Mining and Biodiversity:
Evaluating EAP standards in the sector
ACKNOWLEDGEMENTS

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WWF is one of the world’s largest and most experienced independent conservation organisations, with over 6 million supporters and a global network active in more than 100 countries.

WWF’s mission is to stop the degradation of the planet’s natural environment and to build a future in which humans live in harmony with nature, by conserving the world’s biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.
The beautiful and biodiversity abundant grasslands are effectively the water production areas of South Africa. With water recognised amongst the scarcest resources, grasslands - and their water catchment systems - are thus crucial for our country’s water security.

The wider grasslands domain is home to over 4,000 plant species, 15 of South Africa’s 34 endemic mammals and ten of our 14 globally threatened bird species. They are also vital for crop food production, foraging for livestock and game farming, and tourism and recreation amongst other things.
## Contents

- **Acknowledgements** 3
- **Abbreviations** 8
- **1. Introduction** 9
- **2. Context of Mining and Biodiversity** 10
- **3. Key Challenges** 11
- **4. The Study of EAP Standards** 13
- **5. Key Findings from the Study** 17
- **6. Feedback from the Participants** 20
- **7. Recommendations** 24
- **8. Conclusion** 25
- **9. Appendices** 26
  - **Appendix 1: History of EAPASA** 26
  - **Appendix 2: Differences between existing professional bodies for EAP registration** 27
  - **Appendix 3: Four categories of biodiversity priority within MBG** 28
- **10. References** 30
The need for sustainable development in South Africa, and thus the imperative need for responsible mining, has been recognised by all sectors including government, the non-governmental sector and industry. Yet despite this common goal – and South Africa having some of the best environmental legislation in the world – this will not be achieved unless legislation is correctly implemented, and enforced.

An important stride towards the promotion of responsible mining was government’s launch of the Mining and Biodiversity Guidelines (MBG) in May 2013. The MBG is for use by environmental assessment practitioners (EAPs) and mining houses when preparing environmental impact assessments (EIAs) and environmental management plans (EMPs), as required by law for all prospecting and mining applications.

This study looks to evaluate the standards of these EAPs and their influence and impact as key levers in implementing best practice, as well as government’s role in regulating the EAP sector.

• Section 2 ‘Context’ outlines the issue of conflicting land use between the extraction of mineral resources and the need to prioritise the grasslands as vital for SA’s food and water security as captured in the 2013 Mining and Biodiversity Guidelines.

• Section 3 ‘Challenges’ introduces some of the key challenges around the quality of environmental impact assessments and environmental management plans as part of the process in considering prospecting and mining applications, and the key role players in this process.

• Section 4 ‘The study’ defines the motivation for the study, the area that was assessed and the methodology used to evaluate the environmental assessment practitioners.

• Section 5 ‘The findings’ captures the quantitative findings of the study from the 62 mining applications analysed in line with the six MBG principles.

• Section 6 ‘The feedback’ collates the qualitative feedback from EAPs and other key stakeholders, highlighting views on the MBG and registration of EAPs.

• Section 7 ‘Recommendations’ summarises the overall suggestions resulting from this piece of research and who should be responsible for implementing them.

• Section 8 ‘Conclusion’ captures the closing sentiments around this report and poses a strong question.

• Section 9 ‘Appendices’ contains addendums of various reference material including a history of EAPASA, an overview of EAP registration bodies and categories of biodiversity priority in the Mining and Biodiversity Guideline.
Despite the MBG being released and endorsed by the ministers of the DEA and DMR, there appear to have been further mining and prospecting applications within sensitive locations in the grasslands, creating the need to analyse these applications in the light of the MBG. If EAPs were adequately considering the relevant spatial data at their disposal through the MBG, the question is raised as to why mining and prospecting applications within sensitive water production and biologically diverse areas are still being pursued.

One of the concerns raised by WWF at the outset of the development of the MBG was that although being a very worthwhile and useful product, the MBG may not enjoy optimal implementation unless it is adopted as policy by decision-makers such as the DMR. Adoption as policy even at a regional level would go a long way to ensuring better uptake, implementation and overall mainstreaming.

WWF’s concern was linked to a WWF report released in late 2011 titled ‘Coal and Water Futures in South Africa: a case for conserving headwaters in the Enkangala Grasslands’. The report called on government to mitigate, manage and monitor the impacts of the mining sector in order to protect our valuable water resources. It stated that sustainable economic development, water and food security requires intervention at the highest levels to determine where coal mining, water and food provisioning must be prioritised.

The Mining and Biodiversity Guidelines were jointly published by the Department of Environmental Affairs (DEA) and the Department of Mineral Resources (DMR) in mid 2013. While they hold no legal standing, they do provide pointers to existing biodiversity information and tools and how they can be used to integrate biodiversity considerations at every stage of the mining lifecycle.

Spearheaded by the South African Mining and Biodiversity Forum (SAMBF) – which is facilitated by the Chamber of Mines – both WWF South Africa and the South African National Biodiversity Institute (SANBI) were engaged as co-contributors to the development of these Mining and Biodiversity Guidelines.

WWF-SA and SANBI have shared interest in the grasslands area where most coal mining occurs – across KwaZulu-Natal, Mpumalanga, the Free State and the Eastern Cape – as these grasslands are effectively the water production areas of our country. Without them, we would be unable to survive as a species, or grow our economy.

The Department of Energy states that “77% of South Africa’s energy needs are derived from coal” and that this situation is unlikely to change significantly in the next two decades owing to the lack of suitable alternatives to coal as an energy source.

Given that coal is an ever decreasing resource and energy demands are increasing, this does not bode well for the future of water and food security in South Africa. Many of the high yield agricultural land, water production zones, important biodiversity areas and coal deposits overlap.

With water recognised as one of the scarcest resources in South Africa, grasslands are thus crucial for our country’s water security. The need to protect our grasslands and their water catchment systems should clearly be a national priority and represents a significant risk mitigation strategy whilst simultaneously ensuring appropriate levels of water security to support sustainable economic and social development in South Africa.
Amongst other findings, this report revealed high levels of variation with regard to the quality of environmental impact assessments (EIAs) and environmental management plans (EMPs) as required by law to be developed by an environmental assessment practitioner (EAP) for all mining applications.

The report clearly highlighted weaknesses in the application processes stating “it appears that the EMP exercise is a mere ‘tick box’ process implemented to fulfil the basic environmental requirements, as set by the DMR”. EMPs with inadequate rehabilitation plans, or none at all, make it near impossible to define the links that should be present between these mandatory plans and the calculations for financial provisions for mine rehabilitation. This then inspired a second mining-focused WWF-SA report in August 2012, titled Financial Provisions for Rehabilitation and Closure in South African Mining.

The 2013 Coal and Water Futures report inspired this 2014 study as variation was also traced in the qualifications and experience of the environmental assessment practitioners (EAPs) responsible for the compilation of these vital EMPs. The report stated that EMPs and EIAs must be completed by trained environmental practitioners, even during the prospecting phase and that EAPs must be held responsible for the quality of their work. It also highlighted the need for peer review by external sources or completion of the EMP by external experts, as well as regulation of the EAP sector.

EAPs play a critical role when it comes to the adherence and implementation of legislation related to mining and prospecting applications. They are meant to fulfil the role of filtering applications with acceptable impacts from those applications that would have unacceptable impacts, and then to present their findings to the relevant authorities in an objective manner – thus promoting sustainable development in South Africa.

Questions around the independence or objectivity of in-house EAPs, and misrepresentation of information or findings by experts, are just a few of the concerns that remain unresolved in the EAP sector in South Africa and as stressed by WWF in the Coal and Water Futures report. It is important to note that at present, in-house EAP consultants can be used in the compilation of EMPs as the Mineral and Petroleum Resources Development Act does not compel mining houses to use independent or external EAPs, compared to NEMA which dictates the use of independent EAPs for EIA applications.

Regulation of the environmental impact sector and the registration of EAPs in South Africa has long been debated. Following the creation of regulation body EAPASA in 2011, and an official application to be a Registration Authority according to NEMA 24H in August 2012, the appointment has still not been finalised.

Study area

Following the Coal and Water Futures report study area, the Enkangala Grasslands Project domain was again used as the focus of this study. The Enkangala Grasslands project focal area has the headwaters, or source, of three vital rivers located there – the Vaal, Thukela and Pongola.

Alarmingly, at least a third of the 1.6 million hectare Enkangala domain – which straddles Mpumalanga, KwaZulu-Natal and the Free State – is under some form of prospecting or mining application, many of which are located in these rich biodiversity, high yield water production areas.

Figure 3 Map of the biomes of South Africa showing the grassland biome in green and the outline of the Enkangala Grasslands Project area.
**Approach**

A combination of quantitative and qualitative research was carried out. Using mining and prospecting applications over a one year period the approach was to assess these applications for their adherence to the six core principles of the MBG, which are:

1. Apply the law
2. Use the best biodiversity information
3. Engage stakeholders thoroughly
4. Use best practice environmental impact assessment (EIA) to identify, assess and evaluate impacts on biodiversity
5. Apply the mitigation hierarchy in planning any mining-related activities and develop robust environmental management programmes (EMP)
6. Ensure effective implementation of the EMP, including adaptive management.

It is important to note that this study did not investigate the accuracy of information supplied by the EAPs (which could be the focus of a future study).

Stakeholder and EAP perceptions and feedback around key issues were also obtained through surveys.

**Quantitative methodology**

The Department of Mineral Resources was the first point of contact to obtain sample EMPs and EIAs for prospecting rights, mining permits and mining rights per province. The DMR offices initially co-operated and requested submission of requests to the regional managers in each office. However, after this there was no further response from any of the DMR regional offices. Given the need to proceed with the study, it was decided to approach the provincial conservation authorities for assistance in acquiring these samples of EMPs and EIAs for the study periods.

Support was received from the Mpumalanga Tourism and Parks Agency (MTPA) and Ezemvelo KZN Wildlife. With Mpumalanga and KwaZulu-Natal being the primary focal areas for the study, it was fortuitous that such co-operation and support was forthcoming.

During the initial screening of applications, it was discovered that few applications submitted actually fell within the Enkangala Grasslands domain and it was decided that applications from KZN and Mpumalanga which overlapped with the EGP domain would be reviewed.

A total of 62 applications were evaluated for Mpumalanga and KZN. A spreadsheet was used to table the information gathered during the evaluation of the sampled mining EIAs and EMPs. The spreadsheet columns represented:

- Commodity mined: coal and associated minerals,
- Application type: mining right, prospecting right or mining permit,
- Name of farm/application area,
- Biodiversity conservation status of the application area,
- Details of EAP,
- Size of EAP firm,
- Proponent,
- Phase of study pre or post,
- Six principles of the MBG.

The six principles of the Mining and Biodiversity Guideline (MBG) were used as the baseline criteria against which the sample EMPs and EIAs were assessed as below:

<table>
<thead>
<tr>
<th>MBG Principle</th>
<th>Criteria used to assess the EMPs and EIAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Apply the law</td>
<td>Use of the correct template (proforma) for a particular type of application and full application of all the relevant laws. Generally meeting the administrative requirements which includes the requirements of the MPRDA and other complimentary legislation.</td>
</tr>
<tr>
<td>2. Use the best available biodiversity information</td>
<td>Use of Provincial Conservation Plans. Use of SANBI website to identify conservation status of the area. Acknowledgement of important ecosystems and natural features such as FEPAs, forests, wetlands etc.</td>
</tr>
<tr>
<td>3. Thorough engagement of relevant stakeholders</td>
<td>Identification of key stakeholders as per the MPRDA and MBG. Contact and consultation of all relevant stakeholders. Use of newspaper adverts, flyers, public meetings to inform stakeholders. Evidence and proof of engagement (e.g. comments) included in EIA/EMP report.</td>
</tr>
<tr>
<td>4. Use best practice in environmental impact assessment to identify, assess and evaluate impacts on biodiversity</td>
<td>Ability to identify impacts associated with the proposed activity/activities. Identification of cumulative impacts. Specialist studies incorporated to the application.</td>
</tr>
<tr>
<td>5. Apply the mitigation hierarchy when planning any mining-related activities and develop robust environmental management programmes</td>
<td>Mitigation hierarchy applied to minimise or eliminate identified impacts. Adequate addressing of impacts through EMP and comprehensive reporting on proposed mitigation of biodiversity and related impacts. Rehabilitation should be proposed only if attempts to avoid or minimise the impact are impossible. Offsetting of residual impacts pursued only as a last resort.</td>
</tr>
</tbody>
</table>
Two key areas of relevance are highlighted in the findings, namely adherence to each of the six MBG principles in the first graph, and the levels of adherence between smaller and larger EAP consultancies in the second graph.

**KEY FINDINGS FROM THE STUDY**

**Principle 1: Apply the law**
**Principle 2: Use best available biodiversity information**
**Principle 3: Engage all relevant stakeholders thoroughly**
**Principle 4: Use best practice EIA**
**Principle 5: Apply mitigation hierarchy**
**Principle 6: Ensure effective implementation**

Figure 4 Graph reflecting the levels of adherence to the MBG principles

When considering the findings represented in Figure 4 above, the contrast is obvious between levels of adherence to principles 1 (Apply the law), 3 (Engage all relevant stakeholders thoroughly) and 5 (Apply mitigation hierarchy) which ranges between 81% and 83% compared to the lower levels of adherence to principles 2 (Use best available biodiversity information), 4 (Use best practice EIA) and 6 (Ensure effective implementation) ranging between 68% and 73%.

 Whilst levels of adherence to MBG principles 1, 3 and 5 appear acceptable it must be considered that the MBG does not provide new or additional information and should in fact be the minimum that mining houses should adhere to irrespective of the existence of a guideline such as the MBG.

Levels of non-adherence to MBG principles 2, 4 and 6 range between 27% - 32% – nearly a third of all applications – and this is only representative of the sample area. These levels of non-adherence are too high and confirm what is already being experienced in practice, that certain EAPs and/ or mining houses are apparently disregarding critically important components in the completion of their coal mining or prospecting applications.

Qualitative methodology

A questionnaire was developed to assess EAP and stakeholder views. It was forwarded to 36 EAPs for completion, with the list of EAPs compiled from EMPs and EIAs sampled for this evaluation. While 5 EAPs responded, only 4 completed questionnaires were received. There were a total of 8 responses received from other stakeholders (civil society organisations), and no responses received from government.
Part of this study included a comparison of the levels of adherence to the MBG principles between “smaller” and “larger” EAP consultancies. For the purposes of this study “larger” EAP consultancies are defined as experienced and credible consultancies with a proven track record, appropriate and relevant qualifications as well as credible references for services offered. “Smaller” EAP consultancies refer to consultancies without experience and a proven track record, lack of accountability, as well as lack of relevant qualifications for services offered. Ideally there should not be any such gaps between “larger” and “smaller” EAP consultancies, yet the findings reveal that there are substantial gaps in the levels of adherence. These findings could be attributed to larger EAP consultancies being able to attract and retain more experienced and better educated EAPs when compared to smaller EAP consultancies, but this should not be taking place and is once again unacceptable.

The findings reflect a definite out-performance by larger EAP consultancies in terms of adherence to MBG principles 1 (Apply the law), 2 (Use the best available biodiversity information), 3 (Engage all relevant stakeholders thoroughly) and 5 (Apply mitigation hierarchy) and at the same time highlights unacceptably low adherence to MBG principle 4 (Use best practice EIA) by the larger EAP consultancies (only 50% adherence).

The MBG states “using good practice EIA to identify, assess and evaluate impacts on biodiversity is the fourth principle important for integrating biodiversity information into decision making about mining. This principle is the MBG principle that EAPs should be most familiar with, the expected area of their expertise yet it has the lowest level of adherence. This behaviour is unacceptable at this stage of the responsible mining/sustainable development agenda in South Africa. This reinforces the need for stricter controls over the EAP sector in South Africa under a body like EAPASA.

The smaller EAP consultancies less than satisfactory adherence to MBG principles (ranging between 64% and 80%) indicate that they may need to be better monitored and require more training on the applicable legislation and the MBG before they can even be considered for registration under a body like EAPASA.

**Findings conclusion**

In this sample study, the levels of non-adherence are alarmingly high. The approximately 30% margin of non-adherence by EAPs to the MBG principles is too large to ignore and is cause for concern when considering the context of coal mining and its associated impacts. Lack of adherence to the relevant environmental laws by certain EAPs in the mining sector is one of the gaps that need to be addressed urgently. Full compliance with the six basic MBG principles is necessary if South Africa is serious about meeting its climate change and sustainable development targets given the impact poor adherence will have on unsustainable development application approvals.
FEEDBACK FROM THE PARTICIPANTS

While a variety of questions were addressed in the survey, there were two that were of particular interest. The first one enquired about views on the MBG with regard to the role it plays in helping to complete EMPs and EIAs, and the second one asked of EAPs and other stakeholders what they thought about a registration for EAPs.

Views on Mining and Biodiversity Guidelines

Q: What is your view on the Mining and Biodiversity Guideline in terms of the role it plays in supporting EMP and EIA completion?

I had not had a lot of dealings with the Mining and Biodiversity Guideline. The premise behind the guideline is a good one-sustainable development- and the document provides effective guidance to those persons new to the field. The layout and logical progression of the guideline is comprehensive and informative providing a holistic approach to environmental assessment within the mining sector (including principles of NEMA).

The document does not (should not) provide any “revelations” to those people who deal with EIAs/EMP; but does not serve to reiterate the focus and purpose of environmental assessment, especially within the mining sector (prevention of development where necessary with mitigation, management and rehabilitation for less sensitive areas).

The guideline highlights a balanced and realistic approach to assessments — mining impacts the environment, but the environment also has an impact on mining (especially in terms of planning and method). It is also good that focus is on biodiversity (habitat creation and the interaction of flora and fauna based on earth sciences) rather than focusing on specific plants/animals. In addition, highlighting the fact that the prospecting stage allows for effective environmental baseline data collection (review of scoping undertaken in proforma EMP) that will assist in assessing fatal flaws and risk of any proposed mining operation. It is only once we accept/view the environment as a composite which is in a state of flux with all aspects contributing towards an ever balancing situation that system integrity (and by implication threatened plant and animal species) can be effectively protected. This guideline does not preclude the use of specialists for onsite assessment during the EIA phase of a mining right assessment.

I would say it’s a great tool if used and followed well. I would suggest that communities are work shopped on these guidelines so that they know what to look for and raised during the PPP.

It is not clear on what should be allowed and what not. It is very technical and difficult to understand for the normal person in the street. A short summary and maps of areas that can be easily accessed on the internet would help to show which areas must be considered sensitive and which not.

Potentially good. As long as it is used by DMR.

The guidelines are important because they inform us on important information about the impacts of mining on the biodiversity of the area, both the advantages and disadvantages.

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It is a superb resource for EAPs, the public, mining companies and their investors. However, it is currently not being utilised by the mining sector to consider the placement of mines, evident from the current mining applications. We have no idea how well the EIA processes use these guidelines.

We are not in a position to comment on the role that the MBG plays in supporting EMP and EIA proforma completion, but we believe that our views on the Guideline could be relevant here. The Guideline could be useful tool, but we do not believe that it will play any significant role in changing the approach of consultants, mining companies or government is assessing the environmental impact of mining or in improving the environmental management of mines for the following reasons:

- The Guideline has no legal force – EAPs are not obliged to take it into consideration when drafting EMPs, EMPs and EIAs;
- It is easy to “retrofit” the recommendations of the Guideline into completed EMPs, EMPs and EIAs; and
- The Guidelines appear to have made no difference at all to the extent to which mining companies apply for prospecting and mining rights in ecologically sensitive areas, or to the approach of the DMR in assessing those applications. For example, a prospecting right was recently applied for and granted in the Barberton Nature Reserve in Mpumalanga.

Summary of views on MBG

There is generally a positive response to the MBG by EAPs and some of the other participants. Some of the EAPs state that they have not yet used the MBG but welcome the document and state that it is good for EAPs new to the sector, others stating that it should not be providing anything new to EAPs who are experienced in the sector. This statement supports the view that the MBG embodies the minimum standards that EAPs and mining houses are supposed to be observing in their applications and mining operations. It was also noted that the EAPs who responded are likely to be more environmentally responsible, and are therefore the ones who view the MBG as a statement of the obvious.

Other respondents stated that the MBG is too technical, while another stated that while it is a useful tool, it has not yet changed the approach of EAPs, mining houses and government to mining and prospecting applications. Only time and future re-assessment will tell whether or not the MBG fulfils the role it is supposed to in the mining sector.
Views on registration of EAPs

EAP responses

Q: What is your recommendation regarding EAP certification/registration in SA?

There should be a registration body to govern the quality of work being done. Registration should be compulsory for all EAPs undertaking EIA related processes. Similar to the engineering profession, part of the registration requirement should be the maintaining a level of quality through training and courses recognised by the registration body. Unlike the engineering profession, it is difficult in the environmental industry to identify what courses are worthwhile and which are a waste of time and money. It would be good if the registration body could provide a more focused strategy to maintaining a high standard within the industry.

EAPs need to have a comprehensive understanding of the environment, as well as the specialist environmental information. The EAP takes information form the various specialists and combines them in a succinct and logical fashion, and therefore needs to be able to assess specialist reports, query assessments, and combine sometimes conflicting information in a format that persons without a scientific background can understand. This skill is not necessarily learnt, but comes from understanding and practice. Certification of EAPs allows for control and regulation of the sector; however the effectiveness of such EAP certification depends on the criteria and mechanisms of enforcement. Any person with at least a four year science degree (earth and/or life) should be able to act as an EAP. I am unsure of the effectiveness of certification; more importantly the regulating body should have sufficient capacity to effectively assess the submissions being made for the content, competence and discharging of their duty.

Peer review offers a good mechanism for quality assurance while certification/professional registration binds EAPs to a Code of Conduct or Practice, which would allow for sanction or disciplinary action. Ideally, both review and certification is required.

No comment.

Stakeholder responses

Q: What is your recommendation regarding EAP certification/registration in SA?

Stakeholders call on IAIA-SA to play a more active role in the accreditation and quality assurance of EAPs and their work.

Some recourse short of legal action should be made available to stakeholders when it is apparent that an EAP has been negligent or inexperienced in carrying out their duties.

I suggest they be controlled by a professions board and they come up with a system where the EAPs are not paid directly by the applicants.

EAP regulation will not help unless there are minimum standards to which EAPs and professionals are held accountable and be deregistered if they contravene.

Summary of views on EAP registration

We are of the opinion that all EAPs must be registered by a professional body that regulates the EA practice. The names of registered EAPs must be placed on a panel and the professional body will allocate a name on the panel to a particular mining project. If this recommendation is followed, the public will be able to lodge complaints against the conduct of EAPs with the professional body, which may result in a disciplinary hearing and subsequent suspension, expulsion or any other relevant disciplinary action. The disciplinary body must also be vested with the power to order that a peer review of EMPs, EIAs and EIARS be conducted under certain circumstances. Registered EAPs must be classified in accordance with their academic and professional backgrounds. In this way, only specialist mining EAPs will be allocated to mining projects.

It needs to be implemented as soon as possible and monitored.

To offset inconsistencies in competence and independence, there is the need for EAPs, like more established professions, to be regulated by an independent professional body with whom registration is compulsory to practice. Such a body, the Environmental Assessment Practitioners Association of South Africa (EAPASA) has formed. However, the Minister of Water and Environmental Affairs has, to our knowledge, not yet approved EAPASA’s application under s24H of NEMA to be appointed as a Registration Authority.

Feedback conclusion

There is unanimous support from both stakeholders and EAPs for the registration of EAPs under a body like EAPASA. They are however of the view that registration on its own is not enough that registration needs to be coupled with a peer review system, disciplinary action and possible suspension if EAPs are found guilty of misconduct.

There is also a call for the classification of EAPs according to their academic and professional backgrounds so that specialist mining EAPs are allocated to mining projects. There are also suggestions for a rotation system, or the appointment of a panel that can allocate EAPs to projects. This would promote the independence and level of objectivity of EAPs in the sector.

Some EAPs call for guidance from a body on further training that will assist in maintaining a high standard in the industry.

The findings and feedback have confirmed what has already been observed by stakeholders in the biodiversity sector, and when analysed, the overall performance of the EAP sector is at an unsatisfactory level. If this sub-standard performance in the EAP sector continues, we are unlikely to halt or decrease the current loss of biodiversity in the context of mining activities in South Africa.
**RECOMMENDATIONS**

Since the Mining and Biodiversity Guideline was launched in May 2013, it has generally been welcomed in all sectors. However, concerns remain on whether or not it would change the approach of the EAPs, mining houses and government in assessing the environmental impact of mines on the environment.

Serious consideration needs to be given to the mainstreaming of the MBG in all sectors related to mining and environmental assessment.

The promotion of responsible mining practice in South Africa is critically important not only from an economic perspective, but from a biodiversity, food and water security perspective. This evaluation has highlighted strengths and deficiencies in EAP standards in the mining sector. The current lack of legal control over the EAP sector, pending appointment of EAPASA, has been highlighted as a serious concern by stakeholders and EAPs, and there is general support for the appointment of a registration authority under Section 24H of NEMA as a first priority.

Registration of EAPs on its own is not enough to close the current gaps in control over the EAP sector and stakeholders, and hence this report is highlighting the following recommendations:

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>By who?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Fast track the appointment of EAPASA as a Registration Authority under Section 24H of NEMA.</strong></td>
<td>National government</td>
</tr>
<tr>
<td>a) Once EAPASA appointed, develop regulations to give more legal force to the control of EAPs and EAP standards.</td>
<td>EAPASA</td>
</tr>
<tr>
<td>b) Once EAPASA is appointed, prioritise the creation of a system to assess existing EAP standards and grade EAPs before they are registered on the EAPASA system.</td>
<td>EAPASA</td>
</tr>
<tr>
<td>c) Once EAPASA is appointed, include peer review as a system of control to monitor the work produced by EAPs.</td>
<td>EAPASA</td>
</tr>
<tr>
<td>d) Once EAPASA is appointed, appoint a panel within EAPASA that can review problematic applications and exercise disciplinary action against EAPs that are not performing according to minimum standards.</td>
<td>EAPASA</td>
</tr>
<tr>
<td>e) Once EAPASA is appointed, create a rotation system so that the mining houses do not choose the same EAP consultancy for their applications, thereby promoting the independence and objectivity of the EAP, and consider the control of in-house EAPs in this regard too.</td>
<td>EAPASA</td>
</tr>
<tr>
<td><strong>2. Facilitate access to finance</strong> to build capacity within EAPASA to enable it to carry out its mandate.</td>
<td>DEA</td>
</tr>
<tr>
<td><strong>3. Assess and develop EAP capacity</strong> within national and provincial DEA, DMR and DWA to ensure that applications meet all legal and best practice requirements before applications are authorised.</td>
<td>DEA, DMR &amp; DWA</td>
</tr>
<tr>
<td><strong>4. Facilitate training on the use of the MBG</strong> as an ongoing initiative for better uptake.</td>
<td>SAMBF/ DEA &amp; DMR</td>
</tr>
<tr>
<td><strong>5. Adopt MBG as mandatory policy</strong> in the MPRDA application process.</td>
<td>Regional DMR offices</td>
</tr>
</tbody>
</table>

**CONCLUSION**

Surely failure to apply the laws referred to in the Mining and Biodiversity Guideline minimum standards should result in an immediate rejection of these mining applications?

What is the reason for some EAPs in the sector failing to observe the minimum standards, and what are the possible reasons to justify this failure?

If the suggested recommendations and changes are implemented we could see a positive change in the current levels of adherence to the relevant laws by EAPs in the mining sector. These standards could be re-assessed again in the future to track and report changes, and to reflect changes to EAP standards, towards a true future of sustainable development for South Africa.
APPENDICES

Appendix 1: History of EAPASA

According to eapasa.org, regulation of the environmental impact sector and the registration of EAPs in South Africa has long been debated.

In 2005, the Interim Certification Board (ICB) for Environment Practitioners in South Africa and the Department of Environmental Affairs and Tourism (DEAT) signed a Memorandum of Understanding (MoU) which initiated all the negotiations and consultations which eventually led to the launch of the Environmental Assessment Practitioners Association of South Africa (EAPASA) in 2011.

The then Deputy Minister of Water and Environmental Affairs, Rejoice Mabudafhasi, officially launched EAPASA in April 2011.

EAPASA was established to promote the public interest through the advancement of the quality of environmental assessment practice in South Africa by establishing, promoting and maintaining registration of Environmental Assessment Practitioners in terms of section 24H of the National Environmental Management Act, Act 107 of 1998.

Ms Mabudafhasi spoke of the Department’s commitment “to put in place a system for integrated environmental impact management and assessment within the context of the principles of sustainable development”. She described the system as:

• a combination of initiatives and interventions including the introduction of a framework of alternative tools and systems to enhance and compliment the current environmental impact assessment (EIA) system, and

• developing and maintaining capacity, law reform and the integration of regulatory processes and coordination between organs of state.

An EAPASA board was nominated and selected in November 2011 and formally founded in terms of its constitution in February 2012.

In August 2012, the EAPASA Board submitted an application to the Minister of Water and Environmental Affairs to be appointed as a Registration Authority in terms of section 24H of NEMA, but the appointment has not yet been finalised.

EAPASA has highlighted the outcomes that are required for the proposed Registration Authority to perform an effective quality assurance role in environmental assessment practice in South Africa:

• The establishment of a representative and recognised association that would establish a Registration Authority and agreed registration system that is legally competent in terms of section 24H of NEMA as amended;

• The registration of a qualification for environmental assessment practice within the National Qualifications Framework (NQF) in collaboration with the South African Qualifications Authority (SAQA), which was completed in 2008;

• The conclusion of relevant enabling legal mechanisms making it compulsory for EAPs to be registered, to be implemented when the Minister appoints EAPASA as a registration authority for EAPs in terms of Section 24 H of NEMA.

Appendix 2: Differences between professional bodies for EAP registration

<table>
<thead>
<tr>
<th>Legal standing</th>
<th>South African Council for Natural Scientific Professions (SACNASP)</th>
<th>Southern African Institute of Ecologists and Environmental Scientists (SAIEES)</th>
<th>Interim Certification Board for Environment Assessment Practitioners (ICB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voluntary.</td>
<td>Governed by the Natural Scientific Professions Act, 1993 (Act 106 of 1993); compulsory for professional natural scientists.</td>
<td>Honours degree (or equivalent) in an appropriate discipline, and a further postgraduate degree in ecology, environmental science or equivalent.</td>
<td>The ICB is made up of representatives from 17 participating organisations from diverse fields and professions. Voluntary at present.</td>
</tr>
<tr>
<td>Academic background</td>
<td>BSc Honours in Natural Science. At least one subject that can be used to qualify the applicant in one of the professions as listed in Annexure I, section A of the Act. Human, as opposed to natural scientists, and are not eligible to register with SACNASP. Environmental practitioners without a natural science degree, similarly, cannot register with SACNASP.</td>
<td>Honours degree (or equivalent) in an appropriate discipline, and a further postgraduate degree in ecology, environmental science or equivalent.</td>
<td>A degree in environmental practice from a SA university or Technikon (or recognised equivalent); or a degree from a SA university or Technikon (or recognised equivalent) plus a further postgraduate degree or short course in environmental practice, from a SA university or Technikon (or recognised equivalent).</td>
</tr>
<tr>
<td>Professional experience</td>
<td>3 years minimum.</td>
<td>3 years.</td>
<td>Degree and a short course or diploma in environmental practice – five years subsequent experience in responsible charge.</td>
</tr>
<tr>
<td>Codes of conduct and/ or ethics, and disciplinary procedures</td>
<td>To be drawn up.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>
## Appendix 3: Four categories of biodiversity priority within MBG

<table>
<thead>
<tr>
<th>Category</th>
<th>Biodiversity priority areas</th>
<th>Implications for mining</th>
</tr>
</thead>
</table>
| Areas in which mining is prohibited | • Protected areas | Mining is legally prohibited as the land is:  
  • legally reserved by law, here the protected Areas Act  
  • identified by the Minister of Mineral Resources in terms of Section 49 of the Mineral Resources Act |
| | • World Heritage Sites and their legally proclaimed buffers | |
| | • Areas declared as no-go areas under Section 49 of the Mineral Resources Act | Mining rights should be withdrawn in these areas. |
| Areas in which mining should be prohibited | • Critically endangered and endangered ecosystems | Mining is not yet legally prohibited, but where it should be due to their biodiversity significance and importance to ecosystem services (e.g. water flow regulation and water provisioning), these areas are necessary to ensure protection of the environment, sustainability, and human well-being. Section 49 of the Mineral Resources Act may be an appropriate tool. Granting of Environmental Authorisations should also be prohibited. |
| | • Critical Biodiversity Areas | |
| | • River and wetland Freshwater Ecosystem Priority Areas (FEPAs), and 1km buffer of river and wetland FEPAs | |
| | • Ramsar sites | |
| | • Estuarine functional zone | |

### Areas in which mining is highly undesirable and should be restricted

- Protected area buffers
- Transfrontier Conservation Areas (remaining areas outside of formally proclaimed protected areas)
- High water yield areas
- The Coastal Protection Zone

Mining should be restricted in these areas because they are important for conserving biodiversity, for supporting or buffering the biodiversity priority areas in which mining is prohibited, or for maintaining important ecosystem services for particular communities or the country as a whole. Mining activities should be restricted:

i. subject to strategic assessment of the optimum, sustainable land use in the long term for a given area; taking into account the environmental sensitivity of the area, overall environmental and socio-economic costs and benefits of mining, potential strategic importance of the minerals to the country, and whether or not the minerals could be extracted from deposits outside of these biodiversity priority areas, and/or

ii. subject to the significance of the impact on biodiversity determined through an environmental impact assessment. Granting of Environmental Authorisations should be restricted. Restrictions should also be written into licence agreements and/or other management agreements where they apply.

### Areas in which mining should be avoided where possible

- Ecological support areas
- Vulnerable ecosystems
- Focus areas for land-based protected area expansion and focus areas for offshore protection

This is the least restrictive category of biodiversity priority areas in which mining should be avoided where possible. Biodiversity constraints may limit mining projects. Limitations should be written into licence agreements.
REFERENCES

Legislation

Mineral and Petroleum Resources Development Act 28 of 2002
National Environmental Management Act 107 OF 1998
National Environmental Management Amendment Act 62 of 2008
National Environmental Management: Biodiversity Act 10 of 2004
Regulations to the Minerals and Petroleum Resources Development Act 28 of 2002 published in Government Gazette 26275

Other publications

South African Mining and Biodiversity Guideline, May 2013
WWF-SA Coal and Water Futures: a case study of the Enkangala Grasslands, 2011

Online resources

Certification of Environmental Practitioners www.iia.co.za/Certification/
