

**DRAFT SCOPING
REPORT
COMMENTS**

**DEPARTMENT OF
AGRICULTURE**



Our Reference: 58 0004
CARA Reference: 754/ 022 866 /4
DMR Reference: WC 30/5/1/2/2/10110 MR
LandUse Reference: 20/9/2/2/7/105 & 20/9/2/2/7/181

Greenmind Environmental
Unit MO1, No 36 AECI site
Baker Square, Pardevlei
De Beers Avenue
Somerset West
7130

For attention: Christine Fouche

**RIVIERA TUNGSTEN MINE:
PTN 1 OF FARM 297; PTN 6 & PTN 21 OF NAMAQUASFONTEIN 76: DIVISION
PIKETBERG: BERGRIVIER MUNICIPALITY
Applicant: Bongani Minerals (Pty) Ltd**

Your letter e-mail 11 January 2019 has reference. Thank you for registering this department as an interested and affected party and sharing the link to the Draft Scoping Report. A CD with the information also reached our office.

The Mining Project entails the extraction of the tungsten-molybdenum resource in two phases through opencast- and underground mining operations. As well as the processing of excavated material on site to produce Ammonium Paratungstate (APT) that is then transported to the Saldanha Bay metallurgical plant, and the export of the final product via the Saldanha Bay harbour. The specified activities triggered by the associated mining activities include amongst other things the following:

- Replacing the topsoil and vegetating the disturbed area ±350 ha
- Opencast mining ±400m
- Overburden stripping to access the ore.... ±400m
- Overburden Storage Area ±47.83ha

The statements above indicate a direct footprint impact of ± 350 hectares on agricultural land. The size and depth of the open pit and footprint of overburden stripping is however not mentioned in detail. It is merely referred to as being ± 400m. The site layout plan, however indicates an area of about 20 hectares for the pit. It is assumed that these figures along with the site layout map is only a schematic indication that do not represent the anticipated impact, but is rather a reduced version of the anticipated impact. This

may be due to a lack of information as a result of the limited prospecting that was done in 2012/2013 period when the unauthorised prospecting was terminated.

The mandate of the Department of Agriculture is to protect, maintain and enhance the agricultural production potential of farmland.

The department is concerned that the proposed tungsten mine will:

- Leave an inheritance that will remain for far longer than its working lifespan, causing a massive environmental problem similar to what is already been experienced in other areas in the world.
- Never be able to fully compensate negative impacts of the proposed mine to the state, the environment and land users.
- Prevent the continuation of farming on High and Unique Agricultural Land (HUAL).
- Impact negatively on the right to farm the subject properties and surrounding farms.
- Permanently pollute the natural agricultural resources with minerals that have high levels of toxicity and are classified as emerging contaminants.
- Expose minerals to air and water that will begin to produce acid, which will leach into run-off water to be dispersed into ground and surface water.
- Result in acid mine drainage occurring in the remaining mine pit after mining and rehabilitation.
- Permanently negatively affect water flow in the Krom Antonies River due to dewatering of the mining area.
- Negatively impact yields on boreholes and wells of surrounding groundwater users and may lead to some drying up due to the mine.
- Negatively impact on groundwater dependent wetland systems.
- Produce toxic dust that will impact on the production and market value of fruit and table grapes.
- Impact negatively on future agricultural activities and the continuation of current agricultural activities.
- Impact negatively on proposed new agricultural developments.
- Contaminate the agricultural and environmental resources of the catchment.
- Negatively affect the current agricultural production of the entire Moutonshoek Valley and other farms in the Verlorenvlei catchment area.
- Negatively affect the legally executed water use rights of surrounding farmers.
- Negatively affect Broad-Based Black Economic Empowerment
- Negatively affect the sustainable management of the Verlorenriver and its Estuary.
- Negatively affect the farming community, land users and workers.
- Only provide additional jobs for a short period at the mine and will have a permanent negative impact on the current number of agricultural jobs as well as the long term number of agricultural jobs.
- Nullify the project investments made in this catchment by this office and other government entities.

The subject area is considered to have a Unique Agricultural potential and worth protecting by preventing the undesired consequences of mining. In a letter dated 18 October 2012, addressed to the Bergrivier Municipality, the department stated that -

"Mining will most probably lead to a permanent change in land use and alter the agricultural production potential of the area concerned by having the potential to affect the subsurface water resources, vleis, marches and wetlands which have a supporting role in agriculture."

This department was not in favour of the proposed Temporary Departure to allow the Prospecting in 2012 because this department regarded the prospecting as a forerunner to mining.

The department of Agriculture is concerned that the proposed mine will leave a negative permanent impact on agriculture and the environment and therefore **strongly object to the proposed tungsten mine.**

Please note:

The Western Cape Department of Agriculture reserves the right to request further information and revise initial comments based on any additional information that might be received.

This department is also a commenting authority in the other Land Use application processes that will follow the mining right application. A copy of this letter is therefore forwarded to the Sub-Directorate LandUse Management for attention Mr Cor van der Walt.

Yours sincerely

A handwritten signature in black ink, appearing to be 'JH Smit', with a stylized, cursive style.

JH Smit
District Manager: LandCare West Coast
2019-01-22

**DRAFT SCOPING
REPORT
COMMENTS**

**DEPARTMENT OF
ENVIRONMENTAL
AFFAIRS AND
DEVELOPMENT
PLANNING**



**Western Cape
Government**
Environmental Affairs and
Development Planning

BETTER TOGETHER.

ENQUIRIES:

Ms Rondine Isaacs (Directorate: Development Management)
Ms Iepfieshaam Bekko (Directorate: Biodiversity and Coastal Management)
Ms Evodia Boonzaier (Directorate: Waste Management)
Mr Gunther Frantz (Directorate: Pollution and Chemicals Management)
Mr Peter Harmse (Directorate: Air Quality Management)

REFERENCES:

16/3/3/6/4/2/2/F1/11/2243/18 (Development Management)
004/2019 (Biodiversity and Coastal Management)
19/2/5/3/F1/11/WL0002/19 (Waste Management)
19/3/2/4/F1/11/DFU003/19 (Pollution and Chemicals Management)
19/4/4/BB2-Bongani Minerals (Pty) Ltd (Air Quality Management)

DATE: 12 February 2019

The Board of Directors
Greenmined Environmental (Pty) Ltd
Postnet Suite 62
Private Bag X15
SOMERSET WEST
7130

For attention: Ms Christine Fouche

Tel: (021) 851 2673

E-mail: christine.f@greenmined.co.za

PER E-MAIL

Dear Madam

COMMENT ON THE DRAFT SCOPING REPORT AND PLAN OF STUDY FOR ENVIRONMENTAL IMPACT ASSESSMENT FOR LISTED ACTIVITIES ASSOCIATED WITH THE MINING RIGHT APPLICATION FOR MOLYBDENUM AND TUNGSTEN ON PORTION 1 OF THE FARM NO. 297 RD, PORTION 6 (REMAINING EXTENT) OF THE FARM NAMAQUASFONTEIN NO. 76 RD AND PORTION 21 OF THE FARM NAMAQUASFONTEIN NO. 76 RD, PIKETBERG (DMR REFERENCE: WC30/5/1/2/2/10110MR)

1. The e-mail notification of 5 December 2018 containing the Background Information Document ("BID") and requesting registration as an interested and affected party ("I&AP") for the above project, the Department's response thereto via e-mail on 6 December 2018, the e-mail notification of 11 January 2019 regarding the availability of the Draft Scoping Report ("DSR"), and the DSR and Plan of Study for Environmental Impact Assessment ("EIA") dated January 2019 as received by the Department on 14 January 2019, refer.

2. The Department acknowledges that scoping is the first phase in the Scoping and Environmental Impact Reporting ("S&EIR") process and that specialist studies will be undertaken during the EIA phase to refine the development proposal. The National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") requires the consideration of all relevant factors for sustainable development, including that a risk-averse and cautious approach be applied that considers the limits of current knowledge about the consequences of decisions and actions. As a State department that administers a law relating to a matter affecting the environment, this Department has a constitutional mandate to ensure that the environment is protected and to secure ecologically sustainable development. Based on current knowledge and available information, the Department **objects to and does not support** development which is in direct conflict within the management objectives of a Protected Environment.
3. On 20 April 2018, following an extensive public consultation process, the Moutonshoek Valley area was declared as a Protected Environment under section 28(1)(a)(i) of the National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEM:PAA"). The development is proposed within the Moutonshoek Protected Environment, which is of extremely high conservation importance for the protection of terrestrial and aquatic ecosystems. The Department supports the comments of CapeNature dated 13 December 2018 in response to the BID, which highlights the very sensitive nature of the site. Mining activities pose direct and indirect threats to biodiversity and the ecological functioning in the Moutonshoek Valley and the water-stressed Verlorenvlei Catchment with associated RAMSAR designated Verlorenvlei wetland.
4. Section 48 of the NEM:PAA, 2003 provides for restrictions in protected areas.
"48(1) 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; or
(c) in a protected area referred to in section 9(b) or (d)...."

"48(3) The Minister, after consultation with the Cabinet member responsible for mineral and energy affairs, may, in relation to the activities contemplated in subsection (2), as well as in relation to mining activities conducted in areas contemplated in that subsection which were declared as such after the commencement of this section, prescribe conditions under which those activities may continue in order to reduce or eliminate the impact of those activities on the environment or for the environmental protection of the area concerned."

The Department recommends that the competent authority follow a risk-averse approach and **refuse authorisation** in terms of regulation 22(b)(i) of the EIA Regulations, 2014 (as amended), as the proposed development conflicts with a prohibition contained in legislation.

5. Historically, scoping was a process to identify potentially significant issues and reasonable project alternatives that require assessment, with the Plan of Study for EIA detailing the methods to be employed to assess the potentially significant impacts. Appendix 2 of the EIA Regulations, 2014 (as

amended) sets out the objectives of the scoping process and the content requirements for a scoping report. The following regulations in Appendix 2 are of relevance:

- 5.1 Regulation 1 (d): *"The objective of the scoping process is to, through a consultative process identify and confirm the preferred site, through a detailed site selection process, which includes an identification of impacts and risks inclusive of identification of cumulative impacts and a ranking process of all the identified alternatives focusing on the geographical, physical, biological, social, economic, and cultural aspects of the environment"* (emphasis added).
- 5.2 Regulation 2(1)(g): *"A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include full description of the process followed to reach the proposed preferred activity, site and location of the development footprint within the site, including..."*
- 5.3 The Department notes that only one site alternative was considered by the applicant and that *"should additional viable site alternatives be identified during the EIA process, the project team will heed the suggestions, and investigate the possible implementation thereof"*. Based on the requirements of regulation 1(d) of Appendix 2 of the EIA Regulations, 2014 (as amended), the preferred site must already be confirmed during the scoping phase; and considering that an application for a mining right can only be considered if there is a proven resource and in sufficient quantity; the statement regarding the investigation of alternative sites during the EIA phase appears to be misleading.
- 5.4 The Plan of Study for EIA identifies the various specialist studies that will be undertaken during the EIA phase of the S&EIR application. The environmental assessment practitioner ("EAP") is cautioned that the final reports must be submitted to the competent authority within the stipulated, legislated timeframe. Certain specialist studies (i.e. ecological and freshwater ecology) must be undertaken during the correct season, which may result in the delay in submitting the final reports to the competent authority, and the ultimate lapsing of the EIA application.
- 5.5 In the absence of any scoping-phase specialist studies undertaken to provide an initial assessment of the (nature, significance, consequence, extent, duration and probability of) impacts and risks which have informed the identification of each alternative, this Department is concerned that the development footprint within the site has not yet been confirmed. The conceptual site layout may thus have to be amended in its entirety based on specialist inputs and recommendations.
6. The DSR states that *"A Notice of Intend to Develop will be submitted to Heritage Western Cape (HWC), of which the HIA, inclusive of the palaeontological study, will form part as required in terms of the National Heritage Act, 1999."* Please be advised that the Notice of Intend to Develop should have been submitted to HWC when the application for environmental authorisation was submitted to the competent authority, which would have enabled HWC to provide an initial indication of their heritage requirements. The Plan of Study for EIA indicates that a desktop palaeontological study and a Phase 1 Heritage Impact Assessment will be undertaken by separate specialists during the EIA phase. The Department is concerned that the level of specialist assessment was determined without consultation with the provincial heritage resources authority; that the specialist studies are disjointed and not integrated; and that no visual impact assessment is proposed.

7. This Department's *Guideline for Involving Visual and Aesthetic Specialists in the EIA Process* dated June 2005 recommends the various levels of visual assessment for specific types of developments. Said guideline identifies quarries and mining activities with related processing plants as being a Category 5 development. Category 5 developments in environments categorised as "Protected/wild areas of international, national, or regional significance" are expected to result in a very high visual impact. The category of issues associated with very high visual impacts are indicated as having a potentially significant effect on wilderness quality or scenic resources; resulting in a fundamental change in the visual character of the area; and establishing a major precedent for development in the area. The *Guideline for Involving Visual and Aesthetic Specialists in the EIA Process* recommends a Level 4 Assessment for developments where a very high visual impact is expected. A Level 4 Assessment requires complete 3D modelling and simulations, with and without mitigation. As such, the Plan of Study for EIA must be amended to include the appointment of a suitably qualified and experienced specialist to undertake the necessary level of visual impact assessment.

Notwithstanding the above potentially fatal flaws that may limit the success of the proposed development, please find consolidated comment from various directorates within the Department on the DSR, in support of the Department's objection to the proposed development.

8. Directorate: Development Management (Region 1) – Ms Rondine Isaacs (Rondine.Isaacs@westerncape.gov.za; Tel: (021) 483 4098):
- 8.1 Please be advised that the title page of the DSR (page 10) incorrectly refers to alluvial diamond prospecting. Furthermore, the statement on page 15 of the DSR "*Upon commencement, the proposed project will trigger listed activities (see Table below) in terms of the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations 2014 (as amended 2017) and therefore requires an environmental impact assessment*" is incorrect. Please be advised that the project triggers EIA and waste management listed activities and requires environmental authorisation prior to commencement of any listed activity.
- 8.2 The Directorate notes that no avifaunal specialist study will be commissioned during the EIA phase. The terms of reference ("ToR") for the Ecological Study does not specifically indicate whether an assessment avifaunal impacts will be undertaken. It is further not clear whether the ecologist has the necessary expertise to undertake an avifaunal assessment. A separate, independent avifaunal impact assessment may be required and the Plan of Study for EIA may require an amendment to include an avifaunal assessment. (In this regard, please also refer to paragraph 9.2 below).
- 8.3 It is noted that the Engineering Services Report will discuss the services required for the proposed development, including the handling and storage of dangerous goods. Should the competent authority decide to accept the Final Scoping Report, then the Draft EIA Report must provide a description of the storage capacity related to the development and related operation of facilities or infrastructure for the storage or handling of dangerous goods. The layout of the dangerous goods

storage or handling facility must also be indicated. It is noted that an “explosives magazine” with buffer area will be established during site establishment. Please elaborate what this entails.

- 8.4 Information pertaining to the storage and handling of domestic waste, treatment of wastewater and sewage, and confirmation of electricity and water supply must be provided. The volume of water required during the site establishment and mining operations must be indicated, as well as the sources of water supply.
- 8.5 The applicability of Activity 19 of Listing Notice 1 of the EIA Regulations, 2014 (as amended) must be investigated and if applicable, be applied for and the impacts associated with the listed activity, assessed and reported on.
- 8.6 It is noted that a waste management licence (“WML”) in terms of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (“NEM:WA”) is required for the storage of general waste in lagoons. Section 47 of the NEM:WA describes the procedures for WML applications with section 47(3) of NEM:WA, 2008 stating that “*The steps contemplated in subsection (2) must include the publication of a notice in at least two newspapers circulating in the area in which the waste management activity applied for is to be carried out.*” The Department’s e-mail correspondence of 6 December 2018 alerted the EAP to this requirement. Based on the information contained in the DSR, the proposed development was only advertised in one newspaper (*Die Burger* of 3 December 2018). The publication in only one newspaper represents a **flawed public participation process** undertaken for the WML application. It is not known whether the applicant has applied for exemption in terms of section 74 of the NEM:WA, 2008 to only publish a notice in one newspaper. The competent authority must be consulted as matter of urgency to determine the way forward.
- 8.7 If the competent authority accepts the Final Scoping Report and amended Plan of Study for EIA (inclusive of the additional specialist studies required), then the following comment must be addressed in the Draft EIA Report:
 - 8.7.1 The potential negative impacts of the proposed mining activities on groundwater resources cannot be ignored and it is critical that the EIA Report provide potential management measures that can be applied to avoid or minimise both surface and groundwater pollution, disrupted groundwater flow, a lowered water table and subsequent impacts and residual risk on existing water uses in proximity of the proposed site.
 - 8.7.2 Dewatering is essential to most mining operations and includes the depression of the water table around the dewatered zone. Based on the review of the DSR, it is evident that dewatering remains a critical issue and it is unclear as to how this aspect will be addressed, since dewatering is inherent to underground mining.
 - 8.7.3 Since groundwater flow systems are not delineated by surface drainage or catchment boundaries, the regional context of groundwater systems must form part of the ToR for the Hydrogeological Assessment.
 - 8.7.4 The number and location of private boreholes that will be affected by the proposed mining operations must be clearly indicated.

- 8.7.5 The potential impacts on geohydrology, namely reduction in groundwater recharge, leakage of poor quality stored water, leakage of stored drilling fluids and chemicals, and contamination of groundwater must be thoroughly investigated during the EIA phase and the assumptions and models used must be clearly indicated.
- 8.7.6 Should there be any residue stockpiles or deposits associated with mining and processing activities, an indication of the size and location thereof must be provided.
- 8.7.7 The management of the residue stockpiles or deposits to prevent seepage into the receiving environment must be assessed in the Hydrogeological Assessment.
- 8.7.8 The applicability of the waste management activity listed in Category B3(11) of Government Notice ("GN") No. 921 of 29 November 2013 (as amended) (establishment or reclamation of a residue stockpile or residue deposit resulting from activities which require a mining right) must be investigated and reported on.
- 8.7.9 The applicability of the *Regulations regarding the planning and management of residue stockpiles and residue deposits from a prospecting, mining, exploration or production operation*, under section 69(1)(iA) of the National Environmental Management Waste Act, 2008, as published in GN No. R. 632 of 24 July 2015 must be investigated and reported on.
- 8.7.10 The size and location of the lagoon for the storage of the general waste must be provided. Reference is made to a proposed slimes dam; please clarify whether the slimes dam is the same as the general waste lagoon? On what basis was the classification of the waste (general waste) to be stored in the lagoon made?
- 8.8 The motivation for the need and desirability of the proposed development should further address the after-use vision or post-mining sustainability of the areas earmarked for the proposed mining development, considering that the proposed site is a designated Protected Environment. The National Department of Environmental Affairs' Guideline on Need and Desirability (first version published in terms of section 24J of the NEMA, 1998 in 2014 and second version in 2017), must be consulted and included in the list of applicable legislation and guidelines relevant to the proposed development.
- 8.9 The areas to be avoided as recommended by the various specialists (e.g. ecology, hydrogeology, avifaunal, heritage, visual, etc.) should be integrated and presented in overlays at an appropriate scale to clearly illustrate or map the areas that should be excluded from the development proposal.
9. Directorate: Biodiversity and Coastal Management – Ms Leptieshaam Bekko (leptieshaam.Bekko@westerncape.gov.za; Tel: (021) 483 3370):
- 9.1 The Moutonshoek Protected Environment is home to a variety of plant and animal species such as the endangered and endemic *Diascia caitliniae* flower and the endangered Verlorenvlei redfin fish (*Pseudobarbus verlorenei*), both which occur nowhere else in the world. In addition, it forms part of the Sandveld Corridor within the Greater Cederberg Biodiversity Corridor, a landscape initiative designed to connect protected areas and ensure sound environmental management.

- 9.2 The ToR for the Ecological Study requires the specialist to “*Elaborate on the potential impacts that the proposed activity may have on the receiving ecology (including the Krom Antonies River Valley) as well as the conservation status of the Moutonshoek Protected Environment*”. It is assumed that the ecologist must assess the potential impacts and provide suitable avoidance and mitigation measures. The ToR for the Ecological Study must be expanded to include an assessment of impacts on the Verlorenvlei Estuary, considering that the Moutonshoek Valley is an important catchment for the Verlorenvlei wetland system. Designated as a RAMSAR site in 1991, the Verlorenvlei Estuary is regarded as one of the ten most important wetlands for wading birds in the South-Western Cape. The Verlorenvlei Estuary supports at least 177 bird species with varying conservation status, including the Black Harrier, Black Stork, Ludwig's Bustard, and the Secretary Bird. As such, biodiversity of the Verlorenvlei Estuary is dependent on the health of this upper water catchment.
- 9.3 Due to its importance, the Verlorenvlei Estuary was identified as a priority estuary, and it was one of the first estuaries in the country for which an Estuarine Management Plan (“EMP”) was compiled as part of a pilot study under the auspices of the C.A.P.E. Estuaries Management Programme. This EMP was recently updated to align to the principles indicated in the National Estuarine Management Protocol through this Directorate's Estuary Management Framework and Implementation Strategy Project.
- 9.4 It is noted that the Verlorenvlei Estuary Advisory Forum is not included in the list of I&APs identified and registered for the EIA application. The Verlorenvlei Estuary Advisory Forum is an important stakeholder for any proposed development impacting on the estuary and must be consulted with regards to the proposed development.
- 9.5 The ToR for the Hydrogeological Assessment must be expanded to include a risk assessment to investigate and assess the potential risk to the main aquifer and impacts on boreholes that are within proximity of the proposed mining right area. It is important to note that over abstraction of water (both surface - and groundwater) may have a devastating impact on the hydrogeological system, especially for downstream users. As such, monitoring of borehole water levels and quality is required.
10. Directorate: Waste Management – Ms Evodia Boonzaier (Evodia.Boonzaier@westerncape.gov.za; Tel: (021) 483 8321):
- 10.1 Per the DSR, the Management Plan for the Moutonshoek Protected Environment indicates that the Moutonshoek Valley is “*a priority area due to future development threats, and presence of threatened vegetation types which are not currently in a protected area. Additionally, the area is of importance as the primary water catchment for the Verlorenvlei Estuary...*” Development that is incompatible with the land uses allowed in the Moutonshoek Protected Environment zonation plan should not be allowed. This Directorate supports a risk-averse and cautious approach and reiterates section 48(4) of the NEM:PAA, 2003, which requires the consideration of the interests of local communities and the environmental principles referred to in section 2 of the NEMA, 1998.

- 10.2 Gaps in knowledge and information include limitations on the affected surrounding areas and I&APs, such as the Karookop Primary School which is apparently located on the boundary of the proposed mining right area. This existing establishment and other affected receptors/stakeholders must be clearly indicated on the locality and site layout maps.
11. Directorate: Pollution and Chemicals Management – Mr Gunther Frantz (Gunther.Frantz@westerncape.gov.za; Tel: (021) 483 2975):
- 11.1 The establishment of an (initial) open-cast and 220m underground mine will alter the geohydrological dynamics and groundwater quality of the receiving environment. Open pit mining concerns include landscape and ecological transformation whereas underground mining concerns include long-term water security and rehabilitation challenges. These concerns must be addressed in the Hydrogeological Assessment and Draft EIA Report.
- 11.2 The proposed mining activities will result in impacts to surface water resources such as the Krom Antonies River, which is a major source of water that supplies the Verlorenvlei Estuary with fresh water. It is imperative that a water monitoring system be implemented with identified water quality variables that must be measured. These variables must be detailed in the Draft EIA Report, together with the frequency and locations to be monitored.
12. Directorate: Air Quality Management – Mr Peter Harmse (Peter.Harmse@westerncape.gov.za; Tel: (021) 483 8343):
- 12.1 It is anticipated that activities related to the construction of access roads, mining of molybdenum and tungsten, drilling and blasting, hauling, crushing and stockpiling of final products, storage of waste products, etc. will create noise, dust and exhaust emissions, which could result in significant environmental impacts. Dust generated during the construction and operational phases must comply with the National Dust Control Regulations (GN No. R. 827 of 1 November 2013) promulgated in terms of the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004). These regulations prohibit a person from conducting any activity in such a way as to give rise to dust in such quantities and concentrations that the dust, or dust fall, may have a detrimental effect on the environment, including human health.
- 12.2 Noise generated during the construction and operation phases must comply with the Western Cape Noise Control Regulations (Provincial Notice 200/2013) of 20 June 2013. The Noise and Traffic Impact Assessments must take cognisance of the Noise Control Regulations' requirements.
- 12.3 The DSR indicates that the mining technology to be used during Phase 1 of the operational phase (Years 1 – 4) will include drilling and blasting with associated truck and shovel operations. Phase 2 of the operational phase will, except for drilling and blasting that only occur during the day, occur on a 24-hour, 7 days a week schedule. The Noise Impact Assessment must assess the continuous noise impacts on the receiving environment, especially on sensitive receptors.

13. The applicant is reminded of its general duty of care and the remediation of environmental damage in terms of section 28(1) of the NEMA, 1998 which specifically states that: "...Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment..." The applicant must demonstrate this general duty, together with the duty to avoid causing adverse effects on the estuarine environment per section 58 of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008).
14. Please direct all enquiries to the officials indicated in this correspondence should you require any clarity on any of the comments provided.
15. The Department reserves the right to revise initial comments and request further information based on any information received.

Yours faithfully



pp **HEAD OF DEPARTMENT**

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

**DRAFT SCOPING
REPORT
COMMENTS**

**DEPARTMENT OF
WATER AND
SANITATION**



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

WESTERN CAPE PROVINCE

Private Bag X 16, Sanlamhof, 7532 / 52 Voortrekker Road, Bellville 7530
Tel #: (021) 941 6000 Fax #: (021) 941 6077

Enquiries : M. Tshikalange
Tel # : (021) 941 6040
Email : TshikalangeM@dws.gov.za
Reference : 16/2/7/G300/A/7

Attention: Christine Fouche

Greenmined Environmental (Pty) Ltd
Postnet Suite 62
Private Bag x 15
Somerset West
7129

Dear Ms Fouche

COMMENTS ON THE DRAFT SCOPING REPORT FOR THE PROPOSED RIVIERA TUNGSTEN MINING PROJECT LOCATED IN THE MOUTONSHOEK VALLEY ON PORTION 1 OF FARM 297 RD, PORTION 6 (REMAINING EXTENT) OF THE FARM NAMAQUASFONTEIN 76 RD, AND PORTION 21 OF THE FARM NAMAQUASFONTEIN 76 RD, PIKETBERG, BERGRIVIER LOCAL MUNICIPALITY IN WESTERN CAPE.

1. The Department acknowledges receipt of your application dated January 2019, received by this office on the 07 February 2019. It was noted that the comments are due on the 12 February 2019. As per our telephonic conversation dated 07 February 2019 requesting extension as we have observed that we would not have enough time to provide comments in the interest of protecting the water resource. You advised that it will not be possible; however we will get an opportunity to comment on the Environmental Impact Assessment (EIA).
2. The Department of Water and Sanitation has assessed the above-mentioned application and wish to comment as follows:
 - 2.1 The department has noted that the proposed development will take place in the vicinity of Krom Antonies River on portion 1 of farm 297 RD that flows adjacent to the proposed mining area.
 - 2.2 Therefore the EIA process need to be undertaken including the following specialist studies and submitted to the Department:
 - A freshwater report
 - Storm water management plan
 - Geo-hydrological report



NATIONAL DEVELOPMENT PLAN
Our Future - make it work



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

3. All requirements as stipulated in the National Water Act, 1998 (Act 36 of 1998) regarding water use must be adhered to.
4. This letter does not exempt you from complying with other relevant legislations and requirements of other governmental Departments.
5. Please note that the Department reserves the right to amend and/or add to the comments made above in the light of subsequent information received.

For any further queries/ correspondence in this regard, please do not hesitate to contact the above official.

Your co-operation aimed at the protection of water resources will be highly appreciated.

Regards,

REGIONAL HEAD : **WESTERN CAPE**
Designation : **Acting Deputy Director: Olifants Doorn**
Signed by : **Ms. T. Torch**
Date : **08/02/2019**



NATIONAL DEVELOPMENT PLAN
Our Future - make it work

**DRAFT SCOPING
REPORT
COMMENTS**

**ELAND'S BAY
ENVIRONMENTAL
AND
DEVELOPMENT
ACTION GROUP**



c/o 17 Bergvliet Road Bergvliet 7945

Tel 021 713 1497

12 February 2019

Greenmined Environmental (Pty) Ltd
Private Bag X15
Somerset West
7129

For attention: Ms C Fouche

By email:

Dear Ms Fouche

RE: APPLICATION IN TERMS OF SECTION 22 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, ACT 28 OF 2002, (“MPRDA”), AND THE NATIONAL ENVIRONMENT MANAGEMENT ACT, ACT 107 OF 1998 (“NEMA”) AS WELL AS THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED)

I refer to the above-mentioned application and to the Background Information Document and Draft Scoping Report and submit comments herewith on behalf of the Eland’s Bay Environmental and Development Action Group (“EBEDAG”) of which I am the elected chairman.

1. Statement of Interest

EBEDAG is a formally constituted non-profit civic organisation having a paid up membership and an elected Executive Committee of which I am chairman.

The organisation was established in 2005 with the general aim of promoting conservation efforts in the Eland's Bay / Verlorenvlei region. In this regard, EBEDAG has become well-known for its positive contributions and achievements which include:

- taking an active role in monitoring applications for development in the area;
- promoting efforts to preserve the estuary at Verlorenvlei and the adjacent coastal dunes;
- working extensively with government departments at local, provincial and national levels;
- working extensively with other organizations and authorities, including law enforcement agencies, civic organizations and nature conservation agencies;
- actively supporting the conservation of significant cultural and heritage sites in the area, including the declaration of Provincial Heritage Sites at Baboon Point in Eland's Bay and Diepkloof, near Redelinghuys.

Because the proposed mining of tungsten and molybdenum in the catchment area of Verlorenvlei poses a serious threat to Verlorenvlei and the surrounding area, EBEDAG registered as an Interested and Affected Party in respect of the previous application made by Bongani Minerals in 2009 and along with many other objectors, submitted comments and objections at that time.

EBEDAG is therefore dismayed at the renewed application, for all the reasons we and other objectors have previously voiced, which reasons and grounds for objection remain valid in 2019, ten years later.

Accordingly, we have registered EBEDAG as an Interested and Affected Party (I&AP) with regard to the current application. Our comments and objections follow below.

2. Summary of 2019 application (Reference: Background Information Document)

- 2.1. The applicant currently holds a prospecting right over the proposed mining right application area. The application is for the mining of tungsten and molybdenum.
- 2.2. The extent of the proposed mining footprint is 531.44ha, situated on 3 farms in the Moutonshoek Valley.
- 2.3. In terms of the application, the first phase of the mining operation will involve the stripping the top layer, then waste stripping to expose the ore body, and then open cast mining.
- 2.4. In the first phase (1- 4 years) there will be drilling and blasting with associated truck and shovel operations. Once the mine is fully

operational, it will run 24 hours 7 days a week. The life span of the mine is expected to be 21 years from start of project.

- 2.5. The layout will consist of an open cast pit; waste rock stockpiles; processing plant; run of mine stockpiles; slimes dam; various buildings; roads and depots.
- 2.6. Approximately 12 trucks will visit the mining area per day.
- 2.7. Potable water will be extracted from boreholes in the mining area. 20,000 litres will be needed daily.
- 2.8. A connection to Eskom national grid will be required.

We list these salient aspects in the context of our comments below.

3. Moutonshoek Valley: An Unsuitable Area for Mining

- 3.1. The area demarcated for the proposed open-cast tungsten/molybdenum mine lies at the foot of the Piketberg Mountains and at the headwaters of the catchment area of an internationally acclaimed Ramsar site, the Verlorenvlei.
- 3.2. The Piketberg Mountains and the Moutonshoek Valley contain sites of significant historical, heritage, ecological and agricultural value. For this very reason, the area was declared a Protected Environment in 2018.
- 3.3. The Greater Cederberg Biodiversity Corridor is a well-established initiative which aims to connect the Wilderness area of the Cederberg Mountains via a corridor to the sea at Eland's Bay. The Piketberg Mountains and Moutonshoek Valley form an integral part of the Biodiversity Corridor. The presence of a large-scale open-cast mine in the proposed corridor is completely out of line with this initiative, which is why the 2009 mining application was opposed by CapeNature and the Wildlife and Environment Society of South Africa. Mining activities and the conservation of the natural environment do not make for good bedfellows. There are all too many examples of this in South Africa – as a start, one needs only to witness the devastation caused by open cast mining on the West Coast north of Lambert's Bay.
- 3.4. The proposed location of the tungsten mine is in an area renowned for its links with the pre-colonial past. The Piketberg and surrounding mountains stretching to the sea at Eland's Bay contain hundreds of archaeological sites, many of which have not yet been fully excavated or mapped. The mountains and valleys of the area were the homes and shelters of people for tens of thousands of years, possibly even for hundreds of thousands of years, as excavations in the Cederberg and Eland's Bay have revealed. This heritage, including all rock art sites in the area, is a national asset deserving the highest level of protection and conservation. Mining activities are antithetical to the conservation of

these sites. We urge the officials, when determining the merits of this application, to consider the consequences of losing these irreplaceable links to the distant past for the sake of a mine with a projected life span of 21 years.

3.5. As stated in paragraph 3.1 above, the proposed location of the mine is in the catchment area of Verlorenvlei, a Ramsar site and a riverine / wetland system of international significance. Mining activities in this location will have a severely negative effect on Verlorenvlei, particularly with regard to the following:

- quantity and quality of water flowing into the Verlorenvlei system;
- pollution of rivers and groundwater by the ore treatment plant and slime dams;
- dewatering;
- blasting, noise and dust which will destroy the natural habitat of indigenous flora and fauna;
- visual impact of an extensive open-cast mine, mine machinery, and mining plant in a rural valley.

3.6 It is widely known and accepted that this area is "water-stressed" and that as of time of writing, the Verlorenvlei is under grave threat due to drought and over-extraction of water.

3.7 Agricultural land

The location for the proposed mine is at the epicentre of a profitable farming area which contributes to the local, provincial and national economy and which provides hundreds of permanent and seasonal jobs for farm workers. Agriculture is as much a mainstay of the South African economy as is mining, and in the face of global food shortages, combined with the loss of valuable agricultural land in South Africa, every step should be taken to support and nurture farming activities and to prevent the alienation of agricultural land.

3.8 Loss of jobs

If the proposed mine is approved, thousands of farm workers will lose their jobs in the area. The majority of the workers currently employed on the farms in the area are women who will not be re-employed as mine-workers, machine operators, truck drivers, etc. We therefore question the assertion that mining activities will create jobs and lessen unemployment. To the contrary, research conducted by farmers in the area concludes that jobs will be lost and local unemployment will increase if the mine is approved.

4. Conclusion

EBEDAG hereby registers its strongest objection to the application for mining rights, which if granted, will:

- destroy prime agricultural land;
- destroy the livelihoods of farmers and farm-workers in the area;
- destroy the natural habitat of the protected Moutonshoek Valley;
- destroy any hope that the crisis affecting Verlorenvlei can and will be resolved through increasingly strict water management policies;
- destroy years of careful planning and initiatives in respect of the Greater Cederberg Biodiversity Corridor and in respect of the protection of internationally acclaimed heritage sites at Redelinghuys and elsewhere in the area.

In short, there will be large-scale and irreversible destruction of agricultural, heritage and protected environments. EBEDAG cannot condone this.

Kindly acknowledge receipt hereof. Please send all further notifications and reports relating to this application to the registered address of EBEDAG as per our letterhead.

Yours faithfully

A handwritten signature in black ink, appearing to read "Michael D Winfield". The signature is written in a cursive, somewhat stylized font.

Michael D Winfield
Chairman EBEDAG

**DRAFT SCOPING
REPORT
COMMENTS**

**ENDANGERED
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**ENDANGERED
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Protecting forever, together.

4 February 2019

Attention:

Ms Christine Fouche
Senior Environmental Consultant
Greenmined Environmental

**Comments, from the Endangered Wildlife Trust, on the renewal of prospecting rights
DSR**

This DSR is not objectively drafted at all, when one considers the high biodiversity value of the proposed project site, it is inconceivable that the mining would even be proposed. The project site includes a RAMSAR site and a promulgated Protected Environment. We note that in the overview of the project site they are silent on this, the first reference to these important facts is only on page 25!

CapeNature confirmed, in their comments submitted on the BID, that although a portion of the area to be impacted directly by the proposed mining activities has largely been transformed by agricultural activities, there are still important areas supporting indigenous vegetation, including Leipoldtville Sand Fynbos (Endangered), Swartland Shale Renosterveld (Critically Endangered), Piketberg Quartz Succulent Shrubland (Critically Endangered according to the latest analyses conducted by CapeNature), Piketberg Sandstone Fynbos (Vulnerable), Cape Lowland Alluvial Vegetation (Critically Endangered), and Cape Lowland Freshwater Wetlands. CapeNature further state that the Western Cape Biodiversity Spatial Plan has determined terrestrial and aquatic Critical Biodiversity Areas (CBA's) as well as Ecological Support Areas (ESA's) within and adjacent to the application area. The area also falls within the Greater Cederberg Biodiversity Corridor.

In consideration of the Protected Environment status:

1. As the area is a protected area we feel that more biodiversity related specialists are required.
2. The description of the property is silent on the fact that it is a protected environment, in fact on Page 19 – they drafted the section on clearing vegetation to sound as though this land is agricultural only.
3. The proposed mining includes open cast mining, meaning all top soil will be stripped – completely removing the biodiversity that was sought to be protected.

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The Endangered Wildlife Trust is a non-profit, public benefit organisation dedicated to conserving species and ecosystems in southern Africa to the benefit of all people.

NPO Number: 015-502, **PBO number:** 930 001 777, **Member of IUCN** - The International Union for Conservation of Nature
The Endangered Wildlife Trust is US 501(c)(3) compliant under **US IRS Registration number:** EMP98-0586801.



**ENDANGERED
WILDLIFE TRUST**
Protecting forever, together.

4. The first reference to the fact that DEA must approve the Mining Right is on page 99 – until then DMR was made out to be the only competent authority
5. Policy of non-regression in terms of protected areas must be implemented! There is no point in promulgating protected areas only to turn round in less than a year and mine them!
6. For additional info on the biodiversity value of the area see the points raised by Cape Nature on page 53 – 55.
7. They drafted the sections on the decommissioning phase as though total rehabilitation is achievable and no mention was made to rehabilitating the land as they go. The reality is that rehabilitation never achieves complete return to the original state, there is always significant and long-lasting damage.

Other comments

1. Page 26 The total number of employee positions the mine will create = 211 (including management). It would be interesting to get an idea of how many jobs the farms are currently providing and we note that at page 92 the tourism sector create over 400 jobs in peak season.
2. The comparison of negatives vs positives on page 119 -120 speaks for itself 29 negatives to 8 positives (one of which is the return to agricultural use (IN 30 YEARS TIME) and the other is increased work opportunities. We note that 211 jobs will be created by the mine versus the over 400 jobs created by tourism and those 211 are temporary as opposed to tourism based jobs which are in-perpetuity) if we take care of our natural assets and environmental heritage.

Dr. Ian T. Little

Senior Manager: Habitats | Endangered Wildlife Trust

Southern and East Africa regional chair, Commission on Ecosystem Management: IUCN

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**DRAFT SCOPING
REPORT
COMMENTS**

HILL, H

From: Helga Hill, 37 Vans Road, Tokai, 7945.

4 February 2019

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, Helga Hill, would like to take this opportunity to object to the abovementioned mining right application lodged by Greenmined on behalf of Bongani Minerals.

Basis for objecting:

The targeted area is a protected area and where not, is adjacent to a protected area. It falls within a critically endangered vegetation area with equally rare fauna. Long term job opportunities will be lost. The river also flows into the Verlorenvlei wetlands which is a RAMSAR site supporting thousands of birds. And mining will ruin a particularly beautiful and tranquil valley.

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 (*Pseudobarbus burgi*). Cape Galaxias (*Galaxias zebratus*) and Cape Kurper (*Sandeliacapensis*), 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 Secretary Bird. In addition the Verlorenvlei system of which the valley forms part supports globally threatened species such as Lesser Flamingo, Black Harrier, African Black Oystercatcher 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 precedent 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; 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.

Kind regards



HELGA HILL

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