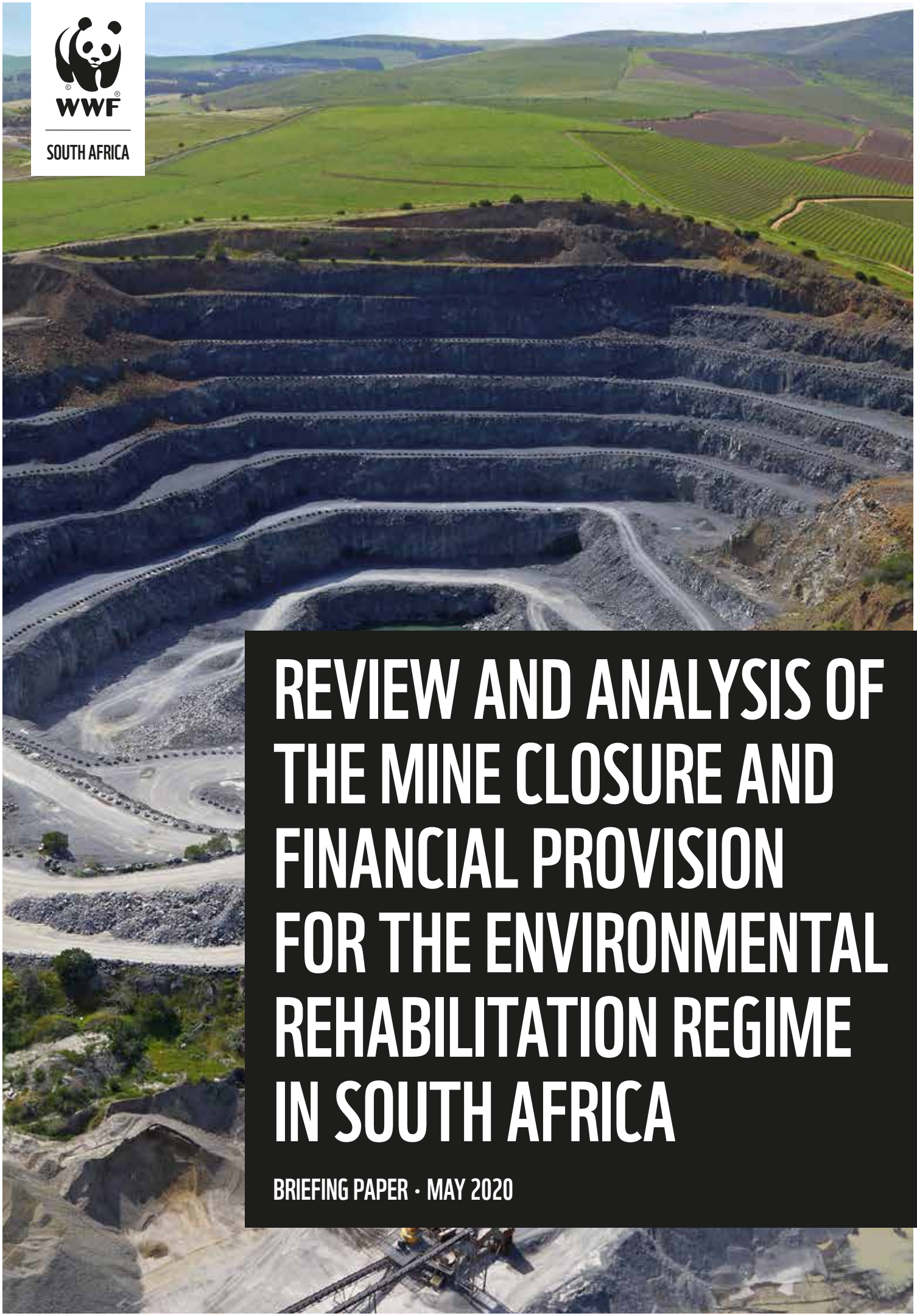

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SOUTH AFRICA

REVIEW AND ANALYSIS OF THE MINE CLOSURE AND FINANCIAL PROVISION FOR THE ENVIRONMENTAL REHABILITATION REGIME IN SOUTH AFRICA

BRIEFING PAPER · MAY 2020

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Cover photo
Shutterstock.com

Citation: Swanepoel, E. (2020) *Review and analysis of the mine closure and financial provision for the environmental rehabilitation regime in South Africa.* Cape Town, WWF South Africa

Available online at:
www.wwf.org.za/report/mine_closure_and_rehabilitation

Published in 2020 by WWF – World Wide Fund for Nature (formerly World Wildlife Fund), Cape Town, South Africa.

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ABBREVIATIONS AND ACRONYMS

AG	Auditor-General
DEA	Department of Environmental Affairs
DEFF	Department of Environment, Forestry and Fisheries
DME	Department of Minerals and Energy
DMR	Department of Mineral Resources
EMP	Environmental Management Plan
EMPr	Environmental Management Programme
FP Regulations	Regulations for Financial Provision for Prospecting, Exploration, Mining and Production Operations
MPRD	Mineral and Petroleum Resources Development
MPRDA	Mineral and Petroleum Resources Development Act 28 of 2002
MRDA	Mineral and Petroleum Resources Development
NEMA	National Environmental Management Act
NEMLAA	National Environmental Management Laws Amendment Act 25 of 2014

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EXECUTIVE SUMMARY

The mining sector, which has been a prominent feature of the South African economy over the years,[1] has left a legacy of environmental degradation in its wake. Despite this, comprehensive legislation to regulate environmental management and mine closure processes (including financial provision requirements) only materialised in recent years. As a result, many historical mining operations were abandoned by their operators with little or no regard to the management of the impacts on public health and safety, and the environment.[2]

The South African legal regime concerned with financial provision for mine closure has seen significant developments, spurred on by concerns about the substantial environmental impacts linked with mining activities. In particular, the October 2009 'Report of the Auditor-General to Parliament on a Performance Audit of the Rehabilitation of Abandoned Mines at the Department of Minerals and Energy' brought into sharp focus the environmental crisis which has arisen as a result of the unrehabilitated mines that litter the landscape in many mining areas.[3] Alarmingly, the Auditor-General (AG) Report[4] found that as of the end of May 2008, there were 5 906 abandoned mines in South Africa, most of which had been abandoned before the coming into effect of the Mineral and Petroleum Resources Development Act of 2002 (MPRDA).[5] The cost of rehabilitating the abandoned mines was furthermore estimated to be in the region of R30 billion (excluding the costs associated with the treatment of acid mine drainage).[6]

Mine closure and financial provision for environmental rehabilitation of mining activities was historically regulated under the MPRDA. In response to concerns about the conflict presented by the environmental management mandate of mining authorities and the imperative to streamline environmental authorisation processes for mining operations,[7] a compromise agreement was reached between environmental authorities and the Department of Minerals and Energy (DME) (now the Department of Mineral Resources (DMR)) in terms of which environment-related aspects of mining would be removed from the MPRDA and regulated through one environmental legislative framework under the National Environmental Management Act of 1998[8] (NEMA), known as 'One Environmental System'. While the Minister responsible for mineral resources would be responsible for the implementation of the One Environmental System in the mining context, the Minister responsible for environmental affairs would retain some oversight as the relevant appeal authority. Significantly, this arrangement has resulted in a conflicted mandate for the DMR (pitting its NEMA obligations against its core mandate – the promotion of mineral development).

The One Environmental System was implemented through amendments to the MPRDA and NEMA, and included the transfer of financial provision for mine closure to the NEMA. Regulations for Financial Provision for Prospecting, Exploration, Mining and Production Operations[9] (the 2015 FP Regulations) were also made under the NEMA to provide the required regulatory detail.

Since then, new financial provision regulations have been proposed in response to concerns raised by various stakeholders regarding the 2015 FP Regulations. The most recent iteration[10] was published for public comment on 17 May 2019 (2019 Draft FP Regulations). These draft regulations are largely modelled on the 2015 FP Regulations and address financial provision requirements related to environmental impacts arising during the lifecycle of a mine (including latent or residual impacts).

Some important developments which the 2019 Draft FP Regulations propose to introduce include the following:

- a specific obligation on an applicant for, or holder of a right to undertake mining-related activities to rehabilitate and remediate environmental damage (and the imposition of environmental rehabilitation obligations on liquidators and business rescue administrators);
- the introduction of a 'sustainable end state' as the standard for environmental rehabilitation to allow mines to practically reach mine closure;
- a clarification of content requirements for the various environmental rehabilitation plans to inform the calculation of financial provision;
- the identification of circumstances under which the Minister of Mineral Resources may access the financial provision of a holder;
- financial provision requirements in respect of section 11 and 102 transactions in terms of the MPRDA;
- the requirement for the funds that are set aside for residual and latent impacts to be ceded to the Minister upon the issuing of a closure certificate;
- the strengthening of the provisions for the holder to disclose information, and provision for independent oversight of environmental rehabilitation plans and financial provision calculations;
- the ability for a holder to claim against their financial provision 10 years or less before closure, in order to facilitate closure under strict conditions; and
- a broader range of offences.

The 2019 Draft FP Regulations seek to address financial provision requirements through an iterative process which involves the development of environmental rehabilitation plans and setting aside financial provision to give effect to those plans, coupled with a review of the plans and a reassessment and adjustment of financial provision, where necessary.

Although the 2019 Draft FP Regulations do address some of the concerns raised in respect of the 2015 FP Regulations and the 2017 Draft Regulations, certain compromises appear to have been made. In particular:

- The inclusion of a 'sustainable end state' as being the standard for environmental rehabilitation (although aimed at practically enabling mines to be legally closed) raises some concerns, given its discretionary formulation.
- The requirement to hold financial provision to cover the costs of environmental rehabilitation for a period of at least 10 years (contained in the 2015 FP Regulations) has been removed to allow for the iterative process of financial provisioning (with the Minister being afforded powers to access financial provision where environmental rehabilitation responsibilities have not been complied with).
- The exclusion of provisions concerned with care and maintenance (purportedly on the basis that those provisions would be *ultra vires*, i.e. beyond the powers and authority of the Minister responsible for environmental affairs). This exclusion is particularly problematic, given that care and maintenance is not adequately regulated elsewhere.
- The DMR's dual mandate (which effectively pits the department's NEMA obligations against the promotion of mineral development) together with capacity constraints within the department remains a significant concern given the scale of the environmental crisis posed by abandoned mines, and the limited progress which has been made by the department in this regard in recent years.

The following recommendations are made with a view to informing the future implementation of the proposed regulations:

- Given the DMR's conflicted mandate, environmental authorities ought properly to be given greater oversight of the implementation of environmental rehabilitation and financial provision requirements. Alternatively, functions relating to environmental rehabilitation and financial provision could be transferred to environmental authorities to avoid a conflict of interest, where relevant.
- Capacity constraints at the DMR must be assessed and addressed to enable effective implementation of the proposed regulations, and to ensure compliance with the requirements of environmental authorisations and environmental rehabilitation plans during the full lifecycle of mining operations. In particular, sufficient appropriately qualified officials must be appointed to oversee all aspects of environmental rehabilitation and financial provision.
- Policy guidelines providing guidance on what constitutes a 'sustainable end state' should be developed to inform the preparation of environmental rehabilitation plans and approval of these plans by the Minister.
- A clear procedure should be developed regarding accessing financial provision held in respect of abandoned mines.
- Given the circumstances which ordinarily necessitate care and maintenance of a mine (together with the possible environmental impacts and risk of abandonment) it is crucial that these aspects are adequately regulated. In light of the proposed exclusion of the care and maintenance provisions from the 2019 Draft FP Regulation, the regulation of mines which have been put into care and maintenance should be revisited on an urgent basis (by the DMR in consultation with the Department of Environment, Forestry and Fisheries (DEFF), formerly the Department of Environmental Affairs (DEA)) given the risk of abandonment of mothballed mines.
- A task team should be established by the government to facilitate access to financial provision and environmental rehabilitation of priority abandoned mines.

INTRODUCTION

Historically, mining has been the backbone of the South African economy. While the sector has slumped in recent decades, the contribution of mining to the economy remains significant.[11] The development of the mining industry has however come with a legacy of environmental degradation. Despite this, comprehensive legislation to regulate environmental management and mine closure processes only materialised in recent years. Consequently, a large number of historical mining operations have been abandoned by their operators with little or no regard to the management of the impacts on public health and safety, and the environment.[12]

Given the legacy of environmental degradation associated with mining activities (particularly in the case of abandoned and derelict mines), financial provision has become a common regulatory measure aimed at giving effect to the 'polluter pays' principle. In the international context, forms of financial provision range from soft measures (such as balance sheet checks and corporate guarantees) to hard measures (such as a letter of credit, cash bonds or trust funds).[13]

The legal regime addressing financial provision and mine closure in South Africa has seen significant development over recent years:[14]

- Financial provision and mine closure were historically regulated under the Minerals Act of 1991,[15] and later, the Mineral and Petroleum Resources Development Act of 2002 (MPRDA).[16]
- However, in light of the environmental challenges linked to mine closure, changes were effected to both the National Environmental Management Act (NEMA) of 1998[17] and the MPRDA in the context of the 'One Environmental System' arrangement to bring the regulation of financial provision for mine closure under the NEMA.
- Regulations for Financial Provision for Prospecting, Exploration, Mining and Production Operations[18] (the 2015 FP Regulations) were also made under the NEMA to provide the required regulatory detail.
- In 2017, in response to concerns raised by various stakeholders regarding the 2015 FP Regulations, Proposed Regulations Pertaining to the Financial Provision for Prospecting, Exploration or Production Operations (2017 Draft FP Regulations)[19] were published for public comment.
- Following input received on the 2017 Draft FP Regulations, on 17 May 2019 a further draft of the proposed regulations (2019 Draft FP Regulations)[20] was published for public comment. Comments on the 2019 Draft FP Regulations had to be submitted by 1 July 2019.

This report is intended to provide a review and analysis of the mine closure and rehabilitation regime in South Africa. The report will therefore consider the following in the context of the relevant legislative framework:

- Regulations for Financial Provision for Prospecting, Exploration, Mining and Production Operations, published in GNR 1147 in *GG* 39425 of 20 November 2015.
- Proposed Regulations Pertaining to the Financial Provision for Prospecting, Exploration or Production Operations, published in GNR 1228 *GG* 41236 of 10 November 2017.
- Proposed Regulations Pertaining to the Financial Provision for the Rehabilitation and Remediation of Environmental Damage caused by Reconnaissance, Prospecting, Exploration, Mining or Production Operations, published in GN 667 in *GG* 42464 of 17 May 2019.
- The 2018 Mining Charter and Mining Charter Implementation Guideline.

BACKGROUND

While pollution of surface and groundwater systems (largely as a result of acid mine drainage) is considered to be one of the most significant environmental impacts associated with abandoned and derelict mines, other environmental impacts include air pollution by dust and emissions from burning mine workings or dumps, and physical hazards posed by sites with open shafts and unstable slopes. The environmental circumstances created in this regard also present significant health and safety risks to local communities.[21] Contamination of water resources and air pollution from dust and toxic gases pose significant health risks, while open shafts and pits, and potential landslides pose safety risks to local communities.[22]

Mining in South Africa operated for a long time under traditionally weak regulation systems that placed the responsibilities for mining impacts on mine owners. In the process, many mines were abandoned. Prior to the enactment of the Minerals Act of 1991,[23] many mining companies used irresponsible mining methods with no regard for protecting the environment. Often, before they could be liquidated or left the country, mining companies left these mines unrehabilitated. The Minerals Act introduced a more comprehensive regulatory regime for mining activities, which included rehabilitation of the land where mining has taken place.[24] From 2004 onwards, the regulation of environmental issues relating to mining (including financial provision for mining activities) was regulated under the MPRDA and the Mineral and Petroleum Resources Development Regulations (MPRD Regulations).[25]

The MPRDA regime provided for financial provision as follows:

Financial provision required prior to approval of Environmental Management Plan (EMP) or Environmental Management Programme (EMPr)	Section 41 of the MPRDA required an applicant for a prospecting right, mining right or mining permit, to make a prescribed financial provision for the rehabilitation or the management of negative environmental impacts, before the Minister would approve an EMP or EMPr.
Financial provision to be set aside in financial vehicle established for rehabilitation purposes	Regulation 53 of the MPRD Regulations provided for financial provision to be made in the form of: (1) trust funds specifically established for rehabilitation purposes; or (2) a financial guarantee from a South African registered bank; or (3) a cash deposit into an account specified; or (4) any other measure which the Director-General may determine.[26]
Method and quantum for financial provision	Detail regarding the method and quantum of financial provision was provided in regulations 53 and 54 of the MPRD Regulations.[27] The mining company concerned had to determine the quantum, in line with the Department of Mineral Resources 2005 Guideline Document for the Evaluation of the Quantum of Closure-Related Financial Provision Provided by a Mine (and required itemisation of costs entailed in premature closure; decommissioning and final closure; and post-closure management of residual and latent environmental impacts).
Application for closure certificate	Application for a closure certificate was required to be made in the circumstances set out in section 43,[28] in accordance with procedural requirements set out in the MPRD Regulations (which included the submission of a Closure Plan, Environmental Risk Report and Final Performance Assessment Report).[29]
Liability retained by holder until closure certificate issued	The holder of a right retained responsibility for any environmental liability, pollution or ecological degradation related to that mine (and was consequently required to retain and maintain financial provision) until a closure certificate had been issued by the Minister in terms of section 43 of the MPRDA.[30]
Financial provision returned following grant of closure certificate	Upon issuing a closure certificate, the financial provision was required to be returned to the holder by the Minister (although a portion could be retained for environmental rehabilitation of latent or residual environmental impacts arising after mine closure).[31]
State responsibility to provide funding for environmental rehabilitation of abandoned mines	Section 46 of the MPRDA provided that, in circumstances where a closure certificate was not issued and no party could be traced to assume responsibility for the liabilities of an abandoned mine, the mine could be classified as derelict and ownerless, and the state would then be obliged to provide funding for its rehabilitation.[32]

The 2009 Auditor-General's (AG) Report highlighted the extent of environmental and health impacts associated with abandoned mines (which had not been adequately managed despite the MPRDA regime) and quantified the environmental rehabilitation costs thereof.[33] Alarmingly, the AG Report[34] found that as of the end of May 2008, there were 5 906 abandoned mines in South Africa, most of which had been abandoned before the coming into effect of the MPRDA. The cost of rehabilitating the abandoned mines was furthermore estimated to be in the region of R30 billion (excluding the costs associated with the treatment of acid mine drainage).[35]

The AG Report further noted that measures were not in place to ensure that abandoned mines were rehabilitated effectively and timeously despite the significance and extent of the environmental impacts. Inadequate reporting, ineffective governance arrangements and leadership oversight were identified as factors contributing to the failure of the then Department of Minerals and Energy's (DME) (now the Department of Mineral Resources) to address the crisis.[36]

Although the financial provision regime under the MPRDA gave the impression of a rigorous framework for mine closure and financial provision, the 2009 AG Report demonstrated major failings in achieving the framework's environmental rehabilitation objectives.

While institutional challenges at the DME (highlighted in the 2009 AG Report) hampered efforts to effectively oversee the implementation of financial provision, mine closure and environmental rehabilitation requirements, shortcomings in the legal framework itself were also problematic. In particular, applications made in terms of sections 11 and 102 of the MPRDA (providing for transfer and amendment of mining rights) did not explicitly require revision of financial provision when transferring or amending rights or conditions of operation.[37] Furthermore, environmental rehabilitation and closure responsibilities were often overlooked in the context of winding-up processes undertaken in terms of insolvency legislation.[38,39]

While the reliance on the outdated 2005 DMR Guideline Document for determination of the quantum of financial provision meant that financial provision was often woefully less than required to meet environmental rehabilitation obligations, the MPRDA regime was also criticised for failing to make adequate provision for independent oversight of financial provision.[40] Inherent risks associated with the financial vehicles proposed for financial provision under the MPRDA regime were also of concern.[41] Furthermore, the regime did not provide for concurrent rehabilitation of environmental impacts (which would mitigate closure rehabilitation requirements),[42] and post-closure impacts (particularly those related to acid mine drainage) were often not adequately catered for in financial provision calculations.[43]

The institutional shortcomings described above were further compounded by uncertainty regarding the DMR's environmental regulation mandate, and the mandate of the environmental authorities insofar as mining activities were concerned. The duplication of mandates furthermore weakened the DMR's resolve to invest in developing its regulatory capacity to enforce a robust and effective standard of enforcement and compliance in environmental authorisations.[44]

REGULATION OF FINANCIAL PROVISION UNDER 'ONE ENVIRONMENTAL SYSTEM' AND THE 2015 FP REGULATIONS

'ONE ENVIRONMENTAL SYSTEM'

In response to mounting concerns about environmental regulation of mining activities by the DMR, and the imperative to streamline environmental authorisation processes for mining operations,[45] a compromise agreement was reached between the Department of Environmental Affairs (DEA) (now the Department of Environment, Forestry and Fisheries (DEFF)) (and the DME (now the DMR). This agreement, known as the 'One Environmental System'[46] specified that:

- All environment-related aspects of mining would be regulated through one environmental legislative framework under the NEMA, with the regulatory framework being set by the Minister responsible for environmental affairs.
- The Minister responsible for mineral resources would be responsible for the implementation of the mining-related provisions of the NEMA and relevant subordinate legislation; and would become the competent authority for environmental authorisations (and waste management licences[47]) required for mining activities.
- Importantly, the Minister responsible for environmental affairs would retain some oversight as the appeal authority in respect of these authorisations.

The One Environmental System was implemented through amendments to the MPRDA and the NEMA. The Mineral and Petroleum Resources Development Amendment Act of 2008[48] (the MPRD Amendment Act) was promulgated in April 2009, but commenced some years later as part of the staged legislative overhaul process which gave effect to One Environmental System.[49] Amendments to the NEMA were given effect in terms of the National Environmental Management Laws Amendment Act, 2014 (NEMLAA).[50]

The transition to One Environmental System was not without incident. Although the system streamlined environmental authorisation processes linked to mining operations, concerns were raised by environmental groups regarding the apparent conflict of interest created by the assignment of the environmental oversight function of mining activities to a department that is mandated to promote mineral extraction.[51] Concern furthermore exists about the DMR's capacity to enforce compliance with environmental laws, given the limited human resources allocated to environmental protection and monitoring (and the department's comparatively poor performance of its environmental compliance and enforcement function when compared with the environmental authorities).[52] The uneasiness between the DMR and the DEA in giving effect to the One Environmental System (and the DMR's apparent

neglect of its enforcement duties) was considered by the Western Cape High Court in *Mineral Sands Resources (Pty) Ltd v Magistrate for the District of Vredendal, Kroutz NO and Others*.[53]

The legislative overhaul which gave effect to One Environmental System also entailed a major realignment of the financial provision framework to bring it in line with the One Environmental System arrangement, and to address some of the deficiencies in the MPRDA framework. Furthermore (and in line with the One Environmental System), the 2015 FP Regulations were made in terms of the NEMA. The MPRDA framework is however still applicable to mining companies that obtained their authorisations prior to November 2015 (in terms of transitional arrangements).

FINANCIAL PROVISION FOR REMEDIATION OF ENVIRONMENTAL DAMAGE IN TERMS OF THE NEMA

Environmental authorisation is required for various mining-related activities.[54] In terms of section 24N of the NEMA, in the environmental authorisation process, a mining company is required to submit an Environmental Management Programme (EMPr) to the Minister for approval. The EMPr must include 'measures to rehabilitate the environment affected by mining-related activities to its natural or predetermined state or to a land use which conforms to the generally accepted principle of sustainable development'.[55] Measures regulating 'environmental damage, pollution, pumping and treatment of polluted or extraneous water or ecological degradation which may occur inside and outside the boundaries of the operations in question' must also be included.[56]

Section 24P and 24R of the NEMA (which were introduced by the NEMLAA) provide for financial provision for environmental rehabilitation and mine closure as follows:

Applicant for environmental authorisation to comply with financial provision requirements	Section 24P(1) provides that an applicant for environmental authorisation relating to mining activities must comply with prescribed financial provision for rehabilitation, closure and ongoing post-decommissioning management of negative environmental impacts, before the environmental authorisation is issued by the Minister of Mineral Resources.	
Assessment of environmental liability	Assessment of environmental liability is required on an annual basis (in accordance with prescribed regulations) and, if necessary, financial provision must be increased to the satisfaction of the Minister.	
Audit on adequacy of financial provision to be submitted to Minister	An Audit Report on the adequacy of the financial provision (prepared by an independent auditor) must be submitted to the Minister annually.[129] The Minister may appoint an independent assessor if he or she is not satisfied with the provision which has been made (the cost of which must be borne by the holder of the right in question).[130]	

While section 24P and 24R of the NEMA establish the legislative framework for financial provision, the required regulatory details are prescribed in terms of regulations published under the NEMA. Significantly these subsections, together with statutory duties of care imposed in terms of section 28 of the NEMA and section 19 of the National Water Act 36 of 1998, imply that environmental rehabilitation of mining operations are a continuing obligation rather than a one-off activity undertaken at mine closure.[57]

Section 24P(6) seeks to ring-fence financial provision in the context of insolvency. However, this subsection has received criticism on the basis that it overlooks the fact that the primary statutory authority with bearing upon the allocation of funds upon a company's demise is not the Insolvency Act[58] (which applies in a supplementary capacity), but rather Chapter 14 of the Companies Act, 1973.[59]

Importantly, section 43(1A) of the NEMA provides that the Minister responsible for environmental affairs is the appeal authority in respect of a decision made by the Minister responsible for mineral resources in terms of the NEMA or National Environmental Management: Waste Act 59 of 2008 (Waste Act). This provision (together with the National Appeal Regulations, 2014[60]) does provide limited oversight to environmental authorities in the context of decisions by the Minister of Mineral Resources (including those relating to financial provision requirements) which are taken on appeal.

	Minister to use financial provision where environmental rehabilitation has not been undertaken	The Minister is empowered to use all or part of the financial provision in order to rehabilitate or manage environmental impacts which have not been (or are not able to be) addressed by a holder of a mining right or an old order right.[125] Importantly, however, financial provision cannot be accessed until such time as a closure certificate has been issued in terms of section 43 of the MPRDA.[126]
	Continuing environmental liability	Financial provision obligations remain applicable *despite* the issue of a closure certificate in terms of the MPRDA, and a holder of a right remains liable for rehabilitation of latent, residual or any other environmental impacts (including the pumping of polluted or extraneous water, for a prescribed period).[127] A portion of the financial provision may be retained to address latent, residual or any other environmental impacts, including the pumping of polluted or extraneous water, for a prescribed period after issuing a closure certificate.[128]
	Financial provision ring-fenced in proceedings under the Insolvency Act	Section 24P(6) states that the Insolvency Act 24 of 1936 does not apply to any form of financial provision for rehabilitation.

MINE CLOSURE IN TERMS OF THE MPRDA

The financial provision section of the MPRDA[61] was repealed, and section 43 (which provides for issuing of closure certificates) was amended to take account of the One Environmental System arrangement.

The salient features of section 43 of the MPRDA, which are relevant in respect of financial provision, include the following:

Environmental liability retained until issue of closure certificate	Section 43(1) provides for responsibility for any environmental liability, pollution, ecological degradation, the pumping and treatment of extraneous water, compliance to the conditions of the environmental authorisation and the management and sustainable closure of mining, to be retained by a mining right holder until such time that the Minister has issued a closure certificate.[62]
Closure certificate	Application for a closure certificate must be submitted to the Regional Manager in the circumstances listed in section 43(3),[63] and must be accompanied by any prescribed information or reports.[64] In terms of section 43(5) a closure certificate may only be issued by the Minister of Mineral Resources following confirmation from the Chief Inspector and relevant environmental departments.[65] **Note**: Although this is intended to provide some environmental oversight, the fact that the Minister of Mineral Resources is the competent authority for environmental authorisations and waste management licences for mining activities presents a clear conflict of interest in this regard.
Portion of financial provision to be retained for latent or residual environmental and health and safety impacts	Section 43(6) provides that the Minister may return the holder's financial provision but may also retain any portion thereof for latent and residual safety, health or environmental impacts that may only become known in the future (in line with section 24P and 24R of the NEMA).
The state's responsibility to ensure environmental rehabilitation of mining activities	Sections 45 and 46 of the MPRDA provide the Minister with directive powers in circumstances where mining activities cause ecological degradation, pollution or environmental damage (including where those circumstances might be harmful to health, safety or well-being). In the event that the right holder or his or her successor in title is deceased or cannot be traced, or in the case of a juristic person who has ceased to exist, has been liquidated, or cannot be traced, the relevant mining authorities may take the measures required. Those measures may be funded from financial provision (insofar as it is available and sufficient) or money appropriated by Parliament for the purpose.

The roles and responsibilities of the environmental and mining authorities relating to mine closure and financial provision for environmental rehabilitation of mining-related activities are set out in table form below:

	ENVIRONMENTAL AUTHORITIES	MINING AUTHORITIES
Regulation of environmental issues relating to mining activities generally	■ Environmental issues related to mining, prospecting, production and related activities are regulated under the NEMA and other relevant environmental legislation. ■ The Minister responsible for environmental affairs: ▪ sets the regulatory framework and norms and standards; and ▪ is the appeal authority in respect of any decision made by the Minister of Mineral Resources in terms of the NEMA or a specific environmental management act.[66]	■ The Minister of Mineral Resources: ▪ is responsible for implementing mining-related provisions of the NEMA and relevant subordinate legislation; and ▪ is the competent authority in respect of environmental authorisations granted in terms of the NEMA and the Waste Act (in addition to being the licensing authority in terms of the MPRDA). ■ Compliance monitoring and enforcement of the NEMA and other environmental legislation pertaining to mining activities are undertaken by environmental mineral resource inspectors appointed by the Minister.
Regulation of mine closure and financial provision for environmental rehabilitation of mining activities	■ Mine closure and financial provision for environmental rehabilitation of mining activities are addressed in terms of section 24P and 24R of the NEMA. ■ Regulations relating to financial provision for mining-related activities may be made by the Minister of Environmental Affairs in terms of the NEMA.	■ In terms of the NEMA and the MPRDA the Minister of Mineral Resources must: ▪ ensure that financial provision for environmental rehabilitation is made and retained by mining companies in accordance with relevant financial provision regulations made by the Minister of Environmental Affairs; ▪ issue directives to mining companies requiring environmental rehabilitation, or undertake environmental rehabilitation or management (using the financial provision) in circumstances where mining companies have failed to do so; and ▪ when issuing a closure certificate in terms of section 43 of the MPRDA, retain sufficient financial provision to address any latent, residual or other environmental impact, including the pumping of polluted or extraneous water. ■ The Minister of Mineral Resources is also responsible for the implementation of financial provision regulations made in terms of the NEMA.

The intertwined mandates of the authorities charged with regulating the environmental management aspects of mining (reflected in the table above) present some difficulties for effective environmental regulation of mining activities.

Although environmental authorities are afforded some oversight (in the context of developing the legislative and regulatory framework and the designation of the Minister responsible for environmental affairs as the appeal authority), the implementation of the One Environmental System in the mining context is ultimately bestowed upon the DMR. Given the scope of that mandate, its effective implementation calls for a well-capacitated authority which is focused on environmental management. While the DMR's competing environmental management and mineral resources development mandates are not conducive to the effective discharge by the DMR of its environmental functions, capacity constraints within the department are also likely to jeopardise the achievement of environmental management objectives (including effective financial provision and environmental rehabilitation). Although recourse is available in the form of the appeal process prescribed in terms of the NEMA (and thereafter judicial review proceedings), that recourse presupposes the proper implementation by the DMR of its environmental management mandate.

Effective implementation of financial provision and environmental rehabilitation requirements requires a robust and effective compliance-monitoring and enforcement programme for mining operations coupled with expertise in financial and environmental rehabilitation. The institutional and capacitation issues within the DMR (which have emerged in the context of One Environmental System) are thus a particular concern insofar as the achievement of financial provisioning and environmental rehabilitation objectives are concerned.

THE 2015 FINANCIAL PROVISION REGULATIONS

On 20 November 2015, the Minister of Environmental Affairs published the 2015 FP Regulations in terms of the NEMA. The purpose of these regulations is to regulate the determination of financial provision as contemplated in the NEMA for the specific costs related to undertaking the management, rehabilitation and remediation of environmental impacts. This is applicable from the commencement of exploration activities, through the lifespan of prospecting and mining operations, and extends to the consideration of, and provision for, latent or residual environmental impacts that may become known in the future.[67] In line with the One Environmental System framework, the Minister of Mineral Resources is responsible for the implementation of the 2015 FP Regulations.[68]

The 2015 FP Regulations flesh out the financial provision requirements set out in terms of Chapter 2 of the NEMA, and include the following salient features:

Financial provision to be made for full lifecycle of the mine	The 2015 FP Regulations echo the requirement set out in the NEMA for financial provision to be made to address environmental rehabilitation and remediation of mining activities. Importantly, this financial provision must cater for: (1) rehabilitation and remediation; (2) decommissioning and closure activities at the end of prospecting, exploration, mining or production operations; and (3) remediation and management of latent or residual environmental impacts which may become known in the future, including the pumping and treatment of polluted or extraneous water.[69]
Environmental rehabilitation plans to be prepared	The following environmental rehabilitation plans must be prepared in respect of each mining operation and in accordance with prescribed content requirements: Annual Rehabilitation Plan; Final Decommissioning, Mine Closure and Rehabilitation Plan; and Environmental Risk Assessment Report (covering residual and latent effects).[70]
Calculation of financial provision with reference to actual costs for environmental rehabilitation plans	Financial provision must be determined through a detailed itemisation of all actual costs involved in the implementation of measures required in terms of each of the abovementioned environmental rehabilitation plans. Significantly, total financial provision must cover the actual costs as determined for a period of at least 10 years.[71]
Financial vehicles for financial provision	Financial provision may take the form of a financial guarantee, deposit into a specified account, or a contribution into a trust fund (although the use of a trust fund is restricted to financial provision for latent or residual environmental impacts only).[72]
Review, assessment and adjustment of financial provision	Provision is made for annual review and assessment of financial provision, and adjustment thereof where necessary. The regulations specifically require that determination, assessment and annual review of financial provision must be undertaken by independent external specialists.[73]
Minister's oversight of assessment and adjustment payments	The results of an assessment of financial provision (including proof of payment of arrangements to provide for any adjustments to the financial provision) must be: (1) audited by an independent auditor; (2) included in an Environmental Audit Report;[74] and (3) submitted to the Minister for approval in the form of an Auditor's Report. The submission of the Auditor's Report must be accompanied by the environmental rehabilitation plans and a declaration reconciling the financial provision with estimates of exposure and liabilities for environmental rehabilitation disclosed in financial statements (which disclosure must include contingent liabilities and restricted cash associated with the financial provision liability).[75] All documents submitted to the Minister must be signed by the CEO and the independent auditor.[76]
Accountability	The 2015 FP Regulations provide for transparency by requiring that an EMPr submitted in terms of section 24N of the NEMA must be made publicly available; and that the CEO is ultimately responsible for implementing the environmental rehabilitation plans and ensuring that sufficient financial provision is available to meet environmental rehabilitation obligations on closure.[77]
Care and maintenance	The care and maintenance provisions require a mining company to apply to the Minister for an operation to be put into care and maintenance. The Minister may approve such an application for a period of not more than five years (at which point the approval would have to be renewed), or give written instructions to the mining rights holder to implement measures deemed necessary.[78]

SUMMARY

- The financial provision framework established under the NEMA, read together with the 2015 FP Regulations, entails a significantly wider perspective on financial provision applicable to a mine's lifecycle than was provided under the MPRDA regime, by making specific provision for annual rehabilitation, rehabilitation on closure, and rehabilitation of any residual or latent environmental impacts.
- By prescribing content requirements for relevant plans along with detail regarding the financial provision requirements, the regulations offer greater clarity, while putting in place measures to ensure that adequate financial provision is secured.
- The 2015 FP Regulations impose more stringent requirements for independence and oversight in respect of calculation and maintenance of financial provision.
- Transparency and accountability in respect of financial provision requirements are also improved through regular audits and reviews, by publication requirements, and by ensuring that both the independent auditor and the CEO sign off on submission to the Minister concerning financial provisions.[79]

Although a clear attempt to tighten up regulation of financial provision, the 2015 FP Regulations are considered by some to be unnecessarily onerous[80] (which could possibly contribute to non-compliance). Despite the abovementioned legal developments, the situation on the ground demonstrates that the legal regime has failed to effectively regulate the environmental rehabilitation of mines.[81] In particular, an apparent reluctance and/or failure on the part of mining companies to initiate closure proceedings and make application for closure certificates (particularly in the case of struggling operations) means that significant funds set aside as financial provision for environmental rehabilitation cannot be accessed as mines have not been deemed legally closed.[82] In many cases, struggling mines are put into 'care and maintenance',[83] thereby avoiding closure processes.[84] The 2015 FP Regulations provide for the submission of a care and maintenance plan and require financial provision to be made where a mine is placed into care and maintenance. However, these provisions have been challenged on the basis that they are *ultra vires* (i.e. they fall outside the competence of the Minister responsible for environmental affairs).

Legal loopholes also enable the avoidance of financial provision and closure processes through the transfer of rights (in terms of sections 11 and 102 of the MPRDA).[85] A common scenario in this regard involves the sale of mines at the end of their productive lives to smaller companies who are often either unwilling or unable to fulfil the rehabilitation obligations. Furthermore, when an operation ceases to be profitable, the mine is in many cases simply abandoned (while mine closure and financial provision obligations are overlooked in the context of winding up or in business rescue processes).[86] In addition to concerns about the formulation of the 2015 FP Regulations, the DMR's conflicted mandate (which entails actively promoting mining while also overseeing environmental protection in the mining context) remains a major point of contention and threatens to undermine the effective implementation of financial provision requirements of the NEMA and the 2015 FP Regulations.[87]

Concerns were furthermore raised by various stakeholders, including the Chamber of Mines (now the Minerals Council South Africa) regarding the 2015 FP Regulations. These included:

- the requirement to retain financial provision for 10 years;
- the restriction of the use of trust funds to make the financial provision for latent or residual environmental impacts (but not annual and closure rehabilitation requirements). This also entailed substantial tax implications, which were of particular concern to industry;
- the inclusion of the annual rehabilitation obligation in the financial provision that had to be set aside (this was viewed as being double accounting);
- public access to key financial provision documents; and
- the possibility that the care and maintenance provisions are *ultra vires*.[88]

BEYOND THE 2015 FINANCIAL PROVISION REGULATIONS

DRAFT 2017 FINANCIAL PROVISION REGULATIONS

In a process which took place following the publication of the 2015 FP Regulations, the DMR engaged with various stakeholders (including the Minerals Council South Africa), in an attempt to address the mining industry's concerns. That process culminated in the publication, on 10 November 2017, of the Proposed Regulations Pertaining to the Financial Provision for Prospecting, Exploration or Production Operations (2017 Draft FP Regulation), which were intended to repeal the 2015 FP Regulations.[89]

The 2017 Draft FP Regulations sought to do the following:

- impose a specific obligation on the holder to rehabilitate and remediate environmental damage;
- amend the definition of 'applicant' such that applicants for consents to cede, transfer, assign, alienate or amend a right or permit as contemplated in section 11 or section 102 of the MPRDA, would be required to determine and provide financial provision prior to these consents being granted;
- remove annual rehabilitation costs from the calculations of the financial provision (meaning that annual rehabilitation may be funded from a mining company's operational budget);
- re-allow the use of trust funds for financial provision for decommissioning, closure and final rehabilitation activities, and recognise 'rehabilitation companies' as financial vehicles into which financial provision may be paid;
- decrease the period for which financial provision must be made from 10 years to three years (or one year with regard to mining permits);
- remove the care and maintenance provisions.[90]

In turn, these changes prompted further concerns, particularly among environmental groups. They objected in particular to the reduction of the period for which financial provision had to be made from 10 years to three years, and to the scrapping of the care and maintenance regulations (particularly given that 'care and maintenance' is at times used as a loophole which allows companies to effectively close mines without following rehabilitation protocols).[91]

2019 DRAFT FINANCIAL PROVISION REGULATIONS – TOWARDS A ROBUST FINANCIAL PROVISION FRAMEWORK?

On 17 May 2019, the Minister of Environmental Affairs published the second draft of the Proposed Regulations Pertaining to the Financial Provision for the Rehabilitation and Remediation of Environmental Damage caused by Reconnaissance, Prospecting, Exploration, Mining or Production Operations (2019 Draft FP Regulations) (which are intended to entirely replace the 2015 FP Regulations).[92] The deadline for comments on the draft regulations was 1 July 2019.

Some significant features of the 2019 Draft FP Regulations are set out below together with comments, where relevant:

- **Competent authority**: In line with the One Environmental System arrangement, the Minister of Mineral Resources is responsible for administering the proposed regulations. The capacity constraints which have been identified with regard to the implementation of One Environmental System by the DMR (discussed above) consequently remain a concern, regarding the effective implementation of the proposed regulations.
- **Obligation to undertake environmental rehabilitation**: Every applicant and holder is obliged to undertake environmental rehabilitation of mining operations in accordance with:

  (1) an Annual Rehabilitation Plan;

  (2) a Final Rehabilitation, Decommissioning and Mine Closure Plan (Mine Closure Plan); and

  (3) an Environmental Risk Assessment Report.

  These plans and reports must be prepared in accordance with prescribed content requirements and must detail the costs involved in their implementation.[93]
- **Financial provision for a 'sustainable end state'**: In terms of the 2019 Draft FP Regulations, financial provision for environmental rehabilitation is required to address the entire lifecycle of the mine (involving the remediation and management of residual and latent environmental damage, including ongoing pumping and treatment of extraneous water) to ensure that a mine can be brought to a sustainable end state.[94]

  Significantly, the apportionment of financial provision is undertaken annually in respect of the anticipated footprint for the following year's mining operations (a significant reduction from the 10-year financial provision requirement contained in the 2015 FP Regulations).[95] The concept 'sustainable end state' is defined with reference to a 'risk threshold', which essentially amounts to the environmental risk which is considered acceptable following mine closure.[96] This could conceivably accommodate opportunities for alternative land uses, such as agri-processing, water reclamation plants, and power plants on mined-out areas, in contrast with the previous obligation to rehabilitate the land to its pre-mining state. The inclusion of the concept 'sustainable end state' is intended to practically enable mines to reach a point where a closure certificate can be issued.[97] The introduction of this concept may serve to facilitate mine closure in respect of mines that might otherwise have sought to avoid their mine closure responsibilities. However, the regulations do not provide much guidance as to what this state will entail and essentially leave this to be determined by mining companies in an iterative process with mining authorities.[98] Given the somewhat discretionary approach, it is possible that the application of the concept could amount a 'lowering of the bar' insofar as environmental rehabilitation is concerned.
- **Financial vehicles for financial provision**: The proposed regulations seek to allow mining companies the freedom to select the financial vehicle that best suits their needs in respect of financial provision. Previous restrictions on the use of trust-fund contributions have been removed and 'closure rehabilitation companies' may be used as a financial vehicle for financial provision, along with financial guarantees and cash deposits.[99]
- **Calculation of financial provision**: Financial provision must be determined with reference to the actual costs entailed in implementing the Annual Rehabilitation Plan; Final Rehabilitation, Decommissioning and Mine Closure Plan; and Environmental Risk Assessment Report (as was the case in the 2015 FP Regulations).[100]
- **Availability and funding of financial provision**: Annual rehabilitation will be funded out of the holder's operational budget, while funds for environmental rehabilitation linked to mine closure and latent and residual impacts must be set aside using appropriate financial vehicles in accordance with prescribed methodologies (which have been revised and simplified).[101] Funds set aside for financial provision must remain in place until a closure certificate is issued in terms of section 43 of the MPRDA (unless a withdrawal is permitted by the Minister in terms of Regulation 11).[102] Funds set aside for residual and latent impacts must be ceded to the Minister (or in the case of a financial guarantee, called upon by the Minister) upon the issuing of a closure certificate.[103]

- **Financial provision for section 11 and section 102 transactions**: The 2019 FP Regulations have gone beyond the 2017 Draft FP Regulations to specifically address financial provision in the context of section 11 consent and section 102 amendments under the MPRDA.[104]
- **Minister's approval/consideration of financial provision**: An Annual Rehabilitation Plan and the determination of financial provision must be submitted to the Minister for approval (along with an application for environmental authorisation). The Mine Closure Plan and Environmental Risk Assessment Report are however only required to be submitted for 'consideration' by the Minister. Proof of financial provision must be provided when the right is granted and becomes effective.
- **Review and reassessment of financial provision**: Financial provision must be reviewed and updated on an annual basis, and the findings of the review (together with an amended Annual Rehabilitation Plan and confirmation of adequacy of financial provision, as may be required) must be submitted to the Minister for approval. Again, any amended Mine Closure Plan or Environmental Risk Assessment Report and proof of payment of adjusted financial provision must be submitted for consideration.[105] The results of the review must also be audited by an independent auditor and the Auditor's Report must be submitted to the Minister for approval.[106]

  The proposed regulations do not appear to provide for the submission for approval of a Mine Closure Plan or Environmental Risk Assessment Report. It is furthermore not clear what recourse is available (other than further review requirements)[107] where submissions do not meet the relevant requirements.[108]
- **Accessing financial provision where environmental remediation has not been undertaken**: The Minister may access financial provision held in respect of a mining operation in circumstances where the holder, liquidator or business rescue administrator in question fails to initiate actions to rehabilitate environmental damage in accordance with its environmental rehabilitation obligations, notwithstanding an order by the Minister to do so.[109] Although this is good news insofar as it enables the state to access funds required to undertake environmental rehabilitation in circumstances where a mine has not been legally closed (including where abandoned mines are concerned), it appears to contradict the requirement in regulation 7(3) that financial provision must remain in place until a closure certificate is issued. The limited progress made by the DMR in recent years with regard to rehabilitation efforts also suggests some substantial failings insofar the department's capacity to facilitate environmental rehabilitation is concerned.
- **Ensuring accountability**: Improved accountability in respect of environmental rehabilitation requirements is intended to be facilitated by:
  - the determination of financial provision by independent specialists (with the review, confirmation or adjustment of the adequacy of financial provision being undertaken by an independent auditor);[110]
  - specific disclosure requirements in respect of determination, adjustment and review of financial provision, auditor's reports, and environmental rehabilitation plans;[111]
  - imposing responsibility for environmental rehabilitation[112] on the CEO of a mining company, or, where liquidation or business rescue proceedings have been initiated, the liquidator or business rescue administrator is responsible. This is a clear attempt to address the legal loopholes around the winding up of companies.

    It is a concern, however, that there is no sanction imposed on liquidators or business rescue administrators who fail to satisfy these requirements. Moreover, in the case of a CEO, liability would lie with the 'holder', which would be the corporate entity that holds the relevant right.[113] It is also not clear how the obligation imposed on liquidators or business rescue administrators might rank against their other obligations, imposed in terms of the legislation governing liquidation and business rescue processes.[114]
  - requiring the CEO, liquidator or business rescue administrator to sign off all documentation submitted to the Minister.[115]
- **Early withdrawal of financial provision**: In response to concerns about situations where early access to financial provisioning is required, the 2019 Draft FP Regulations provide for withdrawal applications to access funds required to facilitate final rehabilitation and closure activities. These applications will be strictly regulated and may only be submitted for the Minister's approval once a year during the 10 years prior to closure.[116]
- **Care and maintenance**: Provisions relating to care and maintenance have been excluded from the 2019 Draft FP Regulations. The deletion of these provisions means that financial provision and environmental management of mines under care and maintenance are not regulated, presenting a significant gap in the legal framework.[117]

DRAFT 2019 FINANCIAL PROVISION REGULATIONS IN A NUTSHELL

Environmental authorisation process

- Prepare and submit:
  - (1) annual rehabilitation plan;
  - (2) mine closure plan; and
  - (3) environmental risk assessment report; and
  - (4) calculation of financial provision

  to the Minister for approval/consideration together with application for environmental authorisation.

During mining operations

- Undertake annual rehabilitation in accordance with the annual rehabilitation plan (to be funded from operational budget).
- Set aside funds for mine closure and latent and residual environmental impacts in appropriate financial vehicles as determined in the mine closure plan and environmental risk assessment report.
- Undertake an annual review, reassessment and readjustment of financial provision and submit findings to the Minister.

Before mine closure

- Undertake environmental rehabilitation in accordance with the mine closure plan to achieve a 'sustainable end state'.
- If required, apply to the Minister to withdraw funds from financial provision to facilitate final rehabilitation and closure activities (only within 10 years preceding mine closure).
- Apply to the Minister for a mine closure certificate.

Mine closure

- Following the granting of a mine closure certificate:
  - (1) financial provision may be returned (although a portion may be retained by the Minister for latent and residual impacts); and
  - (2) financial vehicles for financial provision for latent and residual impacts must be ceded to the DMR.

After mine closure

- The DMR must use financial provision for latent and residual environmental impacts for environmental rehabilitation that may be required after mine closure.

The Minister may make a claim against a financial vehicle for financial provision if environmental rehabilitation obligations have not been complied with.

'SUSTAINABLE END STATE'

In essence, the 2019 Draft Regulations seek to address financial provision requirements through an iterative process of determination and reassessment of environmental rehabilitation and financial provision requirements.

Legislative developments have also been initiated to take account of proposed changes to the financial provision regime.

The most recent version of the National Environmental Management Laws Amendment Bill, 2017[118] echoes many of the requirements of the 2019 FP Regulations insofar as financial provision is concerned. The Bill proposes to amend section 24P of the NEMA and introduce a new section 24PA to provide for, *inter alia*:

- progressive rehabilitation to be undertaken concurrently with mining activities;
- annual drawdown of financial provision for environmental rehabilitation purposes for a period of 10 years prior to mine closure;
- calculation of the quantum of financial provision by a specialist environmental consultant;
- financial provision to be reviewed and audited every three years, with audit reports to be submitted to the Minister every five years; and
- audits to be signed off by the CEO.

Although the draft regulations address some of the concerns raised in respect of the 2015 FP Regulations and the 2017 Draft FP Regulations, certain compromises do however appear to have been made:

- In particular, the inclusion of 'sustainable end state' as being the standard for environmental rehabilitation (although aimed at practically enabling mines to be legally closed) raises some concerns given its discretionary formulation.
- The requirement to hold financial provision to cover the costs of environmental rehabilitation for a period of at least 10 years (contained in the 2015 FP Regulations) has been removed to allow for the iterative process of financial provisioning (with the Minister being afforded powers to access financial provision where environmental rehabilitation responsibilities have not been complied with).
- The exclusion of provisions concerned with care and maintenance (purportedly on the basis that those provisions would be *ultra vires* the mandate of the Department of Environmental Affairs) is also problematic given that this aspect is not regulated elsewhere. Although regulations pertaining to care and maintenance would presumably fall within the regulatory mandate of the DMR, the department may be reluctant to address this issue (given industry resistance to the inclusion of the care and maintenance provisions in the 2015 FP Regulations).
- Institutional issues (particularly the DMR's dual mandate and capacity constraints) remain a significant concern given the scale of the environmental crisis and the limited progress made by the department in recent years (with only around R42 million having been spent on rehabilitating five of the 5 906 derelict and ownerless mines in the past five years).[119]

FINANCIAL PROVISION AND THE MINING CHARTER

On 27 September 2018, the Minister of Mineral Resources published the Broad-Based Socio-Economic Empowerment Charter for the South African Mining and Minerals Industry (2018 Mining Charter).[120] The implementation guidelines were published later that year, on 19 December 2018.[121]

Section 100 of the MPRDA provides that the Mining Charter is a tool to be used to 'ensure the attainment of Government's objectives of redressing historical, social and economic inequalities as stated in the Constitution'.

The MPRDA further provides that the Mining Charter

> ... will set the framework for targets and time table for effecting the entry into and active participation of historically disadvantaged South Africans into the mining industry, and allow such South Africans to benefit from the exploitation of mining and mineral resources and the beneficiation of such mineral resources.

As such, the Mining Charter is intended to serve as a mechanism for promoting transformation and addressing the legacy of inequality in the mining sector, and places obligations on the mining sector aimed at addressing socio-economic issues such as ownership, mine community development, and housing and living conditions.

The 2018 Mining Charter has been criticised (particularly by organisations representing mining communities) on the basis that it was developed without meaningfully engaging the very people it is intended to benefit: mining-affected communities. Instead, negotiations around the Charter primarily involved the government, mining companies and some organised labour (and was also the subject of a legal challenge in this regard).[122]

Among the issues raised by environmental justice organisations is the fact that insufficient attention had been paid to environmental rehabilitation post-mining (although environment conservation and rehabilitation were identified among the skills in respect of which investment for skills development must be made). In their view, the exclusion of environmental rehabilitation from the current Mining Charter (and the failure to include communities in negotiations around its development) is indicative of the fact that the Charter seeks to serve the interests of big business and not communities.[123]

Mining by its nature brings socio-economic development to communities, including the development of new job opportunities in the area, infrastructural development, and attraction of basic needs such as running water, electricity, the building of schools and health care centres. As a result, communities tend to develop around mines (and are generally dependent on the economic opportunities generated by the mine). Abandoned mines are thus commonly found in often densely populated communities. Environmental issues linked to abandoned mines can have a severe impact on the quality of life and livelihood of these communities, particularly impacting on people's health. The financial impacts on communities can also be devastating, resulting in loss of jobs and livelihoods, the creation of 'ghost towns', and a general collapse of infrastructure and services.[124]

The significant environmental and health impacts associated with unrehabilitated mines contribute substantially to the socio-economic inequalities faced by many mining communities. While the 2019 Draft FP Regulations seek to facilitate the effective regulation of financial provision and mine rehabilitation, the inclusion of environmental rehabilitation requirements in the Mining Charter would provide further impetus to the mining sector to better provide for and address environmental rehabilitation requirements.

CONCLUSION

Given the scale of the environmental crisis associated with unrehabilitated mines across the country (despite the financial provision framework under the NEMA and the 2015 FP Regulations being in place), it is clear that more is needed to be done to facilitate environmental rehabilitation of mining activities. While the 2019 Draft FP Regulations have compromised on certain aspects in an effort to facilitate environmental rehabilitation during the full lifecycle of a mine, concern nonetheless remains as to whether they will achieve this objective.

The following recommendations are made in this regard:

- Given the DMR's conflicted mandate, environmental authorities ought properly to be given greater oversight of the implementation of environmental rehabilitation and financial provision requirements. Alternatively, certain functions relating to environmental rehabilitation and financial provision could be transferred to environmental authorities to avoid a conflict of interest, where relevant.
- Capacity constraints at the DMR must be assessed and addressed to enable effective implementation of the proposed regulations, and to ensure compliance with the requirements of environmental authorisations and environmental rehabilitation plans during the full lifecycle of mining operations. In particular, sufficient appropriately qualified officials must be appointed to oversee all aspects of environmental rehabilitation and financial provision.
- Policy guidelines providing guidance on what constitutes a 'sustainable end state' should be developed to inform the preparation of environmental rehabilitation plans and approval thereof by the Minister.
- A clear procedure should be developed regarding accessing financial provision held in respect of abandoned mines.
- Given the circumstances which ordinarily necessitate care and maintenance of a mine (together with the possible environmental impacts and risk of abandonment) it is crucial that this aspect is adequately regulated. In light of the proposed exclusion of the care and maintenance provisions from the draft 2019 FP Regulations, the regulation of mines which have been put into care and maintenance should be revisited on an urgent basis (by the DMR in consultation with DEFF) given the risk of abandonment of mothballed mines.
- A task team should be established by the government to facilitate access to financial provision and environmental rehabilitation of priority abandoned mines.

Endnotes

1 Centre for Environmental Rights, 'Full Disclosure: The Truth about Mpumalanga coal mines failure to comply with their water use licences' (2019) <https://fulldisclosure.cer.org.za/2019/doc/Full-Disclosure-2019.pdf>. (Available at file:///Users/user/Downloads/minerals-council-iar2018-22052019.pdf). According to the report, the mining sector contributed R351 billion (7.3%) to South Africa's gross domestic product (GDP) during 2018.

2 Tracy Humby, 'Facilitating Dereliction? How the South African legal regulatory framework enables mining companies to circumvent disclosure duties' (2014); Sphiwe Emmanuel Mhlongo and Francis Amponsah-Dacosta, 'A Review of Problems and Solutions of Abandoned Mines in South Africa' 2016 (30) *International Journal of Mining, Reclamation and Environment*, 279 at page 280.

3 'Report of the Auditor-General to Parliament on a Performance Audit of the Rehabilitation of Abandoned Mines at the Department of Minerals and Energy' (Auditor-General 2009).

4 Informed by a report by the Council for Geoscience to Department of Minerals and Energy (DME).

5 Mineral and Petroleum Resources Development Act 28 of 2002.

6 'Report of the Auditor-General to Parliament on a Performance Audit of the Rehabilitation of Abandoned Mines at the Department of Minerals and Energy (n 3) 4–5.

7 Informed by the 'Strategy for Sustainable Growth and Meaningful Transformation of the South African Mining Sector'.

8 National Environmental Management Act 107 of 1998.

9 Regulations for Financial Provision for Prospecting, Exploration, Mining and Production Operations, published in GNR 1147 in *GG* 39425 of 20 November 2015.

10 Proposed Regulations Pertaining to the Financial Provision for the Rehabilitation and Remediation of Environmental Damage caused by Reconnaissance, Prospecting, Exploration, Mining or Production Operations, published in GN 667 in *GG* 42464 of 17 May 2019.

11 See Centre for Environmental Rights (n 1). According to the report, the mining sector contributed R351 billion (7.3%) to South Africa's gross domestic product (GDP) during 2018.

12 Humby (n 2); Mhlongo and Amponsah-Dacosta (n 2) 280.

13 Humby (n 2).

14 See discussion under 'Background'.

15 Minerals Act 50 of 1991.

16 Mineral and Petroleum Resources Development Act 28 of 2002.

17 National Environmental Management Act 107 of 1998.

18 Regulations for Financial Provision for Prospecting, Exploration, Mining and Production Operations, published in GNR 1147 in *GG* 39425 of 20 November 2015.

19 Proposed Regulations Pertaining to the Financial Provision for Prospecting, Exploration or Production Operations, published in GNR 1228 in *GG* 41236 of 10 November 2017.

20 Proposed Regulations Pertaining to the Financial Provision for the Rehabilitation and Remediation of Environmental Damage caused by Reconnaissance, Prospecting, Exploration, Mining or Production Operations, published in GN 667 in *GG* 42464 of 17 May 2019.

21 Mhlongo and Amponsah-Dacosta (n 2) 282–283.

22 Mhlongo and Amponsah-Dacosta (n 2) 282–283.

23 Minerals Act 50 of 1991.

24 Mhlongo and Amponsah-Dacosta (n 2) 283.

25 Mineral and Petroleum Resources Development Regulations, published in GN R527 in *GG* 26275 dated 23 April 2004.

26 Regulation 53 of the MPRD Regulations.

27 Regulation 54 of the MPRD Regulations.

28 Section 43(3) of the MPRDA. The circumstances which triggered the requirement to make application for a closure certificate were: the lapsing, abandonment or cancellation of the right or permit in question; or cessation of the prospecting or mining operation; or the relinquishment of any portion of the prospecting of the land to which a right, permit or permission relate; or completion of the prescribed closing plan.

29 Regulation 57 of the MPRD Regulations.

30 Sections 41 and 43 of the MPRDA.

31 Section 43(6) and 41(5) of the MPRDA.

32 Section 46 of the MPRDA.

33 'Report of the Auditor-General to Parliament on a Performance Audit of the Rehabilitation of Abandoned Mines at the Department of Minerals and Energy' (n 3).

34 Informed by a report by the Council for Geoscience to the DME.

35 'Report of the Auditor-General to Parliament on a Performance Audit of the Rehabilitation of Abandoned Mines at the Department of Minerals and Energy' (n 3) at page 4 and 5.

36 'Report of the Auditor-General to Parliament on a Performance Audit of the Rehabilitation of Abandoned Mines at the Department of Minerals and Energy' (n 3) at page 1.

37 Humby (n 2).

38 Primarily in terms of the Companies Act 61 of 1973. While this Act has been repealed and replaced by the Companies Act 71 of 2008, certain sections of the 1973 Act concerned with winding up of companies continue to apply.

39 Humby (n 2); WWF, 'Financial Provisions for Rehabilitation and Closure in South African Mining: Discussion Document on Challenges and Recommended Improvements' (2012) 90–94. Available at: <http://awsassets.wwf.org.za/downloads/wwf_mining_8_august_low_res.pdf>.

40 WWF (n 39) 24–39.

41 WWF (n 39) 31.

42 WWF (n 39) 22.

43 WWF (n 39) 22.

44 Allan Basajjasubi, Johnlyn van Reenen and Gino Cocchiaro, 'Blood, Sweat and Tears: Community Redress Strategies and Their Effectiveness in Mitigating the Impacts of Extractives and Related Infrastructure Projects in South Africa: 2008–2018' *Natural Justice* 12 <https://naturaljustice.org/publication/blood-sweat-and-tears/>.

45 Informed by the 'Strategy for Sustainable Growth and Meaningful Transformation of the South African Mining Sector'.

46 Section 50A(2) of the NEMA. Department of Environmental Affairs, 'Minister Nomvula Mokonyane Publishes Amendments to the Financial Provisioning Regulations Pertaining to Mining in Terms of Environmental Legislation' (21 May 2019) <https://www.environment.gov.za/mediarelease/mokonyane_amends_financialprovisioningregulations>.

47 Required in terms of the National Environmental Management: Waste Act 59 of 2008.

48 Mineral and Petroleum Resources Development Amendment Act 49 of 2008.

49 Certain provisions took effect on 7 June 2013 [Proc. 14, *GG* 36512 of 31 May 2013 as amended by Proc. 17, *GG* 36541 of 6 June 2013] while the final provisions giving effect to 'One Environmental System' only took effect from 7 December 2014 [Proc. 17, *GG* 36541 of 6 June 2013].

50 National Environmental Management Laws Amendment Act 25 of 2014.

51 Centre for Environmental Rights, 'Zero Hour: Poor Governance of Mining and the Violation of Environmental Rights in Mpumalanga' (2016) <https://cer.org.za/wp-content/uploads/2016/06/Zero-Hour-May-2016.pdf>.

52 WWF (n 39) 19–20. Basajjasubi, Van Reenen and Cocchiaro (n 44) 12.

53 *Mineral Sands Resources (Pty) Ltd v Magistrate for the District of Vredendal, Kroutz NO and Others* (18701/16) [2017] ZAWCHC 25; [2017] 2 All SA 599 (WCC) (20 March 2017).

54 Section 24 of the NEMA read with the 2014 EIA Regulations.

55 Section 24N(2) of the NEMA.

56 Section 24N(3) of the NEMA.

57 Humby (n 2).

58 Insolvency Act 24 of 1936.

59 Humby (n 2).

60 National Appeal Regulations, 2014 (published in GN R993 in *GG* 38303 of 8 December 2014).

61 Section 41 of the MPRDA.

62 Section 43(1).

63 Those circumstances being: the lapsing, abandonment or cancellation of the right or permit in question; cessation of the prospecting or mining operation; the relinquishment of any portion of the prospecting of the land to which a right, permit or permission relate; or completion of the prescribed closing plan to which a right, permit or permission relate.

64 Section 43(3) and (4).

65 Section 43(5) and (5A).

66 Which includes the National Environmental Management: Waste Act 59 of 2008.

67 Regulation 2 of the 2015 FP Regulations.

68 Section 50A(2) of the NEMA.

69 Regulation 4 and 5.

70 Regulation 6 read with Appendix 3–5.

71 Regulation 6 and 7.

72 Regulation 8.

73 Regulation 9(1).

74 Required in terms of the EIA Regulations, 2014.

75 Regulation 11.

76 Regulation 11 and 12.

77 Regulation 13.

78 Chapter 3 of the 2015 FP Regulations.

79 Rebecca Campbell, 'Mine Closure and Rehabilitation Regulations Developing under Contesting Pressures' *Mining Weekly* (16 November 2018) <https://m.miningweekly.com/article/mine-closure-and-rehabilitation-regulations-developing-under-contesting-pressures-2018-11-16/rep_id:3861>.

80 Cliffe Dekker Hofmeyer, 'Overhaul of Financial Provision Regime Takes a Step in the Direction of Legal Certainty' (5 February 2018) <https://www.cliffedekkerhofmeyr.com/en/news/publications/2018/Corporate/mining-and-minerals-alert-5-february-overhaul-of-financial-provision-regime-takes-a-step-in-the-direction-of-legal-certainty.html>.

81 Centre for Environmental Rights, 'Full Disclosure: The Truth about Mining Rehabilitation in South Africa' (2018) <https://fulldisclosure.cer.org.za/2018/wp-content/uploads/2018/06/Full-Disclosure-Key-Findings-and-Recommendations.pdf>.

82 Mark Olalde, 'R60-Billion Held for Mines That Are Never Closed' *Oxpeckers Investigative Environmental Journalism* <https://oxpeckers.org/2017/05/r60-billion-held-mines-never-closed/>.

83 'Care and maintenance' is not a legal concept, but a term used by the mining industry to describe the situation where production ceases, but the mine is not closed. A skeleton staff is retained, and environmental expenditure is kept to a minimum, with no rehabilitation taking place. Mining companies usually justify this step by stating that they are hoping for a change in market conditions that would make restarting the mining operation profitable. However, there is no timeframe for this, and it can lead to an indefinite postponement of closure and rehabilitation obligations.

84 Centre for Environmental Rights (n 81).

85 Humby (n 2). And Tracy Humby, 'Mine Closure and Rehabilitation: Canvassing the Issues – Presentation to the Parliamentary Portfolio Committee on Mineral Resources' (Presentation to the Parliamentary Portfolio Committee on Mineral Resources, Parliament, 25 October 2017) <https://pmg.org.za/files/171025Mine_Closure.pptx>. The transfer of mining operations to under-resourced operators (who might not make adequate financial provision for environmental liabilities) and oversight in respect of environmental rehabilitation requirements in winding-up processes means that mining companies may avoid environmental responsibilities associated with mine closure.

86 Centre for Environmental Rights (n 81).

87 Basajjasubi, Van Reenen and Cocchiaro (n 44) 12.

88 Campbell (n 79).

89 Proposed Regulations Pertaining to the Financial Provision for Prospecting, Exploration or Production Operations, published in GN R1228 in *GG* 41236 of 10 November 2017.

90 2017 Draft FP Regulations (n 89).

91 Centre for Environmental Rights 'Comments by Several Civil Society Organisations on the Proposed Regulations Pertaining to Financial Provision for Prospecting, Mining, Exploration or Production Operations' (2017) https://cer.org.za/wp-content/uploads/2018/03/Civil-Society-comments-on-the-proposed-Financial-Provision-Regulations-2017.pdf; Campbell (n 79).

92 Proposed Regulations Pertaining to the Financial Provision for the Rehabilitation and Remediation of Environmental Damage caused by Reconnaissance, Prospecting, Exploration, Mining or Production Operations, published in GN 667 in *GG* 42464 of 17 May 2019.

93 Regulation 6 read with Appendix 1–3.

94 Regulation 5 requires that sufficient funds be available for: (1) progressive rehabilitation and remediation; and (2) rehabilitation, remediation, decommissioning and closure activities; and remediation and management of residual and latent environmental damage, including ongoing pumping and treatment of polluted or extraneous water to ensure that mining activities can be brought to the approved sustainable end state at the scheduled or unscheduled closure of operations, and to manage the related rehabilitation of residual and latent impacts post closure.

95 Regulation 6(2) read with Appendix 4 and 5.

96 'Sustainable end state' is defined as 'the specific situation for land, water and air at the time of reaching the risk threshold'. 'Risk threshold' is in turn defined as 'a determination of the environmental risk resulting from reconnaissance, prospecting, mining, exploration or production operations, which is regarded as being acceptable after the closure objectives have been implemented and the residual and latent defects have been calculated and which is to be included in the environmental risk assessment report …'.

97 Webber Wentzel, '2nd Draft of the Proposed Replacement Financial Provisioning Regulations Published for Comment' (20 May 2019) <https://www.polity.org.za/print-version/2nd-draft-of-the-proposed-replacement-financial-provisioning-regulations-published-for-comment-2019-05-20>. Regulation 5 read with Appendix 2.

98 In terms of environmental rehabilitation plans and reports submitted to the Minister for approval/consideration.

99 Regulation 8. The founding documents of a trust deed or closure rehabilitation company will need to conform with the minimum requirements of Appendix 6, while a template is provided in Appendix 7 for financial guarantees.

100 Regulation 6.

101 Regulation 7(1) read with Appendix 4 and 5.

102 Regulation 7(3).

103 Regulation 7(4).

104 Regulation 1 (definition of applicant) read with regulation 6(3).

105 Regulation 12.

106 Regulation 12 and 13.

107 Regulation 15.

108 Regulation 12, 13 and 15.

109 Regulation 10 read with regulation 4.

110 Regulation 6 read with regulation 13.

111 Regulation 14.

112 Through implementation of the Annual Rehabilitation Plan; Final Rehabilitation, Mine Closure Plan; and Environmental Risk Assessment Report, and requiring that those individuals sign off on all submissions made to the Minister.

113 Offences and penalties provided in terms of regulation 17 and 18.

114 Humby (n 2).

115 Regulation 6(6).

116 Regulation 11.

117 'Centre for Environmental Rights (n 91).

118 National Environmental Management Laws Amendment Bill, 2017 (B14D-2017).

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124 Mhlongo and Amponsah-Dacosta (n 2) 282–283.

125 Section 24P(2).

126 Section 24P.

127 Section 24P(5) and section 24R(1) and (2).

128 Section 24R(2).

129 Section 24P(3).

130 Section 24P(3) and (4).

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– SPHIWE MHLONGO AND FRANCIS AMPONSAH-DACOSTA (2016)

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