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REPORT

ZA

2012

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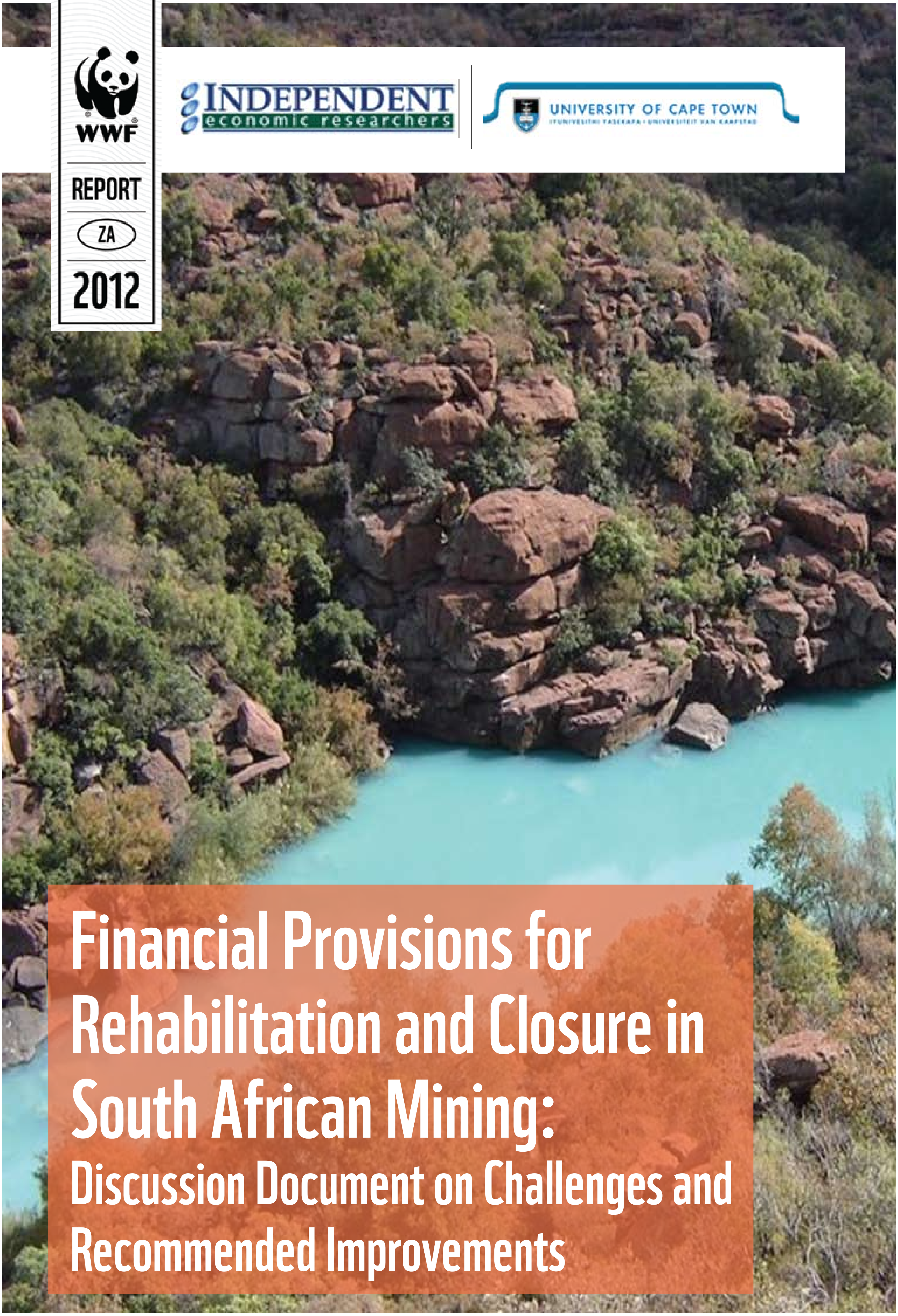

Financial Provisions for Rehabilitation and Closure in South African Mining:

Discussion Document on Challenges and Recommended Improvements

ACKNOWLEDGEMENTS

This report was made possible with funding from the World Wide Fund for Nature (WWF) and with appreciated guidance from its staff including Malango Mughogho and Dr Deon Nel.

We would also like to thank the numerous people interviewed as part of the research process who gave freely of their time and options (see Appendix 1 for a list of interviewees).

The views expressed in the report are those of the authors and do not necessarily reflect of those of WWF or any other organisation.

Published in August 2012 by WWF-World Wide Fund For Nature (Formerly World Wildlife Fund), Cape Town, South Africa.

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Financial Provisions for Rehabilitation and Closure in South African Mining:

Discussion Document on Challenges and Recommended Improvements

Prepared with funding from the World Wide Fund for Nature (WWF)

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EXECUTIVE SUMMARY

Ongoing concerns regarding environmental degradation in mining areas, the high number of ownerless and abandoned mines, and the incidence of acid mine drainage (AMD) have highlighted the need for improved environmental maintenance and rehabilitation in the mining sector. These concerns give rise to questions about the availability of funds to manage the impacts of mining and the adequacy of financial provisions made by mining companies for rehabilitation. With this in mind, this discussion document provides a critical review of the processes surrounding financial provisions for mine rehabilitation and closure and recommends potential improvements. It emphasises the need to deepen the debate on key issues in order to arrive at collective improvements and a more sustainable mining industry.

The estimation and adequacy of financial provisions

Having established a general understanding of the process through which financial provision estimations are generated, a broad review was conducted focused on the practice of financial provision estimation. The result of the review indicated the following areas of concern:

- High levels of variation with regard to the quality of Environmental Management Plans or Programmes (EMPs) and inadequate consideration of longer term water quality issues in particular.
- EMPs with inadequate or no rehabilitation plans at all, making it difficult to trace the links that should be clearly present between these plans and calculations of financial provisions.
- Master rates contained in the 2005 Department of Mineral Resources (DMR) guidelines (2005 DMR Guidelines) are not adjusted for inflation, resulting in significant underestimations of adequate financial provisions.
- Lack of concurrent rehabilitation and clear incentives to rehabilitate, resulting in higher longer term and more significant risks, particularly with regard to water quality impacts.
- There are indications that a number of mines are not making adequate financial provision for closure (uncertainty with regard to the adequacy of financial provisions appears to be greatest in relation to providing for adequate post closure water treatment and management). This is supported by targets set in the two most recent strategic plans of the DMR, which explicitly recognise that more needs to be done to ensure greater compliance with financial provision requirements.[1]
- Confidence in financial provision estimates is undermined by the lack of publicly available independent reviews of financial provision calculations.

This discussion document makes the following recommendations:

- The addition of more stringent provisions accompanied by regular updating of the DMR guidelines for the evaluation of the quantum of closure-related financial provisions including:
  - Augmentation of the guideline to ensure that it remains clear, responsive to changes and actively draws on industry/stakeholder experience and advances on an ongoing basis.
  - Incorporation of other relevant resources such as the 2008 Department of Water Affairs (DWA) best practice guideline series and the 2007 CoM & Coaltech guidelines[2] on rehabilitation.

1. Department of Mineral Resources 2010. Department of Mineral Resources Strategic Plan: 2010/2011-2012/2013. DMR, Pretoria, at 41.
2. Chamber of Mines of South Africa and Coaltech Research Association. 2007. Guidelines for the rehabilitation of mined lands. CoM and Coaltech, Johannesburg (hereafter referred to as “CoM & Coaltech Guidelines”)

    - Clarification of links between the EMP guidelines and the DMR financial provision calculation guidelines to ensure comprehensive, easily referenced and quantified rehabilitation plans in EMPs.
    - Incorporation of measures to incentivise concurrent rehabilitation.

- Augmented and structured use of the independent review mechanism as a standard, default approach when assessing the adequacy of financial provisions.
- Improved public access to data and information on financial provisions.
- Enhancement of the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC code) to allow for greater clarity on how environmental liability costs need to be taken into account, including potential links to the DMR guidelines for the evaluation of the quantum of closure-related financial provisions.
- Integrated authorisation/sign-off of EMPs from environmental and water authorities.

Securing financial provisions using financial instruments

The financial rehabilitation provision required in terms of section 41 of the Mineral and Petroleum Resources Development Act[3] can be provided in one of four methods: cash deposit, guarantee, insurance or approved trust fund. Each of these methods has certain advantages, but also contains certain risks. In the instance of insurance and bank guarantees, the creditworthiness of the counterparties involved plays a key role, as does the ability of the counterparty to on-sell a portion or all of the risks it has assumed by means of credit derivatives. In the instance of a trust fund, the ability of the DMR to access the funds as contemplated in section 41(2) of the MPRDA may be problematic. In addition, it seemed that the standard trust documentation prescribed by the DMR purports to impose obligations on the mining entity in its capacity as beneficiary, which is problematic in law. The wording of the trust deed and the MPRDA must be aligned with the provisions of the Income Tax Act[4] due to the former making reference to repealed sections of the Income Tax Act. Furthermore, while section 37A of the ITA places welcome and needed limitations on the type of investments that these trusts may make, further recommendations are made to ensure that funds invested by the trust are capital protected and enjoy the appropriate degree of diversification and spreading to limit risk.

The impact of the Insolvency Act[5] and the business rescue provisions of the Companies Act on the financial provision and whether it is adequately protected is uncertain and legislative amendment is required in this regard.

It is noted that the provisions of the standard trust deed are not completely aligned with the National Environmental Management Act,[6] the MPRDA, the Trust Property Control Act[7] or the Companies Act[8] insofar as the limitation of liability of trustees/directors is concerned. Consequently recommendations are made with regard to the inadequate cross referencing of the MPRDA with other legislation to adequately deal with liability of directors/trustees. While the liability of trustees should not be too onerous, at a minimum trustees should assume liability should the trust be administered in a manner that would result in the obligations imposed in terms of section 41 of the MPRDA not being discharged.

In addition, the ability to deregister companies in terms of the Companies Act can occur independently of whether a closure certificate has been issued in terms of section 41 of the MPRDA. Furthermore, distributions made by mining entities to shareholders where unfunded environmental obligations exist may not always be subject to the protection afforded by section 4 of the Companies Act imposing a solvency and liquidity test before the making of distributions as defined.

3. Act 28 of 2002 (“MPRDA”)
4. Act 58 of 1962 (“the ITA”)
5. Act 24 of 1936
6. Act 107 of 1998 (“NEMA”)
7. Act 57 of 1988
8. Act 71 of 2008

Financial reporting of environmental risks and closure liabilities

A review of the financial reporting framework relating specifically to environmental risks and closure liabilities revealed:

- There exists a lack of compatibility between environmental considerations and the standard accounting framework. This is particularly apparent in the context of the quantification of liabilities or provisions where uncertainties exist (which is typically the case with environmental obligations). Secondly, the fact that the primary users of the financial statements typically do not include regulators raises concerns as to the efficacy of the financial reporting framework as a primary means of verifying environmental compliance. Thirdly, materiality both qualitative and quantitative is an important factor in the context of the presentation of financial statements. It is hoped that the concept of qualitative materiality would play an important role in ensuring that environmental risks are appropriately disclosed in the financial statements. Fourthly, we express reservations about the safe haven provisions with limited liability for inaccuracies that apply to "forward looking statements" as defined and how this interacts with the duty of care provisions of NEMA.
- The lack of standardisation and industry benchmarking in the context of the integrated reports of various entities were also found to be problematic as they rendered meaningful comparison difficult.
- Much of the integrated report is not customised for the South African context, and allows too much scope for "ticking the boxes" in the absence of substantial compliance, for instance with regard to the disclosure of water and energy consumption without simultaneous or comparative disclosure as to the extent of available resources. Recommendations were made with regard to standardizing disclosure practices to be adopted by all mining entities.
- The role that shareholder involvement can play needs to be stressed with specific reference to Code for Responsible Investing in South Africa,[9] King lll, Regulation 28[10] to the Pension Funds Act[11] and the role of the Equator Principles[12] in respect of funded projects. The efficacy of these measures in improving environmental compliance is limited by the absence of clear guidelines until now and lack of applicability to all mining entities.
- The possibility of requiring all mining entities, whether legally incorporated as companies or not, to conduct an annual audit in terms of section 30 of the Companies Act was explored on the basis that mining per se falls within the public interest as contemplated in that section. Cost constraints, inter alia, mitigate against the need for a "full audit" and may be in excess of what is required in terms of an environmental assurance report. The latter, which would be adequate from an environmental perspective, would simply entail the assurance that there has been substantial compliance with environmental laws and regulations and that the provision required by section 41 is adequate and the assumptions used in its calculation are reasonable, consistent with prior years and comprehensive. It is recommended that the format and content of the assurance report be researched further.
- The concerns raised regarding financial reporting in general seem to suggest the need for a customised accounting standard or other form of guidance applicable to accounting disclosures to be made by mining entities. In this regard, guidance can be obtained from "Exposure Draft of Australian Water Accounting Standard" issued by the Australian Government Department of Meteorology in 2010[13] or the principles of a Carbon Disclosure Project, customised for the mining and South African context.[14]

9. Issued by Institute of Directors in July 2011 (CRISA).
10. Published in Government Gazette 34070 dated 4 March 2011.
11. Act 24 of 1956.
12. Equator Principles June 2006 accessed via http://www.equator-principles.com.
13. Australian Government Bureau of Meteorology: Exposure Draft of Australian Water Accounting Standard 1 accessed via http://www.bom.gov.au/water/standards/documents/ed_awas1_v1.0.pdf.
14. On Carbon Disclosure Project, refer https://www.cdproject.net/CDPResults/CDP-2010-South-Africa-JSE100-Summary.pdf inter alia.

ABBREVIATIONS

AMD	Acid Mine Drainage
CGS	Council for Geoscience
CMMI	Council of Mining and Metallurgical Institutions
CoM	Chamber of Mines (of South Africa)
CPIX	Consumer Price Index excluding mortgage costs
CRISA	Code for Responsible Investment in South Africa
DE	Department of Energy
DEA	Department of Environmental Affairs
DME	Department of Minerals and Energy
DMR	Department of Mineral Resources
DWA	Department of Water Affairs
DWAF	Department of Water Affairs and Forestry
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
GRI	Global Reporting Initiative
ICMM	International Council on Mining and Metals
ITA	Income Tax Act 58 of 1962
Minerals Act	Minerals Act 50 of 1991
MPRDA	Minerals and Petroleum Resources Development Act 28 of 2002
NEMA	National Environmental Management Act 107 of 1998
SAMREC	South African Mineral Resource Committee
ToR	Terms of Reference
Waste Act	National Environmental Management: Waste Act 59 of 2008
WWF	World Wide Fund for Nature

GLOSSARY[15]

Competent person – A person who
- is qualified by virtue of his or her knowledge, training, skills and experience to organise the work and its performance, and
- is familiar with the provision of the Act and other related legislation which apply to the work to be performed, and
- has been trained to recognise any potential or actual problem in the performance of the work.[16]

Concurrent rehabilitation – Rehabilitation that occurs during the process of mining as the ore body is mined out in parts of a mine.

Environment – The surroundings within which humans exist and that are made up of land, water and atmosphere of the earth, micro-organisms, plant and animal life, any part or combination of the foregoing as well as the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.[17]

Environmental Management Plan – A plan to manage and rehabilitate the environmental impact as a result of prospecting, reconnaissance, exploration or mining operations.[18]

Financial provision – The insurance, bank guarantee, trust fund or cash that applicants for or holders of a right or permit must provide in terms of sections 41 and 89 of the MPRDA guaranteeing the availability of sufficient funds to undertake the agreed work programmes and to rehabilitate the prospecting, mining, reconnaissance, exploration or production areas as the case may be.[19]

Master rate – Standardised cost associated with a given rehabilitation action as outlined in the 2005 DMR guidelines for the evaluation of the quantum of closure-related financial provisions.[20]

Mine Closure – This entails the process of rehabilitation at the end of a mine's life leading to the issue of a closure certificate in terms of section 12 of the Minerals Act[21] or in terms of section 43 of the MPRDA.

Mine closure certificate – The holder of a prospecting right, mining right, retention permit or mining permit must apply to the Regional Manager for a closure certificate within 180 days of the occurrence of closure, as defined above. No closure certificate will be issued unless the Chief Inspector and the Department of Water Affairs and Forestry have confirmed in writing that the provisions relating to health and safety and management of potential pollution to water resources have been addressed.[22]

Mine closure cost estimation models – Cost model used to estimate the funds that would be required to achieve mine closure and receive a closure certificate.

15. Sources: Golder Associates (2004), SAMREC (2007) or as specifically indicated otherwise.
16. Golder Associates (2004) at A16, SAMREC code at 5-7, Regulations in Government Gazette 26275 dated 23 April 2004 at 7.
17. Section 1 of NEMA.
18. Section 1 of MPRDA.
19. Section 1 of MPRDA.
20. In particular refer Golder Associates (2004) at C3 1 et seq.
21. 50 of 1991("Minerals Act").
22. Term not defined in section 1, but process described in section 43 of MPRDA.

Mineral reserve – The economically mineable material derived from a Measured or Indicated Mineral Resource or both. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments with a minimum of a Pre-Feasibility Study for a project, or a Life of Mine Plan for an operation, must have been completed, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Where the term "Ore Reserve" is used, this is synonymous with the term "Mineral Reserve."[23]

Planned mine closure – Form of mine closure that occurs when closure is undertaken in a planned way as outlined in a long-term mine plan.

Polluter Pays Principle – Principle according to which the person responsible for harming the environment (i.e. the polluter) should bear the costs of remedying pollution or environmental degradation and consequent adverse health effects to the extent of either the damage done to society or exceeding an acceptable level (standard) of pollution.[24]

Post-closure management – The ongoing management of residual environmental impacts for a specified period as determined after closure in terms of section 43(1) of the MPRDA has been obtained.[25]

Premature mine closure – Form of mine closure that occurs when closure is unexpectedly necessitated before the anticipated time of closure as outlined in a long-term mine plan. Reasons for this form of closure can include unforeseen technical difficulties in mining, sharp decreases in ore prices, etc.

Rehabilitation – The process of reshaping and re-vegetating land to restore it to a stable condition with a land-use that is appropriate for the particular location and is not associated with any pollution issues such as water pollution.[26]

Rehabilitation plan – Plan describing and detailing the concrete actions that are required to adequately mitigate environmental impacts and achieve rehabilitation outcomes.

SAMREC Code – Means the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves.

Sustainable development – The integration of social, economic and environmental factors into planning, implementation and decision-making so as to ensure that development serves present and future generations.[27]

23. SAMREC code 2007 edition at 17.
24. Section 2(4)(p) of NEMA.
25. Golders 2004 at A18.
26. Also refer Golders 2004 at A18, CoM & Coaltech Guidelines at 4.
27. Section 1 of NEMA and section 1 of MPRDA.

CONTENTS

1. INTRODUCTION

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1.1 Background

Ongoing concerns regarding environmental degradation in mining areas, high numbers of ownerless and abandoned mines, and the incidence of acid mine drainage (AMD) have all highlighted the need for improved environmental maintenance and rehabilitation in the mining sector. These concerns give rise to questions about the availability of funds to manage the impacts of mining and the adequacy of financial provisions made by mining companies for rehabilitation. Recent research summarising impacts of coal mining in the Olifants catchment indicates that impacts are severe in many cases and have significant measurable external costs (WWF, 2011). In addition, the report to the inter-ministerial committee on AMD makes for sober reading with regard to impacts and challenges. Although it focuses primarily on abandoned mines in the Witwatersrand gold fields, it also warns about other areas such as the upper reaches of the Vaal and Olifants River systems where the impact of mining on the freshwater sources is noted as a serious concern (CGS et al., 2010). While there is relatively broad consensus that a significant portion of current environmental impacts relate to abandoned mines, there is a clear need to also ensure that current and future mining activities do not add to unacceptable environmental impacts and impose costs on society. The harsh lessons of the past need to be applied lest history be allowed to repeat itself.

Key to the achievement of improved environmental management and rehabilitation are the provisions of the MPRDA and particularly the provisions of section 41 of the MPRDA that incorporate the '*polluter pays principle*' into South Africa's mining legislation. Among other things, section 41 requires applicants for prospecting or mining rights to make a financial provision "for the rehabilitation or management of negative environmental impacts". These financial provisions and particularly those relating to mine closure are key tools aimed at ensuring that the taxpayer is not burdened with the costs of rehabilitation. The accurate estimation of the financial provision, the types of financial instruments that may be used, the protection of the provision against claims of other creditors and the reporting of the provision are all important issues for consideration and debate. With this in mind, this discussion document was commissioned by WWF to contribute to improved environmental management in the mining sector by focusing on the process and outcomes of the financial provisions system for mines.

1.2 Objectives and terms of reference

The main objective of the research was to provide a critical review of the processes surrounding the making of financial provisions for mine rehabilitation and closure in particular. This is appropriate given the important role financial provisions play in ensuring that mines do not leave a negative environmental legacy after closure.

With this mind, the terms of reference (ToR) were as follows:

- Use published sources, stakeholder interviews and other data in order to clearly formulate the challenges and issues with regard to financial provisions for rehabilitation and closure. It is anticipated that these could take the form of:
    - Inadequate clarity in legislation;
    - Constraints associated with the financial instrument choices open to mines with regard to making financial provisions;.
    - Inadequate funding levels for rehabilitation and closure being maintained and secured;
    - Limited auditing of the adequacy of financial provisions by the mines and the state;
    - Inadequate protection of financial provisions in the event of insolvency, sale, etc.
    - Unclear and potentially misleading financial reporting with regard to financial provisions.
- Based on the review, establish whether the financial provisions system and/or the provisions themselves that exist at present are insufficient or inadequate to adequately address current and future environmental rehabilitation.
- Elaborate on the relative importance of key areas of weakness in the system in order to inform the focus of further research.
- Make recommendations for potential improvements to the financial provisions system.

2. APPROACH

2. APPROACH

A phased approach was used with regular team meetings in order to discuss progress and adapt the research process as necessary. The first phase of research was devoted to a lengthy scoping exercise in order to understand the workings of the financial provisions system and identify key areas to focus research in further phases. The areas chosen were those where it was thought recommendations for improvement could be made.

Key information sources included written sources, requested data and interviews with key mining stakeholders, including those involved in environmental as well as financial/accounting matters (see Appendix 1 for a list of people interviewed). We found that most stakeholders interviewed were willing to express their views freely and were eager to contribute to discussions on this important topic.

Throughout the research process the focus was on critical review and analysis in order to provide constructive recommendations on improvements for further discussion. The emphasis was therefore on deepening the debate on these issues in order to arrive at collective improvements and a more sustainable mining industry. In certain instances, issues were simplified to ensure that key issues were not submerged by complexity but were in fact addressed.

Findings and recommendations were broadly grouped in the following areas, which have been used to structure the report:

- The overall legislative environment governing mining and financial provisions in particular;
- The processes and technicalities associated with determining or estimating the appropriate funds needed to meet rehabilitation and closure requirements;
- Financial instruments used to secure financial provisions needed to meet closure requirements including prudent investment of trust monies;
- Financial reporting of closure and rehabilitation liabilities in company accounts.

The study focuses on the systems and mechanisms that govern financial provisions and not on potential human resources capacity constraints within the DMR, although these would appear to be highly relevant.

3. LEGAL REVIEW

3. LEGAL REVIEW[28]

The detailed report setting out the legal position on financing mine decommissioning is set out in Appendix 8 to this document. By way of summary we wish to mention the following aspects in the main body of this report:

MPRDA

Section 37 of the MPRDA provides that the principles set out in section 2 of NEMA apply to all prospecting and mining operations.
Section 38 of the MPRDA provides that holders of permits or rights in terms of the MPRDA must give effect to the objectives of integrated environmental management laid down in Chapter 5 of NEMA, imposes an obligation to rehabilitate areas affected by mining to its natural or predetermined state and makes the holder of such permits or licences liable for environmental damage, pollution or ecological degradation as a result of their mining activities.

Section 41 of the MPRDA requires an applicant for a prospecting right, mining right or mining permit to make a prescribed financial provision for the rehabilitation or management of negative environmental impacts before the Minister approves the EMP.

Section 1 of the MPRDA defines a "financial provision" to mean "the insurance, bank guarantee, trust fund or cash that applicants ... must provide in terms of section 89 guaranteeing the availability of sufficient funds to undertake the agreed work programmes and to rehabilitate the prospecting, mining, reconnaissance, exploration or production areas, as the case may be".

Section 89 provides that no exploration or production operations may commence unless financial provision has been made that is "acceptable to the designated agency guaranteeing the availability of sufficient funds for the due fulfilment of all exploration and production work programmes by the holder".

Government Gazette 26275 dated 23 April 2004, item 53-54, sets out the format that such financial provisions may take: a contribution to a trust fund as contemplated in section 10(1)(cH) of the Income Tax Act, a financial guarantee from a bank or financial institution approved by the Director-General, a deposit into an account specified by the Director-General, or such other method as the Director-General may approve.

The inclusion of costs relating to "agreed work programmes" in the definition of "financial provision" appears to relate to "mining work programmes", which is defined in section 1 of the MPRDA as relating to a work programme to be followed in order to mine a mineral optimally. This appears to be inconsistent with Regulation 54(1) of the MPRDA regulations as the regulations itemise costs making up the financial provision, but make no reference to costs related to the implementation of "mining work programmes".

Secondly, the definition of "mining area" in Regulation 54 appears to include the underground portion of land for which mining rights were granted, but limits the concept of mining area to surface areas only in respect of adjacent land.

It is uncertain whether the practice of allowing the capital set aside for financial provision to be phased in is legally sanctioned, based on the wording of section 41 of the MPRDA.

28. The authors wish to thank the Centre for Environmental Rights for extensive input and assistance with the drafting of this section of the discussion document.

National Water Act 36 of 1998

This act finds application to the present context in that section 40 *et seq*. provides for certain categories of water users to apply for a water use licence, section 19 imposes obligations on certain categories of persons (owners of land or person occupying land) to undertake reasonable measures to prevent pollution of a water resource from occurring, recurring or continuing. In addition, section 30 of the act allows the responsible authority (DWA) to require an applicant or holder of a water use licence to furnish security in respect of any obligation or potential obligations arising from a licence to be issued under the act if deemed necessary for the protection of the water resource or property. This obligation to provide security is insufficiently cross referenced to the financial rehabilitation provisions in section 41 of the MPRDA.

NEMA

The amendments to NEMA intending to incorporate all environmental provisions relating to mining, including the financial provision into Chapter 5 of NEMA, which provisions take effect 18 months after the date of commencement of the Mineral and Resource Development Amendment Act 2008 that to date has not been enacted.
Section 28 of NEMA places a retrospective duty of care on persons who cause, have caused or may cause significant pollution or degradation of the environment.

Section 24(5)(d) of NEMA empowers the Minister to make regulations requiring the provision of "financial or other security to cover the risks to the State and the environment of non-compliance with conditions attached to environmental authorisations". It would be desirable if this obligation in terms of NEMA is explicitly cross referenced to the financial provision in section 41 of the MPRDA to determine the extent of overlap or the extent to which they complement each other.

National Environmental Management Waste Act 59 of 2008

Waste generated by mining is specifically included in the definition of waste, yet the act specifically excludes "residue stockpiles" and "residue deposits". Accordingly, waste management activities that do not relate to the latter will result in the mining entity requiring a waste licence. It is also uncertain whether and to what extent the contaminated land provisions of the act, once operative, would apply in the mining context.

Promotion of Access to Information Act 2 of 2000

The provisions of this Act are relevant to the present discussion insofar as various environmental groups have attempted to obtain information from the DMR and licence holders relating inter alia to the financial provisions made by mining entities.

Insolvency Act 24 of 1936 and Companies Act 71 of 2008

The impact of the financial provision upon insolvency and whether it is ring-fenced would appear to depend on the format in which the financial provision has been made, i.e. cash, guarantee, insurance or trust fund. The DMR insofar as its claim in respect of the financial provision is concerned, would not be a secured or preferred creditor upon insolvency and as such this has implications for the DMR in the event of insolvency of a mine.

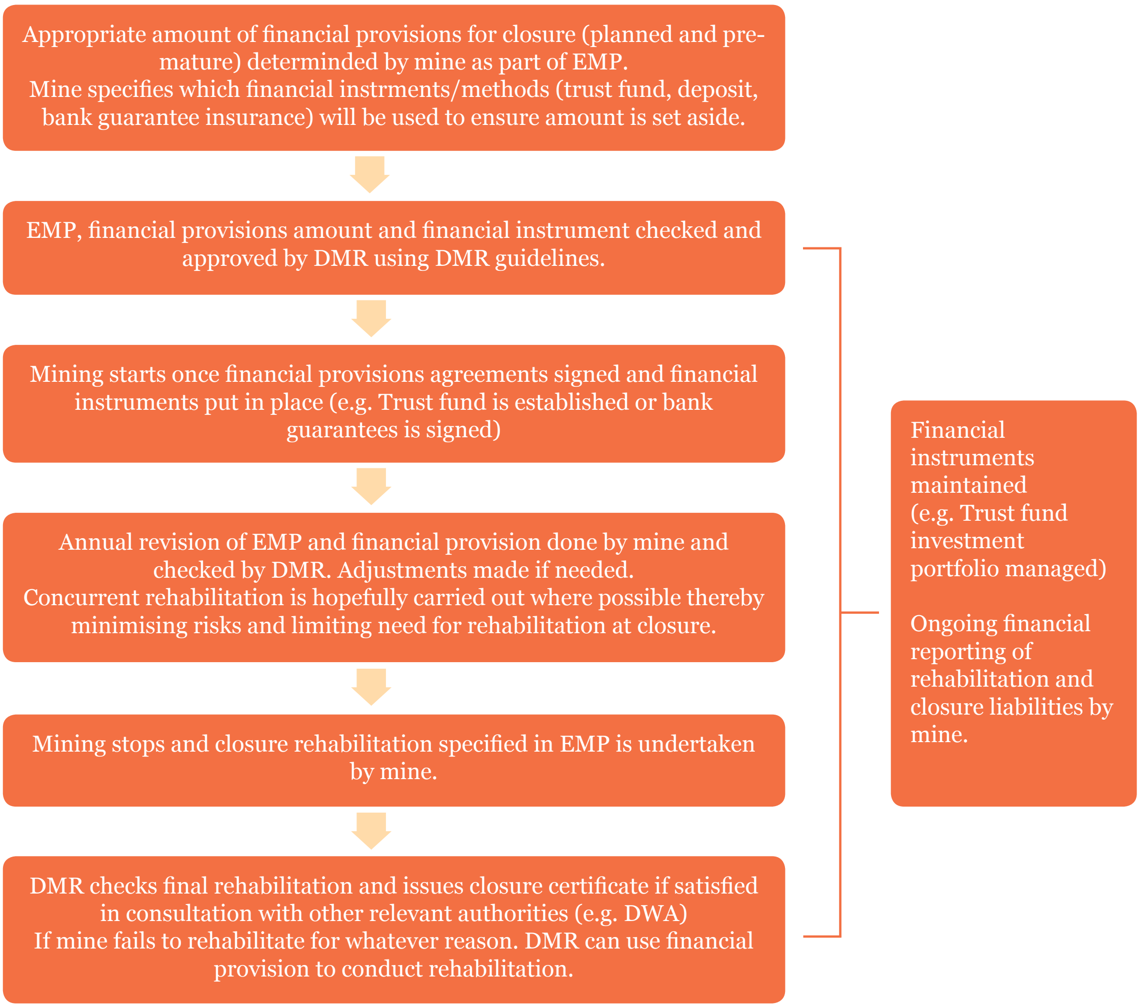
Furthermore, the impact of the business rescue provision of the Companies Act has relevance in that its effect would be to result in a general moratorium on civil legal proceedings and the enforcement of debts may only be carried out with the consent of the business rescue practitioner or the court; accordingly the impact hereof on the ability of the DMR to call up or access the financial provision in terms of section 41(2) of the MPRDA is uncertain.

4. THE FINANCIAL PROVISIONS PROCESS AND KEY CHALLENGES

4. THE FINANCIAL PROVISIONS PROCESS AND KEY CHALLENGES

The preceding legal review provides a basic outline of the processes and systems associated with making financial provision for closure. In order to build on this understanding, Figure 1 shows the key elements or steps in the financial provisions process including those falling outside of state mandates associated with financial reporting by companies and related processes. As can be seen from the figure, the financial provisions process requires mining entities to re-assess and adjust their provisions on an ongoing basis to the satisfaction of the authorities (DMR). Parallel to this, mining companies manage their financial provisions and the financial instruments that they use (i.e. trust funds, bank guarantees, etc.) and report on these provisions as part of their financial reporting processes, which is of particularly interest to shareholders.

Figure 1: Key elements in the legislated financial provisions process and reporting



Based on the scoping stage of the research, the following key aspects were identified as the focus of the remainder of this report:

- The potential refinement of the DMR guidelines for the evaluation of the quantum of closure-related financial provisions;
- Measures to incentivise concurrent rehabilitation as opposed to rehabilitation conducted post closure of the mine which in turn impacts on the financial viability of a mine;
- Amendment of the SAMREC code to allow for greater clarity on how environmental costs need to be taken into account;
- Ways of ensuring that the value of trust fund assets is protected by means of prescribed asset categories;
- Ways of ensuring that financial provisions enjoy greater protection in the event of unexpected events such as mining company insolvency;
- Improvements to financial reporting including “conventional” accounting and auditing standards as well as newer generation integrated reporting;
- Greater public accessibility of data and information on financial provisions.

5. THE ESTIMATION AND ADEQUACY OF FINANCIAL PROVISIONS

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The first step in the process (through which financial provision is made for mine closure) is the estimation of the amount of money necessary to undertake the required environmental rehabilitation prior to mine closure. The manner in which the amount is determined is therefore critical to the overall success of the financial provisions system. With this mind, this section reviews issues and challenges associated with quantum estimation and makes recommendations for improvement. As such it focuses on how the financial provisions estimation process works, what the outcomes of the practical application of the process teach us, and, how it should improve.

5.1 The process for determining financial provisions for closure

Before commencing with mining, mining companies are required to draw up an EMP in accordance with section 39 of the MPRDA for approval by the DMR and without which mining cannot commence. This EMP must detail how environmental impacts will be dealt with and environmental costs internalised and must include the presentation of a rehabilitation and closure plan (see DMR, 2006 for more detailed guidance on the compilation and format of EMPs). The EMP must (DMR, 2006):

- Include a rehabilitation plan showing the areas and aerial extent of the main mining activities, including the anticipated mined-out area at the time of closure, from which the quantum of financial provision can be calculated in accordance with the DMR guideline.
- Ensure that the rehabilitation plan is compatible with the closure objectives.
- Ensure that the quantum calculation distinguishes between those areas that can be rehabilitated concurrently and those that can only be rehabilitated at closure.

Once an EMP is approved, the financial provisions and associated rehabilitation and closure plans need to be reviewed annually by the mining company and adjusted if necessary. As with initial estimates, DMR verification and approval are required in keeping with the ongoing monitoring mandate of the DMR.

The process of actually calculating adequate financial provisions for closure is challenging, as the calculations must provide clarity on what actions must be taken together with the cost estimations in respect of such actions, which estimations are based primarily on experience built up over time. As a result, some of the larger mining companies and their environmental consultants have developed rehabilitation and closure cost estimation models that can be applied in this regard. The DMR also has a “Guideline document for the evaluation of the quantum of closure-related financial provision provided by a mine” released in 2005, which is based on work commissioned by Golder Associates (2004) and includes specific guidance with regard to cost estimation (see DME, 2005). The guideline document is not only used by DMR officials when reviewing the financial provisions of mines but also by miners and consultants that don’t have their own closure cost estimation models. It is thus central to the estimation and ongoing monitoring of adequate financial provisions both from a mining company and state authority perspective.

The principles that have been adopted in the Guidelines are as follows (DME, 2005):

- Legal standing: The guideline document is to be used by the Regional Office personnel as a tool to assess the appropriateness of the quantum of financial provision submitted to the DMR by the mining industry. The guideline document does not, therefore, obviate in any way the holder of a prospecting right, mining right or mining permit from the legal requirement to annually assess his or her environmental liability and adjust his or her financial provision to the satisfaction of the Minister.

- Generic nature: The guideline document is generic in nature and cannot answer all possible questions or deal with all situations relating to financial provision, rehabilitation and mine closure. Further advice and/or experience may be required, based on circumstances that prevail at specific mine sites, to fully assess the quantum for financial provision.
- Standardized approach: The guideline document's generic approach aims to avoid a situation of applying non-aligned empirical approaches and interpretations between DMR Regional Offices.[29]
- Complete picture: The guideline document covers the most essential closure components that are generally required for the closure of a mine site. Site specific conditions must also be considered and under these circumstances, specialist studies (and related closure costs) on aspects such as surface and groundwater pollution and remediation may be required. The outcome of these studies must be considered in the determination of the quantum to arrive at a complete picture of the quantum for financial provision. The guideline does not adequately address the ongoing post-closure impacts and the financial liability that such impacts impose.
- The methodology for computing the quantum is based on the assumption that a third party will be employed by the DMR to undertake the necessary rehabilitation and remedial work should the mining operation close prematurely.

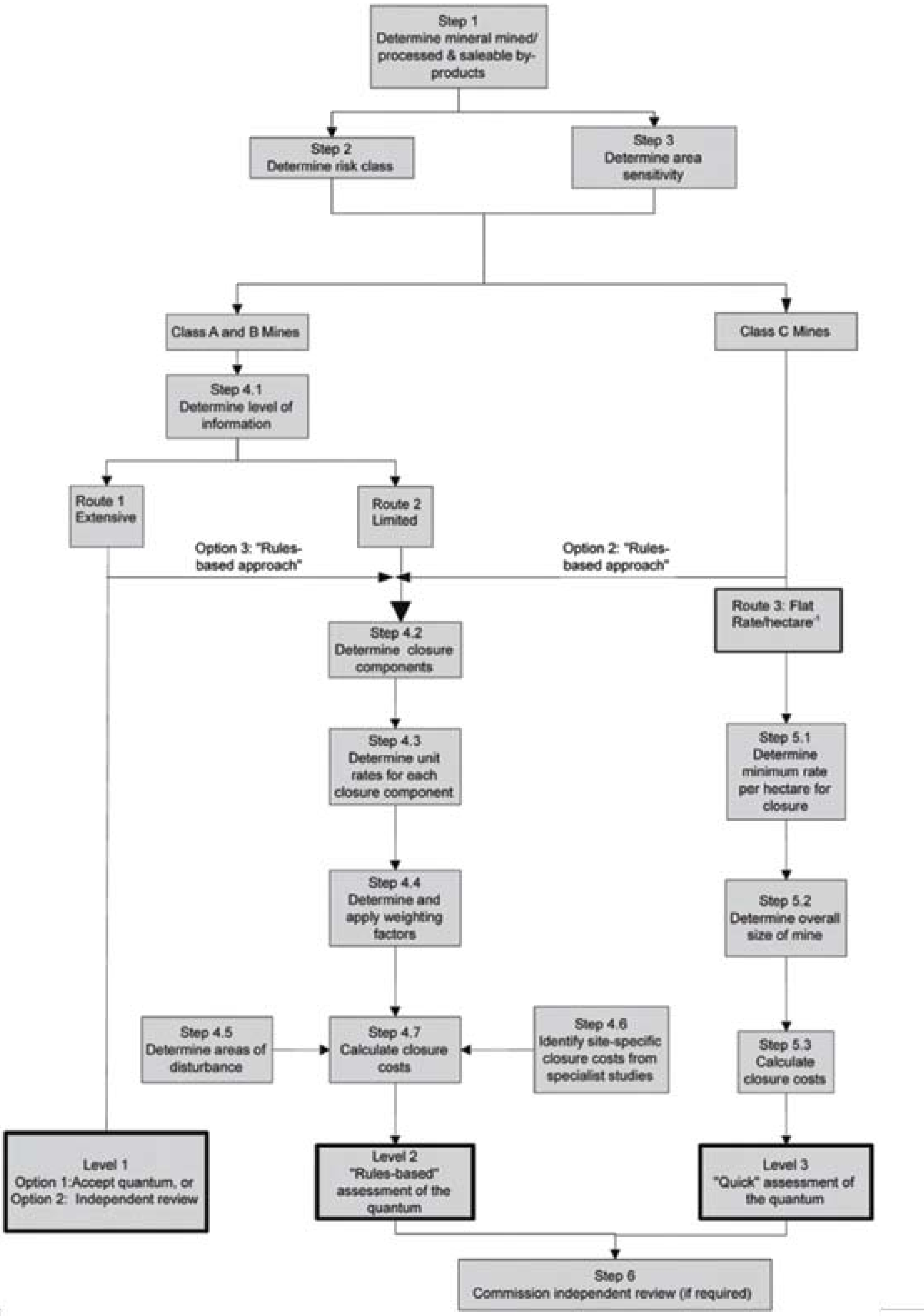
Limitations: The document has certain specific limitations or instances where some sectors of the very diverse spectrum of the mining industry in South Africa are not catered for. The subsistence mining sector (so-called "pick and shovel operations") is a case in point. These sectors could be the subject of a future guideline. Currently there exists a standard practice to impose a flat rate cash deposit in the case of subsistence mining, which will remain in use for the foreseeable future.

Figure 2 indicates the process and possible routes to be followed in the assessment of the quantum for financial provision for closure according to the DMR guidelines. It shows that the following inputs are required to enable determining of the quantum of financial provision:

- Risk ranking for mine type and mineral by-product
- Environmental sensitivity of the mining area
- Level of information available to the DMR Regional Office personnel
- Type of mining operation
- Geographic location of the mine
- Areas of disturbance: Class A and B mines
- Closure costs from specialist studies
- Overall size of mine: Class C mines

29. The Guideline document in fact refers to DME, which it is submitted should read DMR.

Figure 2: The process to be followed in determining the quantum for financial provisions



Source: DME (2005)

The guideline divides closure into the following 14 components in order to facilitate quantum estimation (Step 4.2 in Figure 2):

1. Dismantling of processing plant and related structures
2. (a) Demolition of steel buildings and structures
   (b) Demolition of reinforced concrete buildings and structures

3. Rehabilitation of access roads
4. (a) Demolition and rehabilitation of electrified railway lines
   (b) Demolition and rehabilitation of non-electrified railway lines
5. Demolition of housing and facilities
6. Opencast rehabilitation (including final voids and ramps)
7. Sealing of shafts, adits and inclines
8. (a) Rehabilitation of overburden and spoils
   (b) Rehabilitation of processing waste deposits and evaporation ponds (basic, salt- producing waste)
   (c) Rehabilitation of processing waste deposits and evaporation ponds (acidic, metal-rich waste)
9. Rehabilitation of subsided areas
10. General surface rehabilitation including grassing of all denuded areas
11. River diversions
12. Fencing
13. Water management (Separating clean and dirty water, managing polluted water and managing the impact on groundwater, including water treatment)
14. Two to three years of maintenance and aftercare

Standard cost factors or so-called "master rates" are then supplied for application in the case of each component along with adjustment/multiplication factors that take into account the risk class of the mine (A, B or C in descending order of risk depending on the material being mined) and the environmental sensitivity of the mining site (see Steps 4.3 and 4.4 in Figure 2). Table 1 provides an example of the master rates and adjustment factors to be used for Component 6 of mine closure: opencast rehabilitation (including final voids and ramps). The guidelines make it clear that these master rates require annual updating for inflation based on CPIX or a similar approved method as one would expect.

Table 1: Master rate and adjustment factors for open cast rehabilitation costs

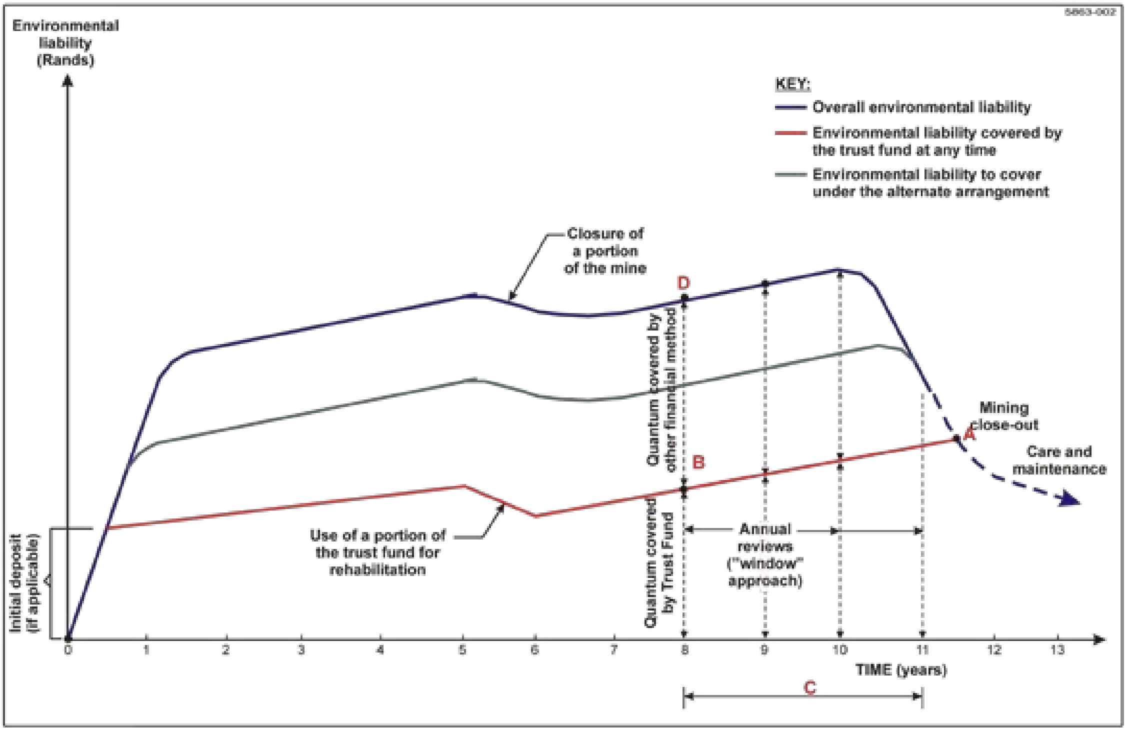
COMPONENT 6	OPENCAST REHABILITATION (including final voids and ramps)			
	Unit		Master rate	
	ha		96,700.00	
	Multiplication factor			
Risk Class (A, B or C)	A	0.04	0.52	1.00
	B	0.04	0.52	1.00
	C	0.04	0.52	1.00
		Low	Medium	High
	Environmental Sensitivity			

Source: DME (2005)

For planned closure annual contributions are most commonly made to a trust fund where they build up over time and are eventually adequate to cover closure costs. These contributions are calculated annually as (A-B)/C, where (Golder Associates, 2004):
- "A" represents the amount determined by a suitably qualified person of the estimated costs to be incurred at the time that operations of the mine or part of the mine are discontinued in order to discharge the obligations imposed in terms of any law that relates to mining operations.
- "B" means the market value of the assets held by the company, society, association or trust in respect of that mine on the date of the determination of the estimated costs in symbol "A".
- "C" represents the estimated remaining life of that mine in number of years.

Figure 3 shows how funds for planned closure build up over time and makes the distinction between providing for planned closure (generally using a trust fund, but also with the option of a bank guarantee or deposit with the DMR) and for premature closure (using non-trust fund methods such as bank guarantees). The guideline specifies that the holder of a prospecting right, mining right or mining permit is required to annually assess the total quantum of environmental liability for the mining operation (points D and A on the graph) and ensure that the financial provision is sufficient to cover the current liability (in the event of premature closure) as well as the end-of-mine liability. This is referred to as the "window approach" as each assessment provides an indication of the environmental liability at that time only (Point D). The holder will also provide, on an annual basis, an indication of the end-of-life environmental liability (Point A).

Figure 3: Schematic indication of the environmental liability of a mining operation



Source: Golder Associates (2004)

In essence, the system is geared towards guaranteeing that adequate funds are available for planned or premature closure at all times and in all possible circumstances. Mining companies need to re-assess their provisions annually and report on these to the DMR who are then required to examine these provisions critically and ensure that they are adequate. The MPRDA allows the Minister to commission an independent review particularly if there is a dispute between the financial provision estimate submitted by the mining company and those thought appropriate by the DMR. This can be a powerful compliance and enforcement tool if used properly and with sufficient frequency. Previous requests addressed to the DMR for details of the frequency and extent to which the provisions relating to the independent review of the quantum of financial provision have been invoked have not been met with a response as yet.

5.2 Implementation capacity and strategic targets

It is clear that the current financial provision system requires significant human resource capacity within the DMR for success. Samson[30] argues that the MPRDA's sustainability framework for the development of EMPs is laudable, if somewhat overwhelming from an implementation and compliance perspective. With regard to capacity, the most recently available published figures indicate that in 2009 the DMR employed 78 officials dedicated to environmental protection and monitoring with a further 13 vacant posts.[31] The question of whether these staff numbers (and their capacity) are adequate in order to deal with significant monitoring and compliance burdens imposed on the DMR is an important one, although not dealt with as part of this research.

30. McLean, J.K. & Carrick, P.J. Environmental Management and Rehabilitation under the Minerals and Petroleum Resources Development Act: A Biodiversity Outlook. 2007 (14) SAJELP 187-215.
31. Source: Reply of the Minister of Mineral Resources to parliamentary question number 1797 on 16 October 2009.

Capacity issues are likely to increase in importance particularly when one considers the DMR's strategic plans that relate to environmental protection. In this regard, the DMR released a strategic plan for the period 2010/2011-2012/2013[32] which was then updated with another strategic plan for the period 2011-2014[33]. A comparison of the targets in these two plans reveals that most targets have been revised upward relatively significantly (see Table 2). For example, in the 2010/2011-2012/2013 strategic plans a target of 1,380 EMP inspections was set for 2012/2013 while the 2011-2014 plan contained a target of 1,800 inspections for that period. The plans also recognise the need to aim for higher levels of funding of liabilities by mines in order to reduce the potential for state liabilities. The 2010/2011-2012/2013 plan targets an increase in fully funded environmental liabilities from 70% in 2010/2011 to 90% in 2012/2013. The 2011-2014 plan also recognises the need to identify mines that are not covering their potential liabilities, setting a target of identifying and dealing with 90 mines with inadequate financial provision per year for the period. Challenges with regard to compliance with financial provision requirements are thus clearly recognised and ambitious targets have been set.

Table 2: DMR strategic plan targets linked to financial provisions

DMR Strategic Plan Period	Outcomes/ Objectives	Measures	Targets				Initiatives
			2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	
2010/2011 - 2012/2013	Reduce state environmental liability	Percentage of mines issued with closure without residual state liability	100%	100%	100%	100%	Assess adequacy of financial provision quantum. Assess closure requirements in line with the provisions of section 43 of the MPRDA
2011 - 2014	Reduce state environmental liability and financial risk	Percentage of mines issued with closure without residual state liability	100%	100%	100%	100%	Assess adequacy of financial provision quantum. Assess closure requirements in line with the provisions of section 43 of the MPRDA
2010/2011 - 2012/2013	Reduce state environmental liability	% of fully funded environmental liabilities	70%	80%	90%	N/A	Review adequacy of provisions for environmental liability
2011 - 2014	Reduce state environmental liability and financial risk	Identified rights and/or mines with inadequate financial provision	N/A	90	90	90	Conduct inspections, review EMP with concurrent financial provision
2010/2011 - 2012/2013	Monitor and enforce compliance	Number of Environmental Management Plan (EMP) inspections	1390	1380	1390	N/A	Develop and approve inspection plans. Conduct EMP inspections. Prepare inspection reports
2011 - 2014	Monitor and enforce compliance	Number of Environmental Management Plan (EMP) inspections	N/A	1740	1900	1900	Develop and approve inspection plans. Conduct EMP inspections. Issues statutory instructions
2010/2011 - 2012/2013	Develop and review internal processes	Number of identified derelict and ownerless rehabilitation projects implemented	7	7	7	N/A	Oversee implementation of contract with service providers
2011 - 2014	Promote sustainable resource use and management	Number of derelict and ownerless mines rehabilitated	N/A	10	20	40	Implement rehabilitation projects

32. Department of Minerals Resources (DMR). 2010. Department of Minerals Resources Strategic Plan: 2010/2011 – 2012/2013. DMR, Pretoria.
33. Department of Minerals Resources (DMR). 2011. Department of Minerals Resources Strategic Plan: 2011 – 2014. DMR, Pretoria.

5.3 Review of financial provision estimation practice

Having established a general understanding of the legislated process through which financial provision estimations are generated, a broad review was conducted focused on the practice of financial provision estimation. Given its central role, the review included a consideration of the efficacy and application of the DMR guideline document released in 2005 for the evaluation of the quantum of closure-related financial provision provided by a mine released in 2005.[34] The review relied relatively heavily on interviews and discussions with a broad range of mining stakeholders given the need to draw on direct experience along with the relative lack of written sources.[35] With regard to the latter, EMP (and associated financial provisions) case studies were accessed and reviewed where possible bearing in mind that these documents are often difficult to find and interpret. As outlined previously, the review is not intended to be extensive or definitive. Its aim is rather to raise important concerns and encourage discussion on key issues in keeping with the overall focus of the research.

In the sections that follow, the results of the review are discussed with specific reference to the following areas of concern:

- Inadequate EMPs and rehabilitation plans including no or tenuous links between the plans and financial provisions;
- Non-inflation of master rates contained in the 2005 DMR guidelines;
- Reservations that a number of mines are still not making adequate financial provision for closure;
- Lack of concurrent rehabilitation.

5.3.1 Inadequate EMPs and associated rehabilitation plans

The EMPs and associated rehabilitation and closure plans that need to be prepared and regularly updated for mines are central to the accurate estimation of appropriate financial provisions. These plans must describe the concrete actions that are required to adequately mitigate environmental impacts and achieve an acceptable closure. Once these actions have been described in detail, they need to be individually and clearly costed allowing for proper calculation of the overall financial provisions.

Research has indicated that the content and quality of EMPs varies significantly in practice. Cases have been identified where the information contained in the EMP is insufficient both for the DMR to fully evaluate the reported impact of the proposed mining activity, and for the applicant's subsequent actions to be measured against the EMP's contents (Brownlee in McLean & Carrick, 2007). The review and interviews with stakeholders revealed that this variability is largely still applicable. The following specific practices can be highlighted as particularly problematic in this regard:

- EMPs that do not contain rehabilitation plans at all, making it impossible to trace the links that should be clearly present between these plans and calculations of financial provisions. The financial provision calculations in these EMPs can be best described as "black box" given their highly significant lack of information and transparency.
- EMPs that contain insufficient rehabilitation plans with tenuous links to the calculation of financial provisions. These often contain limited or unclear distinctions between areas that can be rehabilitated concurrent to mining and those that can only be rehabilitated at closure. These can be best described as "grey box" EMPs given their only barely adequate information and low levels of transparency.
- EMPs that contain inadequate consideration of longer term water quality issues in particular.

EMPs containing these deficiencies have nevertheless been approved by the DMR. This indicates that the lack of a standard or benchmark EMP, with a further concomitant variability in the qualification and experience of practitioners preparing these EMPs, is a major problem.

34. Hereafter referred to as the "2005 DMR guidelines".
35. See Appendix 1 for a list of people interviewed for the project.

A standard needs to be established and enforced with appropriately qualified practitioners responsible for the drafting of EMPs.

5.3.2 Non-inflation of master rates

As mentioned above, the 2005 DMR guidelines make it clear that master rates require annual updating in order to take inflation into account (DME, 2005). However, a number of EMPs were found still to be using the master rates contained in the 2005 DMR guidelines.[36] This introduces almost certain underestimation of the necessary financial provisions, yet financial provision calculations that do not inflation-adjust their numbers have been accepted by the DMR. For example, a 2010 estimate incorrectly using 2005 master rates could represent an underestimate of roughly 35% relative to appropriately inflated costs.[37] It is highly likely that the annual updating of the master rates in the DMR guidelines would put a stop to this practice (see section 5.4.1 for more discussion on this). In the interim, however, for some mining companies and/or their consultants to claim that inflation of costs can be ignored is either extremely naive or disingenuous. The impact that the use of appropriately inflation adjusted master rates may have on the financial viability of certain mines is cause for concern.

5.3.3 Lack of concurrent rehabilitation

The link between the application of concurrent rehabilitation and the need for closure rehabilitation is clear – thorough application of concurrent rehabilitation where possible is one of the best ways to ensure that closure rehabilitation needs and costs are minimised. Environmental managers pointed out that if one applies the principle of "the earlier the better" to rehabilitation it can have a significant impact on reducing future risks. This approach can be particularly effective in ensuring that long term water quality problems do not become difficult to manage. It also allows for greater chances of success with regard to re-establishing the productive potential of land and holds significant aesthetic benefits with potential implications for sectors such as tourism. In most cases, concurrent rehabilitation results in long term cost saving but, importantly, not necessarily in short to medium term cost saving. This has implications for the incentive to apply concurrent rehabilitation. It was also noted in interviews that the incentive structures faced by mine managers (and mining companies) often do not encourage concurrent rehabilitation, focusing instead on conventional and more easily quantified measures such as production, profit, number of accidents, etc.

The application of concurrent rehabilitation has increased over the years in keeping with a growing realisation regarding its benefits. The CoM & Coaltech guidelines devote significant effort to detailing the "how to" of concurrent rehabilitation. However, the mining stakeholders interviewed made it clear that there is still significant underperformance with regard to concurrent rehabilitation generally. Given the links between concurrent and closure rehabilitation, this lack of concurrent rehabilitation can be interpreted as something that does not bode well for the achievement of adequate rehabilitation at closure. In essence, if best practice concurrent rehabilitation was the norm there would be less reason for concern. There is therefore an argument that lack of concurrent rehabilitation can be treated as a leading negative indicator for adequate rehabilitation being achieved at closure.

5.3.4 Reservations regarding adequate financial provisions for closure

There are significant obstacles to generating conclusive, empirically substantiated, independent proof that a particular mine has not made adequate financial provision for closure. This relates not least to the difficulty associated with accessing the required information, conducting a site inspection and securing the cooperation of mine management particularly in the absence of formal authority, legislative mandate or sanction.

36. One of the more prominent cases of this practice is the Environmental Management Plan released in 2009 for Coal of Africa Limited's proposed Vele Colliery in Limpopo (Jacana Environmental, 2009).
37. Note that the master rates in the 2005 DMR guideline were taken unadjusted from the Golder Associates report completed in 2004 (Golder Associates, 2004). It is therefore probably more accurate to consider them as 2004 costs and not 2005 costs.

Notwithstanding these obstacles it was instructive to canvass opinions among mining stakeholders regarding the adequacy of financial provisions on the whole in order to inform further discussions and recommendations. This exercise pointed to the following tentative findings:

- As in the case of EMPs, relatively high levels of variability with regard to the perceived adequacy of financial provisions were reported. Views were that some mines and mining companies appear to be applying the precautionary principle with regard to financial provisions while others clearly are not.
- Uncertainty with regard to the adequacy of financial provisions appears to be highest in relation to providing for adequate post-closure water treatment. The costs associated with treatment can be particularly high and combined with uncertainty about what is strictly required can lead to mines effectively trying to downplay or even ignore unacceptable risks.[38] These high costs and uncertainties also tend to make it difficult for DMR officials to demand that significant financial provisions be made for water treatment. In addition, the lack of mine closure certificates issued may be interpreted partially as an indication that DWA is not satisfied entirely that water quality impacts have been adequately dealt with (which in turn may imply that financial provisions for these impacts may not be adequate). Formal requests by environmental action groups for information with regard to closure certificates issued by DMR have not been responded to at date of publication of this document.
- Certain mining companies are thought to be in the process of building up their trust funds to an adequate level to cover planned closures. They are therefore temporarily inadequate, but one would hope that this is known to DMR and a process is ongoing in which DMR gives these mining companies a certain agreed time frame during which they need to ensure adequate levels are reached for trust funds. The risk of insufficient funds to undertake rehabilitation can be exacerbated where pricing fluctuations in the underlying commodity have a significant impact on the estimated useful life of a mine, which was used as a guideline in calculating the period over which funds were to be built up. It is not clear to what extent these factors are taken into account.
- Confidence in financial provision estimates is not helped by the lack of publicly available independent reviews of financial provision calculations.
- Mining companies in particular, along with industry bodies and investors, are concerned that aside from their impacts on the environment and the reputation of mining, inadequate financial provisions can give non-compliant mines an unfair cost advantage over their competitors. In addition, the cost implications of having to deal with environmental and pollution risks of so-called "toxic non-compliant" neighbours is an issue, especially to larger mining entities that are subject to increased regulatory and stakeholder controls. This creates an uneven playing field and distorts investment decisions.

These findings with regard to general compliance correlate well with the targets in the DMR's two most recent departmental strategic plans, which explicitly recognise that more needs to be done to ensure greater compliance with financial provision requirements (see Section 5.2 for an outline of these).

5.4 Recommendations for improvements

The review in the previous section indicates that despite significant progress as a result of the publication of the 2005 DMR guidelines, challenges remain in the process through which financial provisions are estimated. In keeping with the overall aims of the study, this section makes broad recommendations that should lead to improvements in the financial provisions calculation process. They are focused on the following:

- Elevation, enhancement and regular updating of the DMR guidelines for the evaluation of the quantum of closure-related financial provisions.

38. For example, a 7 Ml/day water treatment plant can cost R200 million to build and have a lifetime running cost of R700 million to R1 billion, albeit that some costs can generally be recovered through the sale of treated water.

- Greater and more structured use of the independent review mechanism when assessing the adequacy of financial provisions.
- Greater public access to data and information on financial provisions.
- Amendment of the SAMREC code to allow for greater clarity on how environmental costs need to be taken into account, including potential links to the DMR guidelines for the evaluation of the quantum of closure-related financial provisions.
- Integrated authorisation/sign-off of EMPs required from the relevant environmental authorities (DWA and DEA).

5.4.1 Elevation, enhancement and regular updating of the DMR guidelines

The 2005 DMR guidelines for the evaluation of the quantum of closure-related financial provisions have laid a foundation for the estimation of and evaluation of financial provisions. However, as one would expect from the first edition of any guideline, they necessitate review for the following reasons:

- Rehabilitation is a dynamic field in which useful research is conducted, techniques evolve and usable information on what constitutes effective rehabilitation and the associated costs is constantly generated and can be used to refine financial provision estimates. This includes information from mines themselves, environmental experts, contractors, researchers and the state (particularly through the rehabilitation of abandoned mines). For example, one of the top priorities for Coaltech sponsored research is preventing and mitigating the impacts of land compaction, about which not enough is understood at present.
- The need to reflect changes in environmental legislation that determines the nature and extent rehabilitation required (e.g. if legislation on water quality standard becomes stricter then rehabilitation and closure requirements must adjust accordingly).
- The guidelines may require modification to take into account changes in the environmental landscape (e.g. water scarcity may result in stricter guidelines as to how water pollution prevention should be dealt with in rehabilitation and closure requirements).
- The need to avoid ambiguity or uncertainties or lacunae with regard to issues such as the appropriate use of inflation adjustment and any other areas where greater clarity is needed, as one would expect with the first edition of a guideline.[39]

In order to draw the full potential out of the guidelines (and associated updating processes) it is recommended that serious consideration be given to:

- Augmentation of the guidelines to ensure that they remain clear, comprehensive and responsive to changes and actively draw on industry/stakeholder experience and advances on an ongoing basis;
- Drawing on and incorporating other relevant resources such as the 2008 DWA best practice guideline series and the CoM & Coaltech guidelines on rehabilitation;
- Clarifying links between the EMP guidelines and the DMR financial provision calculation guidelines to ensure comprehensive, easily referenced and quantified rehabilitation plans in EMPs;
- Incorporation of measures to incentivise concurrent rehabilitation.

These actions should ensure that the status of the guideline is elevated allowing it to become more effective in its primary aim of allowing for more accurate closure cost estimation. It should also improve the probability that it (or at least key elements of it) becomes more widely used by mining companies in their financial provision calculation processes. As was noted in the input document to the DMR guidelines (i.e. Golder Associates, 2004), there would be "… significant benefits if the guideline document were to be used by both the DMR and the mining industry, in order to align the assessment of the environmental liability for a mine."

39. E.g. the master rate for Component 6 (Opencast rehabilitation) in the 2005 DMR guidelines is the only master rate that differs from the master rates in the Golder Associates input document to the guideline (i.e. R96,700/ha in the DMR guideline and R99,600/ha in Golder Associates). This may be a small difference in percentage terms (i.e. 3%); it is, however, significant in absolute terms and should be rectified if needed. Most financial provision calculations reviewed use the DMR master rate although two were found that used the Golder Associates master rate.

5.4.1.1 Augmentation process and creation of a living document

In order to ensure that the guideline remains up to date, it would be worth considering the process surrounding its updating. This could include:

- Scheduling regular reviews and updates (at least every two to three years) and adjusting master rates for inflation every year.
- Ensuring that the updating process calls for inputs from industry stakeholders (including mining companies, industry bodies, other government departments such as DWA and DEA, consultants, academics and civil society). This would improve the overall quality of the guidelines and ensure higher levels of confidence and buy-in to the guidelines from a wider group of stakeholders.
- Provision of explanatory notes and other supporting documentation that can aid with the interpretation of the guidelines and learning. This should be particularly useful for emerging miners as well as newly appointed DMR officials who need to understand and apply the guidelines particularly well.
- The establishment of a website devoted to the guidelines where updated information, supporting documents, data, links to other useful sources, etc. can be posted along with communication from the DMR as needed.

5.4.1.2 Drawing on other relevant resources

In the period since 2005, new documentation has been released which could be drawn on and/or incorporated to improve the DMR guidelines for the evaluation of the quantum of closure-related financial provisions. The 2007 Chamber of Mines and Coaltech Guidelines on the Rehabilitation of Mined Land (CoM & Coaltech, 2007) and the 2008 DWA Best Practice Guideline Series for Water Resource Protection in the Mining Industry (DWAF, 2008) stand out in this regard.

The Chamber of Mines and Coaltech *Guidelines on the Rehabilitation of Mined Land* were produced in 2007 and are a compilation of current best practice in South African and internationally. They focus on detailing how to go about achieving a sustainable rehabilitation end-product following mining and incorporate practical, "on the ground" steps. These steps may impact the costs associated with rehabilitation and should thus be incorporated in the revision of the DMR guidelines.

The 2005 DMR guidelines call for the costing of the "complete picture" with regard to closure including water quality requirements. They are, however, not focused on this aspect and are not prescriptive enough in this regard, particularly in light of ongoing water quality problems in mining areas that have intensified since 2005 (such as AMD in Gauteng and other areas. Given that South Africa is a water-stressed country, there is a clear and urgent need to revisit how the DMR guidelines deal with water quality issues. This should draw on engagement with DWA and incorporation of the 2008 Department of Water Affairs (DWA) Best Practice Guideline Series for Water Resource Protection in the Mining Industry (DWAF, 2008). This series contains a total of 15 documents at varying levels of detail including specific guidelines focused on:

- Water Management Aspects for Mine Closure
- Small-Scale Mining (Standard & User Format)
- Water Management for Mine Residue Deposits
- Water Management in Hydrometallurgical Plants
- Pollution Control Dams
- Water Management for Surface Mines
- Water Management for Underground Mines

The "Best Practice Guideline G5: Water Management Aspects for Mine Closure" is explicit in recognising that "in many mine closure situations, there is a risk of an unacceptable post-closure risk to the water resource. In such situations, there will be a need to determine the financial provisions required to fund both the capital cost of appropriate water management measures and the operating costs associated therewith. In cases where the water management measures are required for a number of decades, provision may also be required to reconstruct the appropriate measures after their design life has been exceeded. While the DMR has prepared guidelines for determining financial provisions, there is no standardized formula or factor that can be applied to determining what the financial provisions for water management should be, as each mine site will have very site specific requirements" (DWA 2008). With this in mind the DWA guidelines suggest a principles-based approach that should underpin the determination of the water management financial provisions. This approach calls for site specific assessments by appropriate experts to determine unacceptable risks (in light of the desired state of the river or system being affected as defined by DWA), to identify appropriate mitigation measures and to cost these measures.

While it is recognised that a principles-based approach is probably appropriate for use with regard to water quality in the DMR guidelines, it would nevertheless be worth investigating the possibility of augmenting this with rule-based or prescriptive elements. For example, minimum provision for water treatment can be specified based on the catchment in which a mine operates. This would have advantages in terms of a better fit with the rest of DMR guidelines which rely on specific quantified master rates. It would also lessen total reliance on expert judgements, making it easier to apply the guidelines.

Ultimately, clearer links between the DWA requirements and the DMR guidelines to mines should with time reduce the likelihood that closure certificates are withheld from mines by DMR due to mines not satisfying DWA requirements. This would be a positive development for all concerned.

5.4.1.3 Clarify links between EMP and financial provision guidelines

There is a need for greater clarity and traceability of the links between actions committed to by mines in EMPs and the individual costs of these actions in financial provision calculations. In order to reinforce requirements in this regard, they could be spelt out more clearly and prescriptively in both EMP guidelines and in financial provision calculation guidelines. This should ensure that there is a reduction in instances where this important aspect is glossed over.

5.4.1.4 Incorporation of measures to incentivise concurrent rehabilitation

Greater concurrent rehabilitation activities by mining entities throughout the life of the mine would significantly increase the likelihood of achievement of rehabilitation goals at closure. It would therefore be worth considering ways in which to incentivise concurrent rehabilitation or at least counter the incentives that work against it.

One possible way of doing this would be to explicitly recognise and penalise a blatant lack of concurrent rehabilitation as part of the annual review of the financial provisions of mines by the DMR. In the current system informed by the DMR guidelines, financial provision estimates for closure are not linked to deliverables for concurrent rehabilitation. Consideration should be given to the introduction of an adjustment/multiplication factor that explicitly increases the amount required for closure financial provisions where concurrent rehabilitation is consistently and/or unacceptably low. This factor could be applied in a similar way to the adjustment/multiplication factors that currently apply to mine risk classes and environmental sensitivity. In order to ensure fairness, DMR inspectors could start by warning mines that are not undertaking concurrent rehabilitation to do so and set targets in this regard. If these targets are not met, then it could be made clear to mines that an adjustment/multiplication factor will be applied thereby increasing their overall requirement for financial provisions and effectively penalising them for a blatant lack of concurrent rehabilitation.

From the mining industry perspective, it would also be worth ensuring that the incentive structures that govern mine manager actions include clear incentives to actively encourage and accord high priority to concurrent rehabilitation. For example, the employment contracts of mine managers may need to be revised to require the achievement of concurrent rehabilitation targets along with other targets such as those related to production levels, cost control, number of accidents, etc.

In addition, consideration could be given to an amendment of section 37B of the Income Tax Act (ITA) that allows for enhanced write-offs in respect of environmental expenditure to further enhance or upfront tax deductions in respect of concurrent rehabilitation as opposed to back-ended rehabilitation expenditure.

5.4.2 Greater and more structured use of the independent review mechanism

The independent review option available to the DMR to assess the adequacy of the financial provision calculations submitted by mining entities, and hence whether these provisions comply with the legislative requirements, is underutilised. Currently this mechanism seems to be applied primarily as a last resort when agreement cannot be reached between the DMR and mining companies with regard to an appropriate financial provisions amount. This is clearly an appropriate use of the mechanism. It should be used more frequently as a matter of course to obtain assurance as to the adequacy and compliance of a particular financial provision, and not only when it is clearly needed to settle a dispute. For example, a certain number of randomly chosen independent reviews could be scheduled for each year. These reviews could also serve as opportunities for capacity building and learning in which experienced consultants/reviewers assist DMR officials with their own reviewing and monitoring skills. Where reviews find that mines are clearly under-providing for closure rehabilitation, the option should exist to make the mines pay for the cost of the review as well as ensuring that they are made to increase their financial provisions to adequate levels.

5.4.3 Greater public access to data and information on financial provisions

On the whole, research into the adequacy of financial provisions is seriously hampered by a lack of accessible data on those provisions. Those mining companies whose annual reports are publicly available tend to present data on their total group-wide financial provisions. While this kind of data is useful, it is necessary to have access to data on each individual mine within a mining group before one can do any serious investigation regarding the adequacy of financial provisions. Notwithstanding formal requests from environmental interest groups for information on the financial provisions held by the DMR, such information has to date not been supplied by the DMR.

If this kind of data was more easily available, researchers and others concerned with the public interest would be able to interrogate it and draw potentially important conclusions, thereby assisting the DMR and mining industry with achieving their stated sustainability goals. For example, it would be interesting to conduct a benchmarking exercise of a large sample of financial provisions for one type of mineral in a given area where it is mined relatively intensively (e.g. coal in key catchments in Mpumalanga). Such an exercise could entail comparison between the financial provisions of mines adjusted for common factors (e.g. size, mining method, hectares mined, tonnages mined, life of mine, proximity to water resources, etc.) with a view to identifying outliers. If properly designed and assuming unfettered access to data it could assist in establishing whether the overall situation with regard to the magnitude of provisions seems reasonable and which mines seem to be under-providing, allowing for more detailed investigations of these mines.

5.4.4 Augmentation of the SAMREC code

The SAMREC Code sets out minimum standards, recommendations and guidelines for public reporting of minerals exploration results, mineral resources and mineral reserves in South Africa. The SAMREC code plays an influential role in the mining industry, particularly at the feasibility stage of mine project assessment. The Code is used to determine whether a mineral resource can be profitably mined (and therefore whether mining is worth pursuing), as it gives detailed guidance on how to measure the available ore body, its value and the magnitude of costs involved in mining. It seeks to lay out the principles and practices needed to establish the “Proved Mineral Reserve”, which is the economically mineable material derived from a Measured Mineral Resource. The term “economically mineable” implies that extraction of the Mineral Reserve has been demonstrated as viable and justifiable. It is relied on by those providing finance to new mining projects or investing in them, as they are not likely to trust any assessment not conducted using the SAMREC code (SAMREC, 2009).[40]

With regard to environmental liabilities, the code requires that one "describe future yearly environmental liabilities / compliance methods and costs, including reclamation and closure and their planned funding." It is neither detailed nor prescriptive with regard to financial provisions beyond this statement and the requirement that risk assessment and cost estimations need to be done by a competent person (i.e. someone that is clearly suitably qualified). There is clear scope for expanding on those sections of the code that deal with the quantification of environmental liabilities, which is of great value to investors, financers and regulators. The potential for options to be explored in this regard was recognised in discussion with SAMREC representatives who are open to ways in which the code can be made more robust, particularly given increasing concerns regarding environmental liabilities.[41] If the DMR guidelines for the evaluation of the quantum of closure-related financial provisions were to be enhanced and their status elevated as recommended in the preceding sections, there would be a solid argument for exploring potential ways in which the SAMREC code could be linked to or at least make clear reference to these guidelines while maintaining its principles-based focus.

40. The SAMREC code was adopted by the JSE in its Listings Requirements in 2000.
41. R. Dixon, SAMREC, pers. comm.

6. SECURING FINANCIAL PROVISIONS USING FINANCIAL INTRUMENTS

6. SECURING FINANCIAL PROVISIONS USING FINANCIAL INTRUMENTS

This section starts by briefly re-stating the legal provisions of the MPRDA that deal with financial provisions, and then provides a critical evaluation of the different financial instruments that can be used to make the financial provisions.

6.1 Recap of the legislative framework

Section 41 of the MPRDA requires an applicant for a prospecting right, mining right or mining permit to make a prescribed financial provision for the rehabilitation or management of negative environmental impacts before the Minister approves the EMP.

Section 1 of the MPRDA defines a "financial provision" to mean "the insurance, bank guarantee, trust fund or cash that applicants … must provide in terms of section 89 guaranteeing the availability of sufficient funds to undertake the agreed work programmes and to rehabilitate the prospecting, mining, reconnaissance, exploration or production areas, as the case may be."

Section 89 provides that no exploration or production operations may commence unless financial provision has been made that is "acceptable to the designated agency guaranteeing the availability of sufficient funds for the due fulfilment of all exploration and production work programmes by the holder".

Government Gazette 26275 dated 23 April 2004, item 53-54, sets out the format that such financial provisions may take: a contribution to a trust fund as contemplated in section 10(1)(cH) of the Income Tax Act (ITA) a financial guarantee from a bank or financial institution approved by the Director-General, a deposit into an account specified by the Director-General, or such other method as the Director-General may approve.

Section 10(1)(cH) was repealed by the Revenue Laws Amendment Act 20 of 2006 and it is submitted that the reference therefore should read "section 10(1)(cP) which refers to the receipts and accruals of a company or trust contemplated in section 37A." This is discussed in more detail below.

6.2 Risks and benefits associated with financial instruments

From the above, it is evident that there are essentially four formats in which the financial provision may be made: cash deposit, bank guarantee, insurance or trust fund.

The choices open to mines in South Africa for making financial provisions introduce flexibility, which offers mining entities choices among financial service providers that would in all probability provide for more cost effectiveness in making the financial provision. From the DMR's perspective the risk of default is spread and diversified among more entities, thereby lowering the risks of default. On the negative side, however, such alternatives introduce a degree of financial complexity that may not be commensurate with the level of financial expertise or capacity at the DMR, which is of major concern.

Our concerns can be succinctly expressed with reference to the following quotation:

"Success of any financial surety instrument depends on the care and effort put into setting it up and managing it. Most will work if they are done properly. Financial failure of the mining

company and organisations involved in the financial guarantee (holder of cash reserve, trust fund, etc.) resulting in a failure to provide funding for mine closure can be mitigated by:

- *Establishing non-accounting provisions monitoring financial performance*;
- *Separating the financial structure for the closure fund from that of the company*;
- *Allowing only investments of closure funds in financial instruments providing 'assured' future payment*;
- *Spreading the risk to a combination of financial vehicles to jointly secure closure funds*." (World Bank, 2008: 53)

We now deal with each of the forms that the financial provision may take separately:

6.2.1 Cash deposit

The cash option of placing an amount of cash on deposit with the DMR is the least used due to the constraints it places on the working capital requirements of the mining entity. It does, however, present a low risk to the DMR subject to the proviso that the quantum of such cash is sufficient to undertake the requisite remedial work and subject to our observations below as to the position on insolvency.

6.2.2 Bank guarantee

We have had sight of the standard bank guarantee which the DMR apparently requires to be used. The disadvantage of using the guarantee mechanism is the cost involved to the mining entity, as such guarantees are typically renewable annually and attract a fee calculated as a percentage of the guaranteed amount. The terms of the standard guarantee wording appear to require the guarantor to give three months' written notice should they wish to withdraw from the guarantee (which would include instances where the solvency or creditworthiness of the mining entity is a concern). However, this would trigger the undertaking to pay the guaranteed amount to the DMR in terms of clause 2 of such guarantee.

Our views are therefore that the guarantee constitutes an acceptable format in which to provide the financial provision as required in terms of section 41 of the MPRDA, subject to the following:

- Creditworthiness of the guarantor. We understand that the DMR has in the instance of insurance products, discussed below, issued a list of a number of "permissible insurers". It is not clear whether such a restriction, for instance to allow only bank guarantees from the "big four" banks in SA, are in place. Concerns surrounding the use of guarantees on the basis that this introduces third parties into the equation, which would increase the risk, are in our view unfounded, on condition that the creditworthiness of the guarantor is acceptable. To the extent that the creditworthiness of the guarantor is better than the mining entity, the use of guarantees could in fact lower the risk of default to the DMR.
- The efficacy of the bank guarantee as a means to secure adequate funds as contemplated in section 41 of the MPRDA, depends critically on the DMR submitting a written claim in terms of clause 2 of the guarantee if given notice by the guarantor of intention to withdraw from the guarantee as contemplated in clause 5. We have some concerns as to the risks should notification be given in terms of clause 5 but written claims are not submitted in terms of clause 2.
- The efficacy of the bank guarantee would also critically depend on whether the DMR officials at a regional level ensure that the correct format and wording of the guarantee is in fact used.
- Clause 4 states that the guarantee is not transferable or negotiable. To the extent that the guarantor enters into credit default swaps or other derivative instruments as a means of on-selling or transferring a portion of the credit risk vis a vis the mining entity, such assignment and delegation of obligations cannot be without recourse to the original guarantor and hence should not adversely impact on the DMR's position.

6.2.3 Insurance

There appears to be a certain level of discomfort surrounding the use of insurance products in the context of section 41 of the MPRDA. Concerns range from so-called "unscrupulous fly by night operators" to the fact that the products are not actually insurance products but performance guarantees disguised as insurance products. The use of insurance products certainly has conceptual appeal but they are relatively untested and only really used in SA and the USA. The DMR placed a moratorium on insurance products until March 2011 at which point it specified that it would allow insurance products only from six of the larger firms. The scepticism surrounding the use of insurance products for mining rehabilitation is also evident in Western Australia.

We make the following observations in this regard:

- The risks surrounding so-called "fly by night" operators could in our view be addressed by specifying a list of permissible insurers as the DMR has apparently done. As stated above, the use of insurance products issued by creditworthy insurers would in our view, if anything, reduce risks to the DMR on the basis of spreading and diversification in that the number of counterparties that the DMR has recourse to in the event of non fulfilment of rehabilitation provisions increases, thereby reducing risk.
- A further aspect surrounding the credit risk or creditworthiness of the insurer would be able to be managed should the ability of the insurer to "on-sell" the risk by means of reinsurance, credit default swaps or other derivative instruments be limited to "a with recourse basis", or with the express approval and permission of the DMR or on condition that it is on-sold to an "approved insurer".
- The use of insurance products and related derivative instruments introduce a level of financial complexity which may not be commensurate with the level of financial expertise at the DMR and the ability of the DMR officials to evaluate the robustness of such instruments may be compromised. Mitigation of this risk could be substantially achieved should a standardized wording of such insurance products be adopted and enforced by the DMR.
- A residual concern is that the documents purporting to be insurance products are in fact simply disguised performance guarantees and that the statutory obligation to conduct rehabilitation is not in effect an uncertain event and hence not an insurable risk. Such risk would be able to be addressed by means of adequately worded, standardized contracts.
- The interaction between insurance cover that the mines may have in respect of unexpected events that could trigger premature closure of the mines, and the financial provisions required in terms of section 41, should perhaps be explored further, for instance to ensure that the interests of the DMR be adequately noted.

6.2.4 Trust funds

The use of trusts as a means of achieving improved compliance with section 41 of the MPRDA would be improved if the following aspects are given further attention:[42]

- Greater clarity as to the legal mechanisms by which funds earmarked for rehabilitation will be accessible for use by the DMR in the event of the provisions of section 41(2) of the MPRDA becoming applicable both from a going concern perspective and in the event of an insolvency.
- Improved and greater provision for liability of trustees to be aligned with section 34 of NEMA, section 38 of the MPRDA as well as section 77 of the Companies Act and section 9 of the Trust Property Control Act. In addition, trustees should become personally liable if the provisions of the trust deed are not complied with.
- In similar vein, while the Master of the High Court would probably not allow unrehabilitated insolvents or persons previously removed from offices of trust for reasons such as fraud or dishonesty from being appointed as trustees, it would be preferable for the trust deed explicitly to preclude certain people from the office of trustee.

42 Based on a copy of a standard trust deed, detailed comments are provided in Appendix 2.

- The trust deed appears to contain various provisions imposing obligations on beneficiaries that seem uncertain and perhaps unenforceable in law. The obligation on the beneficiary mining entity to make contributions to the trust to fund such future rehabilitation should perhaps be dealt with contractually (i.e. not in their capacity qua beneficiaries).
- The trust deed provides that the books of account of the trust are to be audited by independent auditors. This should be amended to ensure that assurances are given as to compliance with the statutory obligations, terms of the trust deed etc., as this would essentially entail greater self-regulation, thereby alleviating resource constraints within the DMR. Such environmental assurance report is to be submitted to the DMR directly by the independent assurance provider and the trust deed should accordingly clearly state that such obligation would be a term of engagement.
- The provisions in the trust deed do cater for a limitation of investments that may be made and are discussed in more detail in Section 6.3 below.
- The trust deed contains references to the repealed section 10(1)(cH) of the Income Tax Act, which would need to be replaced by section 10(1)(cP) read with section 37A.
- The trust deed states that losses of the trust are to be "debited to the account of beneficiaries", which appears to be in contradiction to section 25B of the Income Tax Act and the general legal status of beneficiaries not being liable for losses of the trust in law in their capacity as beneficiaries. Such liability for losses, it is submitted, should be dealt with by means of alternate legal means.

6.3 Investment of financial provisions held in trust

As noted above, the example trust deed contains references to section 10(1)(cH) of the Income Tax Act, which we presume should be cross referenced to section 10(1)(cP) read with section 37A. On the assumption that this is correct, then the assets that the trust may invest in are limited to:

- Financial instruments issued by collective investment schemes, banks and long-term insurers;
- Financial instruments of a listed company unless they were issued by person holding a right of permit in terms of the MPRDA or a connected person in relation to that person;
- Financial instruments issued by any sphere of government of the Republic;
- Any other investments held before 18 November 2003.

While the above limitation would certainly assist, concerns remain that:

- Funds invested by the trust are earmarked for quantifiable rehabilitation provisions to the extent that funds of the trust are invested in equity linked securities and are therefore exposed to market fluctuations. Therefore such assets do not meet the criteria set out in the above quotation from the World Bank as to "assured future payment" (World Bank, 2008).
- There is no assurance in the standard trust deed that the trustees charged with the responsibility of investing the trust funds have the requisite qualifications or experience with regard to investment or asset management. For instance, it is a requirement that trustees involved in investment decisions are at a minimum registered with the Financial Services Board.
- A further risk is the investment of trust funds in financial instruments that may be subject to cyclical fluctuations. For instance, resource based financial instruments acquired in anticipation of a certain holding period that may change unexpectedly should premature closure occur may be subject to downside capital loss. In our view consideration should be given to limiting the class of investments to those where the initial capital is guaranteed or that only a certain specified percentage of the total assets of the trust may be invested in assets where the initial capital is not guaranteed or is subject to market fluctuations.
- The ability to invest in financial instruments issued by "any sphere of government" is cause for concern. The current wording of section 37A would seem to allow investments in municipal bonds that may be issued by municipalities with qualified audit reports as issued by the Auditor-General, or municipalities that may experience financial difficulties. We would accordingly recommend that a further restriction be imposed to limit investments to those spheres of government in possession of a unqualified/clean and recent (i.e. not more

than two years old) audit report issued by the Auditor-General and be limited to spheres of government that firstly have a credit grading and secondly then a credit grading of a predetermined minimum level.
- The above wording of section 37A would furthermore not require a minimum asset spread that would preclude more than a specified percentage of funds to be invested in a particular industry, similar to the restrictions imposed on pension and retirement funds.
- It is also advisable that investment in financial instruments issued by long-term insurers, banks and collective investment schemes be limited to institutions pre-approved by the DMR. In addition, consideration should be given that such approval by the DMR should be done in conjunction with National Treasury.

6.4 Ring-fencing of financial provisions on insolvency

A key issue to consider is the position of the financial rehabilitation provision in the event of insolvency of a mining entity. In a going concern scenario, the possibility still exists of increasing contributions so as to build up towards a sufficient provision as contemplated in section 41 of the MPRDA. This is obviously no longer possible where a company is declared insolvent during the course of its mining operations. This results in the substantial risk of an insufficient amount of funds being set aside for post closure rehabilitation. Apart from these obvious concerns surrounding the adequacy of the quantum of such provision, a residual issue is whether such provision is ring-fenced upon insolvency, i.e. whether such funds would remain exclusively available for the purposes contemplated in section 41 or whether they would become part of the pool of funds available for satisfying the claims of various classes of creditors.

Section 24P of NEMA purports to incorporate the provisions of section 41 of the MPRDA inter alia into NEMA itself. Section 24P of NEMA has, however, not yet come into effect.[43] Section 24P(6), while not operative does indicate insufficiencies insofar as the current position in terms of section 41 of the MPRDA is concerned, as it specifically provides that the Insolvency Act 24 of 1936 shall not apply to the financial provisions contemplated in subsection (1) or any amounts arising from it. It would accordingly appear that the Insolvency Act would apply to the current section 41 provisions. This suggests the important question of whether these provisions are protected and appropriately ring-fenced in the event of insolvency.

Interviewees also raised concerns that the impact of the financial provision and the ranking of various types of creditors would need to be assessed in the context of, inter alia, the business rescue provisions contained in section 128 *et seq*. of the Companies Act 71 of 2008.

6.5 Cross referencing between the MPRDA and other legislation

Very few closure certificates have been issued by the DMR to date. Section 41(5) of the MPRDA explicitly provides that the obligation to maintain the financial provision remains in force until such time as a closure certificate has been issued. Currently the liquidation and deregistration of mining entities that are subject to the Companies Act is administered by the Companies and Intellectual Property Commission and it would appear technically possible that mining companies could deregister without explicit consultation with the DMR. Our recommendation would be that companies or close corporations that are in possession of permits or rights issued by the DMR should not be able to deregister, liquidate or be wound up without prior consultation with the DMR so as to obtain assurance that such deregistration or liquidation will not adversely affect the ability of such entity to fully comply with their obligations in terms of the MPRDA.

43 Section 14(2) of Act 62 of 2008 read with section 2 of Act 49 of 2008.

Section 69 of the Companies Act contains provisions regarding the ineligibility of certain persons from serving as directors of companies. We believe that consideration should be given to imposing a requirement that only persons capable of being a director of a company should be eligible to become holders of mining rights or permit, irrespective of whether such person or entity applying for a mining permit or right (such as a partnership, sole proprietor or business trust) will be subject to the Companies Act.

Section 4 of the Companies Act imposes a solvency and liquidity test that needs to be taken into account before a company may make a distribution as defined. Such solvency and liquidity test is furthermore required to take into account contingent assets and liabilities. Such contingent assets and liabilities would include environmental rehabilitation provisions, and in particular the extent to which environmental rehabilitation provisions as required in terms of section 41 of the MPRDA are as yet unfunded. To the extent that mining entities in possession of permits or rights, and hence subject to the requirements of section 41, are entities regulated by the Companies Act, there would be a safeguard that these entities would not be able to make distributions that would compromise their ability to fulfil their obligations in terms of section 41 of the MPRDA. The same level of assurance unfortunately does not exist in respect of holders of mining rights and permits that conduct their mining activities through a business trust (not the trust contemplated in section 41 but a trading trust through which the entity conducts business) or partnership. Consideration in our view is to be given to require these entities to satisfy the DMR on an annual basis that profit distributions to stakeholders will not undermine their ability to comply with their obligations in terms of section 41 of the MPRDA.

7. FINANCIAL REPORTING OF ENVIRONMENTAL RISKS AND CLOSURE LIABILITIES

7. FINANCIAL REPORTING OF ENVIRONMENTAL RISKS AND CLOSURE LIABILITIES

This section provides a critical review of the current accounting regulatory framework and the extent to which it can be used to improve environmental compliance. Recommendations are then made regarding improvements to the framework.

7.1 Compatibility of the environmental regulations with the current accounting framework

The Conceptual Framework for Financial Reporting 2010, issued by the International Accounting Standards Board (IASB) is issued in South Africa as a Conceptual Framework for Financial Reporting 2010 and was adopted in December 2010. The framework itself illustrates in our view some of the conceptual compatibility problems experienced in conveying environmental risks and liabilities in the context of an accounting regulatory framework. Some of the particular difficulties encountered in the context of environmental considerations are:

- The objective of general purpose financial reporting is to provide financial information to "investors, lenders and other creditors" (OB2). The Framework specifically cautions about the usefulness of financial reporting to "other parties, such as regulators and members of the public" as the financial reports are not primarily directed to these other groups (OB10). This cautious approach is further amplified in IAPS1010[44] paragraph 7, cross referenced to ISA250[45] paragraph 2, while acknowledging the complexity and importance of environmental matters in an audit that "an audit cannot be expected to detect noncompliance with all laws and regulations".
- The Framework considers qualitative characteristics of useful financial information (QC1-39). The fundamental qualitative characteristics are relevance, materiality and faithful representation, whereas qualitative characteristics are enhanced by comparability, verifiability, timeliness and understandability. Relevance in turn is determined inter alia by whether "it is capable of making a difference in the decisions made by users" (QC6) which in turn depends on whether it has predictive value, confirmatory value or both (QC7). With regard to faithful representation the framework states: "To be a perfectly faithful representation, a depiction would have three characteristics. It would be complete, neutral and free from error. Of course, perfection is seldom, if ever, achievable" (QC12). The complexity and difficulties associated with quantifying environmental rehabilitation provisions make it evident that such provisions are not an "easy fit" into this framework.
- The Framework requires the recognition of liabilities provided they can be measured reliably (para 4.46). IAS37 (AC130)[46] in particular defines a contingent liability as including those which constitute "a present obligation that arises from past events but is not recognised because … the amount of the obligation cannot be measured with sufficient reliability."[47] From an environmental perspective accordingly, if the quantum of the amount to be expended in future on rehabilitation cannot be calculated with reasonable certainty, then in terms of the accounting framework it will not be reflected as a provision but will be disclosed as an unquantified contingency in the notes to the financial statements.

44. International Auditing Practice Statement 1010 "Consideration of Environmental Matters in the Audit of Financial Statements".
45. International Standard on Auditing 250 "Consideration of laws and Regulations in and Audit of Financial Statements".
46. International Accounting Standard 37 "Provisions, Contingent Liabilities and Contingent Assets".
47. At par 10.

- The integrated report of various mining entities contained "forward looking statements" as defined, which has the consequence that certain "safe harbour provisions" exist and that the entity and its officers can only be held liable in very specific circumstances for misrepresentation or inaccuracies. The sections dealing with forward looking statements in these reports also typically state that the company undertakes no obligation to publicly update or release revisions to the forward looking statements after the date of this document. This aspect, together with IAS10 (AC107),[48] must be evaluated in the context of the duty of care in section 28 as well as the liability provisions contained in section 34 of NEMA, as well as the personal liability of directors in terms of section 38 of MPRDA.
- ISA320[49] dealing with materiality offers some comfort in the environmental context as materiality is discussed both in relation to the size of the misstatement and the nature, i.e. qualitative versus quantitative materiality. It is submitted that environmental matters would enjoy the status of being relevant to qualitative materiality. However, the paragraph dealing with public sector entities (A2) makes the comment that "in the case of a public sector entity, legislators and regulators are often the primary users of its financial statements. Furthermore the financial statements may be used to make decisions other than economic decisions." This statement may be taken to suggest that in the case of non-public sector entities (e.g. mining entities) the primary purpose of the financial statements IS to make economic decisions. The impact hereof on the qualitative concept of materiality in the context of environmental rehabilitation and compliance is to be assessed more fully.
- The Conceptual Framework for financial reporting furthermore refers to the concept of comparability (QC20 *et seq.*) as a fundamental principle in the preparation of financial statements. We have certain concerns surrounding competitor benchmarking and comparability of disclosure in the context of Integrated Reporting which is discussed below. In the context of the preparation of the financial statements, we are of the view that the differences in the manner in which the various mining entities have disclosed and provided for environmental rehabilitation provisions in their actual financial statements as opposed to integrated reports do comply with this aspect, enabling a meaningful comparison.

7.2 Role of the International Council on Mining and Metals (ICMM)

The ICMM was established to improve sustainable development performance in the mining and metals industry.[50] The key issue is to what extent membership of the ICMM contributes to improved environmental compliance and in particular compliance with section 41 of the MPRDA.

A positive aspect is that a member of the ICMM must *commit* to implementing the ICMM's Sustainable Development Framework (the ICMM Framework).[51] Furthermore, once a member of the ICMM, a report by the Independent Assurance Provider as to compliance with the ICMM Framework would appear to be included in the Integrated Report of the mining entity.

Membership of the ICMM is voluntary, and is not impacted by non-compliance with environmental legislation. Anglogold Ltd, AngloGold Ashanti Ltd, BHP Billiton and GoldFields Ltd are listed as members, whereas Optimum Coal Holdings Ltd, Wescoal Holdings Ltd, Exxaro Resources Limited, Keaton Energy Holdings Ltd, Hwange Colliery Company Ltd and SA Coal Mining Holdings are not. Failure to implement the ICMM Framework does not seem to result in cancellation of membership or any other form of sanction from the ICMM itself.

There are a number of observations to be made in respect of the ICMM principles.[52] While these principles appear laudable, they do not correlate exactly with the sustainability principles in NEMA or the MPRDA and no guidance is given as to how they should be aligned. By way of summary, some potential concerns are:

- Principle 2 requiring, inter alia, integration of sustainable development principles seems to set a requirement of relative as opposed to absolute standards for compliance, with no time

48. International Accounting Standards 10 "Events after the Reporting Period".
49. International Standard on Auditing 320 "Materiality in Planning and performing an audit".
50. http://www.icmm.com/.
51. http://www.icmm.com/about-us/faqs.
52. http://www.icmm.com/our-work/sustainable-development-framework/10-principles last accessed on 1 July 2011.

frame stipulated for when absolute compliance is to be achieved. No mention is made to ensure that these policies are to be aligned with local legislation such as the duty of care in section 28 of NEMA.

- Principle 4 requires implementation of risk management strategies and consultation with interested and affected parties, without giving explicit guidelines as to who determines the risks and who are interested and affected parties, to ensure that these aspects are adequately dealt with. Further empirical research is recommended to establish to what extent inappropriate identification and grading of risks and interested parties is in fact a problem and may contribute to inadequate environmental compliance.
- Principle 6 requires the continual improvement of environmental performance. The wording suggests that it applies to new projects only. This is unfortunate. Furthermore, it uses terms such as "review, prevent, mitigate or ameliorate adverse environmental impacts" without defining these terms or aligning them with local legislation such as NEMA.
- Principle 7 requires a contribution to conservation of biodiversity and integrated approaches to land use planning. The principle requires entities to respect legally designated protected areas only. It furthermore does not appear to require rehabilitation to a standard equivalent to the position pre commencement of mining.
- Principle 10 requires an effective and transparent engagement, communication and independently verified reporting arrangements with stakeholders and that they report on environmental performance and contribution to sustainable development. The concern here, as above, is that it sets a relative and not absolute yardstick.

7.3 Role of Global Reporting Initiative (GRI) sustainability reports[53]

7.3.1 Identification of risks, stakeholders

Key to the adequate resolution of risks is the proper identification of present and future risks. The identification of risks of various mining entities indicates some cause for concern in that not all entities disclose all relevant government departments tasked with the enforcement of environmental legislation as stakeholders. At a minimum one would expect DMR, DWA and DEA to be listed as stakeholders which is not the case at present. Secondly, water pollution or environmental degradation are not identified by all mines as risks facing their organisation. As such, many of the integrated and sustainability reports in their current form as prepared by the various entities are not able to be used as a tool in assessing environmental compliance or risks by authorities.

7.3.2 Non-standardised information

Indications are that industry players do not disclose the same extent of information, thereby making comparisons among various players difficult. A starting point would be to agree on the variables required, and then to establish whether these are disclosed in respect of each entity. The initial suggestions are:

- Environmental rehabilitation provision
- Guarantees to DMR
- Market capitalisation
- Net equity of entity per statement of financial position
- Estimated useful lives of mines
- Water used, recycled, discharged
- Quality of water pre and post discharge
- Water consumption per production in tons, reported separately for fresh and recycled water
- Total hectares affected by mining or in respect of which mining rights are held
- Waste produced vs recycled
- Total hectares rehabilitated, distinguishing among various degrees of rehabilitation

53. Global Reporting Sustainability Guidelines Version 3 last accessed on 8 May 2011 via http://www.globalreporting.org/NR/rdonlyres/69B73A44-F372-4898-8548-B657BA73F8FF/0/G3_Guidelines_English.pdf at 3/170 At 4/170.

- Run of mine reserves, mineral reserve
- Mineral produced/sold in Mt

7.3.3 Definition of environmental performance indicators

GRI sustainability reports should provide a balanced and reasonable representation of the sustainability performance of the reporting organisation. A more extensive commentary on the environmental performance indicators are set out in Appendix 7. Our brief comments on the G3 environmental performance indicators by way of summary are:

- The indicators in our review require customisation for the SA context as aspects EN8-EN10 dealing with water related issues require disclosure relating to water withdrawal by source, water resources significantly affected by withdrawal, and percentage of water recycled and reused. However, the manner in which the questions are framed does not necessarily require a response that would reflect the realities of the fact that we are a water-stressed country, nor the issues surrounding the AMD problem.
- The responses to the GRI questionnaire may be answered in the affirmative, notwithstanding the absence of substantial or meaningful compliance. For instance, it requires disclosure of the environmental impact of goods or services produced but not the environmental impact of the process by which such goods are produced. In the context of gold for instance, gold itself is benign with very little or no environmental impact; it is, however, the process of gold mining that may have adverse environmental impacts. Secondly disclosure is required of energy consumption but without the requirement of indicating whether such energy is clean or not, whether the full cost associated with energy consumption has been internalised by the mining entity, and what the energy consumption is in relation to the size of operations, which may indicate energy wastage or efficiency. Likewise the disclosures surrounding water require disclosure of an absolute amount of water used, without reference to the size of mining operations, what impact the mine's use of water has on the available water resources in the area, and whether the mines have adversely impacted on water for human consumption.
- Disclosure of aspects such as water and energy consumption as environmental performance indicators would be enhanced if required to be more explicitly cross referenced to the economic pricing and costing thereof.
- Environmental performance indicators, perhaps echoing IAPS1010, require disclosure of the monetary value and quantum of fines imposed for environmental non-compliance. It is submitted that the level of assurance to be derived here from in the SA context is limited.
- The performance indicators require an absolute disclosure of emissions, materials used, etc. A disclosure expressing the various factors in relation to the size and extent of the mining entity would be more meaningful. For instance, the amount of energy used in mwH in itself is difficult to assess and becomes far more meaningful if expressly cross referenced to tons of mining output produced.
- The guidelines do not appear to reflect time line commitments as to by what reporting period full compliance will be achieved if not currently the position. For instance, they require disclosure of energy saving measures but do not require reporting on whether the entity has met its own targets for reduction.

7.4 Value of shareholder/stakeholder involvement

The role that shareholders can play in improving environmental compliance with reference to the above is not to be underestimated. However, in the context of CRISA[54], membership is not compulsory and more specific guidance ought to be given in order to improve the contribution it could make. The guidelines set out in King III are similarly a "step in the right direction"; however with the "comply or explain" philosophy inherent in the code it does provide a loophole for unscrupulous operators. In similar vein, it is encouraging that the preamble to Regulation 28 that gives effect to section 36(1)(bB) of the Pension Funds Act specifically refers to promoting

54. Code for Responsible Investing in SA released by Institute of Directors Southern Africa applies with effect from 1 February 2012.

sustainability and environmental, social and governance issues. Sadly, however, no specific guidelines in the form of minimum or maximum investment categories, as is the case with equities and property, are imposed. The Equator Principles[55] set financial industry benchmarks in determining, assessing and managing social and environmental risks in project financing. A detailed evaluation hereof falls outside the scope of this document. Suffice to state that our concerns are that environmental risks could be addressed by means of a credit risk re-pricing, and secondly given that the Equator Principles apply to projects in excess of USD10 million, the usefulness in the SA context may be limited.

7.5 Audit requirements for mining entities

There is no requirement in the MPRDA that holders of rights or permits must be certain types of legal persons. Accordingly private individuals, partnerships, trusts, close corporations and companies can be holders of rights or permits in terms of the MPRDA with the result that holders of rights or permits are subject to varying degrees of statutory control. By way of contrast, the insurance and banking industries in South Africa require[56] inter alia that entities holding a banking or insurance licence must be public companies as defined, with the resultant need to have their financial statements audited as required in terms of section 30 of the Companies Act.

Notwithstanding that entities holding rights or permits in terms of the MPRDA are not necessarily public companies as defined, persuasive arguments could be advanced that the requirements contained in section 30(2)(b) of the Companies Act that mining activities per se fall within the definition of public interest due to the nature of the activities, and would then require entities to be audited.

One needs to be mindful that the costs of an annual audit may be prohibitively expensive and may frustrate the objectives of the MPRDA dealing with transformation in the mining industry. Secondly, from an environmental perspective the audit assurance as to the fact that the financial statements in their entirety "fairly represent" the financial affairs of the entity constitutes more than what is required to obtain "environmental assurance". More limited forms of assurance are contained in ISRS 4400[57] and ISRE 2400,[58] for instance. However, both of these focus on financial assurance, whereas the environmental assurance contemplated would firstly give some form of assurance as to the adequacy of the financial rehabilitation provision in absolute terms. What seems to be required is some additional form of qualitative assurances as to the substantial compliance with environmental legislation as well as the terms and conditions of permits and licences issued in terms of such legislation. It is accordingly recommended that consideration be given to the content of such an assurance engagement as well as the wording to be used in the issuance of such an assurance report.

In essence, much of the concern surrounding inadequate financial reporting could be resolved by means of the adoption of customised accounting and/or disclosure standards to apply to mines, which disclosures would be submitted annually to DMR.

55. Accessed via http://equator-principles.com/resources/equator_principles.pdf.
56. Banks Act 94 of 1990 section 13(2)(c) and Long-Term Insurance Act 52 of 1998 section 9(1)(3).
57. International Standard on Related Services 4400 "Engagements to Perform Agreed-upon Procedures regarding Financial Information".
58. International Standard on Review Engagements 2400 "Engagements to Review financial Statements".

8. CONCLUSIONS AND KEY RECOMMENDATIONS

8. CONCLUSIONS AND KEY RECOMMENDATIONS

The system through which financial provisions are made for mine closure is a relatively complex and dynamic one that relies on a number of coordinated working parts for it to work adequately. High levels of commitment and vigilance are also necessary for success from the authorities, the mining industry, shareholders and other stakeholders. Within the system there are a number of key areas where there is room for improvement. These have been highlighted in this report with a view to catalysing needed discussion regarding their workability and potential adoption. The following summary of recommendations is provided in this regard:

The estimation and adequacy of financial provisions:

- Elevation, enhancement and regular updating of the DMR guidelines for the evaluation of the quantum of closure-related financial provisions.
    - Augmentation of the guidelines to ensure that they remain clear, responsive to changes and actively draw on industry/stakeholder experience and advances on an ongoing basis.
    - Drawing on other relevant resources such as the 2008 DWA best practice guideline series and the 2007 CoM & Coaltech guidelines on rehabilitation.
    - Clarifying links between the EMP guidelines and the DMR financial provision calculation guidelines.
    - Incorporation of measures to incentivise concurrent rehabilitation.
- Greater and more structured use of the independent review mechanism when assessing the adequacy of financial provisions.
- Enhancement of the SAMREC code to allow for greater clarity on how environmental costs need to be taken into account, including potential links to the DMR guidelines for the evaluation of the quantum of closure-related financial provisions.
- Greater public access to data and information on financial provisions.

Securing financial provisions using financial instruments:

- Amendment of MRPDA to align with section 10(1)(cP) read with section 37A of ITA.
- Clarity surrounding insurance for unplanned closure vs insurance as a disguised form of performance or credit guarantee.
- Greater prescription regarding investment of funds in trust for rehabilitation along lines of pension fund regulations and further modification of section 37A of ITA to invest in credit-graded government instruments only.
- The use of legally robust contract documentation in context of guarantees, insurance products and trust funds established in context of section 41 of MPRDA.
- Greater assurance regarding the creditworthiness of third parties involved in issuing financial instruments.
- Legislative amendments required to obtain greater protection on insolvency and impact of the application of the business rescue provisions of the Companies Act.
- The robustness of these recommendations may be compromised given the capacity and resource constraints at DMR.

Financial reporting of environmental risks and closure liabilities:

- Problems were indicated with regard to the compatibility of environmental concerns within the accounting regulatory framework. These included problems regarding accurate quantification, qualitative materiality, primary purpose of the audit, uses of the financial statements not primarily aimed at detection of environmental non-compliance. These problems seem to point towards the need for a customised accounting standard to deal with mining and related disclosures.
- Recommendations with regard to improved G3 guidelines and integrated reporting: the guidelines need customisation in the SA context, timeframes for compliance are to be stipulated, substantial compliance is required.
- Brief analysis of other accounting and auditing standards and frameworks and how to apply or modify in environmental context: issues to explain or analyse are materiality issues, non quantification of uncertain contingent liabilities, forward looking statements, adjustable events.
- Recommendations regarding auditing requirements with regard to financial provisions: public interest requirement in companies act, but modified form of negative assurance as opposed to full scale audit to be investigated.

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9. REFERENCES

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10. ANNEXURES

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Appendix 1: List of people interviewed (alphabetical order)

Name	Organisation
Johan Beukes	Coaltech
Hein Boegman	Gauteng Africa Mining Leader PricewaterhouseCoopers Inc
Jan Briers	DMR Western Cape
Andrew Brown	Golder Associates
Susie Brownlee	Independent environmental management consultant
Peter Carrick	Namaqualand Restoration Initiative, Plant Conservation Unit, UCT
Herman Cornelissen	MINTEK
Reagon Craig	Sanlam Investment Management
Quentin Dollman	AfriSam
Roger Dixon	SAMREC
Stephen Duffett	De Klerk & Van Gend Attorneys Inc
Jon Duncan	Old Mutual Investment Group South Africa
Melissa Fourie	Centre for Environmental Rights
Wayne Hilton	Sanlam Investment Management
Heather Jackson	Head: Socially Responsible Investments Cadiz Asset Management
Andrew Johnstone	GCS Environmental
Francois Joubert	Capital 5 Sustainability Strategies
Neels Labuschagne	Exxaro
Nikisi Lesufi	Chamber of Mines
Maryna Mohr-Swart	Environmental and Sustainability Solutions
Neil Morris	Director Climate Change & Sustainability Services KPMG Services
Stephina Mudau	Chamber of Mines
Shireen Naidoo	Director Climate Change & Sustainability Services KPMG Services
Dawie Otto	Digby Wells Environmental
Koos Pretorius	Federation for a Sustainable Environment
William Pulles	Golder Associates
Alison Ramsden	Director PricewaterhouseCoopers Inc
Stefan Smith	Associate Director PricewaterhouseCoopers inc
Dan Sonnenberg	SANBI Grasslands Programme
Ebrahim Takolia	Deloitte Mining Advisory Services
Phil Tanner	Independent and Digby Wells Environmental
Graham Terry	Executive Director SAICA
Dina Townsend	Centre for Environmental Rights
Dr Anthony Turton	Independent Environmental Advisor
Ingrid Watson	WITS Centre for Sustainability in Mining
Barbara Wessels	Digby Wells Environmental

Appendix 2: Standard trust deed (individual) used by DMR

DEED OF TRUST

Made and entered into by and between

____

(hereinafter referred to as the 'Founder')

AND

____

(the name(s) of the Trustee(s))

1. DEFINITIONS

In this Agreement, the following expressions have the meaning respectively set opposite them unless it appears otherwise from the context:

1.1. 'the Acts and Regulations' means all the relevant laws of the Republic of South Africa and the regulations thereunder, being *inter alia*, the Minerals Act, 1991, the Atmospheric Pollution Prevention Act, 1965, the National Water Act 1998, and any legislation and regulations which may be imposed from time to time to control the management of all the impacts of mining activities.

1.2. 'beneficiary's Accounts' means separate accounts in the accounting records of the Trust to be maintained and administered by the Trustees in respect of the beneficiary as the case may be which are required by this document.

1.3. 'the beneficiary' means _________________________

1.4. 'the Commissioner' means the Commissioner for the South African Revenue Service as referred to in the Income Tax Act No 58 of 1962 as amended ('the IT Act').

1.5. 'the DMD' means the Director Mineral Development for the Province concerned of the Department of Mineral and Energy.

1.6. 'the Founder' means ____________________, a natural person, who is engaged in mining activities in the __________________ Province at ____________________ (and the ______________ Province at ____________________), including in his representative capacity as representative of a company duly incorporated in the Republic of South Africa and/or a Trust registered with the Master of the High Court.

1.7. 'the _________________ Rehabilitation Trust' means a Trust created in terms of the Provisions of clause 3 hereof.

1.8. 'Statutory Obligations' mean the obligations described in clauses 2.2 and 2.3 of the recordal, clause 2.

1.9. 'the Trustees' means __________________, ____________________, ___________________________ and _______________________ jointly, who have agreed to be the first trustees of the ______________ REHABILITATION TRUST.

2. RECORDAL

1.1 The Founder is engaged in mining activities consisting of ______________________
____________________.

1.2 The beneficiary is legally obliged to carry out rehabilitation and to prevent and control pollution at its mining operations in terms of the Acts and Regulations. The costs to be covered are set out in sections 10(1) (cH) (i) (A) (B) (C) of the IT Act.

1.3 For the purpose of making provision for the discharge of the beneficiary's obligations as defined in clause 2.2 and contingent liabilities as set out in point 2.2 above, the Founder is desirous of creating a Rehabilitation Trust to receive, hold and apply such amounts as may be contributed by the beneficiary for the purpose of covering the costs, other than costs which are required in terms of any law to be incurred on an ongoing basis during the life of the mine or part of the mine. The costs will cover obligations discharged at the time of or after the discontinuation of the operations on a mine or part of a mine.

1.4 The Founder wishes to create a Trust for the benefit of the beneficiary and for this purpose wishes to donate R100.00 (one hundred rand) to the Trustees of the trust.

3. THE TRUST AND ITS OBJECTS

3.1 There is hereby created with the approval of the Commissioner for the South African Revenue Service in accordance with section 10(1)(cH) of the IT Act a Trust called the __________________ **REHABILITATION TRUST**.

3.2 The sole object of the Trust is to act as the financial provider for expenditure which the beneficiary is required to undertake at the time of or after the discontinuation of operations on a mine or part of a mine in order to comply with the Statutory Obligations.

3.3 The Trust shall be a body corporate having perpetual succession and be capable of acquiring and disposing of and owning property and assets and contracting in its own name and suing and being sued in its own name. The rights and obligations of the Fund-shall vest in it independently of its beneficiary and/or contributing company.

4. DONATION

4.1 The Founder hereby irrevocably donates the sum of R100.00 (one hundred rand) to the Trustees in trust, who in their capacity as such, hereby accepts such donation for the purpose and subject to the conditions of this Trust.

4.2 The donation made in terms of clause 4.1 hereof shall immediately vest in the Trustees but always subject to the terms of this Deed.

5. ADMINISTRATION OF THE TRUST

5.1 Trustees appointed by the Founder shall administer the Trust.

5.2 The Trustees shall not receive any remuneration from the Trust for their services.

5.3 There shall at all times be not less than two or more than ______________ Trustees.

5.4 The Trustees shall hold office until they resign or are deemed to have vacated their offices in terms of clause 6.

5.5 The Trustees shall control and administer the Trust, and shall perform and discharge the duties incumbent on them hereunder.

6. RESIGNATION OF TRUSTEES

6.1.1 Should a Trustee resign then the remaining Trustees shall immediately appoint a Trustee to fill that vacancy

6.1.2 A trustee may resign at any time on giving notice in writing to the remaining Trustees of his intention to do so and shall in any case be deemed to have vacated his office if he is no longer employed by ___________________ _________________________ or any of its subsidiaries. However the Commissioner in consultation with the DMD may upon application by the Trustees grant approval for a non-employee to be appointed as a trustee.

7. CHAIRMAN AND VOTING

7.1 The Trustees shall from time to time nominate one of their numbers to be Chairman of the Trust and he shall continue to be Chairman until he resigns from that office or ceases to be a Trustee.

7.2 Should the Chairman be absent at any meeting of the Trustees, the Trustees present shall appoint one of their number as Chairman to preside at that meeting.

7.3 Questions arising at meeting of Trustees shall be decided by a simple majority of votes each Trustee personally present having one vote, and in the case of equality of votes the Chairman of such meeting shall have a casting vote.

8. SECRETARY

The Trustees shall appoint a Secretary (which may be a company), who shall not be remunerated with monies from the Trust. The Secretary shall, whenever required to do so by any one Trustee, convene a meeting of the Trustees and be responsible for the minutes to be kept of all meetings and decisions of the Trustees.

9. MEETINGS AND QUORUM

9.1 The Trustees shall meet from time to time to transact the business of the Trust and the necessary quorum for any such meeting shall be two Trustees personally present. Reasonable notice of every such meeting shall be given to each Trustee and all meetings of the Trustees shall, unless otherwise decided by the Trustees, be held in ___________ ______________________________.

9.2 A resolution signed by all the Trustees shall have the same effect as if it had been passed at a duly constituted meeting.

10. TRUSTEES' LIABILITY

10.1 The Trustees shall not be answerable or accountable for any loss arising out of their administration of the Trust, or in respect of any depreciation of any investment of the Trust, unless such loss or depreciation shall occur through their wilful misconduct or gross negligence in which event only the Trustees concerned and not all the Trustees shall be jointly and severally liable.

10.2 The Trustees shall have no responsibility or liability for the efficacy of the measures taken by it in terms of clause 16 or for the sufficiency of contributions and amounts paid by the beneficiary of the Trust in terms of clause 14.

10.3 The Trustees shall not have any liability whatsoever in respect of the creation of any of the conditions referred to in the recordal in clause 2 caused by the operations of the beneficiary or in respect of any claims arising from the presence of such conditions.

10.4 The beneficiary indemnifies the Trustees against claims made against the Trustees arising from the loss or depreciation referred to in this clause 10 in respect of its monies (other than as a result of wilful misconduct or gross negligence on the part of the Trustees) or arising as a result of the measures taken on its behalf proving to be ineffective and/or the contributions and/or amounts obtained from it proving to be insufficient.

11. SECURITY BY THE TRUSTEES

The Trustees shall not be required to lodge security with the Master of the High Court or any other official or authority in terms of the Trust Property Control Act No. 57 of 1988 or any other law requiring that security be lodged with any official or authority for the due performance of their duties hereunder.

12. TRUSTEES' POWERS

12.1 The Trustees shall have general control over the funds of the Trust and shall strive to attain the sole object for which the Trust is established.

12.2 The Trustees shall have plenary powers to enable them to achieve the sole object of the Trust.

12.3 The Trustees shall receive, hold, and apply amounts as may be contributed to the Trust in terms of this agreement by the beneficiary, which amounts have been approved by the DMD, together with the net income thereon. Except as may be otherwise provided herein, the Trustees shall not distribute any of its profits or gains to any person and shall use the funds solely for the objects for which the Trust has been established.

12.4 The Trustees in their personal capacity shall not engage in any trade, undertaking, or business of the Trust nor shall participate in any of the affairs, of the Trust, or provide any financial assistance or services or facilities other than such as required in terms of clause 12.3.

12.5 The management of the affairs and all the powers of the Trust shall vest in the Trustees and without derogating from the generality of the foregoing, the Trustees shall have full legal power:

12.5.1 to invest, realise and re-invest the contributions made to the Trust by the beneficiary and the net income accrued thereon on such terms and at such rates of interest as the Trustees shall decide provided that they shall be limited to making investments in institutions and investment vehicles as referred to in section 10 (1)(cH) (ii), (aa), (bb) and (cc) of the IT Act;

12.5.2 to appropriate firstly the net income defined in 13.6 and secondly the contributions and/or amounts paid in terms of clause 14 for the measures taken for compliance with the Statutory Obligations of the beneficiary;

12.5.3 to institute any legal action for the recovery of monies owing to the Trust and to prosecute, compromise, settle or withdraw any such action;

12.5.4 to execute against the corporeal, incorporeal, movable and immovable property of any of the Trust's judgement debtors;

12.5.5 to execute all documents for and on behalf of the Trust and in this regard to delegate their authority so to execute to two of the Trustees or to one of the Trustees and the Secretary of the Trust; and

12.5.6 generally to perform all acts connected with any of the Trust's affairs.

13. TRUST'S BOOKS OF ACCOUNT AND ACCOUNTING PROCEDURES

13.1 The Trustees shall cause proper books of account to be kept for the Trust and shall appoint independent auditors to report on the financial statements for each financial year of the Trust.

13.2 The financial statements of the Trust for each financial year (which shall be reckoned from 1 March to 28 February) shall be forwarded by the Trustees to the beneficiary of the Trust and to the Commissioner and the DMD within six calendar months after the end of each financial year of the Trust.

13.3 The Trustees shall open a banking account in the name of the Trust, which shall be operated upon by the joint signatures of one of the Trustees and the secretary, or another duly appointed authorised joint signatory.

13.4 All documents required to be signed or executed on behalf of the Trust shall be so signed or executed by the person or persons authorised thereto by resolution of the Trustees.

13.5 All costs, charges and expenses of administering the Trust shall be chargeable to and be borne by the Trust. Such costs, charges and expense shall be paid out of income of the Trust.

13.6 The balance of the gross income remaining in any financial year of the Trust after deducting such costs, charges and expenses shall be net income for the financial year, but if such costs, charges and expenses exceed the income, then the excess shall be the net loss for that financial year.

13.7 Such net income or net loss, as the case may be, shall be transferred (credited/debited) to the account of the beneficiary. Should there be a multiple of beneficiaries, the net income or net loss shall be allocated to the respective accounts on a proportionate basis.

13.8 The Trustees shall not be permitted to distribute, except as may otherwise be provided herein, any of the funds of the Trust to any person and shall utilise the Trusts solely for investment or the objects for which the Trust has been established.

13.9 No surplus funds will be refunded to the Founder or any other person (natural or juristic) but will be dealt with in accordance with paragraph 18.2.

14. ESTIMATES OF COST OF COMPLIANCE WITH THE STATUTORY OBLIGATIONS AND CONTRIBUTIONS TO THE TRUST

14.1 Annually but at least ninety days before the end of its financial year, the beneficiary shall cause written estimates to be prepared, by suitably qualified persons, of the probable cost of measures other than costs which are required in terms of any law to be incurred on an ongoing basis during the life of a mine or part of a mine. The estimates may be made separately in respect of each duty, requirement or function of each group of duties, requirements, or functions as may be necessary or convenient. The estimates shall be certified as being fair by the beneficiary and shall thereafter be forwarded together with the calculations per formula referred to in clause 14.2 for approval to the DMD, on an annual basis.

14.2 The beneficiary shall before the end of its financial year concerned pay into the bank account of the Trust the approved contribution towards the estimated cost of implementing the measures so approved. The contributions shall be calculated in accordance with the formula as set out in section 11(hA) of the IT Act.

15. APPLICATION FOR AN ANNUAL CONTRIBUTION WITH THE DMD

15.1 The DMD shall upon approval of the contributions, issue a certificate confirming that they are satisfied with the contributions and forward it to the beneficiary. The beneficiary shall forward the certificate to the Commissioner together with the income tax return for that particular year of assessment. The certificate will reflect the following:

- that the contribution has been approved and complies with the provisions of clause 2.2 and 2.3;
- the year of assessment to which the contribution relates;
- the specific amount which has been approved, which should be broken down separately for each mine;
- that the taxpayer has complied with all the requirements of sections 11(hA) and 10(1)(cH) of the IT Act.

15.2 The Commissioner will only allow a deduction of the amount of the contribution as reflected on the certificate.

16. COMPLIANCE WITH THE STATUTORY OBLIGATIONS

16.1 The Trustees undertake to ensure that the Statutory Obligations, as stated in clauses 2.2 and 2.3 herein, shall be properly carried out by the beneficiary in accordance with the requirements laid down by the DMD. The funds will be placed at the disposal of such beneficiary to carry out the Statutory Obligations as and when so required. This undertaking shall be a stipulation in favour of the DMD and be enforceable by him.

16.2 In fulfilling the before mentioned undertaking the amount made so available by the Trustees will be limited to the amount which stands to the credit of the beneficiary concerned in the books of the Trust.

16.3 Any withdrawals of amounts from the fund shall be endorsed by the DMD.

16.4 Should there be a balance standing to the credit of any beneficiary after all the measures required to be taken in order to comply with its Statutory Obligations have been executed to the satisfaction of the DMD, the said balance shall be paid to a body referred to in 18.

17. CESSATION OF MINING ACTIVITIES AND SHORTFALL

17.1 Should a beneficiary decide to terminate its mining operations (other than a temporary cessation of such operations) and/or should the beneficiary go into liquidation prior to it having complied with all of the Statutory Obligations as set out in clause 2.2 and 2.3, which it may have, it shall, not earlier than three months and not later than one month prior to taking any steps for the winding up of such mining operations or going into liquidation, as the case may be, have final estimates prepared of the probable cost of compliance with such outstanding Statutory Obligations which shall be certified and approved as provided in 14.1.

18. 17.2 On or after the date of termination of the mining activities, should the total amount of the final estimates as so approved exceed the total amounts standing to the credit of a beneficiary's account, the beneficiary shall forthwith pay to the Trust the shortfall.

19. TERMINATION OF THE TRUST

19.1 The Trust may only be terminated after all the beneficiary's obligations including any post closure obligation set out in terms of clauses 2.2 and 2.3 have been met to the satisfaction and approval of the DMD.

19.2 Should any amount and/or other assets remain after the Statutory Obligations as set out in clauses 2.2 and 2.3 have been met to the satisfaction of the DMD those amounts and other assets should be transferred to a company society, or other association of persons or a trust which fulfil the requirements of section 10(1)(cH) of the IT Act, provided such transfer has been approved by the Commissioner.

20. VARIATION OF THIS AGREEMENT

The provisions of this agreement may from time to time be amended by a resolution of the Trustees and beneficiary and after the prior approval of the Commissioner.

21. CONSEQUENCES FOR NON COMPLIANCE WITH THE TRUST DEED AND THE PROVISIONS OF SECTION 10(1)(cH)

The Commissioner will apply the provisions of section (10)(1)(cH), (a), (b) and (c) of the IT Act in the case of non-compliance.

THUS done and signed in ____________________on the _______________day of ___________________________________ by the Founder.

AS WITNESSES:
1. ___________________________
2. ___________________________

____
For and on behalf of

THUS done and signed in __________________________ on the ________________ day of _______________________ by the Trustee.

AS WITNESSES:
1. ___________________________
2. ___________________________

____
For and on behalf of

THUS done and signed in ______________________on the ________________ day of _____________________________ by the Trustee.

AS WITNESSES:
1. ___________________________
2. ___________________________

____
For and on behalf of

THUS done and signed in _______________________ on the ________________ day of ___________________________ by the Trustee.

AS WITNESSES:
1. ___________________________
2. ___________________________

____
For and on behalf of

THUS done and signed in _______________________ on the ________________ day of ___________________________ by the Trustee.

AS WITNESSES:
1. ___________________________
2. ___________________________

____
For and on behalf of

THUS done and signed in _______________________ on the ________________ day of ___________________________ by the Trustee.

AS WITNESSES:
1. ___________________________
2. ___________________________

____
For and on behalf of

Appendix 3: Commentary on standard trust deed (individual) used by DMR

We set out below a concise commentary on certain of the provisions of the trust deed which in our view are relevant to the present discussion.

Please note that:
- The comments below are not intended to be exhaustive.
- The authors have not had the opportunity to discuss these issues with the DMR and accordingly the comments below may change should such input or consultation with the DMR occur.

Clause 1.1

This paragraph refers to "all relevant laws of the Republic of South Africa ... which may be imposed from time to time to control the management of all the impact of mining activities". It is submitted that as a minimum, explicit reference should be made to the following applicable legislation, which the trust deed does not currently mention by name:
- National Environmental Management Act 107 of 1998
- Mineral and Petroleum Resources Development Act 25 of 2002
- National Environmental Management: Air Quality Act 39 of 2004
- National Environmental Management: Biodiversity Act 10 of 2004
- National Environmental Management: Waste Act 59 of 2008
- National Environmental Management: Protected Areas Act 57 of 2003
- Relevant Land Use Planning Ordinances
- Companies Act 71 of 2008 to the extent that the mining or prospecting rights holder is subject to the provisions of this act.

Clause 1.3

This clause deals with the beneficiary, which seems to be the mining entity concerned. There are various other clauses that require the consent of the DMR (such as clause 6.1.2 regarding the approval of change of trustees if a non employee becomes a trustee, approval of applying amounts contributed to the trust (clause 12.3), supplying audited financial statements to the DMR (clause 13.2), compliance with statutory obligations defined as a stipulation in favour of the DMR and enforceable by him (clause 16.1), withdrawal of amount from the funds shall be endorsed by the DMR (clause 16.3), and termination of trust with approval of DMR (clause 18.1).

The concerns as to the impact of this right of enforcement by the DMR in the event of the insolvency of the beneficiary and whether the stipulation in favour of the DMR would be protected on insolvency of the beneficiary we believe merit closer analysis. Our submission would be that the DMR itself should be included as a beneficiary, with an additional clause that would trigger the right to have assets or investments of the trust distributed to the DMR in the event of a non-compliance with the provisions of section 41 and give effect to the provisions of section 41(2), in particular entitling the minister to utilise the funds provided in terms of section 41 where the entity itself fails to or is unable to conduct the requisite rehabilitation contemplated in section 41 of the MPRDA.

Clause 1.6

This clause contemplates that the founder be a natural person which may warrant amendment to allow a juristic entity to be the founder in the event of larger or listed mining entities.

Clauses relating to the appointment and vacation of office by trustees (clauses 5 and 6)

Trust deeds typically excluded certain people from being able to be appointed as trustees, which is absent from this trust deed. We accordingly submit that consideration be given to making certain persons ineligible to act as trustees, similar to the provisions of section 69 of the

Companies Act. This would include persons prohibited by a court, declared to be a delinquent as defined in section 162 of the Companies Act, unrehabilitated insolvent, persons removed from office of trust on grounds of misconduct involving dishonesty, persons convicted and imprisoned without the option of a fine for offences such as theft, fraud, forgery, perjury.

Clause 6.1.2

This provides for the vacating of the office of trustee should the trustee no longer be employed by the mining entity concerned and as such would seem to suggest that the duty of care, diligence and skill as contemplated in section 9 of the Trust Property Control Act 57 of 1988 would cease in respect of the affairs of the trust from that date onwards. This appears to be in contrast with the provisions of section 38(2) of the MPRDA which contemplates joint and several liability of directors for "any unacceptable negative impact on the environment … caused by the company … they represent *or represented"* (our emphasis). It is therefore recommended that the liability and responsibilities of trustees in terms of the trust deed be aligned with the provisions of section 38 of the MPRDA.

It is furthermore unclear why the office of trusteeship appears to be linked to that of employment by the mining entity unless approved by the DMR. The robustness of the trust and the manner in which it achieves the compliance with the obligations imposed by section 41 of the MPRDA would in our view be enhanced to encourage the appointment of independent trustees with expertise in the area, as well as the appointment of non-executive directors of the mining entity.

Our submission furthermore would be to align the liability of trustees more closely to the provisions dealing with liability of directors in terms of section 77 of the Companies Act, as it would appear anomalous that the same persons may attract different degrees of liability in terms of the trust deed relative to the Companies Act.

Clause 10

This clause purports to indemnify trustees inter alia against losses arising from such instances as a depreciation of investments of the trust, efficacy of rehabilitation measures.

It is submitted that the provisions of clause 10 should be aligned with the provisions of section 9 of the Trust Property Control Act, which explicitly states that any provision contained in a trust deed that purports to exempt a trustee from or indemnify him against liability for breach of trust where the requisite degree of care, diligence and skill is "reasonably expected from someone who manages the affairs of another".

In addition, we submit that the provisions of clause 10 of the Trust deed should also be relooked at having regard to the provisions of section 34 of NEMA.

Clause 12.5.1

This clause limits the investments of the trust to institutions and investments referred to section 10(1)(cH) of the ITA. This section was repealed by the Revenue Laws Amendment Act[59], thereby requiring amendment to the trust deed.

It is submitted that the reference should read "section 10(1)(cP) the receipts and accruals of a company or trust contemplated in section 37A". Section 37A (reproduced in its entirety in Appendix 3) in turn limits the investments to be made by the trust to financial instruments issued in terms of section 37A(2) by:

The company or trust contemplated in subsection (1) may only hold—
a) financial instruments issued by any—
    i) collective investment scheme as regulated in terms of the Collective Investment

59. 20 of 2006.

Schemes Control Act, 2002 (Act No. 45 of 2002);
ii) long-term insurer as regulated in terms of the Long-Term Insurance Act, 1998 (Act No. 52 of 1998);
iii) bank as regulated in terms of the Banks Act, 1990 (Act No. 94 of 1990); or
iv) mutual bank as regulated in terms of the Mutual Banks Act, 1993 (Act No. 124 of 1993);

b) financial instruments of a listed company unless—
i) those financial instruments are issued by a person contemplated in subsection (1)(d); (this refers to someone who holds a mining licence or who engages in mining activities) or
ii) those financial instruments are issued by a person that is a connected person in relation to a person contemplated in subsection (1)(d);

c) financial instruments issued by any sphere of government in the Republic; or
d) any other investments which were held by that company or trust before 18 November 2003.

Similar amendments are recommended to clauses 3.1,18.2, 20, 12.5,15.1 where reference is made to the now repealed section 10(1)(cH) of the Income Tax Act.

The above restrictions as to the type of assets that may be invested in are certainly to be welcomed. However, our submission is that additional measures should be imposed to restrict investments to only those where the underlying capital invested is guaranteed or protected, i.e. only investments where there is no risk of a downward movement in investment value should be allowed. This should in our view result in the investment risks being limited to the solvency risk of the entities referred to above only. A further recommendation would be to impose asset spreading regulations so as to limit the exposure to a single financial institution, insurer, bank or similar to a maximum percentage of total assets belonging to the trust. Please refer to the discussion under section 6.2 of the main report dealing with the investment options.

Clause 13.1

This clause requiring the books of account of the trust to be audited is to be welcomed. However, our recommendation is that greater certainty be obtained as to the exact content of such audit assurance. In this regard, our recommendation is that the audit report should give additional assurance as compliance with the provisions of the trust deed and in particular as to the appropriateness or otherwise of the measures referred to in clauses 14 (calculation of estimates to ensure compliance with statutory obligations), compliance with statutory obligations (clause 16) and shortfall or surplus arising once mining activities have ceased (clause 17 and 18).

Clause 13.5

This clause purports to transfer the net income or loss “to the account of the beneficiary” and such net income or loss shall be allocated to multiple beneficiaries on a proportionate basis.

It is submitted that this clause be aligned with section 25B(4) of the Income Tax Act which expressly prohibits the “flow through” of losses to beneficiaries for income tax purposes.

Secondly it appears clear in law that beneficiaries in their capacity as beneficiaries cannot assume liability for the debts of the trust although such assumption of liability could arise by way of contract or should such beneficiary also be a trustee.[60]

It is accordingly recommended that this concept of allocation of losses to beneficiaries with the presumably resultant obligation to “make good such loss” be dealt with in more certain legal terms.

Clause 14

This clause purposes that the beneficiary shall cause written estimates to be prepared of the probable cost of measures required other than measures required to be incurred on an ongoing

60. Refer to Walter Geach with Jeremy Yeats Trusts: Law and Practice Juta & Co Ltd 2008 at 128.

basis during the life of the mine, and that the estimates are to be "certified as being fair by the beneficiary". In addition, the beneficiary shall "pay into the bank account of the Trust the approved contribution towards the estimated cost of implementing the measures so approved".

Our submission is that this clause needs to be evaluated more carefully from a legal perspective, as typically the duties and responsibilities contemplated in this clause are those that attach to trustees and not beneficiaries.

Clause 19

This clause provides for the amendment of the trust deed and requires the prior approval of the Commissioner for Inland Revenue. It is submitted that consideration be given to such amendment requiring the prior approval of DMR at a minimum and preferably DWAF as well.

Clauses of trust aimed at ensuring provisions of MPRDA cross reference with clause 20.

The trust deed contains various clauses aimed at ensuring compliance with, inter alia, section 41 of the MPRDA, for instance the obligation to ensure that the financial statements shall be audited and copies submitted to the DMR (clause 13.2), and an undertaking by the trustees to ensure that the statutory obligations are complied with and properly carried out.

Given the capacity and resource constraints at DMR, the likelihood that the DMR would have the capacity to monitor compliance and enforcement with the provisions of the trust deed would seem uncertain and in fact unlikely. It is accordingly submitted that the trust deed provide a clause that the trustees shall become personally liable for failure to administer any provisions of the trust deed as a means of self-regulation.

This could occur by means of an expansion of the provisions of clause 20 of the trust deed which provides for the Commissioner for Inland Revenue to apply the provisions of section 10(1)(cH) of the Income Tax Act providing for a punitive tax treatment in the event of non-compliance with that section. See comment elsewhere about the proposed correction to the reference to the Income Tax act.

Appendix 4: Standard guarantee wording used by DMR

(BANK OR GUARANTOR'S LETTERHEAD)

REGIONAL MANAGER

....

....

....

Sir

FINANCIAL GUARANTEE FOR THE REHABILITATION OF LAND DISTURBED BY PROSPECTING / MINING (EXECUTION OF ENVIRONMENTAL MANAGEMENT PROGRAMME/PLAN)

1. Concerning the responsibility in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), which is incumbent on .... (hereinafter referred to as 'the mine owner') to execute the environmental management programme/plan approved in terms of the provisions of the said Act for the mine known as .... and situated (give description of property) ......in the magisterial district of .... (Province), I/We ...., in my/our capacity/capacities of .... and as duly authorized representative/s of ...., (hereinafter referred to as 'the guarantor') confirm that the amount of R...................................... (.................. ....), is available to you for the purpose of executing the said environmental management programme/plan.

2. The guarantor, who hereby waives the advantages of the exceptions ***non numeratae pecuniae non causa debiti execussionis et divisionis***, the meaning and the consequences of which is known to the guarantor, undertakes to pay to you the said sum of

   R... (...) upon receipt of a written claim from you to do so and the claim may be submitted by you, if (in your opinion and discretion) the mine owner fails or remains in default to execute the said environmental management programme/plan, or if he ceases mining/prospecting operations, or if his estate is sequestrated, or if he should hand over his estate in terms of the Insolvency acts which are applicable in the Republic of South Africa, or if the guarantor gives written notice to you in terms of clause 5 of this agreement. The said claim may be instituted by you at any stage commencing from the date of signature of this guarantee.

3. The said amount of R...................................... may be held by you on the condition that you, after having complied with all the provisions of the said environmental management programme/plan, will give account to the guarantor of how the amount was appropriated and repay any unappropriated amount to the guarantor.

4. This undertaking is neither negotiable nor transferable, and–

(a) must be returned to the guarantor when giving account to the guarantor in terms of clause 3 above,

(b) shall lapse on the granting of a closure certificate in terms of the Mineral and Petroleum Resources Development Act, 2002, and

(c) shall not be construed as placing any other responsibility on the guarantor other than the paying of the guaranteed amount.

5. The guarantor reserves the right to withdraw from this guarantee after having given you at least <u>three months</u>' written notice in advance of his intention to do so.

Yours faithfully

……………………………………………………………… ……………………………………… ………………

(SIGNATURE) **(SIGNATURE)**

ADDRESS: ……………………………………………………………………

……………………………………………………………………

……………………………………………………………………

……………………………………………………………………

DATE: ……………………………………………………………………

PLEASE NOTE: (1) No amendments and/or additions to the wording of this guarantee will be accepted.

(2) The address of the guarantee must be stated clearly.

(3) This guarantee must be returned to:

……………………………………………………………………

……………………………………………………………………

HDN/plb/eng28.doc

Appendix 5: Commentary on International Council on Mining and Metals 10 principles61

Principle 02 states:
"Integrate sustainable development principles into company policies and practices.
Plan, design, operate and close operations in a manner that enhances sustainable development.
Implement good practice and innovate to improve social, environmental and economic performance while enhancing shareholder value.
Encourage customers, business partners and suppliers of goods and services to adopt principles and practices that are comparable to our own.
Provide sustainable development training to ensure adequate competency at all levels among our own employees and those of contractors.
Support public policies and practices that foster open and competitive markets."

Critique:
The wording of the above principle seems to suggest that these are principles to be strived for, but does not appear to set absolute standards requiring compliance. For instance, to "plan, design, operate and close operations in a manner that enhances sustainable development" or to "improve environmental performance" may be complied with in terms of this principle when a mining entity improves relative to its most recent past, but does not seem to require, in absolute terms, that mining activities should be sustainable.

Principle 04 is likewise of relevance. It requires the implementation of risk management strategies based on valid date and sound science. It provides:

"Consult with interested and affected parties in the identification, assessment and management of all significant social, health, safety, environmental and economic impacts associated with our activities.
Ensure regular review and updating of risk management systems.
Inform potentially affected parties of significant risks from mining, minerals and metals operations and of the measures that will be taken to manage the potential risks effectively.
Develop, maintain and test effective emergency response procedures in collaboration with potentially affected parties."

Critique
The requirement to consult with "interested and affected parties" raises the question as to who determines who these parties are, as failure to identify them appropriately could undermined the efficacy of the principle.
The reference to "manage the potential risks effectively" is likewise open to abuse: does it require effective remediation from an environmental perspective, or does "best practicable means" or affordability i.e. cost vs benefit play a role too?

Principle 06 seeks to provide for continual improvement of environmental performance:

"Assess the positive and negative, the direct and indirect, and the cumulative environmental impacts of new projects – from exploration through closure.
Implement an environmental management system focused on continual improvement to review, prevent, mitigate or ameliorate adverse environmental impacts.
Rehabilitate land disturbed or occupied by operations in accordance with appropriate post-mining land uses.
Provide for safe storage and disposal of residual wastes and process residues.
Design and plan all operations so that adequate resources are available to meet the closure requirements of all operations."

61. International Council on Mining and Metals last accessed on 4 May 2011 at http://www.icmm.com/our-work/sustainable-development-framework/10-principles.

Critique
The requirement to "assess" the environmental impacts refers only to new projects and as such existing projects that may currently or in future damage the environment seem to be excluded from the ambit of this principle.
The second point however seems to require an implementation of an environmental management system to "review, prevent, mitigate or ameliorate adverse environmental impacts". The terms "mitigate or ameliorate" and "adverse" have not been defined: again, do "best practicable means" or reasonable measures play a role, and do the adverse impacts need to be significant or would any impacts qualify?

Principle 07 requires a contribution to **conservation of biodiversity and integrated approaches to land use planning:**

"Respect legally designated protected areas.
Disseminate scientific data on and promote practices and experiences in biodiversity assessment and management.
Support the development and implementation of scientifically sound, inclusive and transparent procedures for integrated approaches to land use planning, biodiversity, conservation and mining."

Critique
The principle seems to afford protection in designated protected areas and not the relevant country as a whole.
The principle does not appear to require rehabilitation to equate to pre-mining bio-diversity.

Principle 08 requires the facilitation and encouragement in **product design, use, re-use, recycling and disposal of products:**

"Advance understanding of the properties of metals and minerals and their lifecycle effects on human health and the environment.
Conduct or support research and innovation that promotes the use of products and technologies that are safe and efficient in their use of energy, natural resources and other materials.
Develop and promote the concept of integrated materials management throughout the metals and minerals value chain.
Provide regulators and other stakeholders with scientifically sound data and analysis regarding our products and operations as a basis for regulatory decisions.
Support the development of scientifically sound policies, regulations, product standards and material choice decisions that encourage the safe use of mineral and metal products."

Critique
A major stumbling block in environmental litigation has been causation in view of the multiplicity of causes and long lead time before adverse symptoms may manifest themselves.

Principle 10 provides for **effective and transparent engagement, communication and independently verified reporting arrangements with stakeholders:**

"Report on our economic, social and environmental performance and contribution to sustainable development.
Provide information that is timely, accurate and relevant.
Engage with and respond to stakeholders through open consultation processes."

Critique
To report on "environmental performance and contribution to sustainable development" seems to suggest that as long as this is improving it is acceptable. There does not appear to be an absolute requirement.

Appendix 6: Extracts from IAPS 1010

These extracts purport to illustrate that compliance with IAPS 1010 may not result in a foregone conclusion or the sufficient level of assurance that no actual breach of environmental laws has occurred.

- Paragraph 7: an audit cannot be expected to detect noncompliance with all laws and regulations (ISA 250, paragraph 2). … the auditor's purpose is not to plan the audit to detect possible breaches of environmental laws … nor are the auditor's procedures sufficient to draw a conclusion on the entity's compliance with environmental laws and regulations or the adequacy of its controls over environmental matters.
- Paragraphs 8 and 9: the auditor is to assess the inherent risk in the financial statements: however to the extent that environmental risks have not been sufficiently identified as risks per se, then whether these risks have been adequately addressed cannot be determined with sufficient certainty. It is acknowledged that the auditor does not necessarily have the requisite expertise. The extent to which reliance on management's estimates of environmental liabilities are justified would therefore have to be evaluated carefully.
- Paragraph 10: Environmental matters inter alia are defined in relation to the consequences of non compliance; non compliance may however not have been detected and as such it may be difficult for the auditor to opine on this.
- Paragraph 12 acknowledges that at 'As of the date of publication of this Statement there are few authoritative accounting standards, whether International Accounting Standards or national standards, that explicitly address the recognition, measurement, and disclosure of the consequences for the financial statements arising from environmental matters'. It is submitted that this places the auditor potentially at an increased risk and as such that extra caution is recommended; exacerbated by the absence of prescriptive guidelines as to the use of experts.
- Paragraph 15 indicates that the industry in which the client operates may be indicative of an increased risk in respect of environmental non compliance.
- Paragraph 18 states that the auditor is to use professional judgement to evaluate the factors relevant to the assessment of inherent risk. This is to be viewed against management's risk assessment procedures. Some entities reviewed have in our view not sufficiently identified environmental risks in their risk assessment processes. How does the auditor address this?
- Paragraph 21 provides guidance to auditors insofar as complex accounting estimates are used in respect of environmental matters (ISA 540). This is to be examined in further detail.
- Paragraph 24: Only if, in the auditor's judgment, environmental matters may have a material effect on the financial statements of an entity, does the auditor need to obtain an understanding of the entity's significant policies and procedures with respect to its monitoring of, and control over these environmental matters (the entity's 'environmental controls.'
- Paragraph 30: It is management's responsibility to ensure that the entity's operations are conducted in accordance with laws and regulations.
- Paragraph 32: The auditor is not, and cannot be held responsible for preventing noncompliance with environmental laws and regulations. Also, as stated in paragraph 9, the detection of possible breaches of environmental laws and regulations is ordinarily beyond the auditor's professional competence. However, an audit carried out in accordance with ISAs is planned and performed with an attitude of professional skepticism, recognizing that the audit may reveal conditions or events that would lead to questioning whether the entity is complying with relevant environmental laws and regulations in so far as noncompliance could result in a material misstatement of the financial statements.
- Paragraph 37: Substantive procedures include obtaining evidence through inquiry of both management responsible for the preparation of the financial statements and key officers responsible for environmental matters. The auditor considers the need to gather corroborative audit evidence for any environmental assertions from sources inside or outside the entity. In certain situations, the auditor may need to consider using the work of environmental experts.
- Paragraph 39: Environmental laws or regulations are evolving, and interpretation may be difficult or ambiguous. Consultation of an expert may be necessary to assess the impact

of these laws and regulations on the valuation of certain assets (for example, assets that contain asbestos). Making a reasonable estimate of liabilities for known obligations may also appear to be difficult in practice; or

- Paragraph 40: In the course of the audit process, for example in gathering knowledge of the business, in the assessments of inherent and control risk, or in performing certain substantive procedures, evidence may come to the attention of the auditor that indicates the existence of a risk that the financial statements may be materially misstated due to environmental matters. Examples of such circumstances include:
  - The existence of reports outlining material environmental problems prepared by environmental experts, internal auditors or environmental auditors;
  - Violations of environmental laws and regulations cited in correspondence with, or in reports issued by, regulatory agencies;
  - Inclusion of the entity's name in a publicly available register, or plan, for the restoration of soil contamination (if one exists);
  - Media comment about the entity related to major environmental matters;
  - Comments relating to environmental matters made in lawyers' letters;
  - Evidence indicating purchases of goods and services relating to environmental matters that are unusual in relation to the nature of the entity's business;
  - Increased or unusual legal or environmental consultants' fees, or payments of penalties as a result of violation of environmental laws and regulations;
- Paragraph 42: If the auditor intends to use the results of such work as part of the audit, the auditor considers the adequacy of the work performed by environmental experts for the purposes of the audit, as well as the expert's competence and objectivity, in accordance with ISA 620.
- Paragraph 45: Normally, 'environmental audits' are performed at the request of management and are for internal use.
- Paragraph 46: The auditor of the entity's financial statements may consider using the findings of 'environmental audits' as appropriate audit evidence. In that situation the auditor has to decide whether the 'environmental audit' meets the evaluation criteria included in ISA 610, 'Considering the Work of Internal Auditing' or ISA 620. Important criteria to be considered are:
- Appendix 1 contains illustrative questions that could be asked by auditors:
  - Do enforcement agencies monitor the entity's compliance with the requirements of environmental laws, regulations or licenses?
  - Have any regulatory actions been taken or reports been issued by enforcement agencies that may have a material impact on the entity and its financial statements?
  - Have initiatives been scheduled to prevent, abate or remedy damage to the environment, or to deal with conservation of renewable and non-renewable resources?
  - Is there a history of penalties and legal proceedings against the entity or its directors in connection with environmental matters? If so, what were the reasons for such actions?
  - Are any legal proceedings pending with regard to compliance with environmental laws and regulations?
  - Are environmental risks covered by insurance?

- Appendix 2 sets out Substantive Procedures to Detect a Material Misstatement Due to Environmental Matters
  - Consider publicly available industry information to consider any existing or possible future environmental matters. Also consider general available media comment, if any.
  - Where available, consider:
  - Reports issued by environmental experts about the entity, such as site assessments or environmental impact studies;
  - Internal audit reports;
  - "Environmental audit" reports;
  - Reports on due diligence investigations;
  - Reports issued by and correspondence with regulatory agencies;
  - (Publicly available) registers or plans for the restoration of soil contamination;
  - Environmental performance reports issued by the entity.

Appendix 7: G3 environmental performance indicators

Environmental Performance Indicators	Concerns/ observations/areas for improvement
Aspect: Materials EN1 Materials used by weight or volume EN2 Percentage of materials used that are recycled input materials	EN1: Disclosure would be improved if disclosure is made of the scarcity of the material, whether it is used "economically" or wastefully. It is also not clear whether the material itself is hazardous and or whether it can cause pollution when in contact with other materials or substances.
Aspect: Energy	
EN3 Direct energy consumption by primary energy source EN4 Indirect energy consumption by primary source	EN3: No disclosure is required to be made of whether the energy is "clean" or not. Disclosure of energy consumption would be more meaningful if disclosed in relation to the size and extent of the mining operations.
EN5 Energy saved due to conservation and efficiency improvements EN6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives EN7 Initiatives to reduce indirect energy consumption and reductions achieved	EN5-6: There is no requirement to state whether previously set targets have been met or not. Section dealing with energy would be enhanced if details such as subsidised pricing structures are included.
Aspect: Water EN8 Total water withdrawal by source	EN8: The disclosure of absolute water withdrawal would be enhanced if it were expressed in relation to total available water resources of the area, whether the mining operation wastes water or uses it judiciously etc.
EN9 Water sources significantly affected by withdrawal of water EN10 Percentage and total volume of water recycled and reused	EN9: What does "affected" mean? There is no requirement to disclose details of the extent to which water is contaminated.
Aspect: Biodiversity	
EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	EN11 et seq.: This does not appear to deal with mining outside of protected areas.

EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	EN12 does not require disclosure of impact of activities other than in protected areas.
EN13 Habitats protected or restored	EN13 could be responded to by stating the hectares that have been rehabilitated without reference to total area affected by mining and not yet rehabilitated.
EN14 Strategies, current actions, and future plans for managing impacts on biodiversity	
EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	
Aspect: Emissions, Effluents, and Waste	
EN16 Total direct and indirect greenhouse gas emissions by weight	EN16 et seq.: Again, relative as opposed to absolute disclosure more meaningful, i.e. must state emissions in relation to size and extent of mining operations. It is uncertain to what extent the quality of disclosure here would be impacted by the fact that the National Environmental management: Waste Act does not apply to mining waste.
EN17 Other relevant indirect greenhouse gas emissions by weight	
EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved	
EN19 Emissions of ozone-depleting substances by weight	
EN20 NO, SO, and other significant air emissions by type and weight	
EN21 Total water discharge by quality and destination	EN21: This does not require pre and post mining water quality disclosure or whether the water was previously fit for human consumption and now no longer is.
EN22 Total weight of waste by type and disposal method	
EN23 Total number and volume of significant spills.	EN23: “significant spill” is not defined.
EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	

EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff Sustainability Reporting Guidelines RG Version 3.0 **Aspect: Products and Services**	
EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation EN27 Percentage of products sold and their packaging materials that are reclaimed by category **Aspect : Compliance**	EN26: The product from mining itself, for instance gold, is benign; it is the activity of mining that has environmental impacts.
EN28 Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations **Aspect : Transport** EN29 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce **Aspect : Overall** EN30 Total environmental protection expenditures and investments by type	EN28: This does not give meaningful assurance as to environmental compliance in an under-regulated country with governmental capacity and resource constraints.

Appendix 8: Memorandum: Legal requirements for financial provision for rehabilitation of mining areas62

A. Introduction

1. The Mineral and Petroleum Resource Development Act, 2002 (MPRDA) is currently the primary legislation governing the environmental regulation of mining, and provides the most specific provisions on financial provision for rehabilitation of mining areas.[63]

2. Jurisprudence on rehabilitation of mining areas is sparse, and to date there has been no judicial consideration of the application of the financial provision requirements in the MPRDA.

3. In addition to general obligations for rehabilitation of environmental damage that exist in a number of environmental statutes, certain key environmental legislation expressly provides for the provision of security in relation to other operations and activities which have an environmental effect.

4. The relevant legislation is dealt with below.

B. The MPRDA

5. In terms of section 37(1) of the MPRDA, the principles set out in section 2 of the National Environmental Management Act, 1998 (NEMA) apply to all prospecting and mining operations and any matter relating to such operations; and serve as guidelines for the interpretation, administration and implementation of the environmental requirements of the MPRDA.

6. In terms of section 38(1)(a) of the MPRDA, the holder of a reconnaissance permission, prospecting right, mining right, mining permit or retention permit must at all times give effect to the general objectives of integrated environmental management laid down in Chapter 5 of NEMA. Section 38(1)(b) provides that such holder must consider, investigate, assess and communicate the impact of his or her prospecting or mining on the environment as contemplated in section 24(7) of NEMA.64 Such holder must, in terms of section 38(1)(c), manage all environmental impacts: in accordance with his or her environmental management plan or programme, where appropriate; and as an integral part of the reconnaissance, prospecting or mining operation, unless the Minister directs otherwise.

7. Section 38(1)(d) of the MPRDA places an obligation on the holder of a reconnaissance permission, prospecting right, mining right, mining permit or retention permit, as far as reasonably practicable, to rehabilitate the environment affected by the prospecting or mining operations to its natural or predetermined state or to a land use which conforms to the generally accepted principle of sustainable development. Section 38(1)(e) makes the holder of any of the above permissions responsible for any environmental damage, pollution or ecological degradation as a result of their reconnaissance prospecting or mining operations that may occur inside and outside the boundaries of the area to which such right, permit or permission relates.[65]

62. Prepared by Melissa Fourie, with inputs from Robyn Hugo, Christine Reddell and Kate Swart, of the Centre for Environmental Rights, in October 2011. This document may be revised and updated from time to time.
63. Various amendments were made to NEMA by the National Environmental Management Amendment Act 62 of 2008. This Amendment Act incorporates all environmental provisions relating to mining, including financial provision, into Chapter 5 of NEMA. However, in terms of section 14(2) of the Amendment Act, any provision relating to prospecting, mining, exploration and production and related activities comes into operation on a date 18 months after the date of commencement of the Mineral and Resources Development Amendment Act, 2008. The latter Act is not in force as the Minister of Mineral Resources has not yet enacted it.
64. It is not clear why the MPRDA has referred to section 24(7) of NEMA. This may have been a typographical error. It appears that a reference to section 24(1) of NEMA may have been what was intended.
65. Section 38(2) pierces the corporate veil and makes the directors of a company or members of a close corporation jointly and severally liable for any unacceptable negative impacts on the environment, including damage, degradation or pollution advertently or inadvertently caused by the company or close corporation which they represent or represented.

8. “Financial provision” is defined in section 1 of the MPRDA as “the insurance, bank guarantee, trust fund or cash that applicants for or holders of a right must provide in terms of sections 41 and 89 guaranteeing the availability of sufficient funds to undertake the agreed work programmes and to rehabilitate the … Mining … areas”.

9. In addition to the provisions in the MPRDA dealing with “financial provision”, both the quantum of and the method for financial provision are dealt with in the Mineral and Petroleum Resources Development Regulations, 2004, promulgated under the MPRDA (MPRDA Regulations). As is set out below, the methods for financial provision set out in the MPRDA Regulations do not specifically mention “insurance” or “cash”, although the definition of “financial provision” in section 1 of the MPRDA does.

10. Regulation 54(1) of the MPRDA Regulations provides that the quantum of financial provision must be determined in a “guideline document” published by the Department of Mineral Resources (DMR) from time to time. The latest version of that guideline, known as “Guideline Document for the Evaluation of the Quantum of Closure-Related Financial Provision Provided by a Mine” is dated January 2005.

11. Section 89 of the MPRDA provides that, in addition to section 5(4),[66] no exploration operation or production operation may commence unless the holder of the rights concerned has provided for a financial provision – acceptable to the designated agency – guaranteeing the availability of sufficient funds for the due fulfilment of all exploration and production work programmes by the holder.

12. In terms of section 41(1) of the MPRDA, an applicant for a prospecting right, mining right or mining permit must, before the Minister of Mineral Resources (the Minister) approves any environmental management plan[67] or programme[68] in terms of section 39(4), make “the prescribed financial provision for the rehabilitation or management of negative environmental impacts”. In terms of section 1 of the MPRDA, “prescribed” means “prescribed by regulation”. The MPRDA Regulations prescribe the quantum and method of the financial provision.

13. Section 41(2) of the MPRDA provides that, if the holder of a prospecting or mining right or mining permit fails to rehabilitate or manage, or is unable to undertake such rehabilitation or to manage any negative impact on the environment, the Minister may, upon written notice to the holder, use all or part of the financial provision contemplated in section 41(1) to rehabilitate or manage the negative environmental impact.[69]

14. Section 41(3) obliges the holder annually to assess his or her environmental liability and increase the financial provision to the satisfaction of the Minister. Regulation 54(2) elaborates on this, indicating that the holder must annually update and review the quantum of the financial provision: in consultation with a competent person; as required in terms of the approved environmental management programme or environmental management plan; or as requested by the Minister.

15. In terms of section 41(4) of the MPRDA, should the Minister not be satisfied with the assessment and financial provision, he or she may appoint an independent assessor to conduct the assessment and determine the financial provision. Regulation 54(3) provides that any inadequacies with regard to the financial provision must be rectified by the holder:

66. Section 5(4) provides that no person may prospect for or remove, mine, conduct technical cooperation operations, reconnaissance operations, explore for and produce any mineral or petroleum or commence with any work incidental thereto on any area without: (a) an approved environmental management programme or plan; (b) a reconnaissance permission, prospecting right, permission to remove, mining right, mining permit, retention permit, technical cooperation permit, reconnaissance permit, exploration right or production right; and (c) notifying and consulting with the land owner or lawful occupier of the land in question.

67. “Environmental management plan” is defined in section 1 as “a plan to manage and rehabilitate the environmental impact as a result of prospecting, reconnaissance, exploration or mining operations conducted under the authority of a reconnaissance permission, prospecting right, reconnaissance permit, exploration right or mining permit, as the case may be”.

68. “Environmental management programme” is defined in section 1 as “an approved environmental management programme contemplated in section 39”.

69. This right to use all or part of the financial provision has apparently been delegated to the Regional Manager in terms of a Ministerial delegation of 12 May 2004.

in an amendment of the environmental management programme or plan; within the timeframe provided for; or as determined by the Minister.

16. In terms of section 41(5), the requirement to maintain and retain the financial provision remains in force until the Minister issues a certificate in terms of section 43 (the so-called "closure certificate") to such holder, but the Minister may retain a portion of the financial provision to rehabilitate the closed mining or prospecting operation in respect of latent or residual environmental impacts. "Latent environmental impact" is defined in Regulation 1 as "any environmental impact that may result from natural events or disasters after a closure certificate has been issued". "Residual environmental impact" is defined in Regulation 1 as "the environmental impact remaining after a closure certificate has been issued".

17. Until the Minister has issued the closure certificate, the holder of a prospecting right, mining right, retention permit or mining permit remains responsible, in terms of section 43(1), for any environmental liability, pollution or ecological degradation, and the management thereof. Section 43(6) also provides that, when the Minister issues a certificate, he or she must return to the holder such portion of the financial provision contemplated in section 41 as the Minister may deem appropriate, but the Minister may retain any portion of such financial provision for latent and or residual environmental impact that may become known in the future.

18. Section 45 deals with the Minister's power to recover costs in event of urgent remedial measures. In terms of section 45(1), if any mining operations cause or result in ecological degradation, pollution or environmental damage which may be harmful to the health or well-being of anyone and require urgent remedial measures, the Minister may direct the holder of the relevant right to: investigate, evaluate, assess and report on the impact of any pollution or ecological degradation; take such measures as may be specified in such directive; and complete such measures before a date specified in the directive. In terms of section 45(2)(a), if the holder fails to comply with the directive, the Minister may take such measures as may be necessary to protect the health and well-being of any affected person or to remedy ecological degradation and to stop pollution of the environment.

19. Section 45(c) provides that the Minister may apply to a High Court to seize and sell such property of the holder as may be necessary to cover the expenses of implementing such measures, and section 45(d) provides that, in addition, the Minister may use funds appropriated for that purpose by Parliament to fully implement such measures. In terms of section 45(e), the Minister may recover an amount equal to the funds necessary to fully implement the measures from the holder concerned.

20. In terms of section 46(1), if the Minister directs that measures contemplated in section 45 must be taken to prevent pollution or ecological degradation of the environment or to rehabilitate dangerous occurrences, but establishes that the holder, or his or her successor-in-title is deceased or cannot be traced or, in the case of a juristic person, has ceased to exist, has been liquidated or cannot be traced, the Minister may instruct the Regional Manager concerned to take the necessary measures to prevent further pollution or degradation, or to make the area safe. Section 46(2) provides that the measures contemplated in section 46(1) must be funded from the financial provision made by the holder in terms of section 41, where appropriate, or if there is no such provision or if it is inadequate, from money appropriated by Parliament for that purpose.

21. From the definition of "financial provision" in the MPRDA (set out above), this provision is apparently intended to cover two types of costs, namely:

    21.1. The costs of undertaking the "agreed work programmes";

    21.2. The costs of rehabilitating the "mining area".

22. The wording of the definition of “financial provision” appears to suggest that this first type of costs relates to implementation of the mining work programme, rather than the environmental management programme. A “mining work programme” is defined in section 1 of the MPRDA as “the planned mining work programme to be followed in order to mine a mineral resource optimally”. In terms of Regulation 10, one of the documents that an applicant for a mining right is required to submit is the mining work programme contemplated in Regulation 11. In terms of section 23 of the MPRDA, when the Minister considers an application for a mining right, one of the considerations is whether the mineral can be mined optimally in accordance with the mining work programme.

23. The inclusion of costs relating to the mining work programme in the definition of “financial provision” appears to be inconsistent with Regulation 54(1) of the MPRDA Regulations. This regulation contains the itemisation of costs making up the quantum of the financial provision, and makes no reference to any costs related to implementation of the mining work programme. This regulation is dealt with in more detail below.

24. In relation to the second type of costs – for rehabilitating the mining area – section 1 of the MPRDA defines the “mining area” as follows:

“(i) in relation to a mining right or permit, … the area for which that right or permit is granted;

(ii) in relation to any environmental, health, social and labour matter and any latent or other impacts thereto, includes:

(a) any adjacent or non-adjacent surface of land on which the extraction of any mineral and petroleum has not been authorised in terms of [the MPRDA] but upon which related or incidental operations were undertaken and, including –

(i) any area connected to such an area by means of any road, railway line, power line, pipeline, cable way or conveyor belt; and

(ii) any surface of land on which such road, railway line, power line, pipeline or cable way is located; and

(b) all buildings, structures, machinery, mine dumps or objects situated on or in that area which are used for the purpose of mining on the land in question.”

25. The effect of the definition appears to be that the “mining area” includes the underground portions of land for which the mining right was granted, but if an environmental impact (either patent or latent) extends to adjacent land, only the surface area is included in the definition of the “mining area”.

26. It therefore seems that the financial provision would have to cover rehabilitation of underground portions of the area for which the mining right was granted, as well as any affected surface areas on adjacent or non-adjacent land on which related or incidental operations were undertaken.

27. Regulation 54(1) provides that the quantum of financial provision must include a “detailed itemisation of all actual costs required for” three separate components:

27.1. Premature closure regarding:

27.1.1. the rehabilitation of the surface of the area;

27.1.2. the prevention and management of pollution of the atmosphere;

27.1.3. the prevention and management of the pollution of water and the soil;

27.2. The prevention of leakage of water and minerals between sub-surface formations and the surface;

27.3. Decommissioning and final closure of the operation;

27.4. Post-closure management of residual and latent environmental impacts.

28. As indicated above, Regulation 54(1) makes no mention of provision being made for costs related to implementation of the mining work programme.

29. A practice has developed in the mining industry in which capital set aside for financial provisions is "phased in", with portions being paid by the mining company upon finalisation of separate project phases rather than being paid upfront as a lump sum. An analysis of the wording of the relevant provisions in the MPRDA and the MPRDA Regulations show that this practice is not sanctioned by applicable legal provisions.

30. As set out above, section 41(1) of the MPRDA states that the applicant must make financial provision – as defined in section 1 of the MPRDA and as read with Regulation 54(1) – "before the Minister approves the environmental management plan … or programme". Since mining may not, in terms of section 5(4) of the MPRDA, commence without an approved environmental management plan or programme, it seems clear that the entire financial provision must be set aside before mining may take place.

    30.1. The wording of section 41(3) and Regulation 54(2), which require the holder annually to reassess their environmental liability and increase the financial provision to the Minister's satisfaction also seems to suggest that the entire financial provision must be set aside at the start of the operation, and reviewed annually thereafter (rather than parts of it being reviewed as they are decided upon in phases).

    30.2. Regulation 53(1) sets out four methods to provide the financial provision required in terms of section 41 to achieve the "<u>total quantum</u>" for the rehabilitation, management and remediation of negative environmental impacts. "Total quantum" seems to envisage the full amount. Again, it seems unlikely that the drafters would have intended that portions of the financial provision could be provided as the project progressed. It is more likely that the intention was for the lump sum to be calculated and set aside (in one of the forms listed below) at the outset of the mining operation.

    30.3. The following are the four methods set out in Regulation 53(1):

        30.3.1. "*An approved contribution towards a trust fund*" as required in terms of section 10(1)(c)(H) of the Income Tax Act, 1962 and "*in the format as approved by the Director-General from time to time*" (Regulation 53(1)(a));

        30.3.2. "*A financial guarantee from a South African registered bank or any other bank or financial institution approved by the Director-General guaranteeing the financial provision relating to the environmental management programme or plan in the format as approved by the Director General from time to time*" (Regulation 53(1) (b));

        30.3.3. A deposit into an account specified by the Director-General (Regulation 53(1)(c));

        30.3.4. "*Any other method as the Director-General may determine*" (Regulation 53(1)(d)).

30.4. Regulation 53(2) relates to the financial provision in the form of a direct deposit into an account specified by the Director-General (Regulation 53(1)(c)), and states that proof of this payment must be submitted prior to the approval of the environmental management plan or programme. As indicated above, since an approved environmental management plan or programme is a requirement for mining to commence, the lump sum of the financial provision in this form must be paid before commencement. It is highly unlikely that only one method of financial provision would be required to be set aside upfront. This must also be the case in relation to the three other methods.

31. For these reasons, the current practice of "phasing in" of capital for the "financial provision" as the mining operation grows, is not provided for in the legislation. There is a strong argument to be made that, even if justifiable, this practice is not sanctioned by law.

32. As set out above, the definition of "financial provision" in section 1 of the MPRDA specifies the methods of "insurance, bank guarantee, trust fund or cash", and section 41 of the MPRDA provides for the financial provision for the rehabilitation or management of negative environmental impacts to be prescribed by the MPRDA Regulations. Regulation 53(1) sets out the four methods of financial provision. Neither "cash" nor "insurance" is specified, but both may, in terms of Regulation 53(1)(d), be a method determined by the Director-General.

C. National Water Act, 1998 (NWA)

33. In terms of section 19, an owner of land, a person in control of land, or a person who occupies or uses the land on which: any activity or process is or was performed or undertaken; or any other situation exists, which causes, has caused, or is likely to cause pollution of a water resource must take all reasonable measures to prevent such pollution from occurring, recurring, or continuing. Such measures may include measures to: cease, modify or control any act or process causing the pollution; comply with any prescribed waste standard or management practice; contain or prevent the movement of pollutants; eliminate the source of pollution; remedy the effects of pollution; and remedy the effects of any disturbance to the bed and banks of the watercourse.70

34. In terms of the Regulation 8(d) of the Regulations on the Use of Water for Mining and Related Activities aimed at the Protection of Water Resources, 1999, every person in control of a mine or activity must protect any existing pollution control measures or replace any existing pollution control measures deleteriously affected, damaged or destroyed by the removing or reclaiming of materials from any residue deposit or stockpile, and establish additional measures for the prevention of pollution of a water resource which might occur, is occurring or has occurred as a result of such operations. In terms of Regulation 11, any person mining or establishing coal residue deposits must rehabilitate such residue deposits so that: all residue deposits are compacted to prevent spontaneous combustion and minimise the infiltration of water; and the rehabilitation of the residue deposits is implemented concurrently with the mining operation.

35. Section 30 of the NWA provides that a responsible authority may "if it is necessary for the protection of the water resource or property", require the applicant for a water use licence to provide security in respect of any obligation or potential obligation arising from a licence to be issued under the NWA. Such security may include a letter of credit from a bank, a surety or a bank guarantee, a bond, an insurance policy, or "any other appropriate form of security" (in terms of section 30(2)). Section 30(5) stipulates that if the responsible authority requires security in the form of an insurance policy, it may require that it be jointly insured under or be

70. In Harmony Gold Mining Co Ltd v Regional Director, Free State Department of Water Affairs and Forestry and others [2006] 4 All SA 366 (W), a directive had been issued to Harmony Gold Mining Company to contribute to the costs of pumping water in a mine shaft near their own in order to prevent the water from flooding the Harmony shaft. Harmony took this directive on review, arguing that the Regional Director who had issued the directive under section 19(3) of the NWA was not empowered to make this order, and that Harmony was only responsible for pollution prevention on its own land. Howie J interpreted section 19(1) of the NWA to mean that the duty to prevent pollution was not confined to the land of the person obliged to take the measures. Harmony was therefore required to contribute to the cost of pumping water on the proximate mine in order to prevent the water flowing into its own shaft and being polluted there.

a beneficiary of the insurance policy, and, where appropriate, the responsible authority must be regarded as having an insurable interest in the subject matter of the insurance policy.

36. Section 30(3) provides that the responsible authority must determine the type, extent and duration of any security required, and section 30(4) expressly stipulates that the duration of the security may extend beyond the time period specified in the licence in question.

37. Section 30(6) provides that any person may apply in writing to the responsible authority to have any security given by that person in terms of this section amended or discharged at any time, which application may not be unreasonably refused.

D. National Environmental Management Act, 1998

38. Various amendments were made to NEMA by the National Environmental Management Amendment Act 62 of 2008 (NEMA Amendment Act). The NEMA Amendment Act incorporates all environmental provisions relating to mining, including financial provision, into Chapter 5 of NEMA. However, in terms of section 14(2) of the Amendment Act, any provision relating to prospecting, mining, exploration and production and related activities comes into operation on a date 18 months after the date of commencement of the Mineral and Resources Development Amendment Act, 2008. The latter Act is not in force as the Minister of Mineral Resources has not yet enacted it.

39. Section 2 of NEMA sets out the national environmental management principles. These include the following: that the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied section 2(4)(a)(i)); that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied (section 2(4)(a)(ii)); that the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied (section 2(4)(a)(iii)); that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied (section 2(4)(a)(viii)); that responsibility for the environmental health and safety consequences of a policy, programme, project, product, process, service or activity exists throughout its life cycle (section 2(4)(e)); and that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment (section 2(4)(p)).

40. Section 28(1) of NEMA vests in every person who causes, has caused, or may cause significant pollution or degradation of the environment, a duty to take reasonable measures to prevent such pollution or degradation from occurring, continuing, or recurring, or, insofar as such harm to the environment is authorised or cannot be reasonably avoided or stopped, to minimise and rectify such pollution or degradation of the environment. Section 28(3) provides that measures required in terms of 28(1) may include: investigating, assessing and evaluating the impact on the environment; ceasing, modifying or controlling any act, activity or process causing the pollution or degradation; containing or preventing the movement of pollutants or the causant of degradation; eliminating any source of the pollution or degradation; or remedying the effects of the pollution of degradation.

41. This duty of care is retrospective according to section 28(1A)(a). It applies to significant pollution or degradation that occurred before the commencement of NEMA, and applies even when the significant pollution or degradation arises or is likely to arise at a different time from the actual activity that caused the contamination, or when such pollution and degradation arises through an act or activity of a person that results in a change to pre-existing contamination.[71]

71. The case of Bareki NO and Another v Gencor Ltd and Others 2006 (1) SA 432 (T) dealt with the claim of a community against a company which had mined asbestos in their area between 1976 and 1981, causing widespread pollution and environmental degradation that had lead to negative health impacts on the community. The case centred on whether Gencor had a duty under the then section 28

42. Most mining operations also require environmental authorisations under NEMA and the Environmental Assessment Regulations, 2010 (EIA Regulations) promulgated under NEMA for certain listed activities associated with mining, such as building haul roads, removing indigenous vegetation and fuel storage.

43. In terms of section 24(5)(b)(ix) of NEMA, the Minister or MEC may make regulations consistent with subsection (4) (which deals with procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment), laying down the procedure to be followed in respect of, among other matters, financial provision. Section 24(5)(d) also allows the Minister or MEC to make regulations requiring, after consultation with the Minister of Finance, the provision of financial and other security to cover the risks to the State and the environment of non-compliance with the conditions attached to environmental authorisations.

44. In terms of Regulation 33 of the EIA Regulations, the draft environmental management programme must comply with section 24N of NEMA, and include, among other things, a description of the manner in terms of which it intends to comply with any provisions of NEMA regarding financial provision for rehabilitation (Regulation 33(g)(v)).

45. Regulation 37(2)(d) of the EIA Regulations provides that an environmental authorisation may *"where applicable, require the holder of the authorisation to furnish the competent authority with proof of compliance with the requirements regarding financial provision"*.

E. National Environmental Management: Waste, 2008 (NEMWA)

46. Although waste generated by the mining sector is specifically included in the definition of "waste" under section 1 of NEMWA, section 4(1)(b) expressly excludes "residue stockpiles"[72] and "residue deposits"[73] regulated under the MPRDA from its application. Certain radioactive waste[74] is also excluded from the ambit of NEMWA (section 4(1)(a)), but some mining waste which is radioactive may fall outside of this definition (depending on its level of radioactivity).

47. However, to the extent that there are waste management activities associated with a mine that do not constitute "residue deposits and residue stockpiles" and that require a waste

of NEMA to take reasonable corrective measures to rehabilitate the environment and the pollution which they had caused. At that time, section 28 did not expressly have retrospective effect. Although the finding was against the Bareki community's claim, with De Villiers J holding that the legislature had not worded the provision in NEMA strongly enough to read it as retrospective, several positive obligations were interpreted in obiter dicta comments. These obligations were held to arise only from actions causing significant pollution and/or environmental degradation taken on or after the date on which NEMA had come into effect (29 January 1999).
In this regard, section 28(1) was interpreted to create a duty to take reasonably corrective measures "merely from the fact that a person causes, has caused or may cause significant pollution or degradation of the environment" (at page 440). De Villiers J held that section 28(2) goes even further, imposing such obligations to take reasonable corrective measures on an owner of land or premises, or a person in control thereof or with a right to use it, on which any activity was performed or situation arose which caused or is likely to cause significant pollution or environmental degradation. This duty arises, according to De Villiers J, where the activity or process causing pollution was performed without the owner or person in control's knowledge or consent: "(i)n the latter case there would prima facie be an absolute liability which precludes not merely the element of fault, but also the element of unlawful conduct." (at page 440).
De Villiers J therefore concludes that section 28(1) and (2) create at least a strict liability, and in some instances may even create an absolute liability, and that there is no monetary limit to such liability, potentially creating very heavy financial burdens to rectify pollution and/or degradation.
Since the finding in the Bareki case, the legislature has amended NEMA to explicitly state that the duty of care contained in section 28 is retrospective (National Environmental Laws Amendment Act 14 of 2009). As a result, the obligations could therefore now be argued to be wider than De Villiers J anticipated. Section 28(1A) now states that subsection (1) also applies to significant pollution or degradation that: (a) occurred before the commencement of NEMA; (b) arises or is likely to arise at a different time from the actual activity that caused the contamination; or (c) arises through an act or activity of a person that results in a change to pre-existing contamination.
72. In section 1 of the MPRDA, a "residue stockpile" is defined as "any debris, discard, tailings, slimes, screening, slurry, waste rock, foundry sand, beneficiation plant waste, ash or any other product derived from or incidental to a mining operation and which is stockpiled, stored or accumulated for potential re-use, or which is disposed of, by the holder of a mining right, mining permit or production right".
73. In section 1 of the MPRDA, a "residue deposit" is defined as "any residue stockpile remaining at the termination, cancellation or expiry of a prospecting right, mining right, mining permit, exploration right or production right".
74. Radioactive waste, which is governed by the Hazardous Substances Act 15, 1973 (HSA), the National Nuclear Regulator Act, 1999 (NNRA) or the Nuclear Energy Act, 1999, is excluded from NEMWA's ambit. The HSA classifies "Group IV Hazardous Substances" as radioactive material which is outside a nuclear installation and is not used in a nuclear fuel cycle, but which has an activity concentration of more than 100 bequerels per gram, inter alia, and which is used for medical, scientific, agricultural, commercial or industrial purposes, and includes any waste arising from such radioactive material. The NNRA does not appear to apply to radioactive mining waste, and specifically does not apply to Group IV hazardous substances as defined by the HSA.

management licence under NEMWA, section 51(2)(f) provides that a waste management licence may specify "the financial arrangements that the holder of a waste management licence must make for the undertaking of remediation work during the operation of the waste management activity or on decommissioning of the waste management activity". No further details are provided, leaving it to the discretion of the authority issuing the licence as to the nature and form of any security.

48. The contaminated land provisions under NEMWA – which are not yet in force – may be relevant to the mining context. However, because NEMWA does not apply to residue deposits or residue stockpiles (which are broadly defined by the MPRDA), it may be argued that the contaminated land provisions will, when they come into force, also not apply to the majority of mine waste.

49. Section 1 defines "contaminated" as "... the presence in or under any land, site, buildings or structures of a substance ... above the concentration that is normally present in or under that land which ... directly or indirectly affects or may affect the quality of the soil or the environment adversely."

50. In terms of section 35, the provisions relating to contaminated land will have retrospective effect in that they will apply to the contamination of land, even if the contamination occurred before the commencement of the NEMWA.

51. Section 36(1) empowers the Minister or MEC to identify investigation areas on which high-risk activities have taken or are taking place that are likely to result in land contamination, or land or which he or she believes, on reasonable grounds, to be contaminated. The owner of significantly contaminated land, or a person who undertook the contamination-causing activity, must, in terms of section 36(5), notify the Minister and MEC of the contamination as soon as he or she becomes aware of it.

52. Section 37 deals with the consequences of identification and notification of investigation areas. Should an investigation area be determined to be contaminated, the Minister is empowered, by section 38(2), to declare the land a remediation site and make a remediation order specifying the measures to be taken. Section 39 deals with orders to remediate contaminated land.

F Promotion of Access to Information Act 2 of 2000 (PAIA)

53. In terms of section 32(1) of the Constitution of the Republic of South Africa, 1996 (Constitution), everyone has the right of access to:

    53.1. Any information held by the state;

    53.2. Any information that is held by another person and that is required for the exercise or protection of any rights.

54. Section 32(2) of the Constitution provides that national legislation must be enacted to give effect to this right, and may provide for reasonable measures to alleviate the administrative and financial burden on the state.

55. A request for information from either a private or public body must be made under PAIA, which was enacted to give effect to section 32 of the Constitution.

56. In terms of section 5, PAIA applies to the exclusion of any provision of other legislation that:

    56.1. Prohibits or restricts the disclosure of a record of a public body or private body;

56.2. Is materially inconsistent with an object, or a specific provision, of PAIA.

57. The Act provides several grounds for refusal of access to information by both public and private bodies, including, inter alia: protection of the privacy of a third party who is a natural person (sections 34 and 63); protection of commercial information of a third party (sections 36 and 64); and protection of certain confidential information of a third party (sections 37 and 65 (which are dealt with in more detail below)). Public bodies may also raise a defence of mandatory protection of certain records of South African Revenue Service (section 35). The defence that is often raised by public bodies is that the request is manifestly frivolous or vexatious, or the work involved in processing the request would result in a substantial and unreasonable diversion of resources (section 45). Private bodies may also refuse access on the grounds of the record containing commercial information or trade secrets (section 68).

58. Alongside the grounds for refusal, PAIA contains a public interest override provision for both public and private bodies (section 46 and section 70 respectively), which requires information officers to grant a request where the disclosure of the record would reveal evidence of a substantial contravention of or failure to comply with the law; or imminent and serious public safety or environmental risk.

59. In terms of sections 27 and 58 of PAIA, if an information officer fails to give the decision on a request for access within the time required, the information officer is regarded as having refused the request (the so-called "deemed refusal").

60. In terms of section 30(1) of the MRPDA, any information submitted in terms of section 21 (which deals with reconnaissance and prospecting information and data) to the Regional Manager, section 28 (which deals with mining or processing of minerals information and data) to the Director-General, or section 29 (which deals with the Minister's power to direct the submission of specified information or data) may be disclosed to any person:

60.1. In order to achieve any object referred to in section 2(c), (d), or (e);[75]

60.2. In order to give effect to the right of access to information contemplated in section 32 of the Constitution;

60.3. If such information is already publicly available;

60.4. If the relevant right has lapsed or been cancelled, or the area to which such right or permission relates has been abandoned or relinquished.

61. Section 30(2) provides that no information or data may be disclosed to any person if it contains information or data supplied in confidence by the supplier of the information or data. This subsection must be read in light of subsections 30(1) and 30(3) and likely also only pertains to sections 21, 28 or 29. In terms of section 30(3), any person submitting information or data in terms of section 21, 28 or 29 must inform the Regional Manager concerned and indicate which information and data must be treated as confidential and may not be disclosed.

62. This wording gives no indication of how the confidentiality of the information is decided, and seems to be in direct conflict with the aim of section 32 of the Constitution and the objects of PAIA. It is also not in keeping with sections 37 or 64 of PAIA, which deal with the protection of confidential information in records of public and private bodies, respectively.

63. Section 37 of PAIA provides as follows:

75. These objects are, respectively: to promote equitable access to the nation's mineral and petroleum resources to all the people of South Africa (section 2(c)); to substantially and meaningfully expand opportunities for historically disadvantaged persons, including women, to enter the mineral and petroleum industries and to benefit from the exploitation of the nation's mineral and petroleum resources (section 2(d)); and to promote economic growth and mineral and petroleum resources development in the Republic (section 2(e)).

"37. Mandatory protection of certain confidential information, and protection of certain other confidential information, of third party.

(1) Subject to subsection (2), the information officer of a public body—

(a) must refuse a request for access to a record of the body if the disclosure of the record would constitute an action for breach of a duty of confidence owed to a third party in terms of an agreement; or

(b) may refuse a request for access to a record of the body if the record consists of information that was supplied in confidence by a third party—
(i) the disclosure of which could reasonably be expected to prejudice the future supply of similar information, or information from the same source; and
(ii) if it is in the public interest that similar information, or information from the same source, should continue to be supplied.

(2) A record may not be refused in terms of subsection (1) insofar as it consists of information—

(a) already publicly available; or

(b) about the third party concerned that has consented in terms of section 48 or otherwise in writing to its disclosure to the requester concerned."

64. It is clear from section 37 of PAIA that the mere allegation that information is supplied in confidence (as per section 30(2) of the MPRDA) will not suffice under PAIA. Even if a mine had asked the DMR to keep information regarding its financial provision confidential, disclosure by the DMR of such information would not amount to a breach of a duty of confidence owed to a third party in terms of an agreement. In terms of section 37, the DMR could only refuse such access if:

64.1. The information was supplied to it in confidence by a mine;

64.2. The disclosure of the information could reasonably be expected to prejudice the future supply of similar information, or information from the same source;

64.3. If it is in the public interest that similar information, or information from the same source, should continue to be supplied.

65. These requirements would not be met insofar as financial provisions are concerned. Information regarding financial provisions is not information supplied voluntarily by mines – they are required by the MPRDA (and the other legislation set out above) to do so. The effect of this is that a mine would not be entitled to withhold such information for any reason, and the DMR's disclosure of such information could not "*prejudice the future supply of similar information, or information from the same source"*. The DMR can therefore not rely on this ground for refusal in relation to requests made for access to financial provisions.

66. Section 64 of PAIA deals with records of private bodies. It provides that a request for access must be refused "if its disclosure would constitute an action for breach of a duty of confidence owed to a third party in terms of an agreement." The disclosure by a mine of information relating to its financial provisions would not breach any duty of confidence owed in terms of an agreement. The effect of this is that, even though a mine might regard this information as confidential, it cannot refuse to disclose it on this basis.

67. In the circumstances, section 30(2) of the MPRDA, insofar as it provides that information may be withheld simply on the basis that it was supplied in confidence, is materially inconsistent with both the object of PAIA, and with sections 37 and 64 of PAIA.

68. As set out above, section 5 of PAIA provides that it applies to the exclusion of any provision of other legislation that prohibits or restricts the disclosure of a record of a public body or private body; and is materially inconsistent with an object, or a specific provision, of PAIA. Sections 37 and 64 therefore take precedence over section 30(2) of PAIA.

69. In light of section 32 of the Constitution, PAIA, and in the interests of an open and transparent mining environment, financial provisions cannot be withheld simply on the basis that they were supplied in confidence – irrespective of section 30(2) of the MPRDA. Such information could only be withheld if there were a legitimate basis to do so.

G Insolvency Act, 1936 and Companies Act, 2008

70. One of the sections of NEMA that will only come into operation 18 months after the Mineral and Resources Development Amendment Act, 2008 is brought into operation is section 24P. Once in effect, this section will deal with financial provision for remediation of environmental damage for prospecting, mining, exploration, production or related activities on a prospecting, mining, exploration or production area. In terms of section 24P(6), the Insolvency Act, 1936 does not apply to any form of financial provision contemplated in subsection (1) and all amounts arising from that provision; however, assessing the adequacy of this provision to protect financial provision from the claims of other creditors in insolvency may be academic, since indications are that the MPRDA Amendment Act will be replaced with a new amendment act to be brought to Parliament in the near future.

71. The question is whether the financial provisions in the MPRDA are currently ring-fenced when companies are wound up upon insolvency.

72. The Companies Act, 2008 governs all aspects of companies. According to item 9 of Schedule 5, Chapter 14 of the Companies Act, 1973 applies (as if it had not been repealed) to the winding-up and liquidation of companies until the Minister publishes a notice (with the exception of provisions relating to the winding-up of solvent companies, to which provisions in the Companies Act, 2008 apply).

73. In terms of section 339 of the Companies Act, 1973, in the winding-up of a company unable to pay its debts, the provisions of the law relating to insolvency shall, insofar as they are applicable, be applied mutatis mutandis in respect of any matter not specially provided for by the Companies Act, 1973.

74. Section 342 of the Companies Act provides that the assets of a company being wound up shall be applied in payment of the costs, charges and expenses incurred in the winding up and in payment of creditors' claims as they would be applied in payment under insolvency. "Assets" is not defined, but would probably be interpreted to have a similar meaning to the definition of "property" in the Insolvency Act (as set out below).

75. A company may be wound up either by a court order or voluntarily (section 343). In any winding up by the court, all the property of the company concerned shall be deemed to be in the custody and under the control of the Master, until a provisional liquidator has been appointed and has assumed office (section 361(1)); and the court may, by winding-up order or any subsequent order, direct that all or any part of the property, immovable and movable, belonging to the company, or to the trustee on its behalf, shall vest in the liquidator in his official capacity (section 361(3)). "Property" is also not defined in the Companies Act, 1973, but, given the overlap between this Act and the Insolvency Act, would probably be interpreted to have a similar meaning to the definition of "property" in the Insolvency Act.

76. Insurance, trust funds, bank guarantees and direct deposits[76] are not dealt with directly by the Companies Act, 1973 (unless they could be seen as voidable dispositions, which are dealt with below). The provisions of the Insolvency Act which deal specifically with these methods of financial provision are therefore applicable.

77. The Insolvency Act regulates the sequestration and winding up of a debtor's estate, with all of the debtor's property at the date of sequestration (and acquired during sequestration) belonging to the insolvent estate, save for certain defined exclusions (which are dealt with

76. These, as well as cash, are the methods specified in the definition of "financial provision" in section 1 of the MPRDA, and regulation 53(1) of the MPRDA Regulations.

below). The definition of “property” in the Insolvency Act is very wide – it means movable or immovable property, wherever situated within the Republic, and includes contingent interests in property (other than the interests of a fidei commissary heir or legatee).

78. As mentioned above, the Insolvency Act excludes certain property from its ambit. The financial provisions set out above may fall into this category, depending on the form they are in.

Insurance

79. Section 156 of the Insolvency Act provides that where an insurer is obliged to indemnify an insured in respect of any liability incurred by the insured towards a third party, upon sequestration, the third party is entitled to recover from the insurer the amount of the insured’s liability towards the third party (for which the insured was indemnified). Assuming that the DMR is the appointed third party beneficiary of a particular insurance policy, financial provisions would arguably fall into this category, and would therefore be excluded from the insolvent estate, with the DMR being able to claim the insurance directly from the insurer (without having to obtain a court order or enter into an agreement with the trustee).[77]

80. As with all these methods of making financial provision, the devil is in the details – the exact terms of an insurance policy are of utmost importance to ensure the protection of the proceeds of an insurance policy. Limitations of liability linked, for example, to non-compliance of the insured with its obligations under the MPRDA or other relevant legislation, could facilitate a lawful rejection of a claim by the insurer.

Trust funds

81. Certain categories of trust funds or property do not vest in the insolvent estate of the trustee (presuming that the mine, not the DMR, is the trustee of these instruments when used as financial provisions). The assets of a duly constituted trust do not form part of the personal estate of the trustee on his insolvency, since, in terms of section 12 of the Trust Property Control Act 57 of 1988, trust property does not form part of the personal estate of the trustee (except insofar as he, as trust beneficiary, is entitled to the trust property). Therefore, financial provisions in the form of properly constituted trust funds of which the mine is the trustee are excluded from the insolvent estate of that mine.

82. However, an initial assessment of the standard trust deed provided by the DMR as the *“format approved by the Director-General”* (Regulation 53(1)(b)) raises the alarm on a number of issues, not necessarily limited to the consequences of insolvency. These include:

    82.1. Integral references to at least one section of the Income Tax Act 58 of 1962 that was repealed as long ago as 2006. This is potentially a fatal flaw in the trust deed which could affect the enforceability of at least some of its provisions;

    82.2. The imposition of obligations on the mining company in its capacity as beneficiary of the trust, without the company in that capacity being a party to the trust deed;

    82.3. The DMR has no legal right to the funds held by the trust in the event of default by the beneficiary;

    82.4. No provision to address the consequences of non-compliance of the beneficiary with the trust deed for the trustees and their obligation to place the trust’s funds at the disposal of the beneficiary;

    82.5. No attempt to prescribe requirements for who can be appointed trustees of the trust, inter alia to address the issue of potential conflict of interest for trustees who are in another capacity potentially personally liable for the obligations of the mining company (such as directors).

77.LAWSA, Vol 11, 2nd ed, para 245.

83. It appears that the standard trust deed used by the DMR requires urgent revision in order to achieve in law the ends that it is intended to achieve, and to ensure the enforceability of its provisions, specifically against the beneficiary. It also requires consideration of the impacts of business rescue (see below) and insolvency of mining companies who use this particular tool for making the required provision.

Direct deposits

84. It is reasonable to assume that the "deposit into an account specified by the Director-General" referred to in Regulation 53(1)(c) is intended to link to the word "cash" in the definition of "financial provision" in section 1 of the MPRDA. If so, and the amount is paid into a bank account identified by and held for the account of the DMR, those funds would fall outside of the insolvent estate. In the unlikely event that funds remain after rehabilitation has been completed, that estate, or the liquidator of the mining company, would retain a claim against the DMR for the balance of funds so deposited.

Bank guarantees

85. As before, the terms of any guarantee given by a bank for the financial provision liability are of the utmost importance. Because of the time periods involved in rehabilitation and the relatively expensive cost of bank guarantees, the term of the guarantee (which generally rarely exceed one year) as well as the contingencies upon which a guarantee can be called up, will determine the nature of the legal obligations, as well as the consequences of insolvency.

86. The "format approved by the Director-General" (Regulation 53(1)(a)) for bank guarantees provided by the DMR is such that it requires active management and oversight by the DMR, since the likelihood is that each guarantee will have to be replaced every year; failing such management and oversight, there is a risk that the guarantee amount may not match the required provision.

Dispositions

87. The Companies Act, 1973 states that every disposition by a company of its property which, if made by an individual, could, for any reason, be set aside in the event of his insolvency, may, if made by a company, be set aside in the event of the company being wound up and unable to pay all its debts, and the provisions of law relating to insolvency shall mutatis mutandis be applied to such disposition (section 340).

88. The Insolvency Act defines "disposition" as "any transfer or abandonment of rights to property and includes a sale, pledge, delivery, payment, release, compromise, donation or any contract therefor, but does not include a disposition in compliance with an order of the court …". The payment (or setting aside) of a financial provision by any of the methods would therefore constitute a "disposition".

89. In terms of section 26(1) of the Insolvency Act, every disposition of property not made for value may be set aside by the court if it was made by an insolvent: more than two years before the sequestration of the estate, and immediately after the disposition, the liabilities of the insolvent exceeded his assets; or was made within two years of the sequestration, and the person claiming under or benefitted by the disposition is unable to prove that, immediately after the disposition, the assets of the insolvent exceeded his liabilities. Provided that if it is proved that the liabilities of the insolvent at any time after the making of the disposition exceeded his assets by less than the value of the property disposed of, it may be set aside only to the extent of such excess.

90. In terms of section 26(2), a disposition of property not made for value, which was set aside under section 26(1) or which was uncompleted by the insolvent, shall not give rise to any claim in competition with the creditors of the insolvent's estate. This is provided that, in the case of a disposition of property not made for value, which was uncompleted by the

insolvent and which: was made by way of suretyship, guarantee or indemnity; and has not been set aside under section 62(1), the beneficiary concerned may compete with the creditors of the insolvent's estate for an amount not exceeding the amount by which the value of the insolvent's assets exceeded his liabilities immediately before the making of that disposition.

91. Although it is possible that financial provisions could amount to dispositions not made for value, it is hoped that the DMR checks the financial capability of a company to run a mine (including the financial provision) before allowing mining to commence.

92. Dispositions made within six months of sequestration may be set aside if they prefer one creditor above another, unless it can be proved that such disposition was made in the ordinary course of business (section 29 of the Insolvency Act). If the debtor made such preferential disposition at any time when his liabilities exceeded his assets, such disposition may be set aside by the court (section 30). As above, it would be hoped that the DMR would be prudent enough not to let this situation arise in relation to financial provisions.

Ranking of claims

93. According to section 366 of the Companies Act, 1973, the winding up of a company by a court and by a creditors' voluntary winding up must be proved at a meeting of creditors mutatis mutandis in accordance with the provisions relating to the proof of claims against an insolvent estate under the law relating to insolvency (section 366(1)(a)).

94. In terms of the Insolvency Act, a creditor who wishes to share in the distribution of the assets of an insolvent estate must prove a claim against the estate at a meeting of creditors (either the first, second or special meeting). Creditors are ranked according to whether their debt is secured, whether they are preferent, or whether they have concurrent claims (unsecured).

95. The terms "secured creditor" and "preferent creditor" are not defined in the Act, but "security" and "preference" are, and these meanings are therefore expanded. "Security" is defined in section 2 as "... in relation to the claim of a creditor of an insolvent estate, ... the property of that estate over which the creditor has a preferent right by virtue of any special mortgage, landlord's legal hypothec, pledge or right of retention", while "preference" is defined as "...the right to payment of that claim out of the assets of the estate in preference to other claims ...". Secured creditors are therefore creditors who hold real security for their claim (and are entitled to be paid out of the proceeds of the property subject to the security), while preferent creditors do not hold any security for their debt, but, in terms of the Insolvency Act, are entitled to the payment of their claim before concurrent creditors (with this preferent right arising from the provisions of the Act).78 Concurrent creditors are last in line for payment out of what is left of the insolvent estate.

96. The DMR, as a creditor of an insolvent estate (in claiming the financial provision, should it fall into the estate) would not be a secured creditor, since it does not hold any of the types of security in the Act. It would also not be a preferent creditor in this regard. Since the DMR would only have a concurrent claim in relation to financial provisions, this would put the rehabilitation of mines at severe risk, should a mine be liquidated.

H Business rescue under the Companies Act, 2008

97. Business rescue is a relatively new tool in South Africa, having been introduced by the Companies Act, 2008. It is used for companies that are in financial distress, and is defined in section 128(1)(b) as "proceedings to facilitate the rehabilitation of a company that is financially distressed by providing for: the temporary supervision of the company, and of the management of its affairs, business and property; the temporary moratorium on the rights of claimants against the company or in respect of property in its possession;

78. LAWSA, Vol 11, 2nd ed, para 323.

and the development and implementation, if approved, of a plan to rescue the company by restructuring its affairs, business, property, debt and other liabilities, and equity in a manner that maximises the likelihood of the company continuing in existence on a solvent basis or, if it is not possible for the company to so continue in existence, results in a better return for the company's creditors or shareholders than would result from the immediate liquidation of the company."

98. A company is in financial distress when it appears reasonably unlikely that it will be able to pay all its debts as they fall due in the ensuing six months; or that it appears reasonably likely that the company will become insolvent in the ensuing six months (section 128(1)(f)).

99. Business rescue is decided on by the board of directors by resolution in specific circumstances (section 129(1)) and once a resolution has been taken to commence business rescue proceedings; and for as long as it is valid, the company may not commence liquidation proceedings (section 129(6)). This resolution is effective only once it has been filed (section 129(2)(b)), and may not be adopted if liquidation proceedings have been initiated by or against the company (section 129(2)(a)). A court may also order the commencement of business rescue on application by an affected person (section 131(1)) and place the company under supervision.

100. Once business rescue is in force, there is a general moratorium on most civil legal proceedings against the company for as long as the business rescue continues; and enforcement of those debts may only be carried out with the consent of the business rescue practitioner or the court (section 133(1) and (2)).

101. The company's power to deal with its property is restricted during business rescue, and it may only dispose of property: in the ordinary course of business: if the transaction is in good faith and the business rescue practitioner has given their consent; or as part of the approved business rescue plan of the company (section 134(1)).

102. Creditors have a right to be notified and to formally participate in all stages of the proceedings, and play a role in approving the business rescue plan (section 145(1)). Once the plan is approved, it binds all creditors and the company, and creditors may only enforce debts owed by the company in line with this plan (section 154).

103. Financial provisions could be affected by these provisions if they form part of an insolvent mining company's estate.

I. Conclusion

104. There are a number of provisions in legislation that deal with financial provision for rehabilitation of environmental impacts.

105. Information regarding such financial provisions is not readily available to members of the public, but there is very limited ground for refusing access to such information under PAIA.

106. Depending on the form that financial provisions are in, they may potentially be excluded from the insolvent estate. There may also be circumstances in which financial provisions are set aside as dispositions not made for value. If they form part of a mining company's insolvent estate, financial provisions might be affected by business rescue proceedings.

MINING AND THE ENVIRONMENT

100% RECYCLED

12%

of South Africa's land area generates 50% of the country's river flow.

54%

of Mpumalanga province is under some form of planned mining action.

44 years

After mine closure that acid mine decant started into the Blesbokspruit in Gauteng.

R30 billion

The estimated cost of cleaning up after South Africa's nearly 6000 abandoned mines according to the country's Auditor General.

6000

Approximate number of closed and abandoned mines in South Africa.