (Pty) Ltd v City of Cape Town*.[343] Therefore, when the environmental management provisions were removed from the MPRDA after the OES became effective, there was still a requirement to conduct an Environmental Impact Assessment for the listed activities and an approved MPRDA EMPr.[344] As a result and under section 24F of NEMA, companies cannot initiate mining activities without a NEMA EA post 8 December 2014.[345]

[333] Ashton (n 41) 18.
[334] The changes in the approved mining area will trigger the application for section 102 of the MPRDA.
[335] section 24 of NEMA.
[336] Ashton (n 41) 23.
[337] Ibid.
[338] Ibid.
[339] Mineral Sands Resources supra note 37 Para 60.
[340] Mineral Sands Resources supra note 37 Para 61.
[341] Ibid.
[342] Ibid para 30.
[343] Ibid para 171.
[344] Ibid para 39.
[345] Ibid para 40.

2.2 Shell's Wild Coast Seismic Survey

On 6 December 2021, almost seven years of the OES anniversary, uncertainty in the environmental regulation of the industry prevails. This uncertainty is evident in the two cases where an urgent interdict was sought to stop the acquisition of a seismic survey off the Wild Coast of South Africa in *Boarder Deep Sea Angling vs Minister of Mineral Resources and Energy* and *Sustaining The Wild Coast NPC v Minister of Mineral Resources and Energy*.[346] The issue in the litigation was that Shell was not authorised to acquire the seismic survey because it had not obtained the EA under NEMA and undergone the requisite meaningful public participation.[347]

There are two parts to the application. Part A deals with an application for an interim interdict to stop a seismic survey off the Wild Coast region of South Africa's eastern coast, pending the outcome of Part B.[348] Part A of the application was heard on 28 December 2021, and the judgement was delivered on 17 December 2021. Part B application is for an interdict prohibiting seismic survey until an EA is obtained under NEMA.[349]. Part B of the application was heard on 30 and 31 May 2022, and the judgement on 1 September 2022.[350] Part B is relevant to this study and will be discussed.

In 2013, Impact Africa applied for an exploration right (ER) under section 79 of the MPRDA.[351] As part of the application process, an EMPr was submitted following section 39 of the MPRDA.[352] The EMPr was completed by an Environmental Assessment Practitioner, the Environmental Management Resources Southern Africa (ERM).[353] The EMPr covered 2D and 3D seismic exploration activities.[354] The EMPr was approved on 17 April 2014, and the right was granted on 20 May 2014.[355] The ER's subsequent first and second renewals were granted in 2018 and 2021, respectively.[356] In August 2021, Royal Dutch Shell (Shell) farmined in the ER and acquired 50 per cent participating interest and operatorship.[357] The work programme for the second renewal phase is acquiring 3D seismic data.[358]

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[346] Border Deep Sea Angling Association and Others v Minister of Mineral Resources and Energy and Others (3865/2021) [2021] and Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others (3491/2021) [2021].
[347] Border Deep Sea Angling Association and Others v Minister of Mineral Resources and Energy and Others (3865/2021) [2021].
[348] Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others (3491/2021) [2021] paragraph 1.
[349] Ibid para 1.
[350] Ibid para 5.
[351] Ibid.
[352] Ibid.
[353] Environmental Management Resources Southern Africa 'Transkei and Algoa Exploration Areas: Environmental Management Programme (EMPr)' (2013) in Final-EMP-Transkei-2013-POPI-screened.pdf (cer.org.za) last accessed in May 2022; Border Deep Sea Angling Association supra note 347 para16.
[354] Ibid.
[355] Border Deep Sea Angling Association supra note 347 para16.
[356] Ibid.
[357] Ibid at para 17.
[358] Ibid at para 16.

The transitional provisions regarding an MPRDA EMPr, still in effect when the OES came into effect (8 December 2014), required EMPr to be audited by 7 December 2019.[359] The contemplated EMPr audit must be completed every five years for as long as the EMPr is in effect.[360] Impact Africa did not obtain the EA under NEMA. The ER was granted without the EA under NEMA. As part of the second renewal phase application, an EMPr audit was completed in 2020 following the EIA regulations.[361] The environmental practitioner who conducted the EMPr on behalf of Impact Africa also audited the EMPr.[362] Accordingly, the independence of the EMPr audit was questionable because it was completed by the same company that conducted the EMPr.

The optimal weather period for the seismic data acquisition specified in the EMPr is between December and May.[363] The weather period considers the migration of whales and the ocean conditions.[364] Shell initiated the seismic survey in December 2021.[365] An urgent interdict application was submitted to the Eastern Cape High Court in Grahamstown, opposing the acquisition of the 3D seismic survey.[366]

2.2.1 The applicant's head of argument

Four points were submitted to substantiate their argument. First, they referred to section 2 of NEMA, which requires that state organs use NEMA as a guideline for interpreting, implementing and decision-making concerning environmental protection.[367] Secondly, section 24(8)(a) of NEMA states that a NEMA-listed activity authorisation obtained under any other law for a NEMA-listed activity does not negate the requirement to obtain authorisation under NEMA.[368] Thirdly, similar processes may be involved in an EMPr and EA; however, they are independent.[369] This difference is evident in section 24N (1) of NEMA, which requires that an EMPr be submitted to the Minister of Minerals before considering an EA as established in the *Mineral Sands Resources (Pty) Ltd vs Magistrate for the District of Vredendal, Kroutz No and others*.[370]

Furthermore, section 5A of the MPRDA, introduced to effect the OES, requires that EA be obtained before commencing industry activities.[371] The MPRDA's definition of EA references the NEMA's definition of

[359] Regulation 54A(2)b EIA Regulations 2015.
[360] Regulation 54A(2)b EIA Regulations 2015.
[361] Border Deep Sea Angling Association supra note 347 para16.
[362] Ibid at para 16.
[363] Environmental Management Resources (n 353).
[364] Ibid.
[365] Border Deep Sea Angling Association supra note 347 para 1.
[366] Ibid.
[367] Sustaining The Wild Coast NPC supra note 348 Applicants Heads of Argument para 11.3.
[368] Ibid at para 19.2.
[369] Ibid.
[370] Ibid at para 22.2.
[371] Ibid at para 33.

EA.[372] Accordingly, an EA would be completed according to NEMA's provision. Finally, to establish whether seismic acquisition requires an EA, applicants referred to the EIA Regulations Notice 1 of 2014, number 21C, which lists activities that cannot commence without an EA.[373] This list includes all the activities applicable to an exploration right, excluding a desktop study and aerial survey.[374] Therefore, it is against this provision that Shell must obtain an EA under NEMA to acquire seismic data even if MPRDA EMPr is in place.

2.2.2 Respondents Head of Arguments

Shell outlined the evolution of the legislation, which it argued supported that an EA is not required for their seismic survey. They noted the requirement of an EMPR when applying for an ER.[375] They elaborated that the MPRDA amendment, which effected the OES and removed environmental management provisions from the MPRDA, came into effect in June 2013. The EMPr submitted with the application for the ER was approved on 17 April 2014.[376] Furthermore, the transitional arrangements for companies with approved EMPr when the OES came into effect gave the MPRDA EMPr the status of a NEMA EA.[377]

Under NEMA, the industry activities form part of the EIA regulations of 2010. As established in the *Mineral Sands Resources (Pty) Ltd Vs Magistrate for the District of Vredendal, Kroutz,* the approval of the MPRDA EMPr does not eliminate the requirement to obtain an EA under NEMA.[378] In contrast, NEMA's transitional provisions to give effect to the OES also states that an EMPr or EMP issued under the MPRDA has the status of the EA issued under NEMA.[379] Furthermore, NEMA authorises the Minister of Minerals to request the MPRDA EMPr holder to upgrade the EMPr to address any deficiencies.[380] Against this background, Shell considered that no additional environmental management approvals were required.[381] Furthermore, granting the ER renewal served as a legal instrument authorising the seismic acquisition.[382]

On behalf of the Minister, the Chief Director of Legal Services in the DMRE submitted an affidavit outlining the legality of the seismic survey. In his submission, he stated that the MPRDA EMPr, which accompanied

[372] Ibid at para 34.
[373] Ibid at para 36.
[374] Ibid.
[375] Section 79(4)(b).
[376] Border Deep Sea Angling Association supra note 347 para 16.
[377] Section 38B MPRDA of 2008.
[378] Ibid at para 314.
[379] NEMA's Transitional provisions 12(4).
[380] NEMA's Transitional provisions 12(5).
[381] Sustaining The Wild Coast NPC supra note 348 Shell's Heads of Argument para 46.
[382] Ibid para 37.

the application for the renewal of the ER, constitutes an EA envisaged under NEMA.[383] According to the DMRE, the seismic survey is lawful under the MPRDA and NEMA.[384]

2.2.3 The Judgement

Much of the judgement is centralised on public consultation during the ESIA process, where the court found that Shell's consultation was lacking, merely a tick box exercise and not meaningful. However, relevant to this study was the outcome of whether an EA issued under NEMA is required to conduct industry activities when an EMPr issued under the MPRDA is in place.[385] In the EA issue, the court found that Shell did not secure an EA under NEMA necessary for exploration activities regulated by the MPRDA.[386]

The court concluded that absence of the EA coupled with the lacking public participation meant that the procedure used to grant the exploration right was not fair.[387] Furthermore, the Minister of Minerals did not consider environmental harm and the affected community when granting the right. The exploration right and its respective were set aside in their entirety.[388]

From these cases, it is concluded that there continues to be legislative misalignment and duplication. These regulatory misalignments and duplication are concerning because the OES was introduced to eliminate this misalignment and streamline environmental governance. Shell believes it fully complied with all the environmental management requirements and exceeded them, supported by the regulator. The regulator's view on the non-requirement of a NEMA's authorisation is concerning. Whether the DMRE looks past its mandate of promoting industry investment and considers sustainable development is questionable.

3 The Extractives Sector Investment Status post the OES implementation

This section explores the impact of the OES on investment in South Africa. The Karoo Shale Gas project, Exploration Right 236 off the Kwa-Zulu Natal Coast and the Searcher reconnaissance permit are used as case studies. These case studies demonstrate how the introduction of the OES has delayed

[383] Sustaining The Wild Coast NPC supra note 348 Department of Mineral Resources and Energy Answering Affidavit para 4. 1..
[384] Ibid.
[385] *Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others* (3491/2021) [2022] para 31.
[386] Ibid para 24.
[387] Ibid.
[388] Ibid.

investment in South Africa and how there has been a sudden increase in petroleum exploration in South Africa.

The exploration and successful development of petroleum resources present an opportunity to eliminate the current energy challenges in South Africa.[389] South Africa's shale gas resources are estimated at 485Tcf.[390] The successful discovery and production of shale gas will have significant economic benefits for the country.[391] Equally, petroleum exploitation can have detrimental effects on the environment, culture and social elements due to its invasive extraction process and emissions.[392] Accordingly, adequate regulation is key to the sustainable development of these resources.

3.1 Karoo Shale Gas Project

In 2010, a joint venture (JV) partnership consisting of Shell BVI, Bundu and Falcon applied for an exploration right (ER) under section 79 of the Minerals and Petroleum Resources Development Act.[393] An Environmental Management Programme (EMPr) is a prerequisite when applying for an ER.[394] Public consultation is a requirement when completing the EMPr.[395] The public participation raised the following concerns: (1) Drilling and the fracturing process, (2) legal process uncertainty, as there were no regulations for shale gas exploitation and (3) the short timeframe to complete the EMPr process for the potential impact on the environment.[396]

In June 2011, the Minister of Minerals put a moratorium on rights under MPRDA's Chapter 6, except for those with exclusivity.[397] An interdepartmental task team was established in December 2011.[398] The team evaluated the risks associated with fracking and recommended measures to exploit shale gas sustainably.[399] The parliament approved the recommendations of the task team in 2012.[400]

On 15 October 2013, the draft petroleum and exploitation regulations were published by the Minister of Mineral Resources and public invited for comment.[401] These regulations introduced technical provisions

[389] Judith Ashleigh Roberts a Comparative Analysis of Shale Gas Extraction Policy: Potential Lessons for South Africa (Master's degree thesis, Stellenbosch University, 2013) 87.
[390] Ibid.
[391] Ibid 389.
[392] Minister of Mineral Resources v Stern supra note 270 para 7
[393] Ibid para 10.
[394] Section 79(4) MPRDA; section 39 MPRDA.
[395] Regulation 49(1)(f) MPRD Regulations 2004.
[396] Minister of Mineral Resources v Stern supra note 270 para 10.
[397] Ibid para 11.
[398] Ibid para 12.
[399] Ibid.
[400] Ibid para 14.
[401] Republic of South Africa 'Technical regulations for petroleum exploration and exploitation' Government Notice 1032 (2013).

for petroleum exploration and exploitation, especially the hydraulic fracturing associated with shale gas operation.[402] A contrasting view states that these regulations were only introduced because of shale gas exploitation's detrimental environmental impact. Accordingly, the scope of making such regulations lies within the DFFE.[403]

Following presentations and comments on the 2013 draft petroleum and exploitation regulations, the Minister of Mineral Resources put a moratorium on all new application for technical co-operation permits, exploration and production rights on February 2014, which were predominantly onshore Karoo area.[404] Subsequently, in December 2014, the Petroleum Agency of South Africa (PASA), the regulator for petroleum resources extraction, advised the JV to revise the EMPr and exclude fracking.[405] The revised EMPr was subjected to public participation that led to litigation.[406] In June 2015, the Minister of Mineral Resources published the Regulations for Petroleum Exploration and Production.[407]

3.1.1 Minister of Mineral Resources v Stern [408]

The issue raised in litigation was the legality of the Regulations for petroleum exploration and production, which the Minister of Mineral Resources published in June 2015.[409] The authority of the Minister to develop these regulations was questioned.[410] As mentioned above, these regulations aimed to circumvent the environmental impact of shale gas exploitation. Other technical provisions relating to wellbore operations were included, of which it can be argued that these provisions were also introduced in consideration of the environment should there be a mechanical failure of the wellbore.[411]

The court referred to section 50A of the National Environmental Management Act, introduced by the OES.[412] Section 50A(2)(b) exclusively empowered the Minister of DFFE to set an environmental regulatory framework, norms and standards for mineral and petroleum exploitation.[413] The court further confirmed that these powers include identifying listed activities,[414] making regulations,[415] and developing

[402] Republic of South Africa 'Technical regulations for petroleum exploration and exploitation' Government Gazette No.36938.
[403] MPRD draft regulations of 2013 Chapter 2 regulation 3 deals with Environmental Impact Assessment.
[404] Republic of South Africa 'Technical regulations for petroleum exploration and exploitation' Government Gazette No.71.
[405] Minister of Mineral Resources v Stern supra note 270 para 15.
[406] Ibid.
[407] Republic of South Africa 'Regulation for petroleum exploration and production' Government Gazette No. R.466.
[408] Minister of Mineral Resources v Stern supra note 270.
[409] Section 107(1)(a) MPRDA.
[410] Minister of Mineral Resources v Stern supra note 270 para 30.
[411] MPRD draft regulations of 2015 op cit402 note 402; Minister of Mineral Resources v Stern supra note 270 para 35.
[412] Ibid.
[413] Minister of Mineral Resources v Stern supra note 270 para 31.
[414] Ibid.
[415] Ibid.

norms and procedures[416] for a listed activity.[417] Furthermore, the legislative changes included repealing section 107(1)(a) of the MPRDA, which empowered the Minister of Minerals to make regulations for environmental aspects.[418]

Accordingly, the court found that the Minister of Minerals no longer had powers to make environmental regulations concerning minerals and petroleum exploitation.[419] The court concluded that this aligns with the OES's objectives as stipulated under section 50A(2)(b) of NEMA.[420] Therefore, the Regulations for Petroleum Exploration and Production, 2015, were entirely set aside.[421]

In June 2018, the Minister of Mineral Resources put another moratorium on new applications for technical co-operating permits, exploration and production rights offshore and onshore.[422] The 2014 moratorium was lifted on 20 December 2019, four days before publishing the new Upstream Petroleum Resources Development Bill for public comment.[423] However, the exploration and production activities onshore in the Karoo area and offshore new applications are still under moratorium.[424] Furthermore, hydraulic fracturing activities is prohibited until the promulgation of the appropriate regulatory framework for hydraulic fracturing.[425]

3.1.2 The Implication of losing the Karoo Shale Gas Investment

To quantify the delayed investment, Econometrix (Pty) Ltd completed an analysis which forecasts the potential economic benefit to South Africa from the Karoo Shale Gas project.[426] Two scenarios were modelled.[427] Scenario A assumes the resource potential of 20Tcf of gas, and Scenario B estimates the resources at 50Tcf.[428] The details of the input assumptions used in this model are out of the scope of this study. The results will be outlined, focusing on the turnover, value-added to the economy, employment, and the project's contribution to the government revenue.

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[416] Ibid.
[417] Ibid.
[418] Ibid para 30.
[419] Ibid para 48.
[420] Ibid para 31.
[421] Ibid para 53.
[422] Republic of South Africa "Restriction in terms of section 49(1) of the Mineral and Petroleum Resources Development Act, 2002" Government Gazette No.41743 No.657.
[423] Republic of South Africa "Restriction in terms of section 49(1) of the Mineral and Petroleum Resources Development Act, 2002" Government Gazette No.1664.
[424] Ibid.
[425] Ibid.
[426] Econometrix (Pty) Ltd 'Karoo shale gas report: Special report on economic considerations surrounding potential shale gas resources in the Southern Karoo of South Africa' (2012) in Microsoft Word - KSG Report - February 2012 (cer.org.za), last accessed in May 2022.
[427] Ibid 60.
[428] Ibid 61.

Scenario A results indicate that the Karoo Shale Gas project would yield a turnover of R1.168 trillion.[429] The estimated value added to the country's economy from this turnover would be approximately R2 trillion.[430] The estimated employment of such a project reaches a maximum of 355 817 over the project value chain.[431] The estimated overall contribution to the government revenue is estimated at R887 billion.[432]

Scenario B results yield a turnover of R2.9 trillion.[433] The corresponding value that would be added to the country from this turnover is estimated at R5 trillion, creating maximum employment of up to 854 757 jobs.[434] This project's associated annual remuneration of employees would be R1.9 trillion, and the overall contribution to the government revenue is estimated at R2.2 trillion.[435]

It is no wonder the Minister of Mineral Resources favoured natural resource development over the environmental implications, despite being part of the OES. The Minister of Minerals' consideration of the "sustainable benefit" envisaged in the DMRE's mandate focused on economic benefit rather than environmental sustainability in the Karoo project and ignored the legislative changes introduced by the OES. Furthermore, this Karoo project indicates a conflict of interest with the Minister of Mineral Resources mandates following the introduction of the OES.

3.2. Exploration Right 236 off the Kwa-Zulu Natal Coast exploration drilling by companies ENI and Sasol

In the past five years, investors have experienced an increased risk in petroleum exploration in South Africa. This risk is associated with obtaining environmental authorisation for exploration activities. For example, two projects, namely (1) Exploration Right 236 off the Kwa-Zulu Natal Coast exploration drilling by companies Eni and Sasol and (2) Searcher's reconnaissance seismic survey off the West coast of South Africa, resulted in litigation because of environmental authorisations (EA).

In Exploration Right 236, Eni applied for an EA for an exploration and appraisal drilling work programme.[436] Eni already had an Environmental Management Programme (EMPr) granted in December

[429] Ibid at 67.
[430] Ibid.
[431] Ibid.
[432] Ibid.
[433] Ibid.
[434] Ibid.
[435] Ibid.
[436] Minister of Forestry, Fisheries and Environment RSA 'Appeal decision: Appeal against a decision to grant an environmental authorisation to Eni South Africa B.V and Sasol South Africa Ltd in respect of the proposed exploration drilling within offshore Block ER 236, in KwaZulu Natal Province' (LSA 187877)[2020] paragraph 1.1.

2018 under the MPRDA.[437] This EMPr, together with the Environmental Impact Assessment (EIA) report completed in 2019, was sufficient for the DMRE to grant the EA to Eni in August 2019.[438] In line with the EIA Regulations (2014), stakeholders were informed about granting the EA and invited to exercise their right to appeal where necessary.[439]

The DFFE received 45 appeals against the EA.[440] The poor public consultation aggrieved most appellants during the ESIA process.[441] Pertinent to this study are the following: (i) DMRE's conflict of interest in the granting of EAs for oil and gas exploration and (ii) procedural irregularities, competent authority delegation of powers.[442] The latter two appeals result from the changes introduced by the OES.

3.2.1 DMRE's conflict of interest

The impartiality of the DMRE when considering EAs raised concern.[443] The issue is that fairness and justice might be compromised because the DMRE is authorised to issue EAs, and the same Minister is mandated to promote petroleum development in South Africa.[444] Accordingly, the DMRE may be conflicted and not carry out its environmental protection authority in terms of the Constitution and NEMA.[445]

The Petroleum Agency of South Africa (PASA) responded by referencing section 24O of NEMA, which outlines the criteria for considering EAs.[446] These criteria safeguard the potential for impartiality in decision-making.[447] Furthermore, PASA expressed that the appeal process is not the appropriate forum to raise the issue of conflict of mandate.[448] The Minister of Environment, in their evaluation, concurred with PASA's response and further alluded to section 24O, which guides the decision-making process.[449] Accordingly, the Minister of Environment dismissed this ground of appeal.[450]

3.2.2 Procedural irregularities; competent authority delegation of powers

The appellants raised procedural irregularities in the processing and granting of the EA. They believed that the Minister of Minerals should not have delegated the authority to decide the EIA process to

[437] Ibid para 1.4.
[438] Ibid.
[439] Ibid par 1.5.
[440] Ibid para 1.5.
[441] Ibid para 2.74.
[442] Ibid para 1.16.
[443] Ibid para 2.92.
[444] Ibid.
[445] Ibid.
[446] Ibid para 2.95.
[447] Ibid.
[448] Ibid.
[449] Ibid para 2.98.
[450] Ibid.

PASA.[451] In addition, they raised that PASA is only mandated to review and recommend to the DMRE to decide.[452] In response, PASA argued that its role in the EIA process was limited to advising the DMRE.[453] In addition, PASA referenced section 70 of the MPRDA, which empowers the Minister of Minerals to delegate any functions related to petroleum activities to the agency.[454]

Furthermore, in June 2004, the Minister of Minerals issued a Government Notice 733, Government Gazette 26468, where the PASA was designated as the South African Agency responsible for promoting petroleum exploration and exploitation, empowering PASA to perform any other functions regarding petroleum activities at the request of the Minister.[455] The Minister of DFFE concurred that PASA did not act outside of its scope and further emphasised that PASA merely advised the DMRE in this regard and dismissed the appeal.[456]

Even though the appeal was dismissed, the exploration activities halted in 2019 while the Minister of Environmental Affairs reviewed the appeal. The investor's reputation was also tarnished in the process of appeal.[457] Subsequently, the South Durban Community Environmental Alliance filed a suit against the Minister of DFFE, challenging the EA to drill the exploration well.[458] To date, the status of the case is still pending.[459] The delay has led to the loss of foreign investment as the Operator, Eni, exited the Exploration Right and left South Africa.[460] The article cited challenges with drilling in the deep waters and expressed frustration that the oil companies face due to legal uncertainty in South Africa.[461]

3.3 Searcher's reconnaissance seismic survey

Searcher Geodata UK Ltd applied for a reconnaissance permit on 30 April 2021 to acquire seismic data offshore the West Coast of South Africa.[462] The reconnaissance permit was granted on 9 November 2021.[463] The survey was planned from January to May 2022, but an urgent application for an interdict to

[451] Ibid.
[452] Ibid.
[453] Ibid para 2.102.
[454] Ibid para 2.103.
[455] Ibid.
[456] Ibid para 2.106.
[457] Oil and Gas News South Africa 'Controversial KZN drilling project gets go-ahead' in Controversial KZN drilling project gets go-ahead (bizcommunity.com), last accessed in May 2022.
[458] South Durban Community Environmental Alliance v. Minister of Environment, Forestry and Fisheries and Others pending case.
[459] Ibid.
[460] Bloomberg 'Eni to Exit South Africa Offshore Oil Block Amid Tech Challenges' in Eni to Exit South Africa Offshore Oil Block Amid Tech Challenges - Bloomberg, last accessed in May 22.
[461] Ibid.
[462] Christian John Adams & Others v Minister of Mineral Resources and Energy & Others (West Coast Seismic Survey) Part A paragraph 22.
[463] Granting Letter Recon 38.pdf (slrconsulting.com), last accessed on 16 May 2022; Christian John Adams & Others v Minister of Mineral Resources and Energy & Others (West Coast Seismic Survey) Part A paragraph 22.

stop the seismic survey was filed on 7 February 2022.[464] The applicants included small-scale fishers, indigenous communities, and environmental organisations.[465] There were two parts to the application. In Part A, the applicants raised that the affected and interested parties were not consulted adequately.[466] Part B dealt with the legality of the seismic survey acquisition, raising that Searcher had no EA issued under NEMA to complete the survey, which is relevant to this study.[467]

In considering Part B of the application, the legality of starting the seismic survey, the court first referred to section 5A under the MPRDA, which prohibits reconnaissance operations without an EA.[468] The reconnaissance operations are defined under the MPRDA as any activities performed in the search for petroleum, including remote sensing and photo geological surveys, but the prospecting or exploration operations are limited to the acquisition and processing of seismic data.[469] The envisaged EA has the meaning ascribed to it under section 1 of NEMA.[470]

NEMA's EA is covered under Chapter 5. The court started with section 23, which covers the general objectives of integrated environmental management for activities that significantly impact the environment.[471] Furthermore, the court touched on section 24, which requires an EA for a listed activity.[472] Section 24F prohibits the commencement of a listed activity without the Minister of Minerals having granted EA for that activity.[473]

On 11 June 2021, DFFE issued amendments to the EIA Regulations Listing Notice 1, Listing Notice 2 and Listing Notice 3.[474] These amendments were published three months after Searcher had submitted the EMP as part of the reconnaissance permit application.[475] The new Regulations stipulated that an EA, issued under section 24 of NEMA and the 2014 EIR Regulations, is required for reconnaissance permit applications submitted on or after 11 June 2021.[476] The Searcher EMP was submitted after 11 June 2021; however, transitional provisions apply to the applications for the permit.[477]

[464] Christian John Adams & Others supra note 463 para 43.
[465] Ibid para 2.
[466] Ibid.
[467] Ibid para 3.
[468] Ibid.
[469] Ibid para 18.
[470] Ibid.
[471] Ibid.
[472] Ibid para 20.
[473] Ibid para 21.
[474] Ibid.
[475] Ibid.
[476] Ibid.
[477] Ibid.

The court found that Searcher must have an EA issued under NEMA to complete the seismic survey and that Searcher failed to include all relevant parties in the public participation.[478] Accordingly, the court interdicted the respondents from acquiring the seismic survey. However, the interdict is conditional on the outcome of the applicants' appeal of the reconnaissance permit granting, and Part B application, which is the legality of the seismic survey without an EA issued under NEMA.[479]

The interdict caused excessive delays for both the country and the investor. To date, Searcher has not been able to acquire seismic data, and the country has lost on exploration activities that would have assisted the country in understanding its petroleum resources potential. In addition, Searcher has lost money in terms of the mobilising costs paid to bring the seismic acquisition vessel to South Africa to acquire the data. Accordingly, failure to understand the environmental management requirements introduced by the OES continues to paint the country as a high-risk investment destination.

4 Conflict of Interest: Minister of Minerals mandate

This section focuses on the Minister of Minerals' expanded scope following the OES's introduction. Under the OES, the Minister of Minerals is the competent authority for granting EAs.[480] This authority raised concerns regarding conflicting mandates of the DMRE, which may lead to compromised environmental management compliance and enforcement.[481] This compromised compliance will lead to mining companies operating illegally, leading to negative press portraying illegal mining and reputational damage to mining companies, which will deter investment in the country. The DMRE's mission is to regulate, transform, and promote industry development; accordingly, environmental compliance enforcement might be compromised.[482] The scope of the evaluation is limited to granting rights in environmentally protected areas.

4.1 Granting of rights in Environmentally Protected Areas

Chrissiesmeer is located near Ermelo in the Mpumalanga district and is one of the largest freshwater lakes in South Africa, hosting numerous wetlands, and its mouth feeds directly into the Vaal, Olifants and Komati Rivers.[483] It is a sensitive environmental area under the Convention on Wetlands of International

[478] Ibid para 42.
[479] Ibid para 50.
[480] Section 50A(2)(a) NEMA.
[481] Mpinga (n 304) 38.
[482] Ibid at 105.
[483] De Venter H, Naidoo L, Cho M and Job N "Establishing remote sensing toolkits for monitoring freshwater ecosystems under global change" (2020) page 54, Water Research Commission.

Importance.[484] It is also proclaimed under the Critical Biodiversity Areas and a Protected Environment under the Environmental Management Protected Areas Act.[485]

In 2010, the Mpumalanga Tourism and Park Agency (MTPA) applied to the Minister of Minerals, requesting that Chrissiesmeer be declared a restricted and prohibited area to mineral exploitation under section 49 of the MPRDA.[486] Subsequently, a moratorium was issued on 4 March 2011, prohibiting the granting of mineral rights over the area.[487] This process formed part of the regulatory alignment between the Minister of Minerals and DFFR, leading to the appointment of an interdepartmental task team.[488] The task team's role was to determine whether the OES should be implemented or not and advise on the optimal solution for the implementation of the OES, which was currently being deliberated at the time.[489]

The task team's recommendations were incorporated into the Outcome 10 Agreement, signed by the Cabinet in September 2010.[490] The Outcome 10 Agreement included the commitments to identifying environmentally sensitive areas where mineral exploitation should be restricted.[491] The moratorium issued on 4 March 2011 over the Chrissiesmeer Biodiversity Site was scheduled to be in place for three years, in line with the finalisation and gazetting of restricted mineral development areas by April 2014.[492] The Minister of Minerals lifted the moratorium in September 2011, citing the importance of mineral development and its contribution to the country's Gross Domestic Products.[493]

In 2013, Msobo Coal (Pty) Ltd applied for five permits within the Chrissiesmeer Biodiversity Site.[494] The DMRE accepted the application, allowing for the EMPr public participation process to begin. During the EMPr public participation, the project was refused and was also submitted to the Regional Mining Development and Environmental Committee (RMDEC) in Mpumalanga.[495] Ultimately, the DMRE refused

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[484] Lubbe W 'Mining in Chrissiesmeer wetland and state custodianship' Mini dissertation at North-West University (2019) 52.
[485] Province of Mpumalanga 'Declaration of the Chrissiesmeer Protected Environment in terms of the Environmental Management: Protected Areas Act, 2003' Provincial Gazette Extraordinary No. 2251.
[486] Province of Mpumalanga 'Consultation Process in terms of the Environmental Management: Protected Areas Act, 2003: Intention to declare a protected environment' Provincial Gazette Extraordinary No. 2181.
[487] Republic of South Africa 'Prohibition or restriction of prospecting or mining in terms of section 49(1) of the Minerals and Petroleum Resources Development Act, 2002' Gazette No. 34051, No 169.
[488] Centre for Environmental Rights (n 288) 20.
[489] Ibid.
[490] Ibid.
[491] Powell S, Roux S and Horsfield C 'Why no-go areas for mining are in everybody's interest: Learnings from zero hour' In Good Company: Conversations around Transparency and Accountability in South Africa's Extractives Sector (2017) 2nd Edition page 47.
[492] Republic of South Africa 'Prohibition or restriction of prospecting or mining in terms of section 49(1) of the Minerals and Petroleum Resources Development Act, 2002' Gazette No. 34051, No 169.
[493] Susan Shabangu 'Budget Vote Speech' National Council of Provinces (2022) available at Budget Vote Speech by Ms Susan Shabangu, MP, Minister of Mineral Resources, to the National Council of Provinces (NCOP) Parliament | South African Government (www.gov.za), last accessed on 8 December 2022'
[494] Centre for Environmental Rights (n 288) 22.
[495] Ibid.

the Mosobo Coal application.[496] However, in 2015 DMRE also accepted applications from MA Coal (PTY) Ltd and Blue Moon (PTY) Ltd in the Chrissiesmeer Protected Environment.[497]

This case study indicates that the DMRE prioritises mineral development to the detriment of the environment. The Non-Governmental Organisations (NGOs) and ecological protection societies play a significant role during the stakeholder consultation for the EMPr. This is notwithstanding the several engagements that even led to the Cabinet approval of the Outcome 10 Agreement, including the government's commitment to protecting the environment. This conflicting mandate compromise sustainable development of mineral resources, leading to project delays, media reports of illegal mining, which are detrimental to mining companies. In this way, South Africa's perception as a mining destination is compromised.

5 Cooperative Governance

The principle of cooperative governance is enshrined in the Constitution of South Africa.[498] It is further amplified in the regulatory statutes applicable to the industry.[499] Even before the OES came into effect, the MPRDA required that the Minister of Minerals consult other relevant national institutions on matters relating to environmental protection before approving the EMPr and ultimately granting the right.[500] This consultation is also elaborated under Chapter 5 of NEMA's integrated environmental management objectives, which echoes that joint decision-making is required when considering activities that significantly impact the environment and socio-economic conditions.[501]

To fulfil the integrated environmental management objective, an EA issued under NEMA must include a description of the envisaged consultation plan with other national departments and government spheres, with a bearing on environmental management.[502] The consultation plan is further elaborated on the NEMA Environmental Impact Assessment Regulations, where the Minister of Minerals must consult other national departments responsible for environmental management.[503]

The Constitution of South Africa recognises three spheres of government.[504] These are the national, regional and local government spheres.[505] It further specifies the principles of cooperative government

[496] Ibid.
[497] Ibid.
[498] Section 40(2) South African Constitution.
[499] Opening paragraph of NEMA, section 24 NEMA and previously section 40(1) MPRDA.
[500] Section 40(1) MPRDA before the 2013 amendment.
[501] Section 23 NEMA.
[502] Section 14(f) NEMA.
[503] Regulation 7 NEMA Environmental Impact Assessment Regulations.
[504] Section 40(1) South African Constitution.
[505] Ibid.

and intergovernmental relations.[506] These principles require that the three spheres and the different organs of government operate harmoniously and peacefully and promote unity within the Republic of South Africa.[507] The three spheres of government and national organs should conduct their functions and exercise their powers without infringing on other spheres' jurisdictions.[508] The national and local government powers and functions are relevant to this study.

The Constitution authorises the national parliament's exclusive competence to pass legislation in the national sphere.[509] The Constitution further empowers the National parliament to pass legislation on any matter, including those referenced in Schedule 4 but not Schedule 5.[510] Glazewski and Rumble have described this competency as "residual competency".[511] Residual competency allows the National parliament to have exclusive legislative competence to all matters not expressly assigned to the provincial or local sphere.[512] This legislative competency applies to the minerals not listed in Schedule 4 or 5.[513] The MPRDA further exclusively authorises the Minister to grant prospecting or mining rights and permits for mineral and petroleum exploitation.[514]

The municipal legislative authority and powers are provided under Chapter 7 of the Constitution.[515] The objects of the municipal government are listed in Section 152 of the Constitution.[516] The objects that require the municipal government to promote social and economic development and a safe and healthy environment are relevant to this study.

The cooperative government for the municipalities is provided under the Local Government Municipal Systems Act of 2000.[517] The Municipalities must exercise their legislative authority in line with the cooperative governance envisaged in section 41 of the Constitution.[518] This collaborative governance discourages the national and provincial spheres of government from interfering and compromising the local municipality's right to exercise its legislative authority.[519]

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[506] Section 41 South African Constitution.
[507] Section 41(1) South African Constitution.
[508] Ibid.
[509] Section 44 South African Constitution.
[510] Section 44(a) South African Constitution.
[511] J Glazwewski, and O Rumble 'Environmental Law in South Africa'. Chapter 6: Administration and Governance. Looseleaf Service (Issue 1), 2013, LexisNexis.
[512] Ibid.
[513] Ian Brumfitt Reconciling Mining and Land-Use Planning Law: Challenges Facing Cooperative Governance in South Africa." Chapter 2: Constitutional Setting (LLM thesis Cape Town University, 2013)
[514] Section 17, 23, 80 and 84 MPRDA.
[515] Section 151 South African Constitution.
[516] Section 152 South African Constitution.
[517] Section 3 of the Local Government Municipal Systems Act 32 of 2000.
[518] Ibid.
[519] Ibid.

The Minister of Minerals' inability to exercise cooperative governance is illustrated via the *MacSand (Pty) Ltd v City of Cape Town* case. In 2007, the Minister of Minerals granted MacSand (Pty) Ltd a mining permit over the Rocklands dune located in Mitchell's Plain, Cape Town, to mine sand.[520] The mining right was issued over the Rocklands dune for two years, which could be renewed for three years.[521] The City of Cape Town had zoned the Rocklands dune as a public open space.[522]

In 2008, the Minister of Minerals issued a mining right to MacSand (Pty) Ltd, which authorised the company to mine sand from the Westridge dune.[523] There are three ervens in the Westridge Dune, spanning over 74.2 hectares and the mining area approved with the mining right only covered 16.3 hectares.[524] These ervens are namely, erf 9889, erf 1848 and erf 1210. These ervens are zoned in terms of the Land Use Planning Ordinance, 1985 (LUPO), where land is zoned according to its utilisation under the local sphere of a government authority.[525] Two of these erven are zoned as public open spaces and the other as rural areas.[526] The granted mining area is situated in a residential area bounded by private homes.[527] Private homes also border the Rocklands dune area, and additionally, it is located between two schools.[528]

MacSand (Pty) Ltd started mining the Rocklands dunes in 2009.[529] A conflict arose between the DMRE and the City of Cape Town, which saw a series of cases pending at the Constitutional Court. The issue was whether the national government could veto the local government's legislative authority. The City of Cape Town applied for an interdict at the Western Cape High Court to stop mining operations until the dunes were zoned appropriately following LUPO.[530] The interdict was granted.[531] MacSand (Pty) Ltd appealed to the Supreme Court[532] later at the Constitutional Court, which further confirmed the decision taken by the Western Cape High Court.[533]

The Constitutional Court judgment stated that the MPRDA and LUPO are applicable and not in conflict.[534] These two instruments deal with different subject matters, the MPRDA, granting rights and the LUPO,

[520] Maccsand (Pty) Ltd v City of Cape Town 2012 4 SA 181 (CC) para 20.
[521] Ibid.
[522] Ibid.
[523] Ibid para 21.
[524] Ibid.
[525] Ibid.
[526] Ibid.
[527] Ibid.
[528] Ibid.
[529] Ibid para 22.
[530] City of Cape Town v Maccsand (Pty) Ltd 2010 6 SA 63 (WCC) para 23.
[531] Ibid paras 82B-H.
[532] Maccsand (Pty) Ltd v City of Cape Town 2011 6 SA 633 (SCA).
[533] Maccsand (Pty) Ltd v City of Cape Town 2012 4 SA 181 (CC).
[534] Ibid para 51.

the zonation of land.[535] However, exercising a right granted under the MPRDA is subject to LUPO.[536] The court further reiterated the importance of cooperative governance, where there is an overlap between the MPRDA and LUPO.[537] In this way, the OES has caused legal uncertainty, delayed investment, and discouraged FDI in the South African extractives industry.

6 Conclusion

This chapter indicates that the implementation of the OES has proven to be more challenging than envisaged. The case studies show that the transitional arrangements were haphazard and created uncertainty. Court cases are still pending due to the uncertainty introduced by the MPRDA EMPr having the same status as the EA issued under NEMA. The result is that South Africa continues to be viewed as a high-risk mining destination due to these court cases. In addition, this has delayed much-needed investment in the country. The Shell Wild coast seismic survey will hopefully be able to clarify this provision and set precedence

[535] Ibid.
[536] Ibid.
[537] Ibid para 48.

CHAPTER 4: TOWARDS ENVIRONMENTAL GOVERNANCE INTENDED FOR ECONOMIC COMPETITIVENESS

1. Introduction

This research focused on the role of environmental regulations in South Africa's competitiveness regarding mineral and petroleum investment. Attention was paid to the One Environmental System (OES) with its objective of deconvoluting the environmental governance process for the extractives industry.[538] First, the research found that the OES has not achieved its goal of integrated environmental permitting system. The obstacles in achieving this goal are the legal issues concerning the transition to the OES, the scope of the competent authority, the DMRE, which conflicts with its mandate and the lack of cooperative governance between the DMRE and DFFE, discussed above in Chapter three. This study recommends the Organisation for Economic Cooperation and Development's Integrated environmental permitting system guidelines in finding solutions South Africa's single environmental permitting system.

Secondly, the research showed that there continues to be uncertainty in the environmental governance for the industry. This uncertainty continues to delay investment in the industry. In this part, this study recommends environmental governance that is designed to attract investment, focusing on policy design and implementation strategies.

2. Integrated Environmental Permitting System

The integrated environmental permitting system envisage a holistic environmental protection, including the different mediums of air, water, and land through the implementation of a uniform and single permitting system.[539] This holistic approach is driven by the idea of Integrated Pollution Prevention and Control (IPPC) directive, which requires that pollution issues should be addressed in an integrated manner considering the interrelationships between the different environmental media, including water, air land pollution.[540] The fragmentation in the governance of the different environmental media often leads to numerous permits required for industrial projects, increasing compliance costs and project delays,

[538] Section 50A NEMA.
[539] Kaya E "The Implementation of the IPPC directive to SMEs in textile industry in Turkey" (Master Thesis, Lund University, 2005) 10.
[540] H Tolsma "Integrated Environmental Permitting", 2010 Environmental Law Network International page 82.

negatively impacting investment.[541] Globally, and for the past two decades, several countries have identified the importance of an integrated permitting system when facing challenges with environmental governance fragmentation.[542]

In Europe, Sweden adopted an integrated permitting system in 1969.[543] Britain followed after the study completed by the British Royal Commission on Environmental Pollution.[544] The study found that the pollution of one environmental medium may have a ripple effect in other areas of the environment.[545] The study recommended that pollution be directed to the area where the least damage is realised and a unified pollution control inspectorate to ensure that the best practical environmental option is adopted for polluting industries.[546]

Holland adopted a cross-media environmental protection approach mid-1980s following a study on agricultural soil pollution caused by chemical waste.[547] This approach focused on the environmental area receiving the pollution and the area of the source of pollution and classified environmental problems into eight groups, climate change, acidification, waste disposal, dispersion, water depletion and resource management span across territorial and institutional boundaries.[548] The Dutch cross-media approach influenced the Organisation of Economic Cooperation and Development (OECD) Council to recommend an Integrated Pollution Prevention and Control (IPPC) document in 1991.[549] The IPPC document required that risk assessment and mitigation planning on activities impacting the environment be considered in an integrated pollution control throughout the commercial and environmental lifecycle.[550] The OECD adopted the IPPC in 1991, approved by the Pollution Prevention and control group in 1996 and promoted it internationally.[551]

In theory, integrated environmental protection is ideal; however, the practical implementation is challenging.[552] This challenge is introduced by the associated legislative and institutional changes

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[541] Rabe B "Integrated Environmental Permitting: Experience and innovation at the state level" State & Local Government Review, vol. 27, no. 3, 1995, page 209.
[542] X Zwanziger 'The influence of the principle of integration in promoting integrated permitting – A critical reflection through the lens of Netherlands integrated permitting regime' (Master's Degree thesis, Cape Town University, 2013).
[543] R Hersh 'A review of integrated pollution control efforts in selected countries' (1996) Resources for the *Future Discussion Papers* 38.
[544] Zwanziger (n 542) 33.
[545] Ibid.
[546] Ibid.
[547] Hersh (n 543) 4.
[548] Ibid.
[549] OECD 'Recommendation of the Council on Integrated Pollution Prevention and Control' (2007).
[550] Ibid.
[551] Ibid.
[552] Hersh (n 543) 6.

transitioning to the integrated environmental system.[553] Several countries in Eastern Europe, Caucasus and Central Asia (EECCA) aspire to reform the integrated permitting system to replace the current fragmented and inefficient multiple permits and licenses for environmental impacts.[554] Consequently the OECD developed the Integrated Environmental Permitting Guidelines for EECCA countries to facilitate regulatory and institutional reform.[555]

This section begins with recommendations on the legal issues for transitioning into an integrated system. It follows with institutional reform, focusing on the custodian for environmental protection and designation of permitting authority. Lastly, it concludes with the responsibility between the different government spheres.

2.1 Legal Issues

Exploring the existing legal framework is essential when phasing the integrated permitting system.556 A fragmented legislation results in incoherent governance structures, which results in fragmented governance processes.[557] Integration promotes efficiencies on the operational level by eliminating different authorities, legislative duplication and overlap, inconsistencies required by different authorities leading to uncertainty and duplication.[558] Equally detrimental is that various departments use state resources for the same procedure.[559]

The OECD guidelines recommend that the new legislative framework replace and not supplement the existing laws.[560] In addition, the new legislative framework must set out transitional provisions with its associated periods and define competent authorities' roles.[561] The secondary legislation should provide procedures and technical guidelines for permit applications.[562] Legislative integration and implementation are crucial to achieving an efficient integrated permitting system.[563]

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[553] OECD 'Integrated environmental permitting guidelines for EECCA countries' (2005).
[554] Ibid.
[555] Ibid.
[556] Rabe G 'Integrated environmental permitting: Experience and innovation at the state level' (1995) *State & Local Government Review* 214.
[557] Hersh (n 543) 17.
[558] Ibid at 18.
[559] Ibid at 17.
[560] OECD (n 553) 178.
[561] Ibid at 179.
[562] Ibid.
[563] Kotze L 'A legal framework for integrated environmental Governance in South Africa and the North-West Province' (PhD Thesis submitted to the North-West University, 2002) 38.

Legislative integration seeks to achieve the following; first, sustainable development; secondly, harmonise legislation by eliminating contradictions between policies and lastly, mutual benefits and support to all concerned.[564] There are two types of legislative integration, internal and external.[565] Internal integration involves the integration of environmental policies within the environmental sector, while external integration, also called sectoral integration, consists of incorporating ecological provisions into other policies.[566]

External integration fosters sustainable development by considering environmental issues in the policies of other sectors.[567] The intention is to enforce ecological responsibility in other sectors by incorporating environmental procedures in their policies to promote the greening effect.[568] The practical implementation of this integration is challenging because environmental guidelines, standards or programs incorporated into other sectoral policies have different authorities with differing mandates, often leading to conflict.[569] Successful external integration relies on cooperative governance between regulators and extensive public education.[570] Before the OES, the South African extractive industry's environmental provisions were incorporated into the MPRDA.[571] However, this system led to regulatory duplication resulting in conflict between the DMRE and DFFE due to the lack of cooperative governance, previously discussed in section 2.1 in Chapter three.

The internal integration relies on policymaking designed to harmonise environmental law for licensing and permitting.[572] This integration is achieved by harmonising procedures, licences, and sectoral acts to assess a particular activity's ecological impacts holistically.[573] The activity is implemented by a single authority which grants the permit.[574] Internal integration can be implemented in three ways, substantive, procedural or organisational.[575]

First, substantive integration requires that authorities examine the project holistically, assessing the impact of the planned activities on different media separately.[576] The decision-making process is risk-

[564] Collier U Energy and Environment in the European Union 'The Challenge of Integration' (1994) in Zwanziger (n 542) 15.
[565] Zwanziger (n 542) 18.
[566] Ibid.
[567] Davies J 'Some thoughts on implementing integration' (1992) Environmental Law (22) page 144.
[568] Ibid at 146.
[569] Ibid.
[570] Ibid.
[571] Section 39 MPRDA 2002.
[572] Davies (n 567) 140.
[573] Ibid.
[574] Zwanziger (n 542) 21.
[575] Ibid.
[576] Runhaar H 'Tools for integrating environmental objectives into policy and practice: What works where?' (2016) Environmental Impact Assessment Review 59 page 3.

based, and the permit is granted after weighing the positive and negative impacts of the project.[577] The decision-making heavily relies on scientific knowledge, and where are gaps in methodology, some countries, use the Best Available Techniques in solving the problem.[578] Secondly, organisational integration entails integrating administrative or institutional structures of administrative authorities.[579] It requires cooperation between the different authorities and coordination of these respective procedures, which will be controlled by one authority.[580] In this way, various knowledge related to environmental aspects informs decision-making.[581]

Finally, procedural integration focuses on procedure authorisations.[582] This integration is called the one-stop shop, where the approval of activities related to the permit follows the same procedure.[583] This integration is a one-stop shop administered by a single authority, and its advantage is the highly integrated administration organisation.[584] The procedural integration is essential where the activities related to one permit remain under separate Acts.[585] In this case, the procedural integration of the submission of documents and renewal dates can be synchronised to achieve integration.

Transforming into the OES increased regulatory uncertainty and confusion in the South African context.[586] The transitional provisions were ambiguous, and the implementation of the laws which effected the OES were not synchronised.[587] Implementing the internal integration may eliminate the current issues under the OES and enhance investment through procedural integration, where the approval of activities related to the permit follows the same procedure and timeframes., including the submission of documents, . In this way,

[577] Davies (n 567) 142.
[578] Ibid.
[579] Kotze L 'Integrating pollution regulation regimes: A comparative survey of the Finnish and South African legal systems' (2007) 446.
[580] Ibid.
[581] Ibid.
[582] Kotze L 'A legal framework for integrated environmental Governance in South Africa and the North-West Province' (PhD thesis submitted to the North-West University, 2002) 156.
[583] Kotze L 'Revisiting the South African integrated pollution prevention and control regime: A critical survey of recent developments' (2007).
[584] Ibid.
[585] Kotze L 'A legal framework for integrated environmental Governance in South Africa and the North-West Province' (PhD Thesis submitted to the North-West University, 2002) 156.
[586] Business Leadership (n 44) 191.
[587] Ibid.

2.2 Institutional Structure

In reforming the permitting process, political alignment is critical to successfully transition to an integrated permitting process.588 National departments accountable for environmental governance must agree and define the scope for the respective departments.589 This alignment can be achieved through institutional coordination and the formation of an interdepartmental team responsible for natural resources exploitation, environment, water use, and economy.590

The efficiency of the single permitting system is dependent on institutional capacity, both human and financial resources.[591] In South Africa, investors are aggrieved with lacking departmental resources to meet the OES workload.[592] Reserving financial resources for environmental protection may be unjustifiable, especially in developing countries, with trying socio-economic conditions.[593] The industry's activity and size in the country should inform the balance of resource allocation in ecological conservation and socio-economy.[594]

In South Africa, regulatory uncertainty prevails, as explained in Chapter three. The petroleum case discussed in chapter 3 validates this confusion. It is recommended that the regulator conducts information sessions with the industry and affected parties to align permitting procedures, legal requirements, and performance standards.[595] Such sessions will prepare the Industry to plan long-term costs to comply with other single licensing conditions and the associated financial costs.[596] Furthermore, alignment regarding legal requirements through cooperative governance between the Petroleum Agency of South Africa, DMRE, and DFFE is crucial in successfully implementing the single permitting system.

2.2.1 Custodian for Environmental Protection

The department responsible for environmental regulation is the custodian of environmental protection.[597] First, it is responsible for developing legislation for the integrated permitting process using the

588 OECD (n 553) 178.
589 Ibid.
590 Ibid.
591 OECD (n 553) 185.
592 Business Leadership (n 44) 191.
593 Kotze L 'Revisiting the South African integrated pollution prevention and control regime: A critical survey of recent developments' (2007) *Research Gate* 46.
594 OECD (n 553) 185.
595 Ibid 189.
596 Ibid.
597 World Bank 'Strategy for African Mining' (1992) World Bank Technical Paper Number 181: Africa Technical Department Series 38.

recommendation from recommendations from the interdepartmental task teams.[598] Secondly, the environment department is responsible for developing procedures and guidance documents for the permitting authority and the industry and establishing a national database for permits.[599]

The issuance of permits and inspections within one environmental agency may raise a conflict of interest, leading to compromised compliance.[600] Equally, the separation of licensing and enforcement is inefficient due to poor coordination between national departments.[601] The recommendation is to house the permitting function, inspection and enforcement under one institution but in different departments.[602] This setting will enable information exchange and coordination but maintain independence between the various functions' decisions of the respective internal units.[603] Finally, the environmental department will coordinate with other agencies on environmental matters, leading to consistency and predictability in the environmental permitting process, eliminating duplication of state resources on environmental functions and unburdening the industry on complex permitting processes, which will contribute to the country's competitiveness.[604]

2.2.2 Designation of Permitting Authorities

Before the OES, South African environmental governance had several competing authorities, which resulted in fragmented governance efforts. Post the OES, the designation of the Minister of Minerals as the permitting authority has been one of the controversial issues often described as a "fox guarding the henhouse".[605] This controversy is owed to the DMRE's conflicting mandates of promoting natural resource development versus environmental protection induced by such development.[606]

The OECD distinguished between three types of permitting authorities.[607] First, a permitting system involves establishing a "core team" of specialists from the relative departments.[608] The "core team" discusses the permit application, whether through a committee or a written procedure process that results in the issuance of an integrated permit.[609] This permitting option requires harmonisation between the

[598] OECD 'Guiding Principles of Effective Environmental Permitting System: Principle 3: Appropriate Permitting Authority.' (2007) 11.
[599] Ibid.
[600] World Bank (n 597) 38.
[601] OECD (n 553) 180.
[602] Ibid at 182.
[603] World Bank (n 597) 38.
[604] Rabe B 'Integrated Environmental Permitting: Experience and Innovation at the State level.' (1995) State and Local Government Review pages 209-220.
[605] Humby (n 151) 187.
[606] Ibid.
[607] OECD (n 553) 181 -184.
[608] Ibid at 181.
[609] Ibid.

departments, which has proven challenging; however, this option is favoured in developing countries that lack institutional capacity.[610]

The second option is to have numerous permitting authorities for the respective permit.[611] This option creates uncertainty and delays in the permitting process.[612] The third and recommended option envisages a single permitting authority.[613] This authority is responsible for all environmental issues or a "one-stop-shop", where the Operator submits an application for an environmental permit to the department responsible for environmental affairs.[614] The said department is responsible for liaising with the other departments, and their input is communicated formally.[615] The final regulatory decision rests with the competent environmental authority.[616] This option requires institutional capacity building to meet the associated workload.[617]

2.2.3 Permitting Responsibilities between Government Levels

Collaboration between different government spheres is critical in achieving the country's developmental needs.[618] There is a challenge in overstepping defined boundaries between the various government levels.[619] Arguably the consequences of the national regulatory decision are realised at the local level where the project takes place.[620] The national government is removed from the local setting, and its decisions are often driven by economic growth pressures, which are implemented at the local level without consultation with municipalities. This decision-making leaves the permitting decision deficient and compromises sustainable development and conversely, the national government has sufficient resources to handle the complex integrated permitting requirements compared to the local municipalities with minimal resources.[621]

Against this background, cooperation between all levels of government is required to prevent vertical fragmentation and the ingression of the respective authorisations. The functions of the respective government levels should be harmonised and aligned with the decision affecting the relative government

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[610] World Bank (n 597) 38.
[611] OECD (n 553) 181 -184.
[612] Ibid.
[613] Musodza (n 148) 30; Kotze L 'A legal framework for integrated environmental Governance in South Africa and the North-West Province' (PhD thesis submitted to the North-West University, 2002) 151; OECD (n 553) 184.
[614] Ibid.
[615] Ibid.
[616] World Bank (n 597) 38.
[617] Ibid.
[618] Kotze L 'Revisiting the South African integrated pollution prevention and control regime: A critical survey of recent developments' (2007) *Research Gate* 45.
[619] Ibid.
[620] Ibid 53.
[621] Ibid.

sphere and the project's magnitude.[622] For example, since the local branches are mostly affected by mining operations, they may be tasked or at least consulted when issuing environmental permits.

Additionally, smaller projects with minimal economic impact remain the responsibility of the local branches.[623] Larger projects with major economic benefits should be administered nationally because of the resources available at the national level and the national government may be the appeals authority for permits issued at the local branches.[624]

3. Environmental governance that attracts investment

Mining activities impact the social and environmental system.[625] These activities may result in adverse environmental impact such as removal of forest and top soil that is ideal for agricultural use and the risk of water reservoirs contamination.[626] Consequently, resource-rich countries' environmental regulations are becoming more stringent, escalating ecological compliance, and directly increasing pollution reduction costs.[627] There are opposing views to stricter environmental regulations; some claim that strict environmental policy imposes burdens on the industry, thus impacting competitiveness.[628]

From this view arises the pollution haven theory, which posits that countries with lax environmental laws attract more investment.[629] The basis of the idea is that stringent environmental regulation increases delays, costs and risks associated with starting a new project or extending a project.[630] Accordingly, countries with stricter environmental laws are less attractive to investors than developing countries with lax regulations.[631]

The opposing view posits that stringent regulations improve environmental performance and thus spur competitiveness.[632] Investors perceive strict environmental regulation to be one of the indicative factors of a country's political stability.[633] First, strict regulations indicate confidence in environmental regulations, with established timelines for permitting, non-discretionary and well-established regulatory instruments

[622] Ibid.
[623] OECD (n 553) 183.
[624] Ibid.
[625] N Haddaway, Steven Cooke, P Lesser et al 'Evidence of the impacts of metal mining and the effectiveness of mining mitigation measures on social-ecological systems in the Arctic and boreal regions: a systematic map protocol' (2019) Environmental Evidence 8.
[626] Ibid.
[627] A Dechezleprete and M Sato 'Green policies and firm's competitiveness' (2018) OECD 4.
[628] L Lankoski 'Linkages between environmental policy and competitiveness' (2010) OECD 12.
[629] Tienhaara (n 9) 373.
[630] Ibid.
[631] Tienhaara (n 9) 373, 374.
[632] Ibid.
[633] Söderholm (n 5) 134.

and institutions.[634] Secondly, improving environmental performance will, in turn, improve resource efficiency.[635] From this notion, the Porter hypothesis arises.

Porter and van der Linde's hypothesis argues that well-designed environmental standards will initiate innovation to develop new pollution-saving technologies that offset compliance costs and improve environmental and economic performance.[636] The success of this hypothesis relies on three principles: First, compliance should be flexible to accommodate innovation and compliance strategies, reserving these strategies and technology choices to the industry than the regulator. Secondly, there should be certainty in the environmental regulatory process with consistency and predictability that will eliminate duplication and delays. Finally, environmental regulation should be an ongoing effort to improve environmental management rather than focusing on a particular technology.[637]

Soderholm et al. supported Porter and van Linde's hypothesis in their analysis of the environmental regulation's impact on the industry's competitiveness in three countries; Russia, Sweden and Finland.[638] This analysis found that the ecological regulation versus competitiveness challenge extend beyond the stringency of the environmental law and associated escalated project costs and delays.[639] They propose that countries can achieve competitiveness without compromising ecological standards through policy design, implementation strategies and permit conditions flexibility.[640] Other studies also suggest that regulatory coordination between the regulator and industry over time may improve compliance.[641]

3.1 Environmental Policy Design and Implementation Strategies

Countries should consider the following issues which arise before and after the granting of the permit. Predictability and timeliness of the award decision should be considered before granting the permit.[642] Post permit issuance, the flexibility and stringency of the license over the compliance period are critical for competitiveness.[643]

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[634] Ibid.
[635] Porter M, van der Linde C 'Toward a new conception of the environment–competitiveness relationship' (1995) *Journal of Economic Perspectives* 99.
[636] Ibid at 98.
[637] Ibid.
[638] Söderholm (n 5).
[639] Ibid at 132.
[640] Ibid at 135.
[641] Bergquist A, Soderholm K, Kinneryd H, Soderholm P et al. 'Command-and-control revisited: Environmental compliance and technological change in Swedish Industry 1970-1990' (2013) *Ecological Economics* (85) 10.
[642] Ibid.
[643] Ibid.

From the investor's perspective, the uncertainty in the regulatory decision and the associated timeframe is a high risk to competitiveness as it has a bearing on the company's growth and reputation.[644] Mining companies grow by exploration; otherwise, they risk reserves depletion.[645] First, production disruption compromises the company's reputation by introducing unreliability and inconsistency.[646] Secondly, the delays in the timing of production proceeds delay access to the funding required for future exploration activities and finally, existing loan repayments force a particular timeframe.[647]

Two factors associated with delays in environmental permitting decisions have been identified. First the requirement for inclusive participation of affected stakeholders in the decision-making.[648] Generous timeframes reserved for the "social license" to operate are inescapable. This issue is also common in South Africa and has been discussed in section 4.2 of Chapter three.

To prevent delays, public participation should not be limited to company-community consultation; other stakeholders, including the government, interested and affected parties, and Non-Governmental Organisations (NGOs), should be considered.[649] Additionally, meaningful consultation aimed at responsible resource development extends beyond the legislated minimum standards, starting before the project initiation and continuing throughout the project cycle.[650] Accordingly, it should not serve the purpose of "local control" but aim to achieve collaborative goal setting and decision-making tailored to the local context.[651]

Secondly, the discretion in interpreting and implementing rules creates uncertainty in the regulatory decision.[652] The laws should outline the rights and obligations of the investor and those of a regulator in a particular situation.[653] Accordingly, unclear legal rules introduce uncertainty, which may delay projects.[654] Conversely, from a developing state perspective, vague rules create scope for economic development and environmental consideration that can be improved over time.[655]

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[644] World Bank (n 597) 31.
[645] Söderholm (n 5) 135.
[646] SNL Metals and Mining 'The impact of permit delays on the United States Mining Industry' (2015) in New Study Finds U.S. Mine Permitting Delays Hinder U.S. Economy - Minerals Make Life, last accessed in September 2022
[647] Söderholm (n 5) 135.
[648] Ibid at 133, Kokko K, Buanes A & Koivurova et al. 'Sustainable mining, local communities and environmental regulation' (2015) BARENT STUDIES: *Peoples, Economies and Politics*; Yidiz T and Kural O 'The effects of the mining operation activities permit process on the mining sector in Turkey (2020) Resource Policy 69.
[649] Whiteman G and Mamen K 'Meaningful consultation and participation in the mining sector? A review of the consultation and participation of indigenous peoples within the international mining sector' (2002) The North-South Institute.
[650] Ibid.
[651] Ibid.
[652] World Bank (n 597) 20.
[653] Ibid.
[654] Söderholm (n 5) 135.
[655] Ibid.

Delayed environmental permitting and unpredictability are not unique to developing countries like South Africa. In Turkey, delays in environmental permitting are due to frequently revised regulations, institutional incapacity, and poor coordination between state agencies.[656] Developed countries have efficient permitting processes with the least delays primarily credited to established institutions, available resources, and clear environmental laws.[657] Secondary delays are attributable to authority interference, which further impose uncertainty.[658]

3.2 The flexibility of the environmental regulations

Flexible legislation over time stimulates innovation in identifying, developing and demonstrating new technology is critical for economic emissions reduction.[659] Countries often use command and control policies (CAC) or market-based instruments (MBI) for emissions reduction.[660] Emissions and or technology standards, which control emission quantities, are used in CAC laws.[661] MBI regulations incentivise pollution reduction through taxes or emission fees.[662]

Two elements determine the efficiency of the CAC policies. The regulator's capacity to implement, monitor and enforce and, investor-regulator information symmetries.[663] The environmental impact is area specific, and the regulator may not have sufficient resources to adequately determine project-specific pollution abatement accordingly.[664] On the other hand, investors are privileged by experience and access to resources and often know the impact and cost of pollution reduction but have no benefit in revealing such information to the regulator.[665] Therefore, information asymmetries on pollution reduction often exist between the investor and the regulator.

Investors are constantly exploring more efficient technological solutions to comply with stringent regulations.[666] When CAC policies are used with a prescribed technology investors are limited from achieving more cost-effective ways for compliance.[667] The compliance period should also be flexible

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[656] Yildiz T 'The impact of EIA procedure on the mining sector in the permit process of mining operating activities and Turkey analysis.' (2020) *Resource Policy* 5.
[657] Ibid 13.
[658] Söderholm (n 5) 135.
[659] Kokko K, Buanes A & Koivurova et al. 'Sustainable mining, local communities and environmental regulation' (2015) BARENT STUDIES: *Peoples, Economies and Politics* 60.
[660] Blackman A, Li Z and Liu A 'Efficacy of command-and-control and market-based environmental regulation in developing countries (2018) *The Annual Review of Resource Economics (10)* page 382.
[661] Tang K et al. 'Does command-and-control regulation promote green innovation performance? Evidence from China's industrial enterprises' (2020) *Science of the Total Environment (712)* 2.
[662] Ibid.
[663] Bergquist A, (n 641) 8.
[664] Ibid.
[665]Söderholm (n 5) 139.
[666] Ibid.
[667] Ibid.

where the technology standards are used to accommodate the uncertainty in technology research, development, and demonstration.[668]

Investors prefer MBI policies because of incentives, such as tax reductions and emission fee benefits.[669] The incentive based regulation stimulate innovation to pollution control, compared to CAC policies.[670] Furthermore, MBIs introduce flexibility to the choice of technology compliance and period.[671] This instrument extends beyond environmental standards, not only using technology to reduce pollution but also stimulating innovation to use technology that will avoid pollution or cause the minimal impact.[672] However, the efficiency of MBI also depends on the regulator's capacity.[673] The investor cannot realise the incentives if the regulator cannot determine the firm's pollution reduction costs.

3.3 Environmental Regulatory coordination

In designing environmental regulations industry participation, coordination between regulators at different spheres of government and local communities and synchronising these regulations with international standards may improve environmental compliance and competitiveness.[674] Input from the different stakeholders should be clear, outlining the obligations of the industry, allowing the industry to initiate the process of innovation to address the regulatory requirements.[675] This approach is favoured because it may prevent information asymmetries between the investor and the regulator and eliminates grievance from the industry to relax or delay compliance once the regulations are in place.[676]

The environmental policies should ideally be harmonised with international standards and slightly ahead to improve competitiveness.[677] Even though harmonisation with international standards is essential, it is more critical to tailor make such regulations to the country's conditions and political ambitions.[678] Once these regulations are in place, the department responsible for environmental protection will be required to implement, monitor and enforce the compliance.[679]

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[668] Ibid
[669] Bergquist A, (n 641) 8
[670] Kemp M 'Environmental Policy and Technical Change: A comparison of the technological impact of policy instruments' (1995) PhD thesis submitted to Maastricht Universitaire Chapter 2.
[671] Ibid.
[672] Kemp R 'Technology and Environmental Policy – Innovation effects of past policies and suggestions for improvement' (2000) Research Gate
[673] Bergquist A, (n 641) 8
[674] Porter M, van der Linde C. 'Toward a new conception of the environment–competitiveness relationship.' (1995) *Journal of Economic Perspectives* 113
[675] Ibid
[676] Ibid
[677] World Bank (n 597) 48
[678] Ibid
[679] Ibid

Cooperative governance and commitment between the different regulators at all spheres of government on the timelines that will give the industry ample time to evolve towards these standards rather than adopting incremental solutions is a requirement.[680] Furthermore, coordination at national level on the approval process is crucial to prevent the inconsistencies and duplication that can impose delays required by the different regulators.[681] Once alignment is achieved, the standards for new projects should be incorporated into the projects agreements, outlining the environmental considerations and obligations in the initiation of the projects further allowing the industry to plan and innovate over time.[682]

The above discussions show that efficient policy design, implementation strategy, flexibility and coordination may promote sustainable development and competitiveness. Furthermore, the inclusion of all related parties in policy design will address all the stakeholders' interest and prepare the industry to initiate a plan for pollution reduction timeously. Cooperative governance remains the crucial part in achieving sustainable development, successful implementation of environmental policies and competitiveness through the elimination of policy uncertainty.

[680] Bergquist A, (n 641) 10
[681] Porter M, van der Linde C. 'Toward a new conception of the environment–competitiveness relationship.' (1995) *Journal of Economic Perspectives* 113
[682] Bergquist A, (n 641) 10

CHAPTER 5: CONCLUSION

1. Introduction

The research objectives were to assess the role of environmental regulation in enhancing South Africa's competitiveness for mineral and petroleum investment. The study focused on the One Environmental System and its objectives of deconvoluting the environmental governance for the extractives industry (industry) to improve South Africa's competitiveness in industry investment. Three parts were evaluated to determine whether the OES has achieved its objectives: (1) Policy perception post the implementation of the OES, (2) The authority of the Minister of Mineral Resources and Energy to grant environmental authorisations for the industry and (3) Cooperative governance between the Departments of Mineral Resources and Energy and Forestry, Fisheries and Environment, as envisaged in the option chosen to implement the OES, further highlighted in section 6.2.2 of Chapter 2.

2. South Africa's policy perception of Foreign Direct Investment

In response to the country's negative policy perception, associated with regulatory duplication and uncertainty for the industry, the Minister of Minerals and Environment agreed to streamline environmental governance (OES) to improve competitiveness industry in 2014, as elaborated in section 6 of Chapter two. Furthermore, the mining stakeholders completed a declaration Strategy for Sustainable Growth and Meaningful Transformation of South Africa's Mining Industry.[683] The objectives of the strategy were in line with the OES in terms of (i) harmonising the extractives regulatory framework, (ii) considering a single authority for environmental regulations, and (iii) promoting cooperative and harmonised governance between the DMRE and other governing bodies.[684]

This study showed that South Africa's policy perception has not improved since the effect of the OES. This is partly due to the haphazard implementation of the OES associated with the misalignment in the timelines for the statutes gave effect to the OES. The NEMA amendments were enacted in 2009, the corresponding amendments in the MPRDA only came to effect in 2013.[685] This misalignment further created legal uncertainties and duplication in the requirement to comply with both statutes. Seven years post OES implementation, there have been increased court cases due to legal uncertainty, as discussed

[683] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) 28
[684] ibid
[685] The Presidency 'National Environment Laws Amendment Act 44 of 2008' - Gazette No. 31685, No. 1318, commencement date: 11 September 2009 Republic of South Africa 'Mineral and Petroleum Resources Development Act of 2008' Gazette No. 32151, No 437, commencement date 7 June 2013

in section 3 of Chapter three, whether the MPRDA EMPr constitutes an EA issued under NEMA.[686] The result is that South Africa continues to be viewed as a risky mining destination due to these court cases. A media statement, highlighted in section 1 of Chapter two, released by the Minerals Council of South Africa on 13 April 2022, concurs with the country being a risky mining destination.[687]

3. Conflict of Interest: Minister of Minerals Mandate

Under the OES, the Minister of Minerals is designated as the competent authority for granting environmental authorisations. [688] Researchers expressed concern with this designation, sighting that environmental management compliance and enforcement might be compromised due to the DMRE's conflicting mandate.[689] The DMRE's mission is to regulate, transform, and promote industry development; environmental compliance enforcement might be compromised in pursuing industry development promotion.[690]

The DMRE's conflict of interest was reviewed in mineral development in sensitive, environmentally protected areas of the Chrissiesmeer freshwater lake, proclaimed under the Critical Biodiversity Areas and a Protected Environment under the Environmental Management Protected Areas Act discussed in section 5 of Chapter two.[691] This study found that the DMRE prioritises mineral development over sensitive environmental protected areas. This prioritisation compromises sustainable development and leads to project delays during public participation in the Environmental Impact Assessment (EIA) phase.[692] Additionally, mining companies suffer reputation damage due to negative media reports of illegal mining.

This study concludes that project delays and investor reputational damage paint South Africa as a high-risk mining destination and deter investment. Cooperative governance and coordination between the DMRE and DFFE are critical when processing permit applications. This collaboration may eliminate the granting of rights in environmentally sensitive areas, delay issues in the EIA process and improve South Africa's competitiveness.

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[686] Border Deep Sea Angling Association and Others v Minister of Mineral Resources and Energy and Others (3865/2021) [2021] and Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others (3491/2021) [2021].
[687] Minerals Council of South Africa 'South Africa's inclusion in Fraser Institute's ten least attractive mining jurisdictions is an alarming wakeup call that we are moving in the wrong direction' (2022).
[688] Section 50A(2)(a) NEMA.
[689] Ibid at 105.
[690] Ibid at 105.
[691] Province of Mpumalanga 'Declaration of the Chrissiesmeer Protected Environment in terms of the Environmental Management: Protected Areas Act, 2003' Provincial Gazette Extraordinary No. 2251.
[692] Section 5.1 of Chapter two.

4. Cooperative Governance

Out of the three options put forward in implementing the OES, option two was selected because it incorporated an integrated permitting system and cooperative governance, as discussed in section 6 of Chapter two.[693] Several committees and task teams were established to facilitate the implementation of the OES.[694] The committees had representatives from DFFE, DMRE, and DWS committed to cooperation and good participation.[695] These teams dealt with capacity, enforcement, coordination, joint planning, appeals, and communication issues.[696] However, this study found that gaps in cooperative governance compromised the OES implementation, as highlighted in section 5.2 of Chapter three.

The 2006 Environmental Impact Assessment Regulations introduced the turf war between the DMRE and DFFE, where the listed activities included the industry activities that required authorisation under NEMA.[697] Provisions applicable to the industry were suspended; however, the inclusion of industry activities initiated uncertainty in the statutory process to be followed by the industry, and tensions arose between the two departments, as discussed in section 3 of Chapter two.[698] The 2010 EIA Regulations validated the requirement of an environmental authorisation under NEMA before starting mining activities; however, the competent authority was not specified, fuelling the tension between the two departments.

In the implementation phases of the OES, the second phase envisaged temporarily designating the Minister of Minerals as the competent authority for granting environmental authorisations for the industry, and this authority would revert to DFFE in the final phase of the OES implementation, as discussed in section 6.2.2 of Chapter 2. However, the final phase of the OES implementation did not occur because the National Environmental Management Laws Amendment Act of 2014 repealed section 13 of the NEMA of 2008, which provided for the competent authority to revert to DFFE.[699] This further degraded the relationship between these two departments, compromising the efficiency of implementing the OES.

Furthermore, organisational restructuring at DMRE contributed to lost knowledge of the OES journey, with the interdepartmental implementing committee (IPIC) meetings to prepare the DMRE to take over the compliance and enforcement functions ceasing, as highlighted in section 6.2.2 of Chapter 2.[700]

[693] Department of Mineral Resources 'Environmental management plan 2016/2020' (2018) 39.
[694] section 6.2 of Chapter two; Ibid at 39.
[695] Ibid at 87.
[696] Ibid.
[697] Musodza (n 148) 13.
[698] section 3 of Chapter two.
[699] Birch (n 43) 3.
[700] Ibid.

Additionally, post-OES implementation, there was no monitoring of challenges because of the deteriorated joint committees leading to divergent views on regulatory requirements.[701]

Accordingly, this research concludes that there are power dynamics between DMRE and DFFE, which prevents collaboration between the two departments. As part of the powerhouse of the country's economy, the industry enjoys the unique privilege of environmental management self-regulation. However, the DFFE is often viewed as an obstacle to economic development. Poor cooperative governance led to misalignment of requirements for the industry, as highlighted in the court cases in sections 2.1 of Chapter three in the *Mineral Sands Resources (Pty) Ltd v the Magistrate for the District of Vredendal Kroutz* and section 5 of Chapter 3 in the *MacSand (Pty) Ltd v City of Cape Town,* which continue to promote regulatory uncertainty and impact FDI.

[701] Parliamentary Monitoring Group 'One Environmental System colloquium' (2018) unpublished material presented by the DFFE at the Colloquium on One Environmental System led by the Portfolio Committee on Environmental Affairs (2018) in One Environmental System colloquium | PMG, accessed in December 2022.

REFERENCES

Legislation

Constitution of the Republic of South Africa, 1996.

Local Government Municipal Systems Act 32 of 2000.

Minerals and Petroleum Resources Development Act, 28 of 2002.

Mineral and Petroleum Resources Development Amendment Act 49 of 2008.

National Environmental Management Act, 107 of 1998.

National Environmental Management Amendment Act 62 of 2008.

National Environmental Management Laws Amendment Act 25 of 2014.

National Environmental Management: Waste Act 59 of 2008.

National Water Act 36 of 1998.

Cases

Border Deep Sea Angling Association and Others v Minister of Mineral Resources and Energy and Others (3865/2021) [2021].

Christian John Adams & Others v Minister of Mineral Resources and Energy & Others.

City of Cape Town v Maccsand (Pty) Ltd 2010 6 SA 63 (WCC).

Maccsand (Pty) Ltd v City of Cape Town 2011 6 SA 633 (SCA).

Maccsand (Pty) Ltd v City of Cape Town 2012 4 SA 181 (CC).

Mineral Sands Resources (Pty) Ltd v Magistrate for the District of Vredendal, Kroutz No and Others (18701/16) [2017] ZAWCHC 25 (20 March 2017).

Minister of Mineral Resources v Stern & others (1369/2017) and Treasure the Karoo Action Group & another v Department of Mineral Resources & others (790/2018) [2019].

Sustaining The Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others (3491/2021) [2021].

Sustaining the Wild Coast NPC and Others v Minister of Mineral Resources and Energy and Others (3491/2021) [2022].

Notice of Appeal

Centre for Environmental Rights 'Notice of appeal against the grant of prospecting right to Cousin Coal (PTY) Ltd in respect of the remaining extent of portion 10 and portion 16 of the farm Vogelstruispoort 384JT, Magisterial district of Belfast, Mpumalanga (2013).

Declaration

South African Government 'Stakeholders declaration on strategy for sustainable growth and meaningful transformation of South Africa's mining industry' (2010).

UN Commission on Human Rights, 'Rio Declaration on Environment and Development' Human rights and the environment (1994).

Articles

Ashton G 'An example of the impacts of adopting the 'one environmental system' of mining governance: some lessons in environmental governance from MRC's Tormin mine' in In Good Company: Conversations around Transparency and Accountability in South Africa's Extractives Sector (2017) 2nd Edition page 15 – 23.

Bergquist A, Soderholm K, Kinneryd H, Soderholm P et al. Command-and-control revisited: Environmental compliance and technological change in Swedish Industry 1970-1990 (2013) Ecological Economics (85).

Blackman A, Li Z and Liu A 'Efficacy of command-and-control and market based environmental regulation in developing countries (2018) The Annual Review of Resource Economics (10) page 381-404.

Business Leadership South Africa in conjunction with Business Unit South Africa 'A review of regulatory challenges and policy uncertainty impeding investment and employment in South Africa' (2017).

Cameron P and Stanley M '*Oil and Gas Mining: A source for understanding extractives industries* '(2017)

Centre for Environmental Rights 'ZERO HOUR: Poor governance in mining and violation of environmental rights in Mpumalanga" (CER, 2016)

Chamber of Mines of South Africa & Coaltech Research Association 'Guidelines for the rehabilitation of mined land' (2007).

Cornelissen H, Watson I, Adam E and Malefetse T 'Challenges and strategies of abandoned mine rehabilitation in South Africa: The case of asbestos mine rehabilitation' (2019) 205 *Journal of Geochemical Exploration*

Davies J 'Some thoughts on implementing integration' (1992) 22 Environmental Law page 139 -147.

Dechezlepre`tre A and Sato M 'The impact of environmental regulations on competitiveness' (2017) The Review of Environmental Economics and Policy volume 11, number 2 page 183 – 206.

Dechezleprete A and Sato M 'Green policies and firm's competitiveness (2018) OECD

Environmental Management Resources Southern Africa 'Transkei and Algoa Exploration Areas: Environmental Management Programme (EMPr)' (2013)

Feris L 'Constitutional Environmental Rights: An Under-Utilised Resource' (2008) 24 *South African Journal on Human Rights* 29-49.

Golder Associates 'Environmental Management Plan South Western Karoo Basin Gas Exploration Application CENTRAL PRECINCT Shell Exploration Company' B.V. (2011) PASA Reference No. 12/3/220

Glazewskie J and Ponik S 'Compliance with international environmental standards and expectations: review of international developments' (2000)

Haddaway N, Cooke S, Lesser P et al. 'Evidence of the impacts of metal mining and the effectiveness of mining mitigation measures on social-ecological systems in the Arctic and boreal regions: a systematic map protocol' (2019) Environmental Evidence 8

Hersh R 'A review of integrated pollution control efforts in selected countries' (1996) Resources for the Future Discussion Papers

Humby T ‘One environmental system’: Aligning the laws on the environmental management of mining in South Africa’ (2015) 33 Journal of Energy & Natural Resources Law 110

Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (2013). Mining and Sustainable Development: Managing One to Ad advance the other. Geneva IGF.

Kemp M ‘Environmental Policy and Technical Change: A comparison of the technological impact of policy instruments’ (1995) PhD thesis submitted to Maastricht Universitaire

Kemp R ‘Technology and Environmental Policy – Innovation effects of past policies and suggestions for improvement’ (2000) Research Gate

Kengni B, ‘Intergovernmental relations: One Environmental System’ in Van Schalkwyk L (ed), Co-ordinating Governance for Mining: Streamlining Systems for Improved Intergovernmental Relations (Juta, 2019).

Kokko K, Buanes A & Koivurova et al. ‘Sustainable mining, local communities and environmental regulation’ (2015) BARENT STUDIES: Peoples, Economies and Politics (2)

Kotze L ‘Environmental Governance’ in Paterson A & Kotze LJ (eds) Environmental Compliance and Enforcement in South Africa: Legal Perspectives (2009) Juta, Cape Town

Kotze L ‘Integrating pollution regulation regimes: A comparative survey of the Finnish and South African legal systems’ (2007)

Kotze L ‘Revisiting the South African integrated pollution prevention and control regime: A critical survey of recent developments’ (2007) Research Gate

Lankoski L ‘Linkages between environmental policy and competitiveness’ (2010) OECD

McLean J and Carrick P ‘Environmental management and rehabilitation under the Minerals and Petroleum Resources Development Act: A biodiversity outlook (2007) South African Journal of Environmental Law and Policy page 187-216

Prosser I, Wolf L, and Littleboy A ‘Water in mining and industry’ CSIRO (2011) Chapter 10 pages 135-145

Porter M, van der Linde C. ‘Toward a new conception of the environment–competitiveness relationship.’ (1995) Journal of Economic Perspectives, 9(4): 97–118.

Rabe G 'Integrated environmental permitting: Experience and innovation at the state level' (1995) State & Local Government Review (27) 3 page 209 – 220

Runhaar H 'Tools for integrating environmental objectives into policy and practice: What works where?' (2016) Environmental Impact Assessment Review 59

Söderholm K, Soderholm P, Helenius H, Pettersson M, Viklun R, Masloboev M, Mingaleva T, Petrov V 'Environmental regulation and competitiveness in the mining industry: Permitting processes with special focus on Finland, Sweden and Russia' (2015) Resource Policy 43 page 130-142

Soderholm P, Bergquist A 'The political economy of industrial pollution control: environmental regulation in Swedish industry for five decades (2021) Journal of Environmental Planning and Management

Stakeholder Forum for a Sustainable Future 'Review of Implementation of the Rio Principles' (2011)

Tienhaara K 'Mineral Investment and the regulation of the environment in developing countries: lessons from Ghana' (2006) International Environment Agreements page 371-394

Tolsma H "Integrated Environmental Permitting", 2010 Environmental Law Network International

Whiteman G and Mamen K 'Meaningful consultation and participation in the mining sector? A review of the consultation and participation of indigenous peoples within the international mining sector' (2002) The North-South Institute

World Bank 'Digging Beneath the Surface: An exploration of the Net Benefits of Mining in Southern Africa' (2019) World Bank, Washington, DC. © World Bank.

World Bank 'Strategy for African Mining' (1992) World Bank Technical Paper Number 181: Africa Technical Department Series

Wyatt, C., McCurdy, T. '2013 Ranking of Countries for Mining Investment: 'Where Not to Invest' (2013) in Söderholm K et al. 'Environmental regulation and competitiveness in the mining industry: Permitting processes with special focus on Finland, Sweden and Russia' (2015) Resource Policy 43.

van Zyl H et.al. "Rehabilitation and Closure in South African Mining: Discussion Document on Challenges and Recommended Improvements (Summary)" (2012) World Wide Fund South Africa Report Series 3

Yidiz T and Kural O 'The effects of the mining operation activities permit process on the mining sector in Turkey (2020) Resource Policy 69

Online Sources

Brown H (1996) 'Confidentiality and dispositions in the oil and gas industry available at Mostapha Maddahinasab et al Managing Confidential Information on Petroleum Projects in The Case of Third Parties.' available at https://www.instytutpe.pl/wp content/uploads/2017/09/Managing-confidential-information-on-petroleum-projects.pdf 49, last accessed on 18 May 2020

Council of Geoscience 'The Karoo deep drilling project' (2019) in THE KAROO DEEP DRILLING PROJECT (geoscience.org.za) last accessed in May 2022

Department of Mineral Resources, Environmental Affairs and Water Affairs 'Government's One Environmental System Commences' (2014) in Government's One Environmental System commences | Department of Environmental Affairs (dffe.gov.za), accessed in January 2023.

Econometrix (Pty) Ltd 'Karoo shale gas report: Special report on economic considerations surrounding potential shale gas resources in the Southern Karoo of South Africa' (2012) in Microsoft Word - KSG Report - February 2012 (cer.org.za), last accessed in May 2022

Jackwell F (2013) South Africa: Investor Protection: Security of tenure of mining rights in South Africa Explore insights from the DLA Piper Mining Sector - Issue 1 available at https://www.mondaq.com/southafrica/Energy-and-Natural-Resources/282258/Investor-Protection-Security-of-tenure-of-mining-rights-in-South-Africa, last accessed 17 May 2020.

McMahon F and Cervantes M 'Survey of Mining Companies 2009/2010' (2010), page 6 *https://www.fraserinstitute.org/sites/default/files/miningsurvey2009-2010.pdf* last accessed on 30 March 2022

Petroleum Agency Licencing Fiscal Terms available at https://www.petroleumagencysa.com/index.php/regulations/licencing, last accessed on 15.05.2020

Parliamentary Monitoring Group 'One Environmental System colloquium' (2018) unpublished material presented by the DFFE at the Colloquium on One Environmental System led by the Portfolio Committee on

Environmental Affairs (2018) in One Environmental System colloquium | PMG, accessed in December 2022.

Schoeman P 'Transition conundrums in Mining and Environmental Legal Regime' (2019) Warburton Attorneys in https://warburtons.co.za/wp-content/uploads/2020/01/Transitional-Conundrums-in-the-Mining-Environmental-Legal-Regime-February-2019.pdf last accessed on 30 March 2022

SNL Metals and Mining 'The impact of permit delays on the United States Mining Industry' (2015) in New Study Finds U.S. Mine Permitting Delays Hinder U.S. Economy - Minerals Make Life, last accessed in September 2022

Susan Shabangu 'Budget Vote Speech' National Council of Provinces (2022) available at Budget Vote Speech by Ms Susan Shabangu, MP, Minister of Mineral Resources, to the National Council of Provinces (NCOP) Parliament | South African Government (www.gov.za), last accessed on 8 December 2022

Swanepoel E 'Review and analysis of the mine closure and financial provision for the environmental rehabilitation regime in South Africa.' (2020) in mine_closure_and_financial_provision.pdf (dtnac4dfluyw8.cloudfront.net), accessed on January 2023

Government Gazettes and Notices

Department of Mineral Resources 'Contribution of Industrial Minerals to South Africa's economic growth' Report R121 of 2017

Department of Mineral Resources Draft Upstream Petroleum Resources Development Bill Government Gazette, No 42931, 2019

Province of Mpumalanga 'Declaration of the Chrissiesmeer Protected Environment in terms of the Environmental Management: Protected Areas Act, 2003' Provincial Gazette Extraordinary No. 2251

Province of Mpumalanga 'Consultation Process in terms of the Environmental Management: Protected Areas Act, 2003: Intention to declare a protected environment' Provincial Gazette Extraordinary No. 2181

Republic of South Africa 'Mineral and Petroleum Resources Development Act of 2008' Gazette No. 32151, No 437.

Republic of South Africa 'Restriction in terms of section 49(1) of the Mineral and Petroleum Resources Development Act, 2002' Gazette No. 41743, No 657.

Republic of South Africa 'Technical regulations for petroleum exploration and exploitation' Government Notice 1032 (2013).

Republic of South Africa 'Restriction in terms of section 49(1) of the Mineral and Petroleum Resources Development Act, 2002' Government Gazette No.1664.

Republic of South Africa 'Prohibition or Restriction Of Prospecting Or Mining in terms of Section 49[1] of the Mineral and Petroleum Resources Development Act, 2002: Prohibition of prospecting or mining around the Chrissiesmeer Biodiversity Site' Government Gazette No.34051 No. 169

The Presidency 'National Environment Laws Amendment Act 44 of 2008' - Gazette No. 31685, No. 1318.

Government Reports

Department of Environmental Affairs, Department of Mineral Resources, Chamber of Mines, South African Mining and Biodiversity Forum, and South African National Biodiversity Institute 'Mining and Biodiversity Guidelines: Mainstreaming biodiversity into the mining sector' (2013)

Department of Mineral Resources 'Portfolio Committee Colloquium on Environmental Affairs: One Environmental System with many challenges' (2018) The parliamentary monitoring group

Department of Mineral Resources 'Guideline Document for the Evaluation of the Quantum of Closure Related Financial Provision Provided by a Mine' (2005)

Department of Mineral Resources of South Africa 'South Africa's Mineral Industry' (2016)

Department of Mineral Resources 'Contribution of Industrial Minerals to South Africa's economic growth' Report R121 of 2017

Department of Mineral Resources 'Environmental management plan 2016/2020' (2018)

Gary Birch 'National Environmental Management Laws Amendment Bill: Portfolio Committee on Water and Environmental Affairs (2012), The parliamentary monitoring group

South African Law Reform Commission 'Statutory law revision (legislation administered by the Department of Environmental Affairs)' (2015)

National Planning Commission "National Development Plan 2030 Our future make it work" (2011)

Theses

Brumfitt I 'Reconciling Mining and Land-Use Planning Law: Challenges Facing Cooperative Governance in South Africa.' Chapter 2: Constitutional Setting (LLM Thesis Cape Town University, 2013).

Cockrell H 'The quality of EAs in the Mpumalanga Province' MSc Thesis, North-West University, 2018).

Roberts JA 'A Comparative Analysis of Shale Gas Extraction Policy: Potential Lessons for South Africa' (Master's Degree Thesis, University of Stellenbosch, 2013).

Kaya E "The Implementation of the IPPC directive to SMEs in textile industry in Turkey" (Master Thesis, Lund University, 2005).

Kotze L 'A legal framework for integrated environmental Governance in South Africa and the North-West Province' (PhD thesis at North-West University, 2002).

le Roux N 'Environmental Governance, Fragmentation and Sustainability in the Mining Industry' Dissertation (LLM Thesis North-West University, 2011).

Lubbe W 'Mining in Chrissiesmeer wetland and state custodianship' (Mini dissertation at North-West University, 2019).

Maake N 'Towards a one environmental system in the extractives industries in South Africa: A critical analysis of its implementation date, which may disturb its successful facilitation and exacerbate legal uncertainty in the industry' (LLM thesis University of Pretoria, 2018) 47.

Mbonambi N 'A critical analysis of the legal environment for mining in South Africa: Its implications on the inflow of foreign investment into the sector' (LLM thesis University of Pretoria, 2013)

Mausing H 'The effectiveness of the tenth schedule tax regime to attract and retain foreign investment: The current issues and uncertainties experienced within the tenth schedule tax regime and a comparison between

the incentives provided by the tenth schedule and those provided by the Ghana oil and gas tax regime' (Master of Commerce thesis University of Cape Town, 2016).

Mmathapelo L 'An assessment of the efficacy of South Africa's legal framework in addressing key challenges related to liability for mine closure and rehabilitation' (LLM Thesis, University of Pretoria, 2018)

Mdlalose N 'Evaluation of the water use licensing regime of the National Water Act in advancing the protection and conservation of water resources' (LLM Thesis University of KwaZulu-Natal, 2019)

Miltiadies Milaras 'The judicious use of environmental sustainability indicators in support of mine closure in South Africa' (MSc Thesis, University of Pretoria, 2014)

Mpinga S 'Advancing the effective implementation of the one environmental system for mining through cooperative environmental governance' (Master of Law thesis, University of Cape Town, 2020)

Musodza 'The One Environmental System: did we get it right?' (Master's degree Thesis, University of Witwatersrand, 2018).

Onyekachi C 'Balancing the need for investment and environmental protection: A case study of The Gambia.' (LLM thesis University of Pretoria, 2021)

van Schalkwyk CL 'A Legal Perspective on the Role of Municipalities in Navigating the Relationship between Land Use Planning and Mining' (PhD Thesis, University of Cape Town, 2019).

Zwanziger X 'The influence of the principle of integration in promoting integrated permitting – A critical reflection through the lens of Netherlands integrated permitting regime' (Master's Degree Thesis, University of Cape Town, 2012).


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