

APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

#### IMPORTANT NOTICE

#### Kindly note that:

- 1. As from 8 December 2014, this document serves as the application form, and incorporates the requisite documents that are to be submitted together with the application for the necessary environmental authorisations in terms of the said Acts.
- 2. This application form is applicable while the Mineral and Petroleum Resources Development Amendment Act of 2008 is in effect, as the form may require amendment should the Act be further amended.
- 3. Applicants are required to apply for the necessary water use licence and any other authorisations or licences to the relevant competent authorities as required by the relevant legislation. Upon acceptance of an application for a right or permit in terms of the MPRDA, applicants will be required to provide evidence to the Regional Manager that a water use licence has been applied for.
- 4. The Regional Manager will respond to the application and provide the reference and correspondence details of the Competent Authority, and in the event that the application for a right or permit is accepted, together with the date by which the relevant environmental reports must be submitted. Notwithstanding anything that may appear to be stated to the contrary in the acceptance letter, the timeframes are in fact aligned and the prescribed timeframes for the submission of documents as regulated by the NEMA regulations must be strictly adhered to.
- 5. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
- 6. The failure to submit complete information as required in this application form may result in the refusal of the application for an environmental authorisation and consequently of the right or permit applied for.
- 7. This application must be submitted through the SAMRAD online application system of the Department of Mineral Resources under "Other documents to upload".
- 8. Unless protected by law, all information filled in on this application form will become public information on receipt by the competent authority. Any interested and affected party should and shall be provided with the information contained in this application on request, during any stage of the application process.
- 9. Please note that an application fee is payable in terms of the National Environmental Management Act and the National Waste Management Act, which fees must be paid upon lodgement of the application. Should the said application fees not be paid as prescribed the application for a right or permit in terms of the Mineral and Petroleum Resources Development Act cannot be considered to have been made in the prescribed manner and the said application for a right or permit will have to be rejected. In this regard the type of applications must be identified in the table below.

#### PLEASE STATE TYPE OF AUTHORISATIONS BEING APPLIED FOR.

APPLICATION TYPE	APPLICABLE FEE	Mark with an X where applicable
NEMA S&EIR application on its own	R10 000.00	
NEMA BAR application on its own	R 2 000.00	X
NEMWA S&EIR application on its own	R10 000.00	
NEMWA BAR application on its own	R 2 000.00	
NEMA S&EIR application combined with NEMWA S&EIR application	R 15 000.00	
NEMA BAR application combined with NEMWA BAR application	R 3 000.00	
NEMA S&EIR application combined with NEMWA BAR application	R 11 000.00	

#### 1. CONSULTATION BASIC ASSESSMENT AND/ OR SCOPING REPORT

#### 2. DETAILS OF THE APPLICANT

Project applicant:	BONIZENZO HOLDINGS (Pty) Ltd		
Registration no (if any):	2021/912213/07		
Trading name (if any):	BONIZENZO HOLDINGS (Pty) Ltd		
Responsible Person, (e.g	Director		
Director, CEO, etc):			
Contact person:	Peter Makgato		
Physical address:			
Triyolodi dddress.	Postnet Suite MW 539, Private Bag X 18	838, Middelbui	g
Postal address:	1050	Cell	078 173 9680
Postal code:	1050		070 170 0000
Telephone:	078 173 9680	Fax	
E-mail:	pmakgato@gmail.com		

#### 3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP:	Ralph Repinga		
Professional Affiliation/registration;	South African Council of Natural Scientist Professions Registration No: 400097/02		
Contact person (if different from EAP):			
Company:	Licebo Environmental and Mining	(Pty) Ltd	
Physical address:	49 Centuary Avenue, Reyno Ridg	e, eMalahl	eni, 1034
Postal address:	PO Box 20519, Del Judor, eMalal	hleni	
Postal code:	1035	Cell	083 257 8869
Telephone:	013 692 0212	Fax	086 667 1169
E-mail:	Ralph.Repinga@licebo.co.za		

If an EAP has not been appointed please ensure that an independent EAP is appointed as stipulated by the NEMA Regulations, prior to the commencement of the process.

The declaration of independence and the Curriculum Vitae (indicating the experience with environmental impact assessment and relevant application processes) of the EAP must also be attached as **Appendix 1**. EAP DECLARATION OF INDEPENDENCE AND CURRICULUM VITAE

## 4. PROJECT DESCRIPTION

Farm Name:	ROODERAND 41 JP PORTIONS 10, 21 AND 24 AS WELL AS 902 JP REMAINING PORTION AND PORTION OF PORTION 1 AND 2
Application area (Ha)	3280 Ha
Magisterial district:	Ramotshere Moiloa
Distance and direction from nearest town	The farm is situated 45 km from GROOT MARICO town
21 digit Surveyor General Code for each farm portion	The proposed prospecting area covers an extent approximately 3290 Heactares of, extending portions 10,21 and 24 portion of the farm Rooderand 41 JP as well as 902 JP REMAINING PORTION AND PORTION OF PORTION 1 AND 2
	Rooderand 41 JP [T0JP00000000041]
	Portion 10 T0JP0000000004100010 Portion 21 T0JP0000000004100021 Portion 24 T0JP00000000004100024
	902 JP [T0JP00000000902]
	Remainder of Portion 902 T0JP0000000090200000 Portion of Portion 1 T0JP0000000090200001 Portion of Portion 2 T0JP00000000090200002
Locality map	Attach a locality map at a scale not smaller than 1:250000 and attach as Appendix 2
Description of the overall activity. (Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production	BONIZENZO HOLDINGS (Pty) Ltd is intending to undertake prospecting on Portions of the farm Rooderand 41 JP AND 902 JP, situated in the Magisterial district of Ramotshere Moiloa. The proposed prospecting will be undertaken approximately 50 km North of Groot Marico, Situated in the Moses Kotane District Municipality North West province.
Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)	Activities to be undertaken include the drilling of prospecting exploration boreholes, construction of water collection sumps and accessing the portions of the farm via existing roads. The prospecting work will consist of an initial phase of conventional drilling in order to assess the possible viability of the reserve. Drilling will be conducted on an adequate grid survey basis sufficient to aid in the compilation of a comprehensive Geological Report in accordance with the SAMREC Code. The drilling activities will be undertaken in house by BONIZENZO HOLDINGS as they have considerable experience in all fields of exploration.
	It is envisaged that a total of 10 cored boreholes will be drilled during Phase 1, applying a grid spacing approximately 300 metres in order to quantify the coal reserve in terms of the economic feasibility thereof. As such a minimum of approximately 1 500 meters of core drilling is envisaged. Borehole depth is expected to range from approximately 150 meters to 500 meters in order to intersect all the seams if present.
	Casing will be removed from the borehole on completion thereof and the borehole sealed in accordance with "Standard Borehole Sealing Procedure", that is, each borehole certificated in terms of this procedure. Borehole sumps will be rehabilitated in accordance with existing legislation and

any extraneous material removed from site. Where water is to be used for drilling purposes this will be managed in accordance with the local municipality as the water services provider for the consent or permission to draw from existing municipal supply water points.

Drilling personnel (4 or 5) will be housed in caravans on site during the prospecting phase and will make use of sanitary chemical toilets and all such waste disposed of via the approved manner. Potable / drinking water will be provided to the drill crew by the BONIZENZO HOLDINGS.

#### 5. ACTIVITIES TO BE AUTHORISED

(Please provide copies of Environmental Authorisations obtained for the same property as **Appendix 3**) indicate. (Attach a proposed site plan, drawn to a scale acceptable to the competent Authority, showing the location of all the activities to be applied for, as **Appendix 4**)

NAME OF ACTIVITY	Aerial extent of			APPLICABLE	WASTE MANAGEMENT
(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route, etc E.g. for mining, - excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc.)	the Activity Ha or m²	ACTIVIT (Mark with applicable affected).	n an X where	(GNR 983, GNR 984 or GNR 985)	AUTHORISATION  (Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X )
Any activity including the operation of that activity which requires a prospecting right in terms of section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including—	Approximately 3 ha	Activity 20	Number	GNR 327 - Listing Notice 1	
(a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource or [including activities for which an exemption has been issued in terms of section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)]					
The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—	Approximately 3 ha	Activity 27	Number	GNR 327 - Listing Notice 1	
(i) the undertaking of a linear activity; or					

#### 6. PUBLIC PARTICIPATION

(Provide details of the public participation process proposed for the application as required by Regulation).

Details of the Public Participation process to be followed.

#### 6.1.1 IDENTIFICATION OF INTERESTED AND AFFECTED PARTIES TO BE CONSULTED

IDENTIFICATION CRITERIA	Mark with an X where applicable	
	YES	NO
Will the landowner be specifically consulted?	X	
Will the lawful occupier on the property other than the Landowner be consulted?	Х	
Will a tribal authority or host community that may be affected be consulted?	X	
Will recipients of land claims in respect of the area be consulted?	X	
Will the landowners or lawful occupiers of neighbouring properties been identified?	Х	
Will the local municipality be consulted?	X	
Will the Authority responsible for power lines within 100 metres of the area be consulted?	Х	
Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?	Х	
Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? (Specify)	Х	
Will the Provincial Department responsible for the environment be consulted?	Х	
Will all the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above?	Х	
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?	X	
Other, Specify		THE VIEW IN

#### 6.1.2 DETAILS OF THE ENGAGEMENT PROCESS TO BE FOLLOWED

Steps to be taken to notify interested and affected parties (Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. Photographs of notice boards, and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application must be attached as Appendix of the S&El report)

#### PROVIDE DESCRIPTION HERE

Steps to be taken to notify Interested and Affected Parties (I&APs) that will be undertaken as part of this application by BONIZENZO HOLDINGS (Pty) Ltd will be as follows:

The process of identifying and contacting landowners and other I&APs has already commenced. Existing Interested and Affected Parties (I&APs) will still form part of this process.

Landowners and their contact details have been identified through the existing mine's stakeholder register, direct consultation and Title Deed search for the properties falling within the proposed study area.

Site notices, newspaper adverts, telephone discussions, public meetings, e-mails messages and fax will be utilised to identify and register the Interested and Affected Parties. I&APs will also be identified through responses from site notices, newspaper advertisements, telephone discussions, e-mails and faxed communication as well as public meetings which will be conducted as part of this application process.

Letters, Background Information Documents (BID) and Project Commenting Sheets will be made available to Government Authorities, landowners, those occupying the land, adjacent landowners, other Interested and Affected Parties including Non-Governmental Organisations, Local Farmers. This documentation will be used to introduce I&APs to the project and to invite them to participate in the process.

Advertisements for the project will be placed in the local newspapers, and proof of advertisements will be made available as part of the public participation information. On-site notices introducing the project and advertising the public meetings will be placed at strategic public spaces such as libraries, proposed mine's sites entrance gates and on the fence of the proposed project study area. Photographs of areas the site notices will be placed will be taken and made available as part of the Basic Assessment Report (BAR)

Public meeting will be held and the minutes will be recorded for the purpose of incorporating comments and issues in the Scoping and Environmental Impact Report. One meeting will be held during the scoping phase and another meeting will be held as part of the Environmental Impact Assessment phase.

The purpose of the public meetings will be to share information with I&APs regarding the project as well as giving them an opportunity to comment and give input. I&APs will be encouraged to make their concerns heard via the use of telephone, letters, fax, post or e-mail. Recording of the issues and concerns received via e-mail, letters post and faxes will be captured as part consultation process. One-on-one meetings will also be held with I&AP when required.

The following Government Departments but not limited to the identified departments will be notified about the project:

- Department of Mineral Resources (DMR);
- North West Department of Economic Development and Tourism;
- North West Department of Local Government and Housing;
- North West Department of Public Works, Roads and Transport;
- North West Department of Agriculture, Rural Development and Environmental Affairs;
- North West Department of Cooperative Governance and Traditional Affairs,
- Department Rural Development and Land Reform,
- Land Claims Commissioner,
- Department of Water and Sanitation (DWS);
- South African Heritage Resources Agency (SAHRA);
- South African National Biodiversity Institute (SANBI);
- North West Tourism and Parks Agency,
- Zeerust Local Municipality;
- Moses Kotane District Municipality and other relevant government departments and agencies that will be identified as part of this application process.

## Information to be provided to Interested and Affected Parties.

#### Compulsory

- The site plan.
- List of activities to be authorised
- Scale and extent of activities to be authorised
- Typical impacts of activities to be authorised (e.g. Surface disturbance, dust, noise, drainage, fly rock etc.)
- Presentation of the drilling programme
- The duration of the activity.
- Sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land)

Other, specify: The information that will be provided to Interested and Affected Parties will also include the Background Information Document describing the proposed activity and the steps to be followed as part of the initial consultation process, the site notices and newspaper adverts that will be on different locations and local newspapers respectively.

## Information to be required from Interested and Affected Parties.

#### Compulsory

- To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions
- To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity

- To provide information on current land uses and their location within the area under consideration
- To provide information on the location of environmental features on site to make proposals as to how and to what standard the impacts on site can be remedied.
   requested to make written proposals
- To mitigate the potential impacts on their socio-economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied).

#### Other, Specify:

No additional information other than what is indicated above as part of the compulsory information to be provided to Interested and Affected Parties.

#### 7. DESCRIPTION OF THE ASSESSMENT PROCESS TO BE UNDERTAKEN

ITEM	DESCRIPTION
Environmental attributes	The Screening tool developed by the Department of Environmental Affairs will be utilized to determine the overall desktop study of the Environmental attributes of the farm Banksloot 147 JS Existing literature will also be utilized to generate more information on the study area and where
Describe how the Environmental attributes associated with the development footprint will be determined.	required specialist studies will be undertaken.
	*
Identification of impacts and risks.	The environmental risk analysis will be undertaken to identify potential environmental impacts associated with the proposed project as described under section below.
(Describe the process that will be used to identify impacts and risks).	
Consideration of alternatives.	According to Regulation 49(d) of the MPRDA Regulations of GN R527 of 23 April 2004 and Appendix 2 of GN R982 of 04 December 2014, feasible alternatives need to be considered and
(Describe how	assessed for the project. The professional judgement of the EAP, the engineering design
alternatives and in	consultants and I&AP comments, alternatives will be considered to decide on borehole location
particular the alternatives to the proposed site layout and possible	The BAR will provide a description of the alternatives considered and investigated for the proposed development.
alternative methods or technology to be applied will be determined).	According to the DEA & DP (2010) Guideline on Alternatives, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning (DEA&DP), key criteria when identifying and investigating alternatives are that they should be "feasible" and "reasonable". The alternatives identified must serve to achieve the triple bottom-line of sustainability i.e. they must meet the social, economic and ecological needs of the public. The alternatives must also aim to address the key significant impacts of the proposed project by maximising benefits and avoiding or minimizing the negative impacts. The primary objective mus be to avoid all negative impacts, rather than to minimise them. Alternatives are defined in the EIA Regulations as "different means of meeting the general purpose and requirements of the activity".
	The "feasibility" and "reasonability" of and the need for alternatives will be determined by considering, inter alia:
	The general purpose and requirements of the activity;
	Need and desirability;
	Opportunity costs; The need to avoid negative impact altogether;
	The need to avoid negative impact altogether,  The need to minimise unavoidable negative impacts;
	The need to maximise benefits, and
	The need for equitable distributional consequences.
	Alternatives will be considered as part of the Draft BAR phases of this project to ensure that possible alternatives to prevent environmental degradation or damage are considered.

Alternatives will ensure that the sterilisation of the proposed mining coal reserve is minimised when planning the site's infrastructure location. Siting of proposed borehole location will also consider environmental sensitive areas where possible.

## Process to assess and rank impacts.

(Describe the process to be undertaken to identify, assess and rank the impacts and risks for each individual activity) The below risk and impacts identification process and methodology will be used:

Impact Ranking Criteria:

The criteria used for assessing the significance of the impact are given in Table Below. The impact assessment method takes into account the current environment, the details of the proposed project and the findings of the specialist studies. Cognisance has been given to both positive and negative impacts that may result from the development. The significance of the impact is dependent on the consequence and the probability that the impact will occur.

Impact significance = (consequence x probability)

Where:

consequence = (severity + extent)/2

and

severity = [intensity + frequency + duration]/3

Each criterion is given a score from 1 to 5 based on the definitions given in Table below. Although the criteria used for the assessment of impacts attempts to quantify the significance, it is important to note that the assessment is generally a qualitative process and therefore the application of this criteria is open to interpretation.

The process adopted will therefore include the application of scientific measurements and professional judgement to determine the significance of environmental impacts associated with the project. The assessment thus largely relies on experience of the environmental assessment practitioner (EAP).

Where the consequence of an event is not known or cannot be determined, the "precautionary principle" will be adhered to and the worst-case scenario assumed. Where possible, mitigation measures to reduce the significance of negative impacts and enhance positive impacts will be recommended. The detailed actions, which are required to ensure that mitigation is successful, will be provided in the EMPr, which will form part of the BAR.

Consideration will be given to the phase of the project during which the impact occurs. The phase of the development during which the impact will occur, will be noted to assist with the scheduling and implementation of management measures.

Criteria for Assessing the Impact Significance

#### SEVERITY CRITERIA

INTENSITY = MAGNITUDE OF IMPACT	RATING
Insignificant: impact is of a very low magnitude	7
Low: impact is of low magnitude	2
Medium: impact is of medium magnitude	3
High: impact is of high magnitude	4
Very high: impact is of highest order possible	5

FREQUENCY = HOW OFTEN THE IMPACT OCCURS	RATING
Seldom: impact occurs once or twice	1
Occasional: impact occurs every now and then	2
Regular: impact is intermittent but does not occur often	3
Often: impact is intermittent but occurs often	4
Continuous: the impact occurs all the time	5

DURATION = HOW LONG THE IMPACT LASTS	RATING
Very short-term: impact lasts for a very short time (less than a month)	1
Short-term: impact lasts for a short time (months but less than a year)	2
Medium-term: impact lasts for the for more than a year but less than the life of operation.	3
Long-term: impact occurs over the operational life of the proposed extension.	4
Residual: impact is permanent (remains after mine closure)	5

EXTENT = SPATIAL SCOPE OF IMPACT/ FOOTPRINT AREA / NUMBER OF RECEPTORS	RATING
Limited: impact affects the mining area	1
Small: impact extends to the neighbouring farmers	2
Medium: impact extends to surrounding farmers beyond the immediate neighbours	3
Large: impact affects the area covered by the municipal area	4
Very Large: The impact affects an area larger than the municipal area	5

#### **PROBABILITY**

PROBABILITY = LIKELIHOOD THAT THE IMPACT WILL	RATING
Highly unlikely: the impact is highly unlikely to occur	0.2
Unlikely: the impact is unlikely to occur	0.4
Possible: the impact could possibly occur	0.6
Probable: the impact will probably occur	0.8
Definite: the impact will occur	1

#### **IMPACT SIGNIFICANCE**

#### **NEGATIVE IMPACTS**

≤1	Very low	Impact is negligible. No mitigation required.
>1≤2	Low	Impact is of a low order. Mitigation could be considered to reduce impacts. But does not affect environmental acceptability.
>2≤3	Moderate	Impact is real but not substantial in relation to other impacts. Mitigation should be implemented to reduce impacts.

>3≤4	High	Impact is substantial. Mitigation is required to lower impacts to acceptable levels.
>4≤5	Very High	Impact is of the highest order possible.  Mitigation is required to lower impacts to acceptable levels. Potential Fatal Flaw.

#### POSITIVE IMPACTS

≤1	Very low	Impact is negligible.
>1≤2	Low	Impact is of a low order.
>2≤3	Moderate	Impact is real but not substantial in relation to other impacts.
-3sd	High	Impact is substantial.
456	Very High	Impact is of the highest order possible.

#### **Cumulative Impacts**

In accordance with Regulation 982 of NEMA, cumulative impacts are defined as: "the impact of an activity that in itself may not be significant but may become significant when added to the existing and potential impacts eventuating from similar or diverse activities or undertakings in the area". Taking into consideration the above definition, the cumulative impacts for this project will be assessed by considering the current impacts at the mine and the addition of impacts as a result of project.

#### **Project Phases**

The Basic assessment for the project have been assessed over five phases of the project i.e. the planning and design, construction, operation, decommissioning, Closure and post-closure phase.

The planning and design phase refers to the stage when the feasibility studies are being undertaken, the project description is being developed and the mine is being designed. During this phase the BAR will be compiled and all required environmental authorisations will be applied for as well.

The construction phase will commence after all applied environmental authorisations (That is BAR and EMP) for this application. This phase will involve the construction of the required infrastructure.

Contribution of specialist reports.

(Describe how specialist reports, if required, will be undertaken into consideration and inform the impact identification, assessment and remediation process).

Relevant environmental specialist studies will be used to develop the proposed project. Where additional specialist studies are required, desktop studies will be undertaken to ensure that environmental aspects are dressed in order to determine the impacts that might arise as due to the proposed prospecting. The proposed and/or existing studies that will be used as part of this project subject to the identified impacts will include

- Fauna and flora;
- Aquatic assessment
- Wetland assessment:
- Soil, landuse and land capability;
- Surface hydrology;
- Geohydrology, geochemical assessment including (Salt and water balance);
- Noise assessment;
- Air quality assessment;
- Closure and rehabilitation study;
- Blasting and vibration assessment;
- Heritage, cultural and archaeological;

- Paleontological assessments; and
- Socio-economic assessment.

Any other reports that might be requested during the public participation process by Interested and Affected Parties and/or Government Authorities will also be considered.

## Determination of impact management objectives and outcomes.

(Describe how impact management objectives will be determined for each activity to address the potential impact source, and how the impact management outcomes will be aligned with standards.

Topography and soils: The direct impact on landforms associated with the proposed mining activities and associated infrastructure might result in the localised disruption of surface topography. Topsoil will be stripped on the areas that will be disturbed by Ventilation shaft and proposed infrastructure area. It should be noted that the proposed study is situated on cultivated area and the area is owned by the applicant.

Furthermore, as part of the soil disturbance, potential erosion impacts are anticipated to be limited on the developmental and infrastructure construction areas. Rehabilitation will be undertaken during site clearing activities and soil replacement stage respectively.

Land-use and land capability: The proposed prospecting will not impact the current land-use and land capability within the study area. it is anticipated that drilling will be undertaken during dry season to avoid causing agricultural damage to crop.

Surface water resources: The proposed prospecting will be undertaken at least 500m from surface water and no impacts on surface water are anticipated as result of drilling. In case of a breakdown or spillage occurring due to mechanical failure, the applicant will ensure that the appointed contractor has spillage kit provided and an emergency preparedness plan is designed to contain accidental spillages.

Groundwater resources: The potential primary impacts in terms of groundwater will involve the water contamination due to accidental hydrocarbon spills, water contamination due to drill material entering the groundwater. Modelling of the groundwater regime has been undertaken in order to assess and quantify these impacts which are less likely to affect the proposed study area.

Flora: Potential impacts to vegetation will include:

No impacts are anticipated on vegetation since the proposed site. where sensitive flora is identified during investigation, it shall be included in the Basic Assessment Report and will be considered during the life of the project.

Avifauna: Impact on birds breeding, foraging and roosting in or in close proximity of the site, through the modification of the habitat.

Air quality: Dust emissions will vary from day to day depending on the weather conditions and driving habits. Potential possible sources of fugitive emissions:

- Vehicle activities associated with the construction activity and transport of equipment to the site; and
- The use of faulty equipment resulting to excessive fumes.

Noise: During the construction phase there is likelihood that there might be an increase in noise pollution within the project site. The following possible sources of noise could potentially generate noise pollution during Construction stages of this project:

- Movement of construction vehicle
- Drilling of borehole

Cultural, Heritage and Archaeological: Potential impact on sites of cultural and heritage significance, e.g. graves and/or old buildings. Paleontological material, by its very nature, often occurs below ground. The Applicant and contractors will therefore keep in mind that paleontological sites might be exposed during the construction and operational phases.

Waste: Waste generation during the construction phase will have a potential negative impact on the environment, if not controlled adequately. Waste material will mostly be generated during the construction phase and will include general waste and hazardous waste (used oil, cement and concrete etc.).

#### 8. OTHER AUTHORISATIONS REQUIRED

Legislation	Mark with	an X where ap	olicable	
	Authorisa	ition required	Applicati	on submitted
18 4 1 1 1 4 1 1 1	Yes	No	Yes	No
SEMAs				X
National Environmental Management: Air Quality Act		X		Х
National Environmental Management: Biodiversity Act		Х		Х
National Environmental Management: Integrated Coastal Management Act		Х		X
National Environmental Management: Protected Areas Act		Х		Х
National Environmental Management: Waste Act		Х		X
National legislation				Х
Mineral Petroleum Development Resources Act	Х		Х	
National Water Act		Х		Х
National Heritage Resources Act		Х		X
Others: Please specify		Х		Х

Please provide proof of submission of applications in Appendix 5.

In the event that an authorisation in terms of the National Environmental Management: Waste Act is required for any of the activities applied for please state so clearly in order for such an authorisation to be considered as part of this application.

THERE ARE NO ANY OTHER ENVIRONMENTAL AUTHORISATIONS SUBMITTED AS PART OF THIS APPLICATION.

# DRAFT EMPr

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For consultation purposes, provide a high level approach to the management of the potential environmental impacts of each of the activities applied for.

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc)  e.g.: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, storas, workshops, processing plent, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts)  (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, air etc)	AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post- closure)	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods. Control through noise control through management and monitoring though rehabilitation	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)
Site preparation	Site induction of EMP  Dust generation from movement of Vehicles	Air Quality	Construction Phase	Conduct site induction with all drilling crew.  Provide attendance register for all crew member who attended the induction.  Speed Limit to all construction vehicle will be	Compliance to GNR 827 of 01 November 2013, regulations
11	and drilling operations			40km/h.  During dry days it is recommended that use of water to suppress dust when drilling boreholes.	dealing national dust control  During dry days it is for non-residential areas recommended that use of whereby the dust fallout rate water to suppress dust (expressed in mg/m2/day over when drilling boreholes.  30 days average exposure) must not exceed 600 <d<1200. day="" for<="" m2="" mg="" td=""></d<1200.>

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
(E.g. prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc)  e.g. Mining- excavetions, blasting, stockpiles, discard dump or dams, toading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, storas, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts)  (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air etc)	AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, poet-closure)	(modify, remady, control, stop) (e.g. noise control measuree, storm water control, dust control, rehabilitation, design measuree, blasting controls, avoidance, relocation, atternative activities etc)  E.g. Modify through atternative methods. Control through noise control through management and monitoring though rehabilitation	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc.)
					two events within a year but not sequential months
	Contamination of	Water quality	Construction Phase	The applicant to provide	Compliance to Section 19 and
	surface water			spillage kits to construction	20 of NWA
				personal.	
				Where accidental spillages	
				occur, it is recommended	
				that spills are cleaned	
				immediately to avoid	
				contamination of water	
				resources.	
		ī		If the spillage is runs to a	
				wetland, it should be	
				reported to the Department	
				of Mineral resources and	
				Department of water and	
				Sanitation.	

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc) e.g.: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, stores, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts)  (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, air etc)	AFFECTED	PHASE In which impact is anticipated (e.g Construction, commissioning, operational, decommissioning, closure, post- closure)	(modify, remedy, control, stop) (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures. blasting controls, avoidance, relocation, alternative activities etc) E.g. Modify through alternative methods. Control through noise control through management and monitoring though rehabilitation.	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)
	Soil erosion	Soil	Construction Phase	No drilling activities will be undertaken during wet days.  Contractor do use sandbags to prevent erosion during windy days.	Compliance to section 28 and 30 of NEMA
Drilling of Exploration boreholes.	Accidental hydrocarbon spillages	Water quality	Construction Phase	The applicant to provide spillage kits to construction personal.  Where accidental spillages occur, it is recommended that spills are cleaned immediately to avoid contamination of water resources.  If the spillage is runs to a wetland, it should be reported to the Department	Compliance to Section 19 and 20 of NWA Compliance to the Hazardous Substances Act and NEMWA. Occupational Health and Safety Act, Act 85 of 1993 and applicable regulations Mine Health and Safety Act, Act 29 of 1996 and applicable regulations

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
accommodation, equipment storage, site office access route atc)  e.g. Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, stores, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts) (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, air etc.)	AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post-closure)	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activities etc.)  E.g. Modify through alternative methods. Control through noise control through management and monitoring though rehabilitation.	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)
				of Mineral resources and Department of water and Sanitation.	
	Accidental hydrocarbon	Soil quality	Planning phase	Contractor to provide	Compliance to Section 19 and
	spillages			drilling crew with spillage	20 of NWA
		E		kit (iviust include a waste bin), clean spillages	Compilance to the Hazardous Substances Act and NEMWA.
				immediately.	Occupational Health and
				Soil contaminated by	Safety Act, Act 85 of 1993 and
				hydrocarbons must be	applicable regulations
	ĸ			disposed in a hazardous	Mine Health and Safety Act,
				landfill site.	Act 29 of 1996 and applicable
			11		regulations.
	Dust generation	Air quality	Construction	Use self-suppressant drill	Compliance to GNR 827 of 01
				rid or a drill rid that	November 2013, regulations
				generates less dust.	dealing national dust control
.51					for non-residential areas
					whereby the dust fallout rate
					(expressed in mg/m²/day over
					21 P a g e

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc) e.g.: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, storas, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts) (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air etc.)	AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post- closure)	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods.  Control through noise control through management and monitoring though rehabilitation	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)
					30 days average exposure)
					must not exceed
					600 <d<1200. day="" for<="" mg="" m²="" td=""></d<1200.>
				A STATE OF	two events within a year but
					not sequential months.
	Accidental hydrocarbon	Soil Quality	Planning phase	Ensure that drill rig is	Compliance to section 28 and
	spillages.			serviced before coming to	30 of NEMA and relevant
				site or provide last service	regulations
			Year I was	certificate.	
				In case spillage occurs	
				from drill, drip tray must be	
				used to contain the	
				hydrocarbon spillage and	
				once drip tray is full follow	
				emptying procedure.	
	Increase Traffic	Traffic	Planning Phase	Where applicable drilling	Compliance with National
				activities to be undertaken	Road Traffic Act, Act 29 of
				after harvest season is	1989
			k		
					22   P a g e

TO BE	level, dust level, se objectives etc)									tion 28 and	nd relevant				2				
STANDARD	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standerds, end use objectives etc)									Compliance to section 28 and	30 of NEMA and	regulations							
MITIGATION TYPE	(modify, remedy, control, stop)  (e.g. noise control measuree, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods.  Control through noise control through management and monitoring though rehabilitation	completed to avoid using	roads with harvesters.	Communication with	adjacent landowners to be	undertaken so ensure that	prospecting activities do	not have impacts on	farming activities.	The contractor to provide a	hazardous material	storage container, the	container to have a bund	wall and must be monitored	at all time.	The contractor to provide a	spillage kit catering for the	type of hazardous material	used on site.
PROJECT	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post-closure)									Planning phase									
ASPECTS	AFFECTED									Soil Quality									
POTENTIAL IMPACT	(including the potential impacts of cumulative impacts)  (e.g. dust, noise, dralnage surface disturbance, fly rock, surface water contamination, air etc)									Accidental hydrocarbon	spillages.								
Name of Activity	(E.g.: prospecting- drilling site, camp site, accommodation, equipment storage, site office access route etc) e.g. Mining- excavations, blasting, stockpiles, discard dump or dame, loading, hauling and transport, water supply dems and boreholes, accommodation, offices ablution, storas, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)																		

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
eg: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc)  e.g: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes. accommodation, offices ablution, stores, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts) (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air etc)	AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post- closure)	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods. Control through noise control through management and monitoring though rehabilitation	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)
29				In case of an accidental spillage, Clean Accidental spillages immediately and report to the Department.	
	Accidental hydrocarbon spillages.	Water Quality	Planning phase	In case of an accidental spillage, Clean Accidental spillages immediately and report to the Department	Compliance to section 28 and 30 of NEMA and relevant regulations. Compliance to Section 19 and 20 of NWA
	Soil compaction Water contamination	Soil water quality	Planning Phase Construction phase	No Drilling activities to be undertaken within the 500m flood line. Where accidental spillage occurs, clean spillages immediately and dispose	Compliance to section 28 and 30 of NEMA Compliance to section 28 and 30 of NEMA and Section 19 and 20 of NWA. Compliance to the Hazardous Substances Act and NEMWA.

(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site, cuming		ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
	(including the potential impacts of cumulative impacts)	AFFECTED	PHASE In which impact is anticipated	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design	ACHIEVED (Impect avoided, noise level, dust level,
itions, blasting, ump or dams,	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination groundwater contamination air at a)		(e.g. Construction, commissioning, operational, decommissioning, closure, post-	measures, blasting controls, avoidance, relocation, alternative activities etc)	rehabilitation standards, end use objectives etc)
				Control through noise control through management and monitoring though rehabilitation	Appendix of the second of the
lines, conveyors, etc.)					Jacon Library State of Control
				contaminated soil in a	
	22			hazardous substances	
				landfill site.	
Soi	Soil contamination	Soil Quality	Construction phase	Clean hydrocarbon spill	Compliance to the Hazardous
				using hydrocarbon spillage	Substances Act, NEMA, NWA,
				measures.	MPRDA and NEMWA.
Air	Air pollution	Air quality	Construction phase	Prevent making open fire	National Veld and Forest Fire
				on site, firefighting	Act, Act 101 of 1998
				equipment to be erected on	
				site to prevent any fire	
				occurring during the	
			- Annual Indian	construction and operation	
				phase.	
Soil	il and overburden	Visual aspect	Construction	No Mitigation	Compliance with relevant
sto	stockpiles will be visible				Visual standards and
fror	from adjacent farms				regulations

RD TO BE	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)		e with Noise and relevant	Compliance to GNR 827 of 01  November 2013, regulations dealing national dust control for non-residential areas whereby the dust fallout rate (expressed in mg/m2/day over 30 days average exposure) must not exceed 600 600 Compliance to GNR 827 of 01 areas of 1200 
STANDARD	ACHIEVED (Impact avoided, rehabilitation standar	-	Compliance standards regulations.	Compliance to GNR 8 November 2013, reg dealing national dust for non-residential whereby the dust fall (expressed in mg/m2/r 30 days average ex must not 600 <d<1200. <="" m2="" mg="" th=""></d<1200.>
MITIGATION TYPE	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods. Control through noise control through management and monitoring though rehabilitation	No mitigation	Conduct noise survey during the Operation phase of the mining operation	Dust suppression with water will occur during the operation phase.
PROJECT	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post- closure)	Operation	Operation phase	Operation phase
ASPECTS	AFFECTED	Geology	Noise Quality	Air quality
POTENTIAL IMPACT	(including the potential impacts of cumulative impacts) (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, air etc)	Loss of Geological Formation	Increase in Ambient Noise due to mining operation	Increase in dust
Name of Activity	(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc) e.g.: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, stores, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)			

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc) e.g.: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, storas, workshops, processing plant, storm water control berms, roads, pipellines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts)  (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air etc)	AFFECTED	In which impact is anticipated in which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post-closure)	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, evoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods. Control through noise control through management and monitoring though rehabilitation	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)
					two events within a year but not sequential months
Decommissioning	Increase in alien species population	Flora	Decommissioning phase	The control of declared weed and invaders with the infrastructure area should be maintained	National Environmental Management Biodiversity Act 10 of 2004
	Dust generated by vehicles during rehabilitation	Air quality	Decommissioning phase	Apply water to haul roads	Compliance to GNR 827 of 01 November 2013, regulations dealing national dust control for non-residential areas
					whereby the dust fallout rate (expressed in mg/m2/day over 30 days average exposure) must not exceed 600 <d<1200. day="" for<="" mg="" m²="" td=""></d<1200.>

The group control is a more site of the potential impacts of a commodation, affices access now each of the second control is and transport, water scooling learns, and any of the commissioning, and any of the commissioning and any of the commission and any	Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
disturbance roads  Top Soil stripping with Flora, Noise adiatural decommissioning with Flora, Air Quality  Los disturbance roads  Los disturbance roads  Los disturbance roads  Los disturbance roads  Los disturbance and Noise Business are constructed and commissioning associated infrastructure  Site Establishment to Air Quality  Site, Ground  Top Soil stripping with Flora, Air Quality  Excavator, Noise and Noise  Constructional constructional commissioning associated infrastructure  Site Establishment to Air Quality  Fauna & Flora  Los disturbance roads  Dust	ospecting-drilling site, camp site, todation, equipment storage, site costs route etc)	(including the potential impacts of cumulative impacts)	AFFECTED	PHASE In which impact is anticipated	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design	sise fevel, dust
Noise by Noise Decommissioning decommissioning of mining associated infrastructure  Site Establishment to Site, Ground  Transport Equipment to Air Quality  Site, Ground  Gisturbance roads  Top Soil stripping with Flora, Air Quality  Excavator, Noise and Noise  Dust	lining- excavations, blasting, ss, discard dump or dams, hauling and transport, water dams and boreholes, odation, offices ablution, stores, ps, processing plant, storm water berms, roads, pipelines, power veyors, etc.)	(e.g. dust, noise, drainage surface disturbance, fly rock, surface water contemination, arretc)		(e.g. Construction, commissioning, operational, decommissioning, closure, post-closure)	measures, bissting controls, avoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods.  Control through noise control through management and monitoring though rehabilitation	rehabilitation standards, and use objectives etc)
Noise by Noise Decommissioning decommissioning of mining associated infrastructure  Site Establishment Noise Commissioning  Transport Equipment to Air Quality  Site, Ground Fauna & Flora disturbance roads  Top Soil stripping with Flora, Air Quality Operational Excavator, Noise and Noise  Dust						two events within a year but not sequential months
decommissioning of mining associated infrastructure  Site Establishment to Site, Ground Air Quality  Top Soil stripping with Flora, Air Quality  Excavator, Noise and Noise  Dust  phase  Commissioning  Commissioning  Fauna & Flora  Fauna & Flora  Fora, Air Quality  Noise  Dust			Noise	Decommissioning	Undertake	Compliance with relevant
infrastructure  Site Establishment  Site Establishment to Air Quality  Site, Ground  Gisturbance roads  Top Soil stripping with  Excavator, Noise and Noise  Dust  Infrastructure  Commissioning  Fauna & Flora  Fauna & Flora  Fauna & Flora  Moise  Commissioning  Commissioning  Commissioning  Fauna & Flora  Fauna & Flora  Fauna & Flora  Fora, Air Quality  Operational  Excavator, Noise and Noise				phase	decommissioning activities	Noise standards and
infrastructure  Site Establishment  Transport Equipment to Site, Ground  Site, Ground  Air Quality  Site, Ground  Air Quality  Fauna & Flora  disturbance roads  Top Soil stripping with  Excavator, Noise and Noise  Dust					during daylight hours	regulations
Site Establishment to Air Quality  Site, Ground  Aisturbance roads  Top Soil stripping with Flora, Air Quality  Excavator, Noise and Noise  Dust  Commissioning  Fauna & Flora  Fauna & Flora  Flora, Air Quality  Operational  Noise	_	infrastructure				
Site, Ground Fauna & Flora disturbance roads  Top Soil stripping with Flora, Air Quality Operational Excavator, Noise and Noise  Dust	_	Site Establishment	Noise	Commissioning	The control of declared	Compliance with relevant
Fauna & Flora  with Flora, Air Quality Operational and Noise		Transport Equipment to	Air Quality		weed and invaders with the	Noise standards and
with Flora, Air Quality Operational and Noise		Site, Ground	Fauna & Flora		infrastructure area should	regulations
with Flora, Air Quality Operational and Noise	_	disturbance roads			be maintained	
with Flora, Air Quality Operational and Noise					Apply water to haul roads	
vator, Noise and Noise		Top Soil stripping with	Flora, Air Quality	Operational	The control of declared	Compliance with relevant
		Excavator, Noise and	Noise		weed and invaders with the	Noise standards and
		Dust			infrastructure area should	regulations
be mainta					be maintained	
Apply wat					Apply water to haul roads	

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO E	BE
(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc).  e.g.: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution storas, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts)  (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air etc)	AFFECTED	In which impact is anticipated In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post-closure)	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activities etc)  E.g. Modify through alternative methods.  Control through noise control through management and monitoring though rehabilitation	ACHIEVED (Impact avoided, noise level, dust level, rehabilitation standards, end use objectives etc)	etc)
	Top Soil hauling with	Noise, Air Quality	Operational	The control of declared	Compliance with relevant	/ant
	ADT's, Noise and Dust			weed and invaders with the	Noise standards a	and
				infrastructure area should	regulations	
				be maintained		
				Apply water to haul roads		
	Blasting	Geology	Operational	Dust suppression	Compliance with relevant	/ant
				measures should be	Noise standards a	and
				applied to control dust	regulations	
				generation		
	Excavate, Load and	Noise and Air	Operational	The control of declared	Compliance with relevant	/ant
	Haul, Overburden and	Quality		weed and invaders with the	Noise standards a	and
	Ore	I I		infrastructure area should	regulations	
				be maintained		
				Apply water to haul roads		
	Crush and Screen	Noise and Air	Operational	The control of surface run	Compliance with relevant	/ant
		Quality, Water		offf	Noise standards au	and
		contamination		Apply water to haul roads	regulations	

Name of Activity	POTENTIAL IMPACT	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO BE
(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site office access route etc)  e.g.: Mining- excavations, blasting, stockpiles, discard dump or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices ablution, stores, workshops, processing plant, storm water control berms, roads, pipelines, power lines, conveyors, etc.)	(including the potential impacts of cumulative impacts) (e.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air etc)	AFFECTED	PHASE In which impact is anticipated In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post- closure)	(modify, remedy, control, stop)  (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, evoidence, relocation, alternative activities etc)  E.g. Modify through alternative methods.  Control through noise control through management and monitoring though rehabilitation	ACHIEVED (Impact avoided, noise level, dust level, fehabilitetion standards, end use objectives etc)
	Rehabilitate Voids	Noise and Air Quality	De Commissioning	Rehabilitation activities must Conduct work during daylight to limit generation of noise at night	Compliance with relevant Noise standards and regulations
Rehabilitation of affected area	Noise during rehabilitation activities	Noise	Rehabilitation phase	Rehabilitation activities must Conduct work during daylight to limit generation of noise at night.	Compliance with relevant noise standards and regulations
	Increase of dust	Air quality	Rehabilitation phase	Dust suppression measures should be applied to control dust generation.	Compliance to GNR 827 of 01 November 2013, regulations dealing national dust control for non-residential areas whereby the dust fallout rate
					(expressed in mg/m2/day over 30 days average exposure) must not exceed 600 <d<1200. a="" day="" events="" for="" m2="" mg="" td="" two="" within="" year<=""></d<1200.>

Name of Activity	POTENTIAL IMPACT ASP	ASPECTS	PROJECT	MITIGATION TYPE	STANDARD TO	BE
(E.g.: prospecting-drilling site, camp site, accommodation, equipment storage, site	(including the potential impacts of cumulative impacts)	AFFECTED	PHASE	(modify, remedy, control, stop)  (e.g. noise control measures, storm water	ACHIEVED	, Tr
office access route etc)			In which impact is anticipated	control, dust control, rehabilitation, design	(Impact avoided, noise level, dust level,	it level,
	(e.g. dust, noise, drainage surface		A MILE STATE OF THE STATE OF TH	measures, blasting controls, avoidance,	rehabilitation standards, end use objectives etc)	es etc)
e.g: Mining- excavations, blasting,	disturbance, fly rock, surface water	1 P	(e.g Construction,	relocation, alternative activities etc)		
stockpiles, discard dump or dams,	contamination, groundwater		commissioning, operational,			
loading, hauling and transport, water	contamination, air etc)		decommissioning, closure, post-	E.g. Modify through alternative methods.		
supply dams and boreholes,			closure)	Control through noise control through		IV.
accommodation, offices ablution, stores,		が発言していること		management and monitoring though		
workshops, processing plant, storm water	ine			rehabilitation		
control berms, roads, pipelines, power lines, conveyors, etc.)		10 P			Plake Smith Q	
	Alien species	Flora	Rehabilitation phase	The control of declared Compliance with National	Compliance with Nati	tional
				weeds and invaders within Environmental Management	Environmental Manager	ment
				the areas associated with Biodiversity Act, Act 10 of	Biodiversity Act, Act 10	0 of
*				the infrastructure area	2004 and MPRDA	
				should be maintained		

#### 10. CLOSURE PLAN

In the space provided under each heading below, please provide a high level description of the plan for closure and the information that will be provided in the draft EMPr accompanying draft basic assessment report or environmental impact reports going forward.

#### Baseline environment

Describe how the baseline environment will be determined with the input of interested and affected parties and due cognisance of the current land uses and/or existing biophysical environment.

The baseline information will be determined through engagement with the I&APs, consultation meetings with local communities, local municipality(consulting planning division in terms of land-uses and spatial development framework of the local municipality, information provided by local tourism agency(biophysical environment)

#### Closure objectives.

Describe the closure objectives and the extent to which they will be aligned to the baseline environment.

BONIZENZO HOLDINGS will ensure that it plans for sustainable closure of this proposed prospecting by ensuring that every reasonable effort has been made to achieve rehabilitation closure objectives that will give effect to the following principles:

Safety and health of people and animals will be safeguarded from hazards resulting from the drilling operations.

Environmental damage or residual environmental impacts will be minimised to the extent that they are acceptable to all parties involved.

The holes and disturbed areas will be rehabilitated to achieve a condition approximating its natural state, or so that the envisaged post mining land use as indicated on the final BA and EMP report.

The physical and chemical stability of the remaining structures will be made such that risk to the environment through naturally occurring forces is prevented, minimised or eliminated.

Mine closure will be achieved efficiently, cost effectively, and in compliance with the requirement of the legislation.

The objectives will include rehabilitation of land disturbed due to the proposed activities and returned to a suitable stable for subsequent land-use. The final land-use will be made to be in line with the mine's proposed land use within the same area and will be determined as part of the EIA.

#### Rehabilitation plan

Describe scale and aerial extent of the prospecting or mining listed activities to be authorised, including the anticipated prospecting or mining area at the time of closure, and confirm that a site rehabilitation plan drawn to a suitable scale will be provided in the draft EMPr to be submitted together with the draft EIR or Basic Assessment Report as the case may be.

Rehabilitation plan will include the following:

No Vegetation clearance will be undertaken as result of the proposed Prospecting activities. No impacts on vegetation is anticipated;

Sealing of exploration borehole will be undertaken to ensure that land is returned to original state:

#### Rehabilitation costs

Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof.

Rehabilitation costs of the affected areas where Drilling will be undertaken, will be assessed, quantified and cost estimates made to ensure that sufficient financial provision will include the BAR and EMPr

The rehabilitation costs associated with the proposed prospecting will be determined in accordance with the requirements of the MPRDA and be incorporated into the final BA and EMPr in terms of the applicant's capacity to rehabilitate and manage negative impacts on the environment.

	The financial provision for rehabilitation will be evaluated and included as part of the final BA and the EMP report.
Decommissioning  Considering that rehabilitation must take place upon cessation of an activity, describe when	The decommissioning phase refers to the time when prospecting activities have been completed and starting to prepare for closure.
each of activities applied for will be rehabilitated in terms of the individual activity or the cessation of the overall prospecting or mining activity.	Upon cessation of prospecting activates, BONIZENZO HOLDINGS will notify the department of the closure and provide all necessary information of rehabilitation.

Signature of the applicant / Signature on behalf of the applica	nt:
Bonizenzo Holdings (Pty) Ltd	
Name of company (if applicable):	
14 December 2021	
Date:	

# APPENDIX 1: DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

#### I, Mandla Ralph Repinga, declare that -

#### General declaration:

- I act as the independent environmental practitioner in this application;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the Regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that
  reasonably has or may have the potential of influencing any decision to be taken with respect to the application by
  the competent authority; and the objectivity of any report, plan or document to be prepared by myself for submission
  to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available
  to interested and affected parties and the public and that participation by interested and affected parties is facilitated
  in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate
  and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not;
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms
  of section 24F of the Act.

### Disclosure of Vested Interest (delete whichever is not applicable)

<ul> <li>I do not have and will not have any vested interest (either business, financial, personal or or activity proceeding other than remuneration for work performed in terms of the Regulations;</li> </ul>	ther) in the propose
<ul> <li>I have a vested interest in the proposed activity proceeding, such vested interest being:</li> </ul>	
The b	
Signature of the environmental assessment practitioner:	
Licebo Environmental and Mining (Pty) Ltd	
Name of company:	
14 December 2021	
Date:	

Licebo Environmental and Mining (Pty) Ltd Reg. Number: 2009/622180/07; VAT Number: 4170262838 Address, 49 Centaury Avenue, Ben Fleur, eMaiahleni, 1034 Contact Details: 013 692 0212 / 083 257 8869 E-mail Address ralph repinga@gmail.com or ralph repinga@ricebo.co.za



#### CURRICULUM VITAE: MANDLA RALPH REPINGA

Personal Details

Name and Surname:

Date:

Place of Birth:

ID Number: Physical Address: Mandla Ralph Repinga 19 December 1972

Komatipoort (KaHoyi) 721219 5373 083

13 Reyno Heights, Reyno Ridge, Witbank, 1049

Place of Tertiary Education and Associated Dates:

BSc. (Microbiology and Biochemistry): University of Zululand (1994)

BSc. (Honours - Microbiology): MSc. (Environmental Sciences):

University of Zululand (1995) University of Witwatersrand (2011)

Professional Awards:

Awarding Organisation:

Douglas Colliery

Award:

Excellent performance and dedication in the environmental profession (2002).

Awarding Organisation:

Award:

BHP Billiton Energy Coal SA

HSEC Award - Community Category (Greening eMalahleni Project)

The South African Council for Natural Scientific Professions (SACNASP)

Qualification(s)

Qualifications: BSc (Microbiology and Biochemistry) (1994);

BSc (Honours - Microbiology) (1995) University of Zululand

MSc (Environmental Sciences) (2011) - University of Witwatersrand

Professional Affiliation

Registration Body:

Level of Registration: Registration Category:

Professional Natural Scientist

**Environmental Scientist** 

Registration Number:

400097/02

Year:

2002 to current

Registration Body: Level of Registration:

Environmental Assessment Practitioners Association of South Africa (EAPASA)

Registration Number:

2020/2084

Year:

November 2021 to Current

Environmental Assessment Practitioner

Registration Body:

International Association for Impact Assessment South Africa (IAIAsa) Environmental Assessment Practitioner

Level of Registration: Registration Number:

5360

Year:

November 2016 to current

Name of Association:

Level of Membership: Membership Category: South African Collieries Environmental Practitioners Association Member

**Environmental Scientist** 

Year:

2008 to current

Name of Association: Level of Membership: Membership Category:

Olifants River Forum Ordinary Member **Environmental Scientist** 

Year:

2008 to current