



the federation for a sustainable environment

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COMMENTS ON THE APPLICATION FOR THE AMENDMENT OF WESIZWE'S  
BAKUBUNG MINERALS' 2009 ENVIRONMENTAL AUTHORISATION AND ITS  
APPROVED 2010 WATER USE LICENCE

The following comments are submitted on behalf of the Federation for Sustainable Environment (FSE). The FSE is a federation of community based civil society organisations committed to the realisation of the constitutional right to an environment that is not harmful to health or well-being, and to having the environment sustainably managed and protected for future generations. Their mission is specifically focussed on addressing the adverse impacts of mining and industrial activities on the lives and livelihoods of vulnerable and disadvantaged communities who live and work near South Africa's mines and industries.

The FSE is/was a member of *inter alia*:

- The Study Steering Committee on the Department of Water and Sanitation's (DWS) Development of the National Eutrophication Strategy (2020)
- The Study Steering Committee (SSC): Development of the Limpopo Water Management (WMA) Area North Reconciliation Strategy (2017)
- The Water and Sanitation Sector Leadership Group Sustainable Development Goal 6 Task Team. (2018 -)
- The Project Steering Committee: Environmental Management Framework for the Bojanala District Municipality (North West Province, South Africa). (2017)
- DWS' study steering committee on the Feasibility Study for a Long Term Solution to Address the Acid Mine Drainage Associated with the East, Central and West Rand Underground Mining Basins (2012, 2013)
- DWS' Steering Committee on the Classification of Significant Water Resources in the Mokolo and Matlabas Catchments: Limpopo Water Management Area and Crocodile (West) and Marico WMA: WP 10506

- Strategy Steering Committee (SSC) for the DWS’ Crocodile West water Supply System Reconciliation Strategy (Directorate: National Water Resource Planning)
- The South African Human Rights Commission’s (SAHRC) Section 5 Advisory Committee on Mining and Acid Mine Drainage
- The SAHRC’s Advisory Committee (section 11) to monitor and assess the implementation of the recommendations and directives arising out of the Commission’s National Hearing on the Underlying Socio-economic Challenges of Mining-affected Communities in South Africa report.

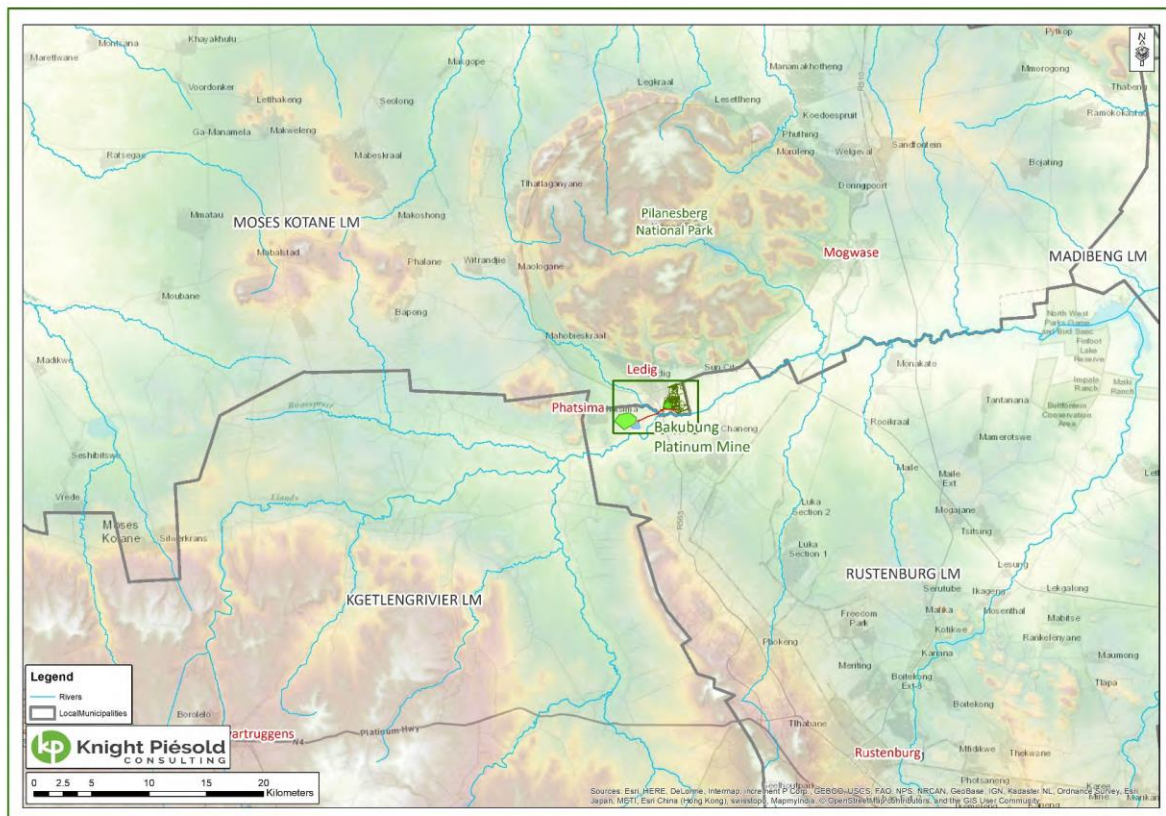
## BACKGROUND

According to the Draft Amendment of Wesizwe’s Bakubung Minerals’ 2009 Environmental Authorisation and its Approved 2010 Water Use Licence (“the Report”) the amendment pertains to:

- Changes to the mining capacity of platinum and the PGMs from 3MT per annum to 1MT per annum (immediate) and 2MT per annum (by 2024);
- **Construction of an additional Tailings Storage Facility (TSF) with evaporation dam on Frischgewaagd Farm;**
- Change of the liner for the stock pad area.

Bakubung Minerals (“the mine”) is located near Ledig, **2 km south of the Pilanesberg Game Reserve** and Sun City in the North West Province.

The close proximity of the mine to the Pilanesberg Game Reserve can be seen from the subjoined map, which was supplied by the Environmental Assessment Practitioner (EAP).



The Report informs us that the proposed area of the TSF and evaporation dam is 27ha. The height of the TSF is envisioned to be approximately 47 m and it will have a storage capacity of 7.6 million tons waste.

Although the TSF and evaporation dam will be lined, there remains the risk of a minor or major liner leakage due to ponding of groundwater underneath the liner in the long term.

The waste is considered a Type 3 waste with Copper and Nickel values above the Total Concentration Threshold (TCT) as prescribed in the National Norms and Standards for the Assessment of Waste for Landfill Disposal and the leachable concentration threshold (LCT) values of Barium, Manganese, Nickel, Lead and Total Dissolved Solids (TDS) also above the LCT 0 in terms of the aforesaid National Norms and Standards.

The Groundwater Impact Assessment confirms that samples from the waste material, which is to be deposited on the planned TSF exceeded the TCT0 or LCT2 values. Cobalt, copper, manganese, nickel and vanadium exceeded the LCT2 limits.

Our comments will focus on the impacts of the construction of an additional TSF and an evaporation dam on the Frischgewaagd farm, which we consider to be of appreciable magnitude and not on the changes to the mining capacity and the change of the liner for the stock pad area, which we consider to be insignificant.

#### BOJANALA PLATINUM DISTRICT MUNICIPALITY ENVIRONMENTAL MANAGEMENT FRAMEWORK (BPDM EMF)

Section 24 O of NEMA dictates that the criteria to be taken into account by competent authorities when considering environmental applications in terms of s 24 are *inter alia*:

*“(1) If the Minister, the Minister of Minerals and Energy, an MEC or identified competent authority considers an application for an environmental authorisation, the Minister of Minerals and Energy, MEC or competent authority must take into account all relevant factors, which may include any information and maps compiled in terms of section 24(3), including any **prescribed environmental management frameworks**, to the extent that such information, maps and frameworks are relevant to the application”.*

(Emphasis added.)

According to the BPDM EMF the number and nature of development applications in the BPDM area for environmental authorisation, indicates that there is “severe development pressure in the district area and that there are complexities around competing land uses in the area.” Tourism and mining are two of the competing land uses in the area.

The BPDM EMF identified the need for sunrise or new economic sectors that can diversify rural economies. According to the BPDM EMF **“Tourism promises to provide new vistas for rural economic transformation.”**

The desired state of the Bojanala Platinum District Municipality Environment is *inter alia* that *“the tourism potential of the area is optimally developed and utilised.”*

**The need and desirability of the proposed Project therefore has to be demonstrated in comparison with the need and desirability for alternative land uses, such as the preservation and development of tourism for the area. This calls for an evaluation of the Best Practicable Environmental Option (BPEO) for this area.**

This appraisal ought to be conducted with the guidance of *inter alia* the Mining Biodiversity Guideline and the taking into consideration of the opportunity costs. According to the Mining and Biodiversity Guideline the importance of the biodiversity features in these areas and the associated ecosystem services is sufficiently high to prohibit mining in these areas. Given the very high biodiversity importance, the Guideline states that an EIA conducted in respect of such an area should include the strategic assessment of optimum, sustainable land-use for a particular area which should determine the significance of the impact on biodiversity. The EIA must take into account the environmental sensitivity of the area, the overall environmental and socio-economic costs and benefits of mining as well as the potential strategic importance of the minerals to the country.

The Guideline states that the EIA “*needs to identify whether mining is the optimal land use, whether it is in the national interest for that deposit to be mined in that area and whether the significance of unavoidable impacts on biodiversity are justified. It is important that a risk averse and cautious approach is adopted. This implies strongly avoiding these biodiversity priority areas, given the importance of the receiving environment and the probability that the proposed activity would have significant negative impacts*”.

When considering mining these biodiversity priority areas, the Guideline prescribes a set of filters that should be sequentially applied and "mining should only be considered if:

- a. It can be clearly shown that the biodiversity priority area coincides with mineral or petroleum reserves that are strategically in the national interest to exploit.
- b. There are no alternative deposits or reserves that could be exploited in areas that are not biodiversity priority areas or less environmentally sensitive areas.
- c. It can be demonstrated that they are spatial options in the landscape that could provide substitute areas of the same habitat conservation, to ensure that biodiversity targets would be met.
- d. A full economic evaluation of mining compared with other reasonable/feasible alternative land uses, undertaken as a necessary component of the EIA, shows that mining would be the optimum sustainable land use in the proposed area.
- e. A detailed assessment and evaluation of the potential direct, indirect and cumulative impacts of mining on biodiversity and ecosystem services shows that there would be no irreplaceable loss or irreversible deterioration, and that minimising, rehabilitating, and offsetting or fully compensating for probable residual impacts would be feasible and assured, taking into account associated risks and time lags.
- f. A risk averse and cautious approach, taking into account the limits of current knowledge about the consequences of decisions and actions, can be demonstrated both in the assessment and evaluation of environmental impacts, and in the design of proposed mitigation and management measures.

The Guideline states further that:

*“The above filters should form the basis for deciding on whether or not, and how and where, to permit mining. This means that based on the significance of the impact, some authorisations may well not be granted. If granted, authorisation may set limits on allowed activities and impacts, and may specify biodiversity offsets that would be written into licence agreements and/or authorisations”.*

The Bakubung Mine's Application for EA ought to have been compiled so as to give effect to the Guideline and the decision maker must consider the Guideline in deciding whether or not to grant environmental authorisation

This includes an assessment of the opportunity costs, e.g.

- o Understanding the value of the foregone opportunity;
- o The achievement of the desired aim/goal for the specific area;
- o Optimising of positive impacts;
- o Minimising of negative impacts;
- o Equitable distribution of impacts; and
- o The maintenance of ecological integrity and environmental quality.

Applying the “*opportunity cost*” principle would change the question being asked, namely, by placing a positive duty upon the decision maker to consider if the proposed development will constitute the best use of the resources (i.e. the best practicable environmental option).

Existing tourism has a direct influence on the economic growth and development in the area. According to the BPDM EMR “*most of the tourism activities in the BPDM is focussed on the ‘bushveld experience’, including game viewing and hunting, but natural and cultural history itself also represents a significant drawcard.*”

And, “*by far the best known attractions in the BPDM area are the nature reserves located in the district. Pilanesberg Game Reserve is one of the most accessible South African game reserves. It is the fourth largest game reserve in South Africa and is set high in the Pilanesberg range, traversing the floor of an ancient, long-extinct volcano. Pilanesberg conserves all the major mammal species including lion, leopard, elephant, rhino and buffalo.*”

The Report (page 59) informs us that the significance of the visual impact of the proposed TSF is rated as high before and after mitigation. Recreational sightseers and tourists who visit the Pilanesberg National Park are highly sensitive to any change in visual quality and to sense of place. It follows hence that the impact of the proposed TSF on the ‘sense of place’ of the Pilanesberg National Park and its visitors will be negative and ought to be assessed. ‘Sense of place’ does not only have a therapeutic or spiritual value, it also has an economic value.

The accumulative impacts on ‘sense of place’ ought furthermore to be assessed since the project site is situated directly adjacent to the western side of the Royal Bafokeng Platinum Styldrift project and immediately north of Maseve's Project 1.

(Interpolation: The Report informs us that the TSF area is proposed on a site that was previously assessed for the placement of a solar plant in the 2016 EIA. The visual impact of a solar plant is far less destructive to “sense of place” than the establishment of a 47 m high TSF containing 7.6 million tons of waste.)

**It is part of our law that the potential impact of a development on the sense of place of an area must be considered.** In the case of *Director: Mineral Development Gauteng Region and another v. Save the Vaal Environment and others* 1999 (2) SA 709 (SCA) at 715C, the Supreme Court of Appeals with regard to a proposed mine on a wetland next to the Vaal river, identified as an environmental concern the “*...predicted constant noise, light, dust and water pollution resulting from the proposed strip mine will totally destroy the ‘sense of place’ of the wetland*

*and the associated Cloudy Creek. Thus the spiritual, aesthetic and therapeutic qualities associated with this area will also be eliminated.”*

The Amendment of Environmental Authorisation and Waste Management Licence Report (page 59) acknowledges that *“the construction, operation, and closure of a new TSF will have a **definite and permanent impact** on the natural topography of the area, which in turn will create a visual impact.”*

(Emphasis added.)

#### SANBI’S MINING AND BIODIVERSITY GUIDELINES AND PROPOSED ZONES ACCORDING TO THE BOJANALA PLATINUM DISTRICT MUNICIPALITY’S (BPDM) ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF0)

According to the BPDM’s EMF, *“in the BPDM area, there are five conservation areas that are legally protected and where mining is prohibited (Category A). Areas of highest biodiversity importance with highest risk for mining (Category B) occurs spread throughout the BPDM area, primarily related to river systems. Areas of high biodiversity importance with a high risk for mining (Category C) occur as buffers around the formally protected conservation areas, but also in nearly 50% of the BPDM.”*

According to the North West Biodiversity Sector Plan (READ, 2015), and as shown in Figure 18 of the Applicant’s Report, the mine as well as the **new TSF site is primarily located on a Critical Biodiversity Area 2 (CBA2)**; 54 percent of the site is of high biodiversity conservation value and of the 23 species, which may potentially occur within the study area, 21 are Red Data species and five are protected under the National Environmental Management Biodiversity Act (NEMBA).

According to SANBI’s Mining and Biodiversity Guidelines, Critical Biodiversity Areas are categorised as of the highest biodiversity importance and because of the high risk for mining, *“environmental screening, environmental impact assessment (EIA) and their associated specialist studies should focus on confirming the presence and significance of these biodiversity features, and to provide site-specific basis on which to apply the mitigation hierarchy to inform regulatory decision-making for mining, water use licences, and environmental authorisations.”*

While the Report confirms the presence and significance of the Area where the proposed TSF will be located, the EIA according to SANBI’s Mining and Biodiversity Guideline ought to have included *“the strategic assessment of optimum, sustainable land use for a particular area...this assessment should fully take into account the environmental sensitivity of the area, the overall environmental and socio-economic costs and benefits of mining, as well as the potential strategic importance of the minerals to the country.”*

The Guideline furthermore states *“authorisations may well not be granted. If granted the authorisation may set limits on allowed activities and impacts, and may specify biodiversity offsets that would be written into licence agreements and/or authorisations.”*

(Emphasis added.)

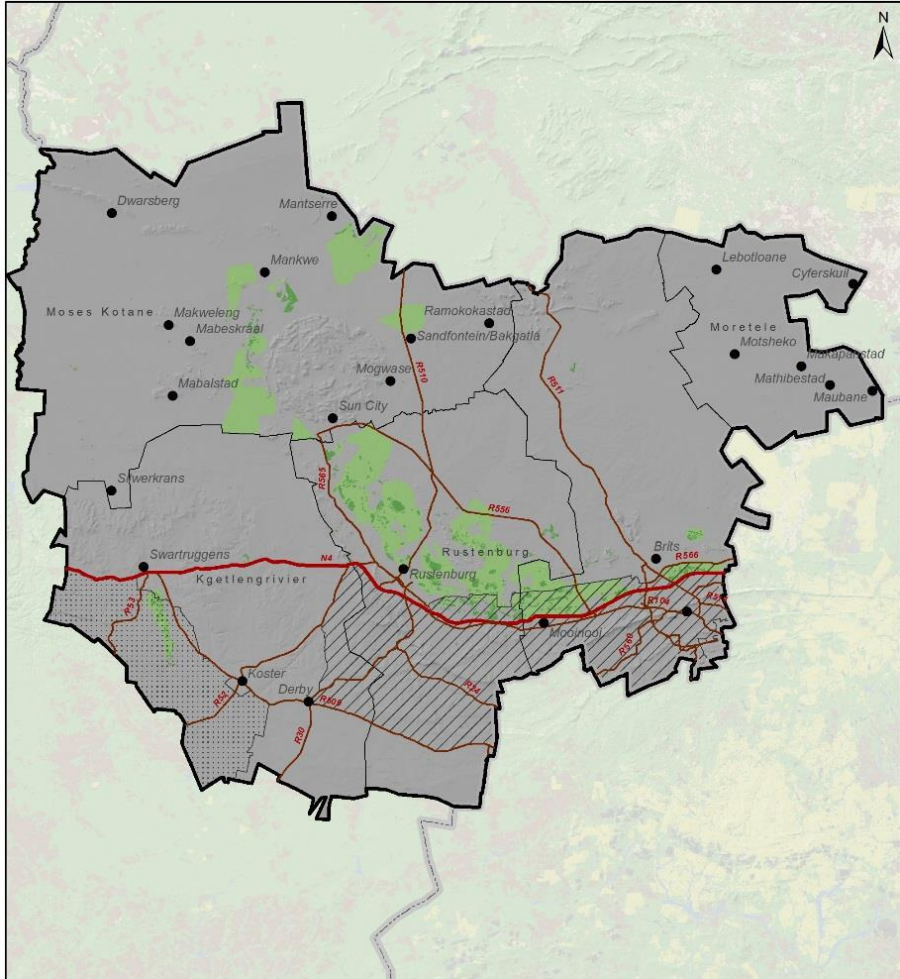
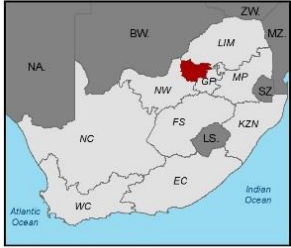
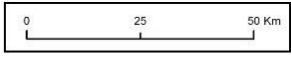
The subjoined maps are included in the BPDM EMF to indicate zones where mining is allowed and areas and zones earmarked as a biodiversity zone.

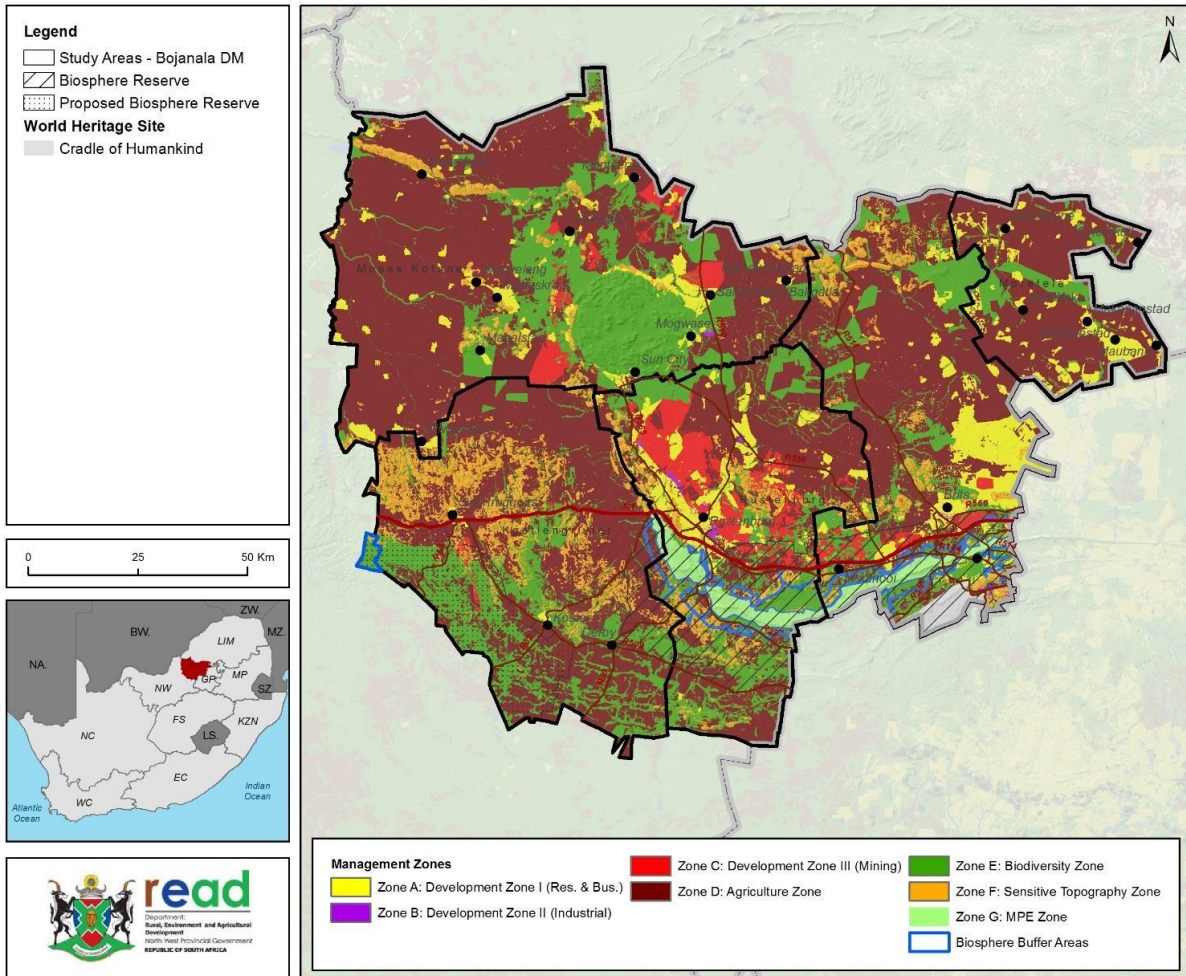
**Legend**

-  Study Areas - Bojanala DM
-  Biosphere Reserve
-  Proposed Biosphere Reserve

**Mining Potential**

-  0
-  1
-  2
-  3
-  4
-  5





**Kindly confirm if the Application for the project is aligned with the BPDM EMF proposed zones for tourism and biodiversity and SANBI’s guidelines.**

**BASELINE AQUATIC ECOLOGY ASSESSMENT**

We are informed by the Report that the Application falls within the Elands River Catchment Management Area (CMA) and on a larger scale within the Crocodile West Limpopo CMA. According to the Report the proposed Ecological Category for the relevant section of the Elands River is a D.

The Water Quality Monitoring Report confirms that the *“The Elands River in turn flows into the Limpopo River.”* The Report also informs us that *“groundwater is the sole source of water for many of the surrounding households on farms. It is for this reason that an accurate monitoring program is essential so that a potential groundwater quality impact can be identified and managed or mitigated in time.”*

Prefatory to our comments on the findings of the aquatic ecology assessment and the Water Quality Monitoring and Groundwater Report, we think it relevant to refer to the reply of the acting Director General of the Department of Water and Sanitation in August 2019, in response to the FSE’s request for the status of the actions which were proposed in the 2016 Draft Reconciliation Strategy for the Limpopo and **which was to be implemented as a matter of urgency**, namely:



1. Verification of water entitlements, that is, whether the Validation and Verification Study was finalised and a compliance monitoring and enforcement plan was developed, and unlawful water use was eliminated through prosecution.
2. The re-evaluation of the water resources of areas where unlawful water uses were removed and the water balances adjusted accordingly.
3. Monitoring of the water use to confirm water requirement projections before implementing options.
4. Implementation of water conservation and water demand management.
5. Monitoring of observed flows and storage levels at strategic points.
6. Water quality monitoring.
7. Groundwater monitoring.
8. The setting of clear targets for the construction of bulk water distribution systems.
9. The continuous integration between water balances and water supply planning to water services schemes, etc.

The Acting Director General (DG), at the time, replied that:

1. The verification is not finalized and thus the monitoring and enforcement plan is not yet developed;
2. The re-evaluation of the water resources of the areas could not be finalised due to the verification process yet to be finalised;
3. There are challenges that the Department is currently addressing regarding the surface water quantity monitoring and data processing;
4. The monitoring of transition elements needs to be addressed;
5. An update for the 2017 reconciliation strategy should be done.

#### (ANNEXURE “A”)

The response by the Acting DG highlights the serious gaps and challenges in the management of scarce water resources within the Catchment. The Catchment Agency (CMA) for the Limpopo Water Management Area has also not been established. **It is for this reason that the FSE urges the Applicant to adopt the precautionary approach when determining the management measures of surface run-off, and the treatment of extraneous or polluted water.**

The information in the Bakubung Mine’s Baseline Aquatic Ecology Assessment is advised by a desktop study and literature review, and a once off field visit on the 26<sup>th</sup> and 27<sup>th</sup> of February 2020. High rainfall was experienced prior to the field visit, which may have resulted in a dilution of pollution hence a compromised assessment.

The Baseline Aquatic Ecology Assessment furthermore informs us that:

- the aquifer system in the study area is important for local supplies and in supplying base flow for rivers;
- the vulnerability for contamination of this system is classified as medium, and
- there are wetlands within the study area, consisting of ephemeral channels, channelled and un-channelled valley bottoms with a low to moderate ecological sensitivity and importance.

**The literature, which are referenced in the above-mentioned Assessment, does not include the DWS’ Determination of Resources Quality Objectives and Numerical Limits Report in the Mokolo, Matlabas, Crocodile West and Marico Catchment in the Limpopo North West Water Management Area.**

We now refer to the Department of Water Affairs' (DWS) Resource Quality Objectives (RQOs) and Numerical Limits Report in the Mokolo, Matlabas, Crocodile West and Marico Catchment in the Limpopo North West Water Management Area (WMA 01).

According to the DWS' Report on the RQOs the Upper reaches (to the Swartruggens Dam) of the Elands River fall within Resource Unit (RU) 5.1 while the Elands River downstream (from the Swartruggens Dam to Lindleyspoort) falls within RU 5.2.

RU 5.1 is categorised as Class II and according to the DWS' Report the presence of the vulnerable *B. motebensis* within the upper reaches contribute to a high Ecological Importance and Sensitivity (EIS) for the upper reaches. The wetlands within this RU are classified as important and the rivers are classified as Freshwater Ecosystem Priority Areas (FEPAs).

RU 5.2: The IUA is a Class II and the Present Ecological Status is a C ecological category. The Ecological Water Requirements (EWR) rapid site 10 is present in this RU.

It is understood that the Application falls within RU 5.2, which according to the DWS' RQOs and Numerical Limits Report calls for:

1. The maintenance of low flows and drought flows must be attained to support the aquatic ecosystem and downstream users;
2. The instream concentration of nutrients specified must be attained to sustain aquatic ecosystem health and ensure the prescribed ecological category is met. The Nitrate and Nitrite as Nitrogen limit is  $\leq 0.05$  mg/l.

**(It is common cause that most commercial explosives used for blasting contain from 70% to 94% (by weight) ammonium nitrate and that when some of the explosives end up in shot rock and ore through either spillage or incomplete detonation, ammonia and nitrates can leach into ground water.)**

3. The concentrations of toxicants should not pose a risk to aquatic organisms and human health. The Numerical Limits of:
  - a. Al should not exceed 0.1 mg/l
  - b. Mn should not exceed 0.15 mg/l
  - c. Fe should not exceed 0.3mg/l
  - d. Pb (hard) should not exceed 0.0095 mg/l
  - e. Cu (hard) should not exceed 0.0073 mg/l
  - f. Ni should not exceed 0.07 mg/l
  - g. Co should not exceed 0.05 mg/l
  - h. Zn should not exceed 0.002 mg/l
4. Habitat diversity should be maintained for a C ecological category or improved upon.
5. The riparian vegetation cover should be maintained at a C ecological category or better condition.
6. The suitability of this stretch of river to serve as a habitat for aquatic bird and mammal populations must be maintained through proper habitat management.
7. Macro invertebrate assemblage must be maintained in a C category ecological condition or improved upon.
8. Diatom assemblage must be maintained in a C/D ecological category or improved upon.

**The Groundwater Report shows that 2 sampling points have poor water quality, 1 site has unacceptable water quality and 4 sites have marginal (not ideal) water quality. The Nitrate at sampling point FBH04D was 12.5 and the Mn at MBH03D and MBH05 was 0.583 and 0.545 respectively, which if our interpretation is correct, is in non-compliance with the RQOs.**

**This matter is not of trivial importance since this is a water scarce area with competing water users, and “groundwater is the sole source of water for many of the surrounding households on farms.”**

**The Report on Surface Water shows 3 sites having unacceptable water quality, 1 site having poor water quality with nitrate levels at 2.71 and 2.51 at SW2 and SW3 respectively, which if our interpretation is correct, are in non-compliance with the RQOs.**

**We hereby call upon the Applicant or its EAP to report on its current compliance with the above RQOs, the impact of its proposed TSF on the RQOs and its mitigation and management measures to comply with the abovementioned RQOs.**

The FSE furthermore requests that the Applicant presents its Application for the Amendment of its Water Use Licence to the Elands/Hex’s Catchment Management Forum (CMF) to allow for participation by stakeholders within the CMF.

#### AIR QUALITY

It is inferred that the Bakubung Mine falls within the Waterberg Bojanala Priority Area (WBPA). The WBPA was declared in 2012 as the third National Priority Area in terms of section 18 of the National Air Quality Management Act, 2004 (Act No. 39 of 2004) (AQA). Following the declaration, an Air Quality Management Plan (AQMP) was developed in terms of section 19 of AQA and was gazetted on the 9 December 2015. One of the WBPA AQMP’s goals is the reduction of emissions in compliance with the NAAQS in the WBPA.

According to the EAP the current operations of the Bakubung mine did not result in exceedences of more than two times per year and according to the Air Quality Specialist Report for the Bakubung Platinum Mine TSF Project the impacts for the proposed Application are considered to be low.

Notwithstanding the above findings, of relevance are the following findings which ought to motivate the Applicant to adopt a precautionary approach:

1. At the recent Bojanala Air Quality Implementation Task Team (ITT) Meeting on 1 September 2020, Mr Victor Loate of the Department: Economic Development, Environment, Conservation and Tourism, North West Provincial Government (DEDECT-NW) presented a report on the State of Air from the DEDECT-NW Network. He indicated that levels of SO<sub>2</sub> were high. According to Dr Cheledi Tshehla (South Africa Weather Services) the PM<sub>10</sub> and PM<sub>2.5</sub> exceeded the daily average limit resulting in non-compliance with the NAAQS.
2. Following the South African Human Rights Commission’s National Hearing on the Underlying Socio Economic Challenges of Mining Affected Communities in South Africa on 13-14 September; 26 and 28 September; and 3 November 2016, the Commission issued the following directives:

The DEA (in cooperation with COGTA and SALGA) is directed to conduct an audit of all provincial governments and municipalities to confirm:

- Whether all municipalities have developed and incorporated an air quality management plan into their IDPs; and
- Whether all provincial MECs and municipalities have appointed an air quality officer in line with NEMAQA.
- **Noting the reported lack of certainty around the applicability of NEMAQA to mining activities, the DEA (together with the DMR) are directed to issue a formal notice clarifying the requirements.** A copy of this public notice must be submitted to the SAHRC within three months from the release of this Report and must be accompanied by a report outlining measures taken to ensure that all industry role players are adequately made aware of the requirements.
- **The DEA (together with the DMR) must jointly report on the measures taken to streamline the control of the cumulative air pollution impacts of mining operations.** This report must outline the mechanisms that have been put in place for collation, verification and dissemination of information between stakeholders in relation to impacts reported and / or interventions undertaken in relation to air quality.

In the light of the abovementioned, we support the recommendation by Airshed Planning Professionals that an **air quality management plan** and not merely an air quality monitoring plan be adopted.

#### CORPORATE STRUCTURE AND RESPONSIBILITY

We are informed in the Air Quality Specialist Report for the Bakubung Platinum Mine that “*Wesizwe Platinum Limited (Wesizwe) is the owner of Bakubung Platinum Mine (BPM)*” and that “*Bakubung Minerals (Pty) Ltd holds the mining right for BPM.*”

Are we correct in our inference from this statement that both Wesizwe Platinum Ltd as owner of the Bakubung Mine and Bakubung Minerals (Pty) Ltd as holder of the mining right will be responsible in terms of s 28 and s 34 of the NEMA for the duty of care and remediation of environmental damage?<sup>1</sup> Please advise.

#### MITIGATION MEASURES AND ENFORCEMENT

Pages ii & iii of the Executive Summary Report inform us of the potential impacts of the proposed amendment to the EA and the WUL, namely:

- soil loss,
- loss of habitat for fauna,
- loss of faunal biodiversity,
- loss of faunal of conservation concern,
- loss of vegetation types,
- loss of plant communities,
- loss of plant species of conservation concern, and
- loss of water course habitat

The abovementioned impacts are categorised as high in the unmitigated scenario.

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<sup>1</sup> Section 34 of NEMA makes provision for both ‘firms’ (including companies and partnerships) and their ‘directors’ (including board members, executive committees or other managing bodies or companies or members of close corporations or of partnerships) to be held liable, in their personal capacities, for environmental crimes. This personal liability also applies to managers, agents or employees who have done or omitted to do an allocated task, while acting on behalf of their employer.

The impact on climate change is assessed as medium.

We are further informed that these impacts “*require a measure of mitigation which, if successfully implemented will reduce the significance of the impacts and the related residual risk*”.

The EAP concluded: “*It follows that provided the EMP is effectively implemented there is no environmental, social, or economic reason why the project should not proceed.*”

(Emphasis added.)

In the light of the findings of:

1. The South African Human Rights Commission (SAHRC) pursuant to its National Hearing on the Underlying Socio Economic Challenges of Mining Affected Communities in South Africa, on 13-14 September; 26 and 28 September; 3 November 2016, namely that: “*Overall the mining sector is riddled with challenges related to land, housing, water, the environment and the absence of sufficient participation mechanisms and access to information...Non-compliance, the failure to monitor compliance, poor enforcement, and a severe lack of coordination amongst especially government stakeholders exacerbate the socio-economic challenges faced by mining-affected communities*”, and

(ANNEXURE “B”)

2. The findings of Judge Spilg in the Environmental v BP Southern Africa (Pty) Ltd matter, namely of “*an opaque administration or an under-capacitated and potentially inhibited law enforcement agency which cannot claim the number of successful convictions one would have expected despite clear evidence of historic degradation to our environment*”,

**we express concern that the failure to implement the proposed mitigation measures may most likely not be monitored and enforced due to the DMRE’s and the DWS’ capacity constraints. For this reason we strongly recommend that a Forum be established which will allow interested and affected parties to raise their concerns and grievances with the Applicant with the objective to address and resolve environmental concerns.**

Submitted by:

Mariette Liefferink

CEO: Federation for a Sustainable Environment.

29 October 2020.

23 November 2020

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**Attention:** Tania Oosthuizen

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Our ref: Francois Joubert/Onalerona Phiri/307717.00006

**COMMENTS IN RESPECT OF BAKABUNG PLATINUM MINE AMENDMENT OF ENVIRONMENTAL AUTHORISATION AND WASTE MANAGEMENT LICENCE: NORTH WEST REGION, BOJANALA PLATINUM DISTRICT MUNICIPALITY, MOSES KOTANE LOCAL MUNICIPALITY**

Dear Sir/Madam,

**1. Introduction**

- 1.1 We have been instructed by Bakubung Ba Ratheo Traditional Community (“**the Community**”/“**our client**”) to review and comment on the Draft Report in relation to the amendment of the Bakubung Platinum Mine (“**BPM**”) Environmental Authorisation and Waste Management Licence (“**the Draft Report**”).
- 1.2 Bakubung Minerals (Pty) Ltd is the owner of Bakubung Platinum Mine (“**BPM**”), currently operating on the farm Frischgewaagd 96JQ (Portions 3, 4 and 11). Bakubung Minerals (Pty) Ltd holds the mining right for BPM.
- 1.3 Knight Piésold (“**the EAP**”) has been appointed by Bakubung Minerals (Pty) Ltd to amend the existing approved Environmental Authorisation (EA) and Waste Management Licence granted in 2017 – (NW/30/5/1/2/3/2/1/(339) EM) of the BPM. The mine is located near Ledig, 2km south of the Pilanesberg Game Reserve and Sun City in the North West Province.
- 1.4 Mining activities at BPM are in respect of Platinum Group Elements, i.e. platinum, palladium, rhodium, and gold, with copper and nickel as by-products. The mine falls within the Rustenburg and Moses Kotane Local Municipalities of the Bojanala District Municipality.
- 1.5 This letter serves as our client’s comments in respect of the Draft Report. Please take note that we do not regard this reply as our final opportunity to engage as an interested and affected party and reserve the right to comment at a later stage.

## 2. Proposed Changes in the Amendment Application

- 2.1 The Amendment Application is based on BPM's intention to re-optimize the mining process in order to make its operations financially viable. The mine capacity was authorised for 3 MT/annum, but BPM wishes to approach this capacity in a phased approach – 1 Mt/annum (immediate) and 2 MT/annum, by 2024.
- 2.2 The specific changes to the project which form part of the proposed amendment are as follows:
  - 2.2.1 capacity change from 3 MT/annum to 1 MT/annum and 2 MT/annum;
  - 2.2.2 construction of an additional Tailings Storage Facility (“TSF”) on Frischgewaagd Farm; and
  - 2.2.3 change of liner for the stock pad area.

## 3. Social Impact of the Proposed Amendment

### *Community Interest and Public Participation*

- 3.1 In terms of the Draft Report, the project is located in Ward 28 of the Moses Kotane Local Municipality that falls under the Bojanala Platinum District Municipality in the North West Province. The area is under the traditional authority of our client. It is worth noting that the area is predominantly rural with predominantly traditional land ownership.
- 3.2 In addition, the Draft Report provides that Setswana is the home language of most residents in the study area and that there are differences in the language profiles of the different wards, with some wards having a relatively large proportion of people with isiZulu as a home language.
- 3.3 It is submitted that, in keeping with the principle of public participation, it is important that affected communities be consulted and engaged in an accessible and understandable way, in order to allow them to make meaningful contributions to the Public Participation Process. Although the Draft Report indicates that notices were posted and stakeholder engagement forums were held in relation to the proposed amendment application, the Draft Report does not specify whether the affected communities were engaged in languages understandable to them. It is crucial for a meaningful Public Participation Process that I&APs are informed of any and all information which may affect their interests in a manner understandable to them.

### *Socio-Economic Impact*

- 3.4 The Draft Report provides that the construction, operation and closure of the new TSF will have a definite and permanent impact on the natural topography of the area, which in turn will create a visual impact. The anticipated visual impact will have an adverse effect on one of the main economic sectors in the area, i.e. tourism, which will detrimentally affect a community that is already economically weak and poverty stricken. Any detraction from efforts to strengthen and support the socio-economic sustenance of the community without substituting such efforts with a better alternative economic source will be detrimental to the community.

- 3.5 The Draft Report goes on to state that the proposed TSF is within the boundaries of an existing mine on an area previously earmarked for a solar power station. However, it is submitted that the visual impact of a solar power station tends to be worse than the visual impact of a mine or TSF. The argument that this in turn reduces the magnitude of the impact to moderate is inadequate and not sustainable.

#### ***Degradation of Community Cohesion***

- 3.6 The Draft Report has highlighted that there has been a long-standing issue of local tensions in the community relating to the spending of royalties. There is a risk that such tensions may be exacerbated in the proposed amendment application. This could lead communities to resort to violent protests if they are of the view that they are not heard, which could place lives in danger and lead to damaged property. Apart from suggesting that emergency procedures be put in place by the mine, the Draft Report does not propose ways in which such tensions can be resolved or avoided indefinitely in the future. It is submitted that this is an issue which the Applicant should prioritise, reflect on and address more comprehensively in the Final Report.

### **4. Environmental Impact of the Proposed Amendment**

#### ***Impact on Natural Resources***

- 4.1 The Draft Report provides that the main economic sectors in the Moses Kotane municipal area are tourism, manufacturing, agriculture, and mining and that besides Pilanesberg, there are a number of smaller nature reserves in the area.
- 4.2 It is important to note that section 48(1)(a) of the National Environmental Management: Protected Areas Act 57 of 2003 (“**NEMPAA**”), provides that “[d]espite other legislation, no person may conduct commercial prospecting or mining activities in a special nature reserve or nature reserve; or (b) in a protected environment without the written permission of the Minister”.
- 4.3 Unless the EAP or Applicant is able to present clear evidence that the relevant Ministerial permission from the Minister of Environment, Forestry and Fisheries has been obtained, it is submitted that the Application should be withdrawn by the EAP or Applicant to the extent that the project will affect such nature reserves.

#### ***Terrestrial Biodiversity***

- 4.4 It is submitted that the proposed changes set out in the Draft Report are detrimental to terrestrial biodiversity. According to the North West Biodiversity Sector Plan, 2015, the mine as well as the new TSF site are primarily located on Critical Biodiversity Area 2 (“**CBA 2**”). In terms of the Sector Plan, Critical Biodiversity Areas are areas of the landscape that need to be maintained in a natural or near-natural state in order to ensure the continued existence and functioning of species and ecosystems and the delivery of ecosystem services. In other words, if these areas are not maintained in a natural or near natural state then biodiversity targets cannot be met.
- 4.5 According to the Draft Report, the TSF area is proposed on a site that was previously assessed for the placement of a solar plant in the 2016 EIA. This site



was found to comprise comprises 35.8% Mixed Woodland & Thicket, 8.4% Acacia mellifera Bushland & Thicket and 55.8% secondary vegetation. Therefore, approximately 54% of the site is of high biodiversity conservation value. It is submitted that such biodiversity is threatened by the proposed amendment application.

### ***Loss of Vegetation Types***

- 4.6 The Draft Report provides that there will be a clearing of approximately 30 ha of Marikana Thornveld, which is a vulnerable vegetation type, within an area mapped as a CBA 2, and this is rated as an impact of high severity for both the unmitigated and mitigated scenarios.

### ***Surface Water Pollution and Loss of Watercourse Habitats***

- 4.7 The Draft Report provides that the construction of surface infrastructure on the mining area could impact on the watercourse habitat. There is also a risk of increase of surface water runoff from stockpiles, hardened surfaces and areas cleared of vegetation could lead to the deposition of sediment and increase erosion within the watercourses. This could cause the ecological and hydrological integrity of the watercourses to be altered.

### ***Soils and Land Capability***

- 4.8 The Draft Report provides that stripping and stockpiling of soil for the construction and operation of the TSF will take place, which will result in the following impact to the soil:
- 4.8.1 loss of the original spatial distribution of natural soil forms and horizon sequences which cannot be reconstructed similarly during the rehabilitation process;
  - 4.8.2 loss of original topography and drainage pattern;
  - 4.8.3 loss of original soil depth and soil volume;
  - 4.8.4 loss of original fertility and organic carbon content; and
  - 4.8.5 compaction during rehabilitation which will adversely affect root development and effective soil depth.
- 4.9 The Draft Report states further that the impact of soil loss during the all phases is rated as high significance before mitigation and moderate significance after mitigation. It is submitted that, despite the mitigation of the impact of soil loss to moderate, the security of land and land use entitlements of the community will be adversely affected as they will no longer be able to cultivate the land and use it for agricultural purposes. The removal of the topsoil will cause the existing arable and grazing land capability to cease completely.
- 4.10 We note that the Draft Report provides that the new TSF is not currently being utilized for agricultural activities, and was earmarked for mining infrastructure. However, if this is considered in the context that in the Moses Kotane Local Municipality, the large portion of households are under the food poverty line or in very close proximity of the poverty line, and that the intensity of poverty has increased more than in the surrounding areas, it is submitted that the proposed

amendment does not serve the socio-economic interests of the community or their entitlement to use the land to its fullest potential for their sustenance.

- 4.11 It is submitted that the risk of soil contamination by hydrocarbon spillages during construction or operational activities on the mine, or because of a liner or infrastructure leakage, erases any prospects of the use of land to eradicate the challenge of poverty which currently confronts the community.

**5. Conclusion**

- 5.1 In conclusion, we submit that the Draft Report fails to stipulate how the abovementioned risks will be adequately addressed and mitigated. Based on the afore going, our client objects to the proposed amendment application.

- 5.2 Our client's rights are reserved.

Yours faithfully

*[Sent electronically without signature]*

**Fasken**