Effective environmental governance in the mining sector

BACKGROUND

Historically, the environmental aspects of mining were not well-regulated. It was only with the Mines and Works Act (Act No. 27 of 1956) that specific measures for the protection of the surface of land were enacted. In 1991, the Minerals Act was passed and a more determined approach to environmental regulation was enforced, which remained in place with the Mineral and Petroleum Resources Development Act, or MPRDA (Act No. 28 of 2002). The National Environmental Management Act, or NEMA, (Act No. 107 of 1998) is the legislative environmental “framework” in South Africa, which defines the environmental management approach that should be integrated across all sectors, including the mining sector, while the Environmental Governance Framework promotes good governance in the South African mining sector.
However, although the objective of the Environmental Governance Framework is to ensure that the environmental impacts of mining activities are effectively mitigated or managed to a level that is acceptable to the country in accordance with the constitution as well as international standards, it is not properly adhered to. Furthermore, the inadequate implementation and enforcement of the framework has seriously compromised its efficacy and ability to ensure environmental sustainability. This is caused mainly by the lack of interdepartmental coordination, weak implementation structures, and lack of resources.

In the hopes of addressing this, the One Environmental System was introduced to streamline processes for mining, environmental authorisations, and water use. However, the system has not been successful in prioritising the issuing of closure certificates for end-of-life mines, and this has resulted in socio-economic risks for communities surrounding these mines. There is therefore a need to determine ways in which these issues can effectively be addressed.

Based on the results of an evaluation which was undertaken to assess the relevance and effectiveness of legislation and its implementation relating to environmental governance in the mining sector, this policy brief makes recommendations for addressing these issues.

**EVALUATION OF ENVIRONMENTAL GOVERNANCE IN THE MINING SECTOR**

The evaluation of the environmental governance in the mining sector, which was commissioned by the Department of Environmental Affairs (DEA) in partnership with the Department of Planning, Monitoring and Evaluation (DPME) in order to establish ways in which adherence to the framework can be enhanced, was approved in the 2014/15 National Evaluation Plan.

The evaluation covers the period from the promulgation of the Minerals Act (Act 50 of 1991) up to the legislation in place as of March 2014. A multi-method approach was used to respond to the evaluation questions, including a literature review, key informant interviews (KIIs), and four case studies (Gauteng gold mining, Northern Cape asbestos mining, Mpumalanga coal mining and North West platinum mining). The evaluation faced a number of limitations, including a lack of response to interview requests, limited quantitative data, and the publication of two sets of draft regulations at the start of the evaluation for public comment. The amendments of the published regulations did not form part of the context in which this evaluation was commissioned, however, they did have implications for the evaluation findings.

**KEY EVALUATION FINDINGS**

The findings of the evaluation indicated that while the Environmental Governance Framework is suitable for promoting good governance in the mining sector, in practice there are numerous gaps which are outlined below:

**Inadequacies of current guidelines to ensure adequate rehabilitation.**

The guidelines were generally felt by those interviewed to be insufficient for calculating the costs of rehabilitation as most mines complete their own calculations using different parameters. The guidelines are also perceived to be outdated, too generic, and not inclusive of water liabilities. Although the inadequacies of the guidelines for the calculation of financial provision may present some risk to the State, this risk is currently mitigated by the provisions of the MPRDA and its regulations.

**Appropriateness and effectiveness of current institutional mechanisms for environmental performance.**

The institutional mechanisms used for environmental performance are the promulgated statutes and regulations relating to environmental management. In theory, the framework described in the regulations is appropriate for promoting good governance in the mining sector. However, it is poorly enforced in practice. Preventive mechanisms (sustainable development and precautionary principles) will play an important role in protecting the environment to ensure sustainability for future purposes.

**Effect of the Minerals Act and MPRDA on the environmental performance of mining.**

While regulated changes in legislation have potentially enhanced environmental governance of mining, implementation remains a concern. Without adequate enforcement, the legislation loses its effectiveness. Regular site visits may be essential to ensure that there are no illegal mining activities within different areas.
Extent to which mining-related environmental liabilities is covered by the State.
Most of the historical mines that were established and operated prior to the Environmental Governance Framework that was the focus of this evaluation are no longer operational and cannot be held liable for environmental rehabilitation costs. These costs have therefore become the responsibility of the State. As with mining-related environmental liabilities, the cost for the State could have been reduced if the legislation at the time required mines to make financial provision for rehabilitation and closure. Again, the State has limited liabilities for new mines given the limited number of closure certificates.

Appropriateness of the implementation and enforcement of mining-related environmental governance from within the Department of Mineral Resources (DMR).
This evaluation accepts the DMR’s current responsibility, particularly as another change to the regime would be too disruptive to the mining industry, but has identified a number of criteria that are required for an effective competent authority. The criteria includes improving capacity, systems, and cross-departmental coordination. Currently, the criteria are not all met by any of the relevant government departments (DEA, DMR and Department of Water and Sanitation).

KEY POLICY IMPLICATIONS
With the promulgation of the Minerals Act in 1991, environmental governance in the mining sector improved significantly as mining companies were held liable for the environment and any impacts caused as a result of their prospecting and mining activities. This was further strengthened with the promulgation of the MPRDA, NEMA and their related regulations by virtue of the Environmental Management Plan (EMP) requirements and the calculations of financial provision. The legislation therefore provides a strong basis for environmental sustainability in the mining industry, however, the implementation thereof reduces its efficacy.

Eventually, what section 24 of the Constitution and NEMA require is that decision-makers employ the environment-centred difference of sustainable development, which in essence entails making environmentally-friendly, value-laden choice.

Each and every development initiative should be monitored by competent authorities, such as Environmental Impact Practitioners (EAPs), the Strategic Environmental Assessment (SEA), and both the NEMA Land and Air Quality Acts.
RECOMMENDATIONS

- To avoid confusion, legislation, particularly NEMA, should provide definitions across environmental regulations, including defining the term ‘sustainability’. Parallel rehabilitation should be encouraged or enforced. In clearly defining ‘sustainability’, the method for conducting sustainability assessments should also be defined, with clear demarcation of responsibility between mines and authorities.

- Mining companies should be responsible for all predictable environmental impacts as approved in the EMP, including unforeseen environmental impacts during operation. The State should be liable for all other unforeseen environmental impacts.

- Communication channels within and between departments should be reviewed and improved.

- DMR should develop the capacity, skills, technical expertise and systems for an effective competent authority.

- Guidelines for calculating the cost of financial provision for rehabilitation and closure of mines should be updated and training provided to mines and consultants on its implementation. DMR should move to an automated reporting system with data stored in a central database.