POTENTIALLY UNCOVERED LIABILITIES—
THE PROBLEM OF A FRAGMENTED APPROACH TO
MINE CLOSURE TRUST FUNDS IN SOUTH AFRICA

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Mine Closure Trust Funds were established in South Africa in recognition (on the part of government and the mining industry) that the costs associated with the closure of mines had increased substantially as a result of evolving environmental legislation. As much of these environmental requirements were, in effect, being brought in retroactively, a compromise was reached whereby the deductions for the Fund became a pre-tax item. At the time (1992) it was implied by both parties that due to the retroactive nature of the arrangement, changes would be made as experience accumulated. Curiously this has not happened so far. It seems that skills or capacity constraints in this field have limited the revision of this potentially significant aspect of environmental management in the mining industry.

Without Objective Criteria – The Origins of Current Practice

A key problem with the determination of final closure liabilities arose right at the outset of the process: In order for mining companies to begin setting aside amounts for the closure provision, it was necessary for that liability to be quantified. The problem was that during the negotiations process that led to the creation of these funds, no South African closure criteria or guidelines had been set whereby final closure costs could be determined objectively. At the time neither the Receiver of Revenue, the DME, nor for that matter the mining companies possessed the expertise to make anything more than educated guesses about closure costs in a situation where everyone accepted that goalposts were likely to keep moving for some time. The initial closure liability determinations/calculations were therefore not done in a uniform manner or based on any historical data. Definitions of what constituted closure varied between companies and between individual sites. Closure estimates were calculated by metallurgists, consultants, quantity surveyors or even estates managers. The one exception to this was the area of demolition where most operators possessed or were able to directly access hard figures on the costs involved. However beyond this the initial calculations of closure liabilities lacked uniformity and consistency.

An informal survey of closure estimates for three major metaliferous mining companies listed on the JSE in the early 1990s revealed uniformity only insofar as the following was included in every estimate;

- Grassing of tailings dams,
- Demolition of dedicated mining infrastructure, such as mills and plant
- Capping of Shaftheads,

The assumptions underpinning, e.g. grassing of tailings dams varied considerably; from grassing to paddocking and partial grassing. For the latter it was common practice to set aside a limited amount for post-closure maintenance, while this was generally not done for the former. None of the initial estimates made explicit or material provision for post-closure monitoring or ongoing water pollution
management measures. For one of these mining companies three different sites had adopted three different approaches to the calculation of the actual contribution in terms of including or excluding revenue from salvage and scrap. Despite this discrepancy – one operation providing for gross closure liability and another for liability net of said revenues – the Receiver accepted the provisions for no less than 4 years. Managing the social impact of closure was poorly understood at the time and no provision for this was made. In short, capacity and knowledge constraints created a situation where, by present standards, there was a tendency for under-provision.

In the absence of clear guidance on what would require demolition and what would be done with the demolition rubble, the Receiver's ability to assess the validity of the calculations was further restricted. Over the years the SA Receiver of Revenue (now SARS) has made no effort to acquire technical capacity to assess the validity of the assumptions behind the calculations of mine closure liability. To this day there are no objective criteria or guidelines, as there are in First World settings, for a company or consultant can rely on for the calculation of a mine closure liability. For example, Australian legislation and industry guidelines specify the slope angle of a tailings dam for it to be accepted for closure. European legislation specifies the depth and nature of capping material that must be placed over demolished foundations and building rubble. There is no uniformity of criteria in guidelines or legislation in South Africa. The calculation of closure liability remains at the complete discretion of the mining company from whose ranks the trust fund trustees are virtually without exception.

Conflicting Objectives – SARS and DME in the administration of the Trust Funds

The prime objective of the Recciver of Revenue was and remains the maximization of tax revenue. Consequently it was very reluctant to agree to mine closure deductions being pre-tax items in the first place. Overlooking that the terms of the trust deed of a mine closure trust fund stipulate that money could only ever be utilized for reimbursement of actual closure expenditure, the Receiver sought to limit deductions by stipulating that these could be made only for 'properly quantified work'. Thus it precluded a company from making a contribution to account for a closure liability that it knew would require attention but whose rehabilitation/ remediation it could at this stage not calculate in detail. In practice, SARS opposition to general provisions for still indeterminate but real liabilities such as water pollution, has limited the ability of more progressive mining companies to set aside funds for such potentially major issues such as water pollution in a timely and sustainable manner.

The Receiver's approach is understandable and consistent with its organizational objective. In its efforts to limit the pre-tax contributions a mining company may make to the Trust Fund, it does seem to overlook that any overprovision of funds will in terms of the regulations governing such funds revert to the state if not utilised for closure work. As funds can only be claimed from the Trust Fund once work has been carried out, the Receiver's approach raises the danger of landing the state with unfinished closure work obligations. For at the time that the under-provision may finally be apparent it is unlikely that the company (which will have ceased revenue-generating operations by then) will be in a position to top up the shortfall. By contrast over-provision is likely to cost the state only the time value of money for the duration of those over-provided funds being placed into the Trust Fund.
The Receiver’s approach to the funds thus stands in direct opposition to that of the Department of Minerals and Energy (DME) whose objective it is to take all steps to reduce the possibility of mine closure occurring in a way that leaves the state with a financial liability for final closure. The DME’s role in mine closure is that of gatekeeper when it comes to the transfer of liability from the owner of the mining license back to the state. At present it has no formal role in administering or judging the adequacy of the closure provisions that will finance this move to closure. The same applies to the Department of Water Affairs and other who may be called upon to judge as to the sustainability of a mine’s closure work. As a result, RSA is now in the situation whereby SARS, who signs off on the trust fund deductions, seeks to limit these, while the DME (and DWAF) is, in theory, pushing companies to increase the provision. (Possibly there will come a time when other departments will be called upon to judge the adequacy of ‘social closure provisions) In practice, the moving goalposts both in the environmental and social fields inhibit progress in determining what would constitute sustainable closure.

For South Africa, this working at cross-purposes has created a situation where a major, if not the major closure liability associated with metalliferous and coal mines— that of acid rock drainage (and water pollution in general)—may be un-funded or at least under-provided due to technology presently not being sufficiently advanced to quantify remedial measures to the SARS satisfaction. By the late 1990s a broad range of acid water treatment technologies were in the process of being piloted on a scale that would allow mining companies to make the first tentative but meaningful cost estimates associated with their large-scale usage. All indications from these trials as well as the experience from public water utilities are that the treatment of substantial amounts of polluted water over potentially long periods of time, will require considerable capital and operational resources. Yet despite their ability to revise such estimates on a regular basis as better information becomes available, companies face opposition from SARS in beginning—a generic level-to make provision for such liabilities.

The strategic consequences of under-provision — a Namibian case study

The risks inherent in such a system have so far not manifested at large South African mining operations, largely due to the industry’s continued ability to lengthen the life of even century-old operations such as ERPM. However, South Africa’s neighbour, Namibia, has already confronted mine closure in a case where the company’s usage (more or less) of the South African model resulted in considerable under-provision for closure. In 2001 TCL Ltd, Namibia’s third-largest miner, ceased operations due to poor market prices for its products. A due diligence by prospective new operators revealed that only 30% of the true closure requirements had in fact been set aside by the company. This had not been done out of malice or negligence but simply lack of technical understanding of the financial requirements of closure. While the Namibian legislative requirements for mine closure did at the time not require formal provision for mine closure, the key similarity to the RSA situation in which the mining company retains complete discretion of the extent of the closure provision is notable. The under-provision in the TCL situation led to an agreement between the Namibian authorities and the new operators whereby financial provision for closure would be funded pro-rata to turnover and where a mine closure trust fund with external trustees,
drawn from the DME, would own material equity in the new operating entity to ensure the continued setting aside of adequate funds. Such direct government intervention can hardly be desirable from the perspective of the South African mining industry, but in the absence of progress of on objective closure criteria the risk of state intervention in the event of an under-funded closure exists.

To amplify the problems of fragmentation, the South African closure provision system lacks a major court or mine closure precedent. This may well occur when one of the older mining operators eventually does reach the end of its life. In the meantime the industry could benefit from sharing the rehabilitation and closure experience gained at site level and from international peers. In order to maintain the self-regulatory approach to closure industry could also take considerable steps to manage its risk in this respect by engaging with government to improve clarity in areas such as,

- the distinguishing criteria between closure expenditure and operational expenditure,
- the extent of post-closure monitoring required,
- guidelines on the assumptions for anticipated revenues from scrap and salvage sales, with respect to the trust funds
- the creation of space to make provision for as yet unquantifiable liabilities,

All of these matters however will remain secondary, in a system that lacks objective, commonly-applicable guidelines on the criteria by which closure can be achieved. In this context the industry may also wish to engage the DME on the setting of guidelines for provisions for 'social closure', rather than awaiting legislative imposition. The authorities administering these systems can no longer legitimately avoid acquiring at least some technical capacity to enable them to assess company estimates more objectively. The development of cost effective mine closure trust funds that will ensure that mining leaves a positive environmental as well as economic legacy require clarity of criteria is an urgent necessity for a country in which many major mining operations are reaching the evening of their life. Without objective, legitimate closure guidelines or criteria, mine closure funding will always be open to challenge.

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1 This paper is based on the authors experience as a trustee of Mine Closure Trust Funds over the past 6 years. It is meant to provoke debate and therefore does not cite each and every law or guideline referred to.

2 The information in this paragraph is based on personal communications from John Rogers, GM of the Namibian Chamber of Mines and Veston Malango, Deputy Director: Directorate of Mines at the Ministry of mines and Energy of Namibia, in February 2003.