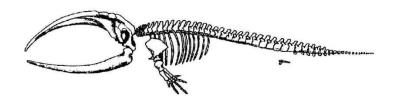
MATTHEWS, L



Vertebrate Designs

Mr Lachlan Matthews Tel: 0833641440 Website: <u>www.lachlanmatthews.co.za</u> Email: lachlan@lachlanmatthews.co.za

Date: 01.02.2019

Comments on Draft Scoping report for Bongani Minerals application

Attention: Christine Fouche

In response to the application by Bongani minerals (Pty) Ltd to open a tungsten mine in the Moutonshoek valley I would like to take the opportunity to comment on the Draft Scoping Report.

- The Krom Antonies River flows through the Mountonshoek valley and on into the Verlorenvlei wetland and estuary.
- Verlorenvlei is recognised internationally as a Ramsar wetland and as an Important Bird and Biodiversity Area (IBA).
- The flow of ground water into the Sandveld aquifers that supply water to the local potato industry also originates in the Piketberg Mountains and any infiltration of chemicals could have adverse repercussions. I find no reference to this in the DSR.
- Moutonshoek is an established and growing tourist destination.
- Any economic advantage gained locally by 15 years of mining is unlikely to benefit the local inhabitants in the short or long term any more than the existing environmental assets.
- For the duration of the mining the area will lose tourism due to trucks, blasting, dust etc. and many of the local inhabitants will not be reimbursed this loss of income and their businesses will have to be rebuilt.
- Due to the complexity of the flora, fauna, and hydrology of this catchment the impact of the proposed mine cannot be accurately determined. Therefore the risk of irreparable or long term damage to the area outweighs the possible profits or gains to the local inhabitants and the environment.
- This area has a number of special plants and animals including the iconic Cape Leopard and Black / Verreaux's Eagle, an endemic fish species named the Verlorenvlei Redfin (Pseudobarbus verloreni) which is listed as Endangered on the IUCN Red List. Plants such as Diascia caitliniae (Endangered) and the Redlinghuys Pincushion (Leucospermum arenarium) listed as Critically Endangered also occur in the area. The estuary below the proposed mine supports over 190 bird species, of which 75 are water birds and many are migrants.
- A thorough study of the archaeology in the proposed mining area has not been completed.

To summarise: The DSR explains in detail how the environmental and economic mining impacts will be limited but this is not a guarantee that no damage will be done. The reality is that, for only 15 years production, the mine will be placed in a very unusual sensitive environment and will negatively impact that environment and many of the current economic activities and will then depart leaving the local environment in a worse state and many of the local inhabitants to rebuild their businesses or find other employment. This does not make environmental or economic sense.

Yours Sincerely,

Lachlan Matthews

<u>METELERKAMP, L</u>

Christine Fouche

From: Sent:	Luke Metelerkamp <imetelerkamp@gmail.com> 05 February 2019 13:11</imetelerkamp@gmail.com>
To:	Christine Fouche
Cc:	lionel@strata-africa.com
Subject:	Fwd: Objection to mining right application WC 30/5/1/2/2/10110 MR

Resending due to send mail box return from Greenminded listed email address. Kindly see objection below.

----- Forwarded message ------From: Luke Metelerkamp <<u>lmetelerkamp@gmail.com</u>> Date: Tue, 5 Feb 2019 at 12:21 Subject: Objection to mining right application WC 30/5/1/2/2/10110 MR To: <<u>christine.f@greenmined.co.za</u>> Cc: Rose O'Flynn <<u>rosinante.rose@gmail.com</u>>, Rosie Downey <<u>roseydee@gmail.com</u>>

To whom it may concern,

As a land owner in the surrounding area, I object to the proposed mining application and wish to be added as an interested and effected party and kept informed on this process in writing via email at lmetelerkamp@gmail.com

Some of my concerns are as follows:

1. Under the proposed scenarios, the <u>known</u> social and ecological impacts do not justify the potential economic returns. Particularly given that economic returns will be fleeting and concentrated in disproportionately into the hands a a very small number of stakeholders, most of whom are not resident members of this area and community. I see no real justification within the report for putting the highly threatened global biodiversity hot-spot and down-stream RAMSAR wetland at further risk.

2. Under the proposed scenarios, the <u>unknown and potentially unforeseen</u> social and ecological impacts do not justify the speculative economic and social returns. Particularly given that the economic returns will be fleeting and concentrated in disproportionately into the hands a a very small number of already wealthy stakeholders, most of whom are not resident members of this area and community. The proposal is economically an extractive in nature.

3. I do not feel that risks relating, in particular, to air pollution, acid processes and slime dams have been adequately mitigated. And, further, following the closure and site rehabilitation process that legal and institutional mechanisms for ensuring long-term accountability of the mine owners for negative social, ecological and economic impacts of the proposed mine and processing facilities are in place. Based on the track-record of mining companies internationally, a very real risk exists that following the closure of the mine, mine owners will not be held accountable for the long-term damages and losses incurred to the surrounding community as a result of mining activities. The acid mine drainage situation in Gauteng provides an example of why a more detailed plan for long-term shareholder accountability is needed before the proposed mining license is issued to Bongani Minerals. Particularly in an agricultural region that is heavily reliant on ground water for farming and drinking. Based on established scientific principles of complexity and uncertainty, mechanisms for ensuring accountability need to extend beyond catering to known long-term risks, in order to ensure that affected parties are adequately insured against the impacts of <u>all long-term</u> damages after mine closure.

4. No proven scientifically proven track record for successful restoration of the fynbos vegetation exists within this particular biome. In other words, there is no proof that successful rehabilitation is achievable following the closure of the site. Based on this long term trials under local conditions are needed before restoration can proposed as a realistic and reliable mitigation method for the biodiversity risks.

5. The proposed usage of the slime dams following mine closure is purely speculative. A very weak business case if presented for aquaculture and, given the 20 year time frame, it is unrealistic and irresponsible to propose this a possible long-term social benefit or potential mitigation method.

6. Adequate recognition of the risks posed to the agri-tourism income of surrounding community is not evident in the report. The long-term ramifications of the mine on the sustainable long-term businesses in the region clearly indicate that mining rights should not be granted to the applicant.

Dr. Luke Metelerkamp

'Is the spring coming?' he said. 'What is it like?' ...' It is the sun shining on the rain and the rain falling on the sunshine, and things pushing up and working under the earth.' - *Frances Hodgson Burnett*

<u>MUNRO, L</u>



Westlake Conservation Centre Corner of Ou Kaapse Weg & Steenberg Rd Tokai, 7945

Email: admin@cteet.co.za Phone: +27 21 444 2794 www.cteet.co.za

Dear Christine Fouche

6 February 2019

Many thanks for the opportunity to comment on the Draft Scoping Report prepared for Bongani Minerals by Greenmined Consultants, dated January 2019.

Comments from the Nature Care Fund (an arm of the Cape Town Environmental Education Trust), intended to improve this Scoping Report, such that it is a tool useful for defining the scope of environmental study, and hence for decision-making, follow.

Firstly, it would be appreciated if Greenmined Environmental Consultants expand their Executive Summary to include, among other things:

- (i) A summary of the mining application history in the area;
- (ii) A summary of the process around the granting of prospecting rights;
- (iii) A summary of feedback from key stakeholders to this renewed process; and
- (iv) A summary of the key issues identified through the Scoping Process.

In addition, to please consider providing additional background (desktop-sourced) information into the Draft Scoping Report as follows in Section A below.

And adding to the Plan of Scoping, and therefore incorporating into the Draft Scoping Report, Section B.

And editing the Draft Scoping Report as outlined in Section C.

We appreciate the opportunity to participate in the journey of ensuring environmental best practice with yourselves, authorities, and other stakeholders.

A: Desktop-sourced information to add to the Scoping Report

- 1. Present an overview of the history of mining and associated environmental processes that have preceded this application for mining in this area.
- 2. Present a map that allows the reader to obtain bearing through the identification of the nearest major roads and towns.
- 3. Present a map that shows the Greater Cederberg Biodiversity Corridor, and other Protected Natural Environments (Moutenshoek Protected Environment), private nature reserves, and Ramsar wetland site(s) (Verloerenvlei) on this map.
- 4. Present a map that shows the Critical Biodiversity Areas (CBAs), and Ecological Support Areas (ESAs).

B: Additional studies to be included in the Plan of Scoping for this EIA

- 1. Inclusion of Biodiversity and Wetland Offset Specialist Studies (in the event that socio-economic and/or other imperatives override the existing status of this land as a nationally Protected Environment).
- 2. Include an Environmental Economics Study that investigates the existing eco-tourism and related investments into the region, and considers sustainable livelihoods and economic opportunities.



These specialist findings to feed into the Socio-Economic Specialist Study called for by the Department of Environmental Affairs and Development Planning.

C: Edit the Draft Scoping Report

- Re-name the "Site Alternative 1" as "the only site", since it would appear that there is no alternative site. (As per heading for Table 3 "Site Alternative 1 (preferred and only site alternative"). Referring to the only site for mining as "Site Alternative 1" is confusing, and potentially misleading. As mentioned in the Draft Scoping Report (page 29), should alternative sites present themselves as the EIA unfolds, they will be considered accordingly, and then be accurately referred to as "Alternatives".
- 2. In the list of potential positive and negative impacts (Draft Scoping Report, page 119):
 - a. Please expand what you mean by "Mining within the Moutonshoek Protected Environment", providing a detailed breakdown as to why this might be perceived as "negative".
 - b. Please add to the "Negative Impacts" list:
 - Potential loss of existing investment in the eco-tourism sector in the region as raised by CapeNature (Appendix 5, Page 16)
 - Potential loss of existing investment in the wetland system connected with the Verlorensvlei system as raised by CapeNature (Appendix 5, page 16).
 - Potential loss/destruction of indigenous vegetation for the entire footprint area (this loss presently only with reference to the "construction footprint", on page 119 of the Draft Scoping Report).
 - Consideration of impacts should rehabilitation of the ecosystems be impossible to undertake.
- 3. Include in the "Description of aspects to be assessed by specialists", for the Ecological Study, Freshwater Ecological Assessment, Hydrogeological Assessment, Heritage Assessment and Socioeconomic Assessments (page 131-133):
 - a. Provide a detailed description as to the underlying values and rationale behind declaring Moutonshoek as a Protected Environment; and
 - b. Provide a detailed analysis of how these values will be affected by the proposed development.
 - c. Provide a detailed analysis of the direct, indirect and cumulative impacts on affected ecosystems and social systems.
 - d. Provide a detailed analysis concerning the extent to which impacts can be mitigated, the extent to which they are reversible, and most importantly, whether or not there will be *loss of irreplaceable resources* (either directly or indirectly, that is, to Verlorenvlei or the Protected Environment itself).

Looking forward to further communications.

Yours sincerely,

AMunro

Lynette Munro Conservation Partnership Facilitator



PARKER, D

Postnet 5 P Bag 16x Hermanus 7200 diparkerhermanus@yahoo.co.uk

TO: Christine Fouche

Greenmined Environmental (Pty) Ltd Unit MO1 Office No 36 AECI Site Baker Square Paardevlei De Beers Avenue Somerset West 7130

By email: Christine.f@greenmined.co.za

COMMENTS: DRAFT SCOPING REPORT FOR PUBLIC COMMENT WITH REGARDS TO MINING RIGHT APPLICATION BY BONGANI MINERALS (PTY) LTD OVER PORTION 6 (REMAINING EXTENT) OF THE FARM NAMAQUASFONTEIN, PORTION 1 OF THE FARM PIKETBERG RD AND PORTION 21 OF THE FARM NAMAQUASFONTEIN, SWARTLAND DISTRICT, WESTERN CAPE PROVINCE

I, **Diana Parker** would like to take this opportunity to object to the abovementioned mining right application lodged by Greenmined on behalf of Bongani Minerals.

My objection to this proposal is that mining has such a huge long term negative effect on the environment and mining companies are notoriously lax in any form of successful rehabilitation, that it far outweighs any consideration for the short term benefits to possible employment figures. Mining is in any case becoming more automated with fewer people being employed, so the bottom line must be pure profit to the mining company and little social upliftment. Tourism to this area plays a greater role in achieving this objective and preserves some of South Africa's diminishing natural resources to the benefit of ALL.

Further environmental concerns:

- Certain properties under consideration for this mining right application form part of the recently designated Moutonshoek Protected Environment. Other properties forming part of the application are directly adjacent to and bordering on the Protected Environment. The area's natural heritage and ecological sensitivity is part of the reason for this declaration as a Protected Environment.
- The area contains a number of threatened vegetation types, also part of its reason for declaration as a Protected Environment. These vegetation types include: Critically Endangered Swartland Shale Renosterveld, Piketberg Quartz Succulent Shrubland which qualifies as Critically

Endangered according to the latest analysis conducted by CapeNature (only 11.7% of its original very small extent is remaining), Critically Endangered Cape Lowland Alluvial Vegetation, Endangered Leipoldtville Sand Fynbos, Vulnerable Piketberg Sandstone Fynbos, and Cape Lowland Freshwater Wetlands. These vegetation types are not only threatened in themselves, but provide essential habitat for a range of biodiversity present in this area. The presence of critically endangered vegetation types alone should preclude any mining developments from this area.

- The Moutonshoek Valley is estimated to supply 60% of the water volume and 90% of the water quality to the Verlorenvlei Estuary, which is listed as an Important Bird and Biodiversity Area and a Ramsar site, or wetland of international significance. The area is already highly water-stressed and the development of a mine will ultimately lead to the collapse of the freshwater and estuarine ecosystems within this area.
- The Moutonshoek Valley, including those sites indicated in the mining right application, contain the endangered fish species the Verlorenvlei Redfin (*Pseudobarbus verloreni*), previously undescribed, and genetically different from the Berg River Redfin (*Pseudobarbusburgi*). Cape Galaxias (*Galaxias zebratus*) and Cape Kurper (*Sandelia capensis*), both classified as Near Threatened, also occur within the river systems of this area.
- The Moutonshoek Valley supports several threatened bird species including Ludwig's Bustard, Black Stork, Black Harrier and Secretarybird. In addition the Verlorenvlei system of which the valley forms part supports globally threatened species such as Lesser Flamingo, Black Harrier, and Chestnut-banded Plover. Nationally threatened species include Caspian Tern, Great White Pelican, Greater Flamingo, African Marsh-Harrier and Ludwig's Bustard. Endemic species include Cape Spurfowl, Cape Bulbul and Southern Black Korhaan.
- The conservation of the above species and the Verlorenvlei Estuary is an obligation for South Africa as a signatory to the Convention on Biological Diversity, Convention on Migratory Species and African-Eurasian Waterbird Agreement. The commitments to these multilateral environmental agreements and the impact of the mining activities on these species and habitats must be taken into account.
- The scoping report states that *The RAMSAR status of Verlorenvlei takes president and accordingly directs the mining project proposal* (Table 2. Applicable legislation). If the applicant wishes to honour this statement, due to the Ramsar status, the mining applicant should be required to prove that all water flows to Verlorenvlei are maintained and even improved by the mining activities, whilst also not impacting on the water volumes available to agriculture. The detailed hydrological modelling study should provide clear evidence of the maintenance of water flows and improvements to water quality.

Further social concerns:

- The area provides essential job security to local communities through the agricultural production in the area, and also food security and economic opportunities through the production of wine, potatoes, race horses and citrus.
- The Scoping Report states that the proposed labour component of the operation is approximately 211 employees including management. (Page 26 of the Draft Scoping Report).

• While this figure is not insignificant, we await the outcomes of the socio-economic evaluation as it must be determined how many jobs will be AT RISK or LOST in the local agricultural sector as a result of the mining development. Further, the loss of potable water will lead to a decline in agricultural productivity and a loss of jobs throughout the entire Verlorenvlei catchment. We require a detailed study of these impacts which clearly illustrates the degree of threat to livelihoods associated with the agricultural sector in this area.

Diana Parker ID 4809220539084

PULFRICH, A







PO Box 302, McGregor 6708, South Africa. Ph: +27-21-7829553, E-Mail: apulfrich@pisces.co.za

Greenmined Environmental (Pty) Ltd Unit MO1, No 36 AECI site Baker Square, Paardevlei De Beers Avenue Somerset West 7130

11 February 2019

Madam

Bongani Minerals (Pty) Ltd mining right application (WC 30/5/1/2/2/10110 MR)

As the director of Pisces Environmental Services (Pty) Ltd, home-owner at Mountain Mist on the mountain Engelsman se Baken above Aurora, and member of the Mountain Mist Home-Owners Association, I would like to submit the following comments on the proposed Riviera Tungsten Project by Bongani Minerals (Pty) Ltd. These comments relate primarily to the ecological and fresh water environments, and do not cover agricultural, heritage, archaeological and socioeconomic issues, as these fall outside my professional experience.

1) The proposed mine site is located in the centre of the newly proclaimed Moutonshoek Protected Environment (MPE), which was established on the grounds of the Moutonshoek Valley being an area of extremely high conservation value due to its ecological sensitivity. The MPE hosts numerous vegetation types of conservation importance, including the critically endangered Swartland Shale and Swartland Silcrete Renosterveld, Cape Lowland Alluvial Vegetation and Piketberg Quartz Succulent Shrubland, the endangered Leipoldtville Sand Fynbos and the vulnerable Piketberg Sandstone Fynbos. From a faunal perspective, the MPE provides habitat for a number of Red Data Book mammal (e.g. four species of golden mole, white-tailed rat, Cape leopard), bird (Greater and Lesser Flamingos, Great White Pelicans, Chestnut-banded Plovers, Blue Crane, African Marsh Harrier and Black Harrier), reptile (e.g. two species of dwarf burrowing skinks, Southern Speckled Padloper) and fresh water fish (Verlorenvlei redfin) species, many of which are endemic to the area and have extremely restricted ranges. A full Lists of species confirmed to be present can be found in Schroder, Huntley & Wright (2018): *Moutonshoek Protected Environment Management Plan*.

Portions of the Moutonshoek Valley have been identified as critical ecological support areas and buffers, whereas the Krom Antonies River as a whole has been identified as an aquatic Critical Biodiversity Area and buffer, by the Western Cape Biodiversity Spatial Plan.

Furthermore, the MPE forms part of the Sandveld Corridor within the Greater Cederberg Biodiversity Corridor, a initiative designed to maintain and restore connectivity across between protected areas as a mechanism to ensure sound environmental management in response to the impacts of climate change. Any proposed development (be it mining or otherwise) that results in habitat degradation and associated species loss, would thus be in direct conflict with the management objectives of the Moutonshoek Protected Environment and the Greater Cederberg Biodiversity Corridor, and could result in ecosystem collapse, loss of ecosystem services and potential extinction of those species endemic to the area.

2) Not only does the MPE support a large diversity of endangered and threatened flora and fauna, but it protects the Krom Antonies River and its catchment, which serves as the main tributary of the already water-stressed Verlorenvlei wetland system. As one of the largest natural fresh-water wetlands along the South African West Coast, Verlorenvlei is recognized as a wetland of international importance and has been a Ramsar site since 28 June 1991. The Verlorenvlei Estuary is also listed as an Important Bird and Biodiversity Area (IBA), and a Key Biodiversity Area (KBA). Verlorenvlei supports at least 177 bird species including several Red Data Book species (Ludwig's Bustard, Black Stork, Black Harrier and Secretary Bird), as well as four indigenous freshwater fish species, three of which have not been recorded from elsewhere (Verlorenvlei redfin, Cape kurper and Cape Galaxias).

The integrity of the Verlorenvlei Estuary and its biodiversity is dependent on the health of its upper water catchment area and by its ground water source. Due to limited surface flow, agriculture in the area is already highly dependent on ground water, thus posing a significant existing risk to the sustainability of the wetland. As the Krom Antonies River falls within the mining application area, degradation of the catchment area and river system can be expected, with cascade effects extending downstream to the Verlorenvlei wetland system. Furthermore, the effects of substantial ground water abstraction at the mine (an estimated 20,000 litres per day) would affect the water table thereby reducing the natural ground- or surface water supplies within this area. This would not only impact negatively on water supply to the already water-stressed Verlorenvlei wetland, but also affect agricultural practices in the area. Any further abstraction of ground water in the Krom Antonies River and its catchment should not be permitted as it is unlikely to be sustainable over the long-term.

A further very significant risk is the potential contamination of ground water and aquifers through discharge of waste water and slimes following acid leaching of the concentrate and leaching of sulphide minerals from the overburden stockpiles, thereby threatening the ecosystem health of the catchment area as well as the downstream wetland system. The slimes will be heavily contaminated, and disposal thereof to backfill the shafts and excavations as stated in the BID is totally unacceptable.

- 3) It appears that a Draft Scoping Report (DSR) for the initial mining application was submitted to the Department of Minerals and Energy (DME) in May 2009. The correspondence from DME to this submission pointed out, amongst other things, that:
 - the information contained in the DSR was insufficient for the authorities to make an informed decision;
 - the applicant was to "to attempt to resolve concerns and objections with directly affected parties and relevant authorities";
 - more detail was required as regards the project description;

 a wide range of specialist studies must be undertaken (hydrological, siltation of the river, noise and dust, visual, soil and land capability, botanical, traffic, heritage and archaeological).

The Final Scoping Report (FSR) mentions that a **desktop** botanical and groundwater study were undertaken, **preliminary comments** were provided on freshwater ecosystems and a social and labour plan was compiled. The FSR, however, failed to address the wide range of other comments raised by the key stakeholders and thus falls short of the requirements requested by DME. As the subsequent required EIA was not compiled within the required period, a second mining right application was submitted in late September 2009. This application was similarly withdrawn in March 2012.

Appended to the DME correspondence mentioned above were responses from Cape Nature and DEADP opposing the mining application, and a request by the Department of Agriculture that "this PPP needs to be both more comprehensive and more thoroughly interrogated than usual" and that "a very transparent and thorough PPP be ensured by DME during the Application".

Nonetheless, a further prospecting right application was submitted to DME in March 2010, and despite continued objections, the right was issued in July 2011. Although the commenting authorities were aware of the prospecting right application, it appears that public consultation as required by law (\$16(4)(b) of the Minerals and Petroleum Development Act, and \$23(2)(d) of the National Environmental management Act) was not complied with at the time, as key I&APs were only informed indirectly subsequent to the issuing of the right. It is also of great concern that neither Cape Nature nor the Department of Environmental Affairs and Development Planning (DEADP) were aware of the issuing of the very least have taken cognisance of the concerns raised by the principal commenting authorities prior to it being issued.

4) Furthermore, the public consultation process undertaken for this (mining) application is found to be totally inadequate. The stakeholder list reveals some serious omissions. One would expect that at the very least the funders of the Moutonshoek Protected Environment and South African National Biodiversity Institute (SANBI) be informed of the plans for development of this ecologically sensitive area. Furthermore, for a project of this importance, the various businesses offering campsites, accommodation and ecotourismbased activities around Piketberg, Kapteinskloof, Aurora, and Verlorenvlei etc, as well as home-owners associations in the general area should have been informed. These may have been included in the long list of names provided in Appendix 5 of the DSR, but with no indication being provided of their affiliations it is impossible to ascertain what bases have been covered. Recent correspondence with other affected parties has revealed that much of the contact information used for the public consultation process was outdated, the required on-site notices were not erected and even adjacent land-owners were not informed as required by law. This raises serious questions as to how many of the affected parties listed actually received notification of the proposed project. Simply using stakeholder list from the previous application is short-sighted and imprudent. Including farms and accommodation based near Robertson under "surrounding landowners" is also questionable?! Most importantly, running the stakeholder consultation for a project of such potentially wide-ranging impact over the festive season (even with an extension) is not acceptable as many people are away during this time and will not see notices placed in public places, adverts placed in newspapers or be in a position to collect **notifications sent by registered mail**.

- 5) The project description provided in the DSR is lacking in the detail needed to fully understand the mining approach, ore treatment processes and mine-waste handling facilities. It appears that the engineering designs have not as yet been compiled, or if they have, have not been thoroughly thought through. The project description is therefore (again) totally inadequate for affected parties to make an informed decision.
- 6) The DSR states that various specialists were appointed to undertake a variety of impact studies (hydrogeological, ecological, fresh water, agricultural, traffic, air and noise quality, heritage, archaeological, socio-economic) to inform the proposed application. The description of the baseline environment provided in the DSR is, however, gravely lacking the detail necessary to adequately inform stakeholders and authorities on the status of the receiving environment. The usual practice for an EIA of this importance is that the DSR is only released once all the information from the specialists has been collated, thereby providing a comprehensive overview of the receiving environment from a physical, ecological and social perspective. It seems that all that has been done in this case is that information provided in comments received during the first round of the public participation has been used to compile the description of the receiving environment. Little reference is made to the information contained in the Final Scoping Report for the 2009 mining right application (Cilliers, le Roux, Maritz & Withers 2009), and no cognisance appears to have been taken at all of the comments lodged at the time by DME, Cape Nature, DEADP and the Department of Agriculture. The Final Scoping Report submitted for the 2009 application was already of substandard quality. The DSR provided to the public for comment for the current mining application is even more inferior.
- 7) The proposed mining site is located in a rural area sought by week-enders and visitors for its tranguillity and remoteness. Mining operations will involve blasting and the generation of large quantities of dust, a substantial increase in traffic on secondary roads (also dustgenerating) and an visual eyesore in an area hitherto relatively untouched by developments other than agriculture. These activities will all distract from the region's sense-of-place, negatively affecting both residents and visitors, and with potential knock-on effects on tourism. Dust and compromised air quality can have substantial negative effects on crops, and is a nuisance to those residents and visitors affected. The DSR fails to state what dust control measures will be implemented, both at the mine and along the transport routes. Process water from the plant will be contaminated and can thus not be used as dust control, and the use of potable water as dust control in a drought stricken area would be irresponsible and unacceptable. The use of process water from an offsite desalination plant also has environmental implications; firstly the carbon footprint required to transport the water to site, and secondly the adverse effects on marine communities of the discharge of a hypersaline effluent from the desalination plant into the sea. These factors all need to be considered in the implementation of an integrated environmental management approach.
- 8) Rehabilitation: it is stated in the BID that "Upon closure of the mining operation the entire footprint area will be rehabilitated so as to allow the affected area to return to agricultural use". The DSR states that the decommissioning phase will involve "rehabilitation, sloping and landscaping of all affected areas, the replacement of topsoil,

and the removal of all infrastructure no longer needed by the landowners. The right holder will further be responsible for the seeding of all rehabilitated areas". lt is recognised that some of the mining area extends over areas already altered by agricultural practices, but considering that critically endangered, endangered and vulnerable vegetation types (and their associated fauna) in the mining area will have been irreversibly destroyed, rehabilitation of the impacted area "to agricultural use" is considered totally inadequate. By its very nature, open cast mining is destructive and the unavoidable (and often irreversible) removal of even small areas of vegetation with extremely high conservation value, will pose a direct and significant threat to biodiversity and ecological infrastructure in the MPE and Greater Cederberg Biodiversity Corridor. Any further loss of critically endangered or endangered vegetation types should not be permitted. Furthermore, what safeguards are being taken for the likely impacts on ground water, and downstream degradation of the Krom Antonies River and the Verlorenvlei Wetland system? What management actions and rehabilitation approaches are being taken for likely cascade effects on these ecologically sensitive environments?

It is stated that the mine will be an open cast pit, with shafts extending to 220 m depth. Much of the excavated material will be treated and extracted, suggesting that there will be a sediment deficit when backfilling the mining void. Even if all the stripped overburden is returned to the excavation during rehabilitation (which is seldom undertaken due to excessive costs), there is a very high likelihood that what will remain at the end of operations is 'a hole in the ground'. Although still operational, the de Hoek mine at Piketberg is a good example of tailings heaps and pits that are unlikely to every be properly rehabilitated. The agricultural use of a substantial depression in the landscape, even if it has been sloped and landscaped, is questionable. What sediment budget models have been undertaken to illustrate the topography of the rehabilitated area at the end of life-of-mine?

At the time of the initial mining application in 2009, the Department of Agriculture recommended that rehabilitation costs be set at a figure of R407 million. Ten years later, this figure will be substantially higher - has this been realised in the current application, or will the proponent rehabilitate to their 'standards' leaving an environmental disaster in their wake, as has happened countless times before in similar applications (e.g. Tormin, Xolobeni).

- 9) Without the background details from the various specialist studies on which the reader can base a confident conclusion, the preliminary identification of impacts appear in most cases to have been objectively assessed, although the stated mitigation potential for a number of the impacts is highly questionable. Important, however, is that of the 60 impacts initially listed, 43% have been rated as either Medium-High or High. This alone is a clear indication of the extent of the fatal flaws associated with the proposed project and raises a red-flag to the mining application. The proposed mining activities and associated impacts thus pose an unacceptably high risk to the biodiversity and functioning of the terrestrial and aquatic ecosystems in the area and significant negative and irreversible impacts would occur if mining was authorized.
- 10) Lastly, the National Environmental Management : Protected Areas Act (No. 57 of 2003) states in §48:

- Despite other legislation, no person may conduct commercial prospecting or mining activities --
 - (a) in a special nature reserve or nature reserve;
 - (b) in a protected environment without the written permission of the Minister and the Cabinet member responsible for minerals and energy affairs.

One only hopes that the relevant Minister and Cabinet member have the integrity to reach a responsible decision that weighs up the long-term sustainability of an ecologically sensitivity area of extremely high conservation value against the short-term financial benefits of a non-renewable resource, which by all accounts is a marginal reserve. To this end §24 of the Constitution of the Republic of South Africa has relevance:

Everyone has the right -

- (a) to an environment that is not harmful to their health or well-being, and
- (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that -
 - (i) prevent pollution and ecological degradation;
 - (ii) promote conservation; and
 - (iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

As an independent environmental consultant, homeowner in the Piketberg area, and as representative of the Mountain Mist Home Owners Association, I therefore strongly object to this application for mining within the Moutonshoek Protected Environment and urge that it not be given any further consideration.

Yours faithfully

Andrea Pulfrich

Dr Andrea Pulfrich (Director) Pisces Environmental Services (Pty) Ltd

Mountain Mist Home Owners Association

Nic & Ann Augustyn Frans & Irene Labuschagne Brian & Linda Thorn Renn Holtzhausen André & Ann Van Niekerk Phillip Blumenthal & Family Mike Quail & Family Riaan & Susan Landman Richard Katz Hennie Lamprecht Andrea Pulfrich

STRANGE, F

Felicity Strange Erf 22 Verlorenvlei Heritage Settlement VERLORENVLEI Elands Bay 11th February 2019 By email: <u>vleiratdesign@gmail.com</u>

Christine Fouche Greenmined Environmental (Pty) Ltd Unit MO1 Office No 36 ACEI Site Baker Square Paardevlei De Beers Avenue SOMERSET WEST 7130 By email: <u>Christine.f@greenmined.co.za</u>

Dear Ms Fouche,

<u>Re: Application for mining of tungsten in the Moutonshoek Valley on portions of Farm 297 and</u> portions 6 and 21 of Farm Namaquasfontein No 76 – Draft Scoping Report. <u>DMR Ref: WC 30/5/1/2/2/10110/MR</u>

Thank you for the opportunity to comment on the Draft Scoping Report (DSR) for this application.

I. <u>Public Participation Process in terms of NEMA:</u>

REFERENCING

When referencing this document it should be cited as follows: Department of Environmental Affairs (2017), Public Participation guideline in terms of NEMA EIA Regulations, Department of Environmental Affairs, Pretoria, South Africa

Extracts from Public Participation guideline in terms of NEMA:

1. INTRODUCTION AND LEGAL BACKGROUND

(Inter alia)

- 1.1. "...it is essential to ensure that there is adequate and appropriate opportunity for public participation (PP) in decisions that may affect the environment.
- 1.2. Section 24(1A) (c) of the Act allows for this participation by requiring that the person conducting PP comply with any regulated procedure related to public consultation and information gathering through the public participation process (PPP)."
 - Some inhabitants of the district are not literate and or do not have access to information technology.
 - It has been ascertained by means of visits to such communities that many were not even aware that there is an Application process underway, let alone what they might be able to do about it.
 - What has the applicant done to reach these people and enable them to register, object and comment if they so choose?

- At a personal level this application was brought to <u>my</u> notice indirectly and by chance via other parties as my email address had changed over the intervening period from <u>strangedesign@telkomsa.net</u> to <u>vleiratdesign@gmail.com</u>
- How can the applicant categorically state that they contacted me directly?

2. CHARACTERISTICS OF A COMPREHENSIVE PUBLIC PARTICPATION

(Inter alia)

"The person conducting PP is required in terms of environmental legislation to provide the CA and RI & APs with reasonable opportunity to participate in PPP information gathering and participation procedures. As such, it is required that unless justified by exceptional circumstances, as agreed to by the CA, the person conducting PP must refrain from conducting any PPP during the period of 15 December to 5 January."

"...it must be noted that the PPP must be undertaken at a time or time period that enables all RI&APs an opportunity to comment and should there be any doubt by the applicant, EAP or the CA that all RI&APs have not been given such opportunity, then there can be consideration of redoing or restarting the PPP."

We understand that the time period given to English speaking citizens register as I&AP's was de facto 30 days, however it is also true that the process was initiated at the start of the Christmas holiday season and was emotionally disruptive and distressing, this may not be illegal but it is unethical.

4. NOTIFICATION

"All potential and I&APs have a right to be informed early <u>and in an informative and</u> <u>proactive way regarding proposals that may affect their lives or livelihoods."</u>

- "The level of public participation must be at a minimum be informed by
- the scale of anticipated impacts of the proposed project;

• the sensitivity of the affected environment and the degree of controversy of the project; and

• the characteristics of the potentially affected parties"

"...the person conducting PP must exercise insight and discretion and ensure that the language used allows for the facilitation of a PPP where all potential and RI&APs are provided with a reasonable opportunity to comment on an application and participate without unnecessary difficulty during the PPP;

- Please note as per Annexure 1 the email attached and contents pasted in below, that Afrikaans and isiXhosa versions of I&AP forms were only made available 23rd January 2019.
- Judging by the forms subsequently submitted proving that many respondents either speak Afrikaans or isiXhosa and not English; this means these people in truth only had 12 days in which to respond.

II. Water, air, soil, natural habitat, human settlements and livelihoods

- 1. The most precious resource in South Africa, in fact in the world, is water.
 - How can the value of low grade tungsten ore lying beneath tons of overburden which can only be excavated and beneficiated by means of an apocalyptic mining operation, be set against the intrinsic value of an already beleaguered natural landscape and water catchment area, and existing agricultural infrastructure and human settlements?
- 2. The Moutonshoek Valley was declared a Protected Environment 9th April 2018.
 - How can anyone mine tungsten here and simultaneously viably protect the environment?
- 3. Page 21 of the DSR: "Except for drilling and blasting that will work day shift, all mining operations will be run on a 24 hour 7 days a week schedule."

3.1. The long term negative effects of tungsten dust are well documented and it is clear from the DSR that considerable volumes of dust would be generated for many years.

- How can it be feasible to contain such volumes of dust within the site?
- It is well documented that dust from the Sahara Desert reaches the Amazon Basin.
- Smoke and ash from the Jonkershoek Fire of March 2015 reached Verlorenvlei .
- What guarantee can the applicant provide that, under applicable weather conditions, tungsten dust particles will not travel the equivalent distance?

3.2. The transportation of APT across and out of the valley over an extended period would generate noise would which make life impossible for people and animals.

How can it be proven that such a level of noise would not have any damaging effects?

3.3 The method of beneficiation described would inevitably contaminate the soil and seasonal rainfall would convey such contaminants across the landscape and into the Krom Antonies river and thus into the Verloren River.

- Has there been a tungsten mining operation anywhere in the world that can show evidence that there would not be the same result in the landscape under consideration?
- 4. The Moutonshoek Valley accommodates 2 vitally important aquifers which provide the ground water sources to an extensive area of the surrounding landscape and serve significant agricultural infrastructure.

The scope and duration of the envisaged application and mining methods would incontrovertibly and eternally compromise this invaluable water source.

How does the applicant propose to ring fence the immediate sources of groundwater to farms in the valley and also to ring fence the aquifers so as to protect them? 5. The Krom Antonies River rises in the Moutonshoek Valley and now constitutes the major contributing source of surface water for the Verloren River and ultimately Verlorenvlei. Depletion of or contamination of this water resource would compromise all enterprise alongside the Verloren River valley all the way to Elands Bay.

5.1. In respect of agriculture, in a country which is short of water and arable land, this is untenable.

✤ Are alternative arable land and water sources being identified and will they be procured for the relocation of all the undertakings and inhabitants of the valley?

5.2. Given the consequent environmental degradation thousands of farmworkers would be deprived of their employment, at a time when national unemployment figures are at an all-time high.

Will alternative means of employment for all these people be provided by the applicant?

5.3. The intention, as per the DSR, to monitor groundwater which would inevitably be contaminated or lost in the process would be laughable if it was not intrinsically improbable.

- Can the applicant describe exactly how this monitoring will be carried out?
- 6. The natural resources of the valley and surrounds have already been severely impacted by development and agriculture; in particular ground and surface water, endemic vegetation, and habitat for all forms of wild life including fish and birds.
 - How does the applicant realistically intend to proceed without causing massive environmental degradation; in the form of contamination of the air, water and soil, loss of water and natural habitat, and the loss of rare flora, threatened endemic fish and a drought compromised bird population?
- 7. Verlorenvlei, a declared RAMSAR site, Important Bird Area and designated an Internationally Significant Wetland is already beleaguered.
 - If this application succeeds and the Verlorenvlei wetland consequently fails to meet the qualifying criteria, is the applicant prepared to be party to the inevitable listing of Verlorenvlei on the Montreux Record and thus bring shame upon the entire country and all its citizens?

Felicity Strange Verlorenvlei 11th February 2019

Annexure1 - attached to email and pasted in below:

Email from Greenmined 23rd January 2019 containing I&AP forms in Afrikaans and isiXhosa

----- Forwarded Message ------

Subject: RE: Background Information Document - Bongani Minerals (Pty) Ltd- Krom Antoniesrivier Bewarea

Date:Wed, 23 Jan 2019 11:03:18 +0000

From: Christine Fouche <<u>Christine.F@greenmined.co.za></u>

To:Bennie & Jacqui van der Merwe <u><namaquas@intekom.co.za></u>, Marlene Lingenfelder <u><admin@greenmined.co.za></u>

Beste Mevrou Van der Merwe

Hiermee stuur ek graag aan u die agtergrondinligting-dokument vir die Bongani Minerals (Pty) Ltd mynaansoek soos vertaal in Afrikaans en isiXhosa.

Kind Regards/Vriendelike Groete

Ms Christine Fouche

Senior Environmental Consultant

"the goal isn't to live forever, it is to protect a planet that will"

DISCLAIMER: This e-mail, the information that it contains and any files transmitted with it are confidential and are intended solely for the individuals or entity to which it has been addressed. If you are not the intended recipient you are hereby notified that any disclosure, copying, distribution or use of the content in any way is strictly prohibited and may give rise to claims against you. Please notify the sender of the error immediately. Any views contained herein are those of the sender unless specifically stated to be those of Greenmined Environmental (Pty) Ltd. It is not represented, warranted or guaranteed that the integrity of this communication has been maintained, nor that it is free of errors, viruses, interception or interference.

Please consider the environment before printing this e-mail

From: Bennie & Jacqui van der Merwe [mailto:namaquas@intekom.co.za]
Sent: 14 January 2019 09:25
To: Christine Fouche; Marlene Lingenfelder
Subject: Re: Background Information Document - Bongani Minerals (Pty) Ltd- Krom Antoniesrivier Bewarea

Middag Christine

Dankie vir u skrywe van 7/1/2019. Ek neem aan Greenmined was met verlof. Ons het al gehoop dat jul eerder vir ons die vertalings gestuur het. Ons het al 14/12/2018 daarvoor gevra.

Ek heg aan die lys wat jul aan ons gepos het waarvan elke persoon of Afrikaans of Xhosa is. Gershwin Pieters is intussen oorlede.

Verder is ek Jacqueline van der Merwe en my man Benjamin van der Merwe Afrikaans, ons Krom Antonies Bewarea is Afrikaans en die volgende lys mense by Posbus 67, Piketberg 7320 is ook of Afrikaans of Xhosa:

Niel Visser

Michelle Visser

Vakakhulu Mdlelembe

Jaco Ockhuis

Karel Skirmaans

Andries Swarts

Marietha Opperman

Pitirose Makoae

Loretta Lottering

Barend Springfeld

Maria Saroon

Jolien Jacobs

Asanda Hlekani

Zenele Mdlelembe

Mpendulo Mona

Dawid Storm

Carl Franse

Nicolaas Ockhuis

Tessa Lombard

Davine van Rooyen

Andries Andreas Swarts

Hendrik Saroon

Pieter Johnson

Aletta Ngemtu

Gerhard Swartz

Zamakuluwenga Ngemntu

Marlene Johnson

Zukile Mgqoboka

Archiebold Mdlelembe

Josef Presence

Nick Fredericks

Simon Claasen

Kerneels van Wyk

Maria van Wyk

Ek sal waardeer as u almal solank lys as geaffekteerde persone en as 'n saak van dringendheid die kennisgewings in Afrikaans en Xhosa stuur.

Die uwe

Jacqui van der Merwe

TAYLOR, N

PROPOSED RIVIERA TUNGSTEN PROJECT MAGISTERIAL DISTRICT OF PIKETBERG WESTERN CAPE PROVINCE

REFERENCE NUMBER: WC 30/5/1/2/2/10110 MR

JANUARY 2019

RESPONSE BY:

N.A.G.TAYLOR ESQ.

NO.22 VERLORENVLEI HERITAGE SETTLEMENT

ELANDS BAY 8110

TO : DRAFT SCOPING REPORT: FOR PUBLIC COMMENT WITH REGARDS TO MINING RIGHT APPLICATION BY BONGANI MINERALS (PTY) LTD OVER PORTION 6 (REMAINING EXTENT) OF THE FARM NAMAQUASFONTEIN, PORTION 1 OF THE FARM PIKETBERG RD AND PORTION 21 OF THE FARM NAMAQUASFONTEIN, SWARTLAND DISTRICT, WESTERN CAPE PROVINCE.

"IN THE 21st CENTURY IT IS NO LONGER POSSIBLE FOR ANY ENTITY TO PASS ON DOWNSTREAM COSTS WITHOUT PAYING THE FULL PRICE FOR DOING SO."

Briefly: The **"Downstream Costs"** of the applicants proposed mine in the Moutonshoek apply to all damage and potential damage in any shape or form to affected people, farms, businesses, and environments. I respectfully request a *fully researched and comprehensive answer to the questions below*:

1. THE PUBLIC PARTICIPATION PROCESS *will* constitute a prodigious waste of the public's time. In the light of recent endless corruption exposures, it is hard to believe there is no corruption underlying this application.

Would the applicant please clarify and give reasons why citizens of the Republic of South Africa should be required to fight a time consuming and potential life and death battle, with both the applicant and the government?

2. HIDDEN AGENDAS. Would the applicant please provide details of their relationship with the government department and give guarantees that there are no preconditions or hidden agendas pertaining to this application?

3. WATER POLLUTION AND WATER LOSS would be inevitable and dangerous to all life in the valley. Will the applicant please supply proof of strategies and plans for mitigation, should this situation arise?

4. DAMAGE TO DOWNSTREAM COMMUNTIES from Redelinghuys to the coast would be inevitable. Work opportunities downstream on farms and in the towns of Redelinghuys and Elands Bay could disappear entirely. Is the applicant aware that a mine such as envisaged could very likely create this situation, and if so what plans and strategies does the applicant have in place to ensure this would not happen?

5. ECOLOGICAL LANDSCAPE. The applicant is no doubt aware of the potential for loss of animal and plant life from the proposed mining site and surrounds, as well as all productive and other relatively environmentally stable land downstream. Does the applicant have a comprehensive mitigation or compensations plan and insurance to cover disasters occurring that would negatively affect our ecological landscape and its already limited ability to produce food?

6. DUST POLLUTION. Previous studies point to inevitable side effects of pollution and damage to people and landscape within 100km radius from *dust*, should the mine go ahead.

What processes does the applicant plan to use to prevent damage to areas far from the proposed mining site? The people in these areas, inevitably downwind in either summer or winter, could suffer endless threats to their health, their farms, their homes, and their businesses. What steps has the applicant taken to scientifically prove this would not be the case?

7. WIDESPREAD UNCERTAINTY. The apparently indefinite duration of proposed mining and its impact on landscape, infrastructure and roads would and has already created instant uncertainty amongst communities *that know about* it in the surrounding area from Piketberg to Graafwater Clanwilliam, Lamberts Bay, Elands Bay and south to Veldrif and Laaiplek. These communities would suffer substantial disruption.

What written assurances can the applicant give all I&APs that this application is not speculative and simply "playing with people's lives"?

What steps has the applicant taken [apart from a clearly desktop scoping report], to investigate and scientifically ascertain how these 'downstream costs' would be mitigated? Considering the aforementioned, will the applicant please state any new technical strategic or economic reasons for re-applying for a mining right in Moutonshoek?

8. DEEP FISSURE AQUIFERS AND UNDERGROUND STREAMS. When it comes to deep fissure aquifers, the unpredictability of underground water needs to be emphasised. Please note that in 1969 the Tulbach earthquake caused the drying up of 13 springs far away at Muishoek [4kms North of Grootdrif causeway on the Northern bank of Verlorenvlei] There are any number of other deep springs in the area.

Can the applicant assure us with complete confidence and provide guarantees backed by comprehensive insurance, that there would be absolutely no chance that *dynamiting and explosions* could trigger a similar occurrence at any point along the Veloren Rift Valley and the surrounds?

9. MOUTONSHOEK TWO AQUIFERS. In addition: Well point and borehole water from sources adjacent to the Vlei and farther afield would in all likelihood be negatively affected by any large scale interference with the *aquifers* in the Moutonshoek. This could have far reaching effects on the surrounding area. As a result all property owners and residents right to a healthy lifestyle would be made unsustainable without usable water.

Could the applicants please provide written guarantees accompanied by sworn affidavits to all landowners and I&APs, plus proof of insurance cover against legal claims and class actions in this regard? If not provide comprehensive reasons why they cannot.

10. PELAGIC FISH NURSERY FUNCTION. The applicant may be aware of the pelagic fish nursery functions of the Verlorenvlei. At present due to drought and over abstraction in the catchments, water from the Verlorenvlei does not flow into the sea. Should mining be undertaken any water coming through would be too polluted to allow for pelagic fish nursery function in the estuarine section below the Elands Bay Road Bridge.

As it would certainly be part of the downstream costs of the proposed mining activity I would like to know details of studies undertaken by the applicant and his consultants into this aspect and its effect on the fishing community concerned?

11. RIGHT TO A HEALTHY ENVIRONMENT. The Bill of Rights makes allowance for our "Right to a healthy environment". Should mining be allowed there would be an immediate and permanent depression of property values in the vicinity. We retired here because it was rural and nature friendly with a weather cycle of rising and falling water levels in the Verlorenvlei. It seems to me that the methods and ethics of the 20th century where money alone was the deciding factor in

government policy, have continued into the first two decades of the 21st century. The 'just do it then fix it', may have worked 20 or even 5 years ago but the people have wised up due to social media. While government may be unable or unwilling to enforce much of the legislation provided, be assured that South Africans are neither stupid nor acquiescent. As you will become aware, we will fight this application to the death and then some. I have read the premise on which the previous and this draft scoping report base their rationales and neither are convincing.

Would the applicant therefore please provide estimates based on proper and recent scientific evidence and precedents to illustrate why it is practical profitable and beneficial to both the applicant and the farms concerned to mine this particular section of the Moutonshoek?

12. FLEDGELING TOURISM EFFORTS DOWNSTREAM. Tourism forms part of the economy Elands Bay and Verlorenvlei. Considering the pollution and water problems mentioned above, mining could negatively affect business and entrepreneurship in fledgling communities which are only just getting on their feet.

Has the applicant made allowances for this eventuality, and would the applicant kindly provide proof of plans for compensation and restitution should the above areas be affected?

13. ALTERNATIVE ACCOMMODATION. The Moutonshoek valley is already over developed and is at a point where farmers in the area will be obliged to change their methods, just as were farmers in the Murray Darling Basin in South Australia nearly 20 years ago. They will be forced to farm more efficiently and effectively and cooperate with others downstream. They will learn to share limited resources like water. Or be subjected to a campaign by their downstream neighbours. The downstream neighbours are a well informed and widespread stakeholder and interest group with access to substantial scientific and legal resources. This group is already taking steps to ensure that the Verlorenvlei is saved from complete disaster. Total destruction of the Verlorenvlei environs by current agricultural practices or by mining? It is one and the same to us. *Either one is a no go option*. With this in mind we would like to ask both the applicant, his/her consultants, and the owners of agricultural units in the area who have supported the application:

[A] How many valleys, with the same beauty and agricultural potential of Moutonshoek is the applicant aware of in the Western Cape or indeed in the RSA? If the mining should go ahead and farmers, landowners, communities and stakeholders are obliged to move their domicile elsewhere?

[B] Could the applicant provide proof of provision of alternative equivalent opportunity accommodation for the aforementioned as is customary in the New South Africa, or proof of insurance for compensation to illustrate that the applicant understands the precedent?

14. KILLING THE GOLDEN GOOSE. I accept that mining would do a speedier and more devastating job of killing the valley than current agricultural practices. A mine such as is proposed is de facto permanent, there would be no turning back. Do this applicant and its consultants truly believe what they want to do is a viable proposition when weighed against the overwhelming financial environmental and human costs involved. And would the applicant provide proper justification for believing this?

15. INTERNATIONAL PRECEDENTS. Several rivers around the world already have 'rights of nature' enforceable in law. Courts are never keen to ignore precedents including international precedents. Awareness of fragile ecosystems in the context of sustainability and climate change is increasing and taking its place in the world's market places. Is the applicant aware of this, and the potential legal process involved in fighting an international claim?

Are the applicant and consultants aware of the rising movement in favour of environmental animal and other 'soft' rights emerging in the world, and would the applicant please provide research and justification should he/she chooses to ignore this trend?

16. MONTREUX RECORD. Verlorenvlei is a 'Ramsar' site and a country like RSA would be extremely embarrassed if Verlorenvlei were to be listed on the Montreux Record as a result of mining, or farming for that matter. We I&APs are quite prepared to embarrass anyone who stands in the way of restoring Verlorenvlei to its rightful state of health. Is this applicant prepared to face the facts of what mining would mean in this regard and is the applicant then prepared to indemnify the government and the South African People from consequences arising should Verlorenvlei be so listed?

17. ANSWERS PLEASE. I remember the last set of consultants saw fit to ditto and cross reference points in my objection, sometimes in a disrespectful and offhand manner, even points I stressed should be answered comprehensively. Since this is but a summary of what questions I will potentially need to ask of the Final Scoping Report, would the applicant please save time and effort and answer all the above questions fully, as requested at the outset?

I thank you and look forward to hearing from you in due course.

Kind regards

Nick Taylor