

Rehabilitation and Mine Closure Liability: An Assessment of the Accountability of the System to Communities

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Executive Summary

South Africa has a long and somewhat troubled history when it comes to mine closure. Looking at the topography of the greater Johannesburg area, the remnants of the gold mining industry are evident by the many rehabilitated mine dumps which litter the skyline. Most mining operations are viable for around 30 years, depending on the mineral mined and the reserves available, but the environmental and social impacts are felt long thereafter. The immense environmental and financial costs of past failures have been born by the government and the whole of society. In particular, affected communities continue to live with the severe harm to health and well-being associated with mine legacy pollution, which threatens the social fabric. To prevent a repeat of the mistakes of the past, the manner in which mining companies rehabilitate the land used for mining, both surface and underground, requires careful regulation. For the system to be effective, accountable and user-friendly, the obligations and processes should be clearly defined in the legislation. Further, the rehabilitation process should be as transparent as possible, providing for meaningful consultation in order to ensure accountability to stakeholders and especially to communities whose very survival is dependent on the success of mine rehabilitation and closure.

The South African legislature has developed mechanisms to promote sound management of mine closure and rehabilitation by mining companies. The Mineral and Petroleum Resources Development Act (MPRDA) requires rights holders to set aside a financial guarantee for rehabilitation. All mining right holders are required to set aside this financial provision for the discharge of their rehabilitation obligations, which can be returned to them on the issuing of a closure certificate by the state regulator. Further the State requires an application for a closure certificate on the closure or abandonment of the mining operation. The closure certificate can only be granted if the required documents, including a closure plan and an environmental risk report, are furnished and the environment has been satisfactorily rehabilitated. The issuing of the certificate makes the right holder eligible for a return of a portion of the financial provision once an acceptable environmental state has been reached.

The mine closure liability and rehabilitation system has come under increased scrutiny following recent events, namely, the acid mine drainage crisis, several judgments pertaining to post-closure liability (*Harmony Gold*, 2005); (*Stilfontein Gold Mining*, 2006); (*Kebble*, 2007); (*Harmony Gold* 2012); (*Harmony Gold*, 2014) (MPRDA Amendment Bill, 2013). Attention has, in particular, been focused on the financial provision, the duration of liability and the gaps which allow companies to contract out of their mine closure obligations (WWF, 2012), (Humby, 2013). Public interest organisation have also raised issues such as the nature of mining companies' ongoing obligations to rehabilitate the environment and whether the language in which the MPRDA couches the conditions triggering the closure certificate process allows mines to avoid these obligations. The latest set of proposed amendments to the MPRDA leaves many of these issues unresolved.

This paper shall contribute to the discussion of how mine closure is regulated through a critical assessment of the system informed by a community-based perspective. The question we will seek to begin answering is why, despite legislative obligations to rehabilitate the environment concurrently, and during the closure and post-closure phases, communities are still, often left with severe environmental harm and a sense of powerlessness. In particular we shall ask whether the regulatory system is clear in defining the following areas: The content of obligations; and the procedures to be followed to foster transparency and accountability, especially to directly affected communities.

Drawing on both prior studies and our work in representing mine-affected communities, we shall first present the problems faced by communities in the wake of mine closure. Having set the scene we shall provide an overview of the main laws regulating the rehabilitation of mines. This shall be followed by a discussion on the legislative design, focusing on gaps, ambiguities and significant omissions. Challenges of implementation shall be briefly discussed and linked to the design of the system.

Having laid out the challenges and shortcomings of the system, the discussion will move towards suggesting possible solutions. First, some observations on the state of international best practice, a potential source for reform, shall be made. Building on these ideas, and on the gaps highlighted in this paper, a set of possible interventions to enhance the system shall be proposed for discussion.

1 Introduction

The impacts of mining-related harms on the quality of life of affected communities have been increasingly documented and are often severe, wide-ranging and long-term in nature. When a mine or shafts closes, communities are often left with polluted air, water and soil. Environmental degradation such as mining waste, acid mine drainage and soil erosion outlasts the lifespan of a mine, resulting in a legacy that poses a daily threat to the health, safety and well-being of communities. For example, high incidents of respiratory illnesses and skin diseases have been reported in mine-affected communities. Further, the closure of mines leads to significant job losses creating an environment conducive to crime. This compounds the ongoing social impacts of the population influx resulting from the arrival of the mine and which include housing shortages, increased sex work and pressure on local infrastructure.

Consultation with the community on rehabilitation is often highly sporadic, with a selective number of representatives, and is characterised by highly limited information sharing with the community.

Some larger companies have, towards the end of life of mine, sold major mining operations to junior miners, thereby divesting rehabilitation obligations to companies that frequently lack the capacity and experience to conduct large-scale rehabilitation. These companies may, in turn, go bankrupt, leading to abandoned or 'orphaned' mines. As these sites will frequently not be fenced-off or secured in any manner, they represent a constant threat to the safety of the community, especially to children who may come into contact with toxic materials or fall into pits. The security vacuum, coupled with the loss of livelihood for mine workers often leads to the occupation of mine sites by illegal mining operations known colloquially as 'Zama Zamas.' These operations exist entirely outside of the regulatory system so environmental management is frequently non-existent.

In recognition of these lasting and harmful impacts, the legislature has imposed a range of obligations pertaining to the management of mine closure and rehabilitation, primarily through the vehicle of the Mineral and Petroleum Resources Development Act (MPRDA) and the accompanying regulations. As will be shown below, South Africa's legislative framework compares rather favourably to that of foreign jurisdictions with respect to the range of rehabilitation planning and implementation obligations expressly imposed on mining companies. However, communities frequently do not see these obligations discharged meaningfully. The question is why?

For communities experiencing the impacts of several mines, it is highly difficult to attribute responsibility for the harms and establish the respective rehabilitation obligations of mining companies. To complicate the matter further, the environmental degradation in communities will also often be, in part, attributable to actors outside of the mining sector including local municipalities and commercial agriculture.

This is a particularly difficult exercise when the responsible mining companies have not provided communities with up-to-date, accurate, comprehensive and understandable information on the impacts of mining, the closure plan and the risk assessment. In such cases, community organisations seeking a safe environment will need to expend limited resources on an often protracted information gathering exercise which may involve letters to the company, access to information (PAIA) applications and even litigation. This represents a failure of accountability.

An absence of regular consultation increases the risk that rehabilitation will not address all key impacts experienced locally, for example severe structural damage to housing as a result of mining. The result might be that even where the mining company is complying with its closure plan, and thereby addressing, for example, its tailings and soil erosion, the community will experience no progress on a matter impairing their safety and well-being.

This paper shall therefore seek to explain this gap between relatively extensive statutory provision for mine closure and the lack of recourse and tangible improvements experienced by many communities.

2 Overview of the South African Legal Framework regulating environmental rehabilitation of mines

2.1 Constitutional and Statutory Background

Like all South African law, provisions regulating environmental rehabilitation and mine closure must be interpreted in a manner consistent with 'the spirit, object and purport of the bill of rights.' This means that these provisions must be read in a manner capable of advancing the section 24 environmental right, which protects the right to an environment 'not harmful to health or well-being', embodies principles including sustainable development, environmental justice and intergenerational equity, and which requires the legislature and executive to undertake 'reasonable legislative and other measures' to realise this right.

These 'reasonable measures' include environmental and minerals legislation, the National Environmental Management Act (NEMA) and the MPRDA being of particular importance. NEMA is 'framework legislation' providing the general principles, standards and procedures for environmental management and which is supplemented by a suite of sector-specific laws. Section 2 of NEMA ('national environmental management principles') expands on the principles in the environmental right. The following principles are of particular importance to understanding the rehabilitation obligations of mineral rights holders and the rights of mining-affected communities: 'Environmental Justice should be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons'(Section 2 (4) (c) of NEMA, 1998); responsibility for the environmental consequences throughout its life-cycle (Section 2 (4) (e) of NEMA, 1998); the 'polluter pays' principle (Section 2 (4) (p) of NEMA, 1998) and the participation of all interested and affected persons, and

vulnerable and disadvantaged persons in particular, in environmental management(Section 2 (4) (f) of NEMA, 1998).

The MPRDA contains a set of objects and requires that ‘any reasonable interpretation’ consistent with these objects be preferred over any reasonable interpretation that is inconsistent with such objects’ (Section 4 (1) of MPRDA, 2002). The most significant principle and object introduced by the MPRDA is custodianship, which means that mineral and petroleum resources belong to ‘the nation’ and the role of the state is to act as a custodian, using its regulatory authority over licensing and other matters to ensure the benefits from mineral wealth are shared by all(Sections 2 (b), 3 (1), 3 (2) of MPRDA, 2002). This role includes transformation of the sector by expanding opportunities for historically disadvantaged persons to participate in and to benefit from the exploitation of minerals and petroleum (Sections 2(c) and (d) of MPRDA, 2002) and ensuring that this occurs in a manner that is environmentally sustainable (Section 3 (c) of MPRDA, 2002).

The consequence is that, wherever possible, the statutory provisions governing the rehabilitation duties should be construed in a manner that promotes lifecycle responsibility or ‘cradle to grave’ obligations for remediating environmental harm, environmental justice and accountable, transparent and participatory environmental management.

2.2 Sources of Rehabilitation Obligations of Mining Rights Holders

The obligations with respect to the rehabilitation of mine sites are largely contained in the MPRDA and accompanying regulations, though mining-related activities will invariably trigger a range of environmental provisions contained in legislation including NEMA, the National Water Act (NWA) and the National Environmental Management: Waste Act (NEMWA).

The MPRDA, the main source of rehabilitation obligations, requires rights holders to ‘as far as reasonably practicable’ rehabilitate the land affected by the operation ‘to its natural or predetermined state, or to a land use which conforms to the generally accepted principle of sustainable development’ (Section 38 (1) (d) of MPRDA, 2002).

The MPRDA regulations require the submission of closure objectives as part of the draft Environmental Management Programme (EMP) / Environmental Management Programme Report (EMPR) and which must contain ‘...the key objectives for mine closure to guide the project design, development and management of environmental impacts’; future land use objectives for the site, and the costs of closure...’(Reg 61 (1) of the MPRDA Regulations,2004).

The MPRDA regulations provide that, as part of their EMP/EMPR, applicants for mineral rights are required to submit a closure plan which is the vehicle for translating the closure objectives into a plan that can be implemented (Reg 62 of the MPRDA Regulations, 2004). The closure plan must contain a number of components all of which are necessary for establishing what measures need to be taken, how they will be taken, and how they will be funded. These components include, inter alia, the closure objectives; a summary of the regulatory requirements for closure negotiated as encapsulated in the EMP / EMPR; a summary of the results of the environmental risk report; the results of rehabilitation efforts undertaken; a description of the methods to decommission each prospecting or mining component and the mitigation or management strategy for residual or latent impacts; details of any long-term management and maintenance expected; details of a proposed closure cost and financial provision for monitoring, maintenance and post closure management and; a record of interested and affected persons consulted which shows consultation is required in the preparation of closure plans.

2.3 Financial Provision and Closure Certificate

The MPRDA aims to ensure the availability of funds for the environmental rehabilitation of the site regardless of the financial state of the mining company, through requiring the company to set aside a 'financial provision' as a condition for the issuing of a mineral right (WWF, 2012). The MPRDA allows for four methods for securing the financial provision namely via cash deposit, guarantee, insurance or approved trust fund. In the event the holder of the right or permit fails to manage and/or rehabilitate the environment, the government may use this sum to do so itself. Applicants are required to annually review the financial provision and the adjusted sum must be approved by the Minister. If the Minister is not satisfied with the assessment and financial provision s/he may appoint an external assessor to conduct the assessment and determine the financial provision.

The financial provision constitutes part of a statutory schema to incentivise the sound management of environmental impacts and encourage thorough rehabilitation. Upon the issuing of a closure certificate by the Minister, the obligation to maintain a financial provision ends though the Minister may still retain a portion for the purpose of rehabilitating the closed site in respect of latent or residual environmental impacts.

The closure certificate is a regulatory mechanism for ensuring the right or permit holder does not abandon the mine site before remediating harm to the environment. Application for the closure certificate is mandatory upon the lapsing, abandonment or cancellation of the right or permit in question; the cessation of the prospecting or mining operation; the relinquishment of any portion of the prospecting of the land to which a right, permit or permission relate; or the completion of the prescribed closing plan to which a right, permit or permission relate. The main incentive for applying for a certificate is that under the present system that the issuing of the closure certificate marks the end of the right or permit holder's environmental liability (Section 43(1) of the MPRDA, 2002). Note however, that the proposed amendments to the MPRDA, presently awaiting the assent of the President, will if and when they come into effect, preserve the liability with the right or permit holder notwithstanding the issuing of the certificate. In addition, as stated above, the issuing of a closure certificate marks the end, albeit with caveats, of its obligation to maintain the financial provision.

To ensure compliance with rehabilitation obligations mining companies are required to accompany their application with a set of documents namely the closure plan, environmental risk report, and a final performance assessment report (of the EMP/EMPR) which, combined, are designed to give comprehensive information on the rehabilitation that has taken place.

3 Regulatory lacunae and Challenges of Implementation

3.1 Gaps and uncertainties in the legislation

As stated above, the MPRDA regulations provide that the closure plan is a component of the EMP /EMPR. As we know EMP / EMPRs must be submitted as one of several documents required before a mineral right is issued by the DMR. The closure plan must also be submitted, along with the Environmental Risk Report in the application for the closure certificate. This would indicate that the closure plan to be submitted in the latter process would be a version of the original closure plan that has been updated in the light of subsequent rehabilitation measures and developments on the mine site. Further, one of the prescribed components of the closure plan is 'a summary of the results of progressive rehabilitation undertaken'. Where the right / permit application pertains to a pre-existing mine, it makes sense to require this information in the closure plan submitted with the EMP

/ EMPR but it would only be possible to provide this information at a subsequent stage where the application pertains to a new mining operation.

While the regulations require the right or permit holder to annually review the financial provision there is no express requirement to review the closure plan itself in the process. A key purpose for reviewing the financial provision would seem to ensure the costs of rehabilitation are adjusted in light of changing circumstances. The requirement that the financial provision is based on a detailed itemisation of the costs for, inter alia 'the rehabilitation of the surface of the area' suggests recognition by the regulator of the need for a precise fit between the financial provision and the environmental remediation plans it is providing for. The purpose of ensuring the financial provision adapts to evolving circumstances would not be realised if the reviewed provision is based on a closure plan that has not itself been continually reviewed.

Therefore ongoing review of the closure plan is implicit in the review of the financial provision. However, to ensure the closure plan remains relevant and for the sake of clarity, the regulations should expressly provide for a formal and periodic review and assessment process with respect to closure plans.

3.2 The Rights of Affected Communities in Closure Rehabilitation

There is no question about whether rehabilitation of the environment is of paramount importance. A failure to remediate environmental impacts on air, soil, water and infrastructure poses threats to the health, livelihood, culture and survival of adjacent communities. Neither is there any doubt regarding the obligations of mining companies to rehabilitate the site on an ongoing basis. Thus, the substantive rights of communities are relatively clear. The MPRDA and regulations, however, provide less clarity on the procedural rights of communities, i.e. the extent of community participation in and oversight over the rehabilitation of land in their immediate vicinity.

The regulations do provide for consultation of interested and affected parties during the formulation of the initial plan (during the EMP / EMPR process) though there is no express requirement regarding the form of this consultation, i.e. written and/or oral comments; public meetings and other permutations, what constitutes adequate notice and what information interested and affected parties should be furnished with. Neither are there provisions promoting the inclusivity of the process. The absence of detailed regulation of the consultation and participation is a common feature across the numerous processes under the MPRDA and which contrasts unfavourably with the more detailed processes contained in the NEMA EIA regulations. There is also no provision for periodic consultation on the progress of the implementation of the closure plan and any other rehabilitation initiatives in terms of the EMP/EMPR. Nor is there any express requirement to consult during the closure certificate application process.

This absence of a clear legal requirement, explains why some of the communities represented by public interest law organisations have reported that they were not consulted by the mining company on environmental issues during the decommissioning, closure and post-closure phases. The result, we have observed, is that communities feel abandoned, marginalised and believe that the mining company has not taken meaningful measures to repair the damage to their environment. A gulf between community and company perceptions emerges and the result is mutual mistrust and suspicion. Inadequate consultation also represents a lost opportunity for mining companies, whose rehabilitation plans can benefit from the community's unique knowledge of the local socio-ecological setting.

For communities to be in a position to assess whether rehabilitation is addressing the most keenly experienced impacts on their environment, they need to have access to up to accurate and up to date information. This information would include the impacts of mining, the programmes and

measures that have been put in place to remediate the impacts and achieve the post-closure objectives, the extent of progress on commitments, and the content of future measures and timelines. Consequently, it is vital that mining companies and government report to communities periodically in a clear manner and enable access to information regarding rehabilitation of the area.

There is no express requirement for reporting to the community and providing access to documents including the (up to date) closure plan, environmental risk report, final performance report and financial provision determination. In our experience engaging with mine-affected communities and with other stakeholders, it is rare that companies go beyond the letter of the law by proactively providing documents and explanations regarding the status of rehabilitation. Communities may have to resort to the protracted PAIA process to gain access to the information necessary for them to even begin participating in the closure process on an informed basis. Even where requests are successful, the information furnished is frequently incomplete.

The absence of regular and meaningful participation leads to confusion and frustration on the part of communities.

3.4 Implementation Challenges

While the institution of a financial provision to incentivise compliance with environmental remediation obligations by holders of mining rights is sound in conception, there is evidence that the system as a whole is not functioning as intended. The problems are identified and addressed in depth in a discussion paper commissioned by the World Wild Fund for Nature (WWF) which divides issues between those relating the 'estimation and adequacy of financial provisions', 'securing financial provisions using financial instruments' and 'financial reporting of environmental risks and closure liabilities'(WWF, 2012). With regards to the first of these, the report noted a high degree of inconsistency in the quality of EMPs and their rehabilitation plans (especially regarding longer-term water quality issues). Therefore, the plans which the financial provisions are calculated to implement are themselves flawed. Further there was uncertainty regarding the determination of the financial provision and indications that some mines have made insufficient financial provision for post-closure rehabilitation. In relation to quantum the document recommended both 'augmented and structured use of the independent review mechanism as a standard, default approach when assessing the adequacy of financial provisions' and 'improved public access to data and information on financial provisions.' In relation to the securing of the financial provision, key issues highlighted included the potential threat posed by the provisions of the insolvency act and the Companies act (with regard to business rescue) on the financial provision and lack of alignment between the MPRDA with legislation pertaining to trust deeds.

4 Overview of literature international best practice in relation to community participation in mine closure

At the transnational level, the body of soft law (codes, guidelines and toolkits) on best practice for mine closure has grown over the previous two decades. The International Finance Corporation (part of the World Bank Group) has issued a set of mining-specific environmental health and safety guidelines which includes a sub-section on 'mine closure and post closure.'(Scalon, 2014) Second, the World Bank Multi-stakeholder Initiative has produced a guide for government departments overseeing mine rehabilitation. The guide identifies 5 components of decommissioning and closure namely 'stakeholders, consultation and engagement', 'monitoring and enforcement', 'financial assurance tools and guarantees', 'environmental and social best practice (management systems)' and 'policy, legal and regulatory framework' (Scalon, 2014). The International Council on Mining and

Metals (ICMM) has published a set of principles for sustainable mining which include ‘contribut[ing] to community development from project development through closure in collaboration with host communities and their representatives’ in the form of a toolkit for managing the closure process (Scalon, 2014).

Reading a number of national, regional and global surveys of legal frameworks and practices in relation to mine closure, the overall impression is that all jurisdictions are grappling with the management of mine closure and rehabilitation. Areas of particular difficulty include the uneven distribution of the environmental costs of closure and obstacles to participation in the process by mine-affected communities. This is especially the case in countries of the global South such as Peru and Brazil (Clarke, 2005). However countries of the global North such as Canada (Hernandez, 2013; Hawkins, 2008) are, despite their greater state capacity, also struggling to develop appropriate and cost-effective mechanisms for dealing with abandoned mines in particular.

This bleak picture is, to some extent, explained by the fact that attention to the closure of mines by companies and governments is a relatively recent development, beginning in the 1970s, the decade in which the modern environmental movement gained ground (Clarke, 2005). While there has been a trend since the late 20th century towards increased regulation (Clarke, 2005), the general pattern is still of sparse and vague regulations. Thus an international survey of closure regulation in 2005 found that while countries typically have a raft of legislation impacting on mine closure ‘many countries do not have provisions for mine closure in their mining laws... and few governments have actual mine closure legislation’(Clarke, 2005). Even as of 2014, the provisions of many countries regulating mine closure are broad (and in many cases significantly broader than South Africa’s). For example the Brazilian system does not specify the contents of the rehabilitation plan and contains no mechanism for guaranteeing the financing of rehabilitation (Scalon, 2014).

In a study of mine closure practices in four Latin American countries, it is shown that, in lieu of regulation, the adoption of international best practice standards, especially by international financial institutions, has been a significant driver of improved rehabilitation practices, at least by multi-national corporations (MNCs) who have a reputation to protect. In adopting uniform practices for their operations, MNCs have often adopted policies and practices that have gone beyond what was required in host countries (Bastida and Sandford,2006) .

5 Recommendations for enhancing clarity and accountability to communities

As the above analysis has clearly shown, South Africa is far from unique in its failure to prevent severe mining legacy harms and to ensure meaningful participation of mine-affected communities in the closure and rehabilitation processes. All mining countries have a major problem with mine closure and to date none have devised an appropriate and cost-effective means of dealing with the issue. For example, there has been criticism of the ineffectiveness of present mechanisms in the province of Ontario, Canada, for monitoring adherence to rehabilitation obligation and the continued ability of the company to meet its financial assurance.

This does not detract from the importance of responding to the systemic harms experienced by mine-affected communities in South Africa. The social and environmental problems experienced by communities during and after closure are aspects of a broader dynamic that is present throughout the life cycle of mining: mine workers and affected communities, too frequently, shoulder most of the negative impacts associated with mining while reaping a smaller share of the benefits than is commensurate with their contribution. This pattern is also reflective of the age of the mining sector, which developed in South Africa’s colonial and apartheid past, rather than in the democratic era. The recent turmoil in the sector exemplified by the 5 month strike amongst workers on the Platinum

Belt indicates that reconfiguring relationships and the cost-benefit distribution in the sector, is an imperative. Enhancements to the mine closure system should be seen as required by this broader aim.

There are some basic principles that should guide the manner in which all parties approach mine closure in order to contribute towards a more sustainable minerals sector. First - and this applies as much to other moments in the mining life cycle – the underlying mind-set should be that mining operations should adapt to the interests, values and way of life of the host community and not vice versa. This requires that communities should be afforded the opportunity to participate in the design, implementation, monitoring and review of measures to mitigate negative impacts at all stages of the project life cycle. Further consultation should take place on a regular basis throughout the life of mine.

Second, it should be borne in mind that different permutations of socio-economic, environmental and political factors exist in each mining community. We must, accordingly remember that mine closure and rehabilitation cannot follow a once size fits all approach and should instead be mindful of the particular challenges of the site and responsive to the knowledge and preferences of local communities. As is suggested in a case study in Papua New Guinea, there are mechanisms for incorporating different forms of local knowledge into the rehabilitation process. Taking local knowledge into account will allow those charged with decision making in the closure process to have a full grasp of the socio-ecological landscape and of the impacts of mining.

Third, responsiveness to local communities requires facilitating access to information required to engage as full participants in the post-closure process. In the rural areas where mining in South Africa is increasingly taking place, the technical language of mining companies does not automatically resonate with the indigenous knowledge systems of some communities. Consequently, mining companies need to pay specific attention to narrowing gaps in frames of reference when engaging with local stakeholders, reinforcing misunderstandings between mining officials and communities. Therefore explanations of impacts, risks and mitigation measures to communities must be provided in a language and manner accessible to communities. However, communities should still be provided with the relevant documentation in order to allow them to engage critically with the explanations provided by mining companies.

In order to ensure that the rehabilitation process is a genuine partnership with local communities and employees it is vital that structures are established that can give a platform to and regularise this process. There are already models for such multi-stakeholder structures in the form of environmental monitoring/management committees (EMCs) and the Future Forum required by the MPRDA. The former refers to the multi-stakeholder (i.e. government, company, non-governmental organisations and community based organisations) compliance monitoring bodies that are not legislated but are increasingly a condition for the issuing of environmental authorisation and water use licenses for high impact projects including mines. The latter refers to a body consisting of representatives of management and labour that is required by the MPRDA regulations and the LRA and with the purpose of addressing and mitigating the impact of restructuring, downscaling and closure on local employment and economic development. This existing structure might be augmented with an additional branch addressing the environmental (water, biodiversity and heritage) impacts during decommissioning and closure and their social ramifications. Such a body might be constituted 2 years before decommissioning is anticipated in order to afford it time to develop procedures and relationships of trust. The body would include representatives from the relevant levels and branches of government, from local community based organisations, from labour and from company management. There should be provision for the merging of forums where there is simultaneous decommissioning and closure of several mines in a particular area (e.g. Witbank). Transparency and the pro-active sharing of information should be a compulsory feature of these bodies. Further, the participation of senior office holders from the company and government must be required.

However, given the superior resources and cohesion of management, labour and government, there is the danger that the community voice will be marginalised on these bodies. Consequently these bodies do not replace the need for direct consultation by company management and government officials with communities on the closure process. While institutionalising carries the risk of co-option, such consultation should occur with organisations that represent, and are accountable to, a broad cross-section of the community. There should be a regulatory process through which communities are able to constitute themselves into a structure for the purpose of acting as overseers of rehabilitation. The body should consist of elected community representatives and two environmental specialists (in water and biodiversity). Management and government should be required to report to this body periodically on the implementation of and compliance with the closure plan and financial provision.

The unfortunate reality is that mine affected communities largely comprise of the less resourced portion of the population. As a consequence, communities experience obstacles in accessing justice and realising their environmental and socio-economic rights. Therefore creative ways of bringing community interests to the fore in decision-making and monitoring processes must be applied. This requires bold reforms to make the procedures practicably applicable in a real-world post-closure context.

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