mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

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, 2 002 (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 license and any other authorisations or licenses 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 license 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 lodgment 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	
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	X
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

NEMA BAR application on its own

2. DETAILS OF THE APPLICANT

Project applicant:	**Sizisa Ukhanyo Trading 830 CC**		
Registration no (if any):	**2006/111450/23**		
Trading name (if any):	**NA**		
Responsible Person, *(e.g. Director, CEO)*:	**CEO**		
Contact person:	**Jianqiang Su**		
Physical address:	**4 Coot Crescent Table View 7441**		
Postal address:	**P.O. Box 169 Table View**		
Postal code:	**7439**	Cell:	**074 7569495**
Telephone:	**021 5568483**	Fax:	**021 5568483**
E-mail:	**stone-window@163.com**		

3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EAP:	J.A. Barnard		
Profession affiliation/registration:	• SACNASP Registration No.: 400197/09 as Professional Natural Scientist • Certified EAPSA: Interim Certification Board for Environmental Assessment Practitioners of SA		
Contact person: *(if different from EAP):*	See above.		
Company	Green Direction Sustainability Consulting (Pty) Ltd		
Physical address:	Postnet Somerset West; Shop 1B; Melcksloot Village; Somerset West		
Postal address:	Postnet Somerset West; Suite 922; Private Bag X15; Somerset West		
Postal code:	7130	Cell:	082 4444364
Telephone:	082 4444364	Fax:	N./A
E-mail:	jenny@greendirection.co.za		

Appendix 1a: Declaration of independence
Appendix 1b: Curriculum Vitae
(Indicating the experience with environmental impact assessment and relevant application processes)

4. PROJECT DESCRIPTION

Farm Name:	1. Portion of Portion 1 of the Farm Nous West 76 2. Portion of Portion 4 of the Farm Nous West 76
Application area (Ha)	Refer to Mine Layout at Appendix 4a. The figure numbered 1 to 4 represents mining block 2 an area of 3860Ha situated over a portion of Portion 1 of the Farm Nous West No 76 The figure lettered a to d represents mining block 1 an area of 131Ha situated over a portion of Portion 4 of the Farm Nous West No 76. **TOTAL AREA IS 3991 hectares**
Magisterial district:	Kenhardt
District Municipality	ZF Mgcawu
Local Municipality	Kai! Garib
Distance and direction from nearest town	80km north-east of Pofadder and 92Km north-west of Kakamas
21-digit Surveyor General Code for each farm portion	C0360000000000007600001(Portion 1 of Farm Nous West No. 76) C0360000000000007600004 (Portion of Portion 4 of Farm Nous West No. 76)
Locality map	Appendix 2
Description of the overall activity. (Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)	Mining Right

5. ACTIVITIES TO BE AUTHORISED

Appendix 3: Environmental Authorisations obtained for the same property

- NC30/5/1/3/2/10232MP
- NC30/5/1/3/2/10104MP
- NC30/5/1/3/2/10610PR

Appendix 4: Layout map showing location of all the activities to be applied for

The exact size of the footprints will be determined together with the final layout map

NAME OF ACTIVITY	Aerial extent of the Activity Ha or m^2	LISTED ACTIVITY	APPLICABLE LISTING NOTICE	WASTE MANAGEMENT AUTHORISATION
Application for Mining Right	3991 Ha	X	**GNR 984 (dated 8/12/2014) LN1 Activity 17, as amended by GNR 325 (dated 7/04/2017), LN2 Activity 17:** Any activity including the operation of that activity which requires a mining right as contemplated in S22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including - (a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource; or (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing;	
1. POST-APPROVAL ACTIVITIES				
1.1. Demarcate mining areas as defined in Mine Plan and EMP	Using visible poles or fences as demarcation system.	No	NA	No

2. ESTABLISHMENT ACTIVITIES	It is important to note that this mine is already in place as a prospecting operation. Most of the existing facilities are also in place and will require upgrading or expansion only.			
2.1. Conduct Environmental Induction training	All staff members		NA	No
2.2 All access roads are already in place	Not applicable		NA	No
2.3. Electrical supply is already in place	Not applicable	No	NA	No
2.4. Upgrade existing accommodation and office precincts and structures	Less than 2ha	X	**GNR 983 (dated 8/12/2014) LN1 Activity 27, as amended by GNR 327 (dated 7/04/2017) LN1 Activity 27:** The clearance of an area of 1 hectare or more but less than 20 hectares of indigenous vegetation. **GNR 983 (dated 8/12/ 2014) LN1 Activity 28, as amended by GNR 327 (dated 7/04/2017) LN1Activity 28:** Commercial or industrial developments where such land was used for agriculture on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare. **GNR 985 (dated 8/12/2014) LN3 Activity 12, as amended by GNR 324 (dated 7/04/2017) LN3 Activity 12(g) iv.[1]:** The clearance of an area of 300 square metres or more of indigenous vegetation (g) in the Northern Cape iv. on land where at the time of coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.	No
2.5 Upgrade or construct new workshop	Less than 1ha	X	**GNR 985 (dated 12/8/2014) LN3 Activity 12, as amended by GNR 324 (dated 7/04/2017) LN3 Activity 12(g) iv.[2]:** The clearance of an area of 300 square metres or more of indigenous vegetation (g) in the Northern Cape iv. on land where at the time of coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning	No

[1] Status of land's zoning to be determined. Only applies if zoning is Open Space, conservation or equivalent zoning.
[2] Status of land's zoning to be determined. Only applies if zoning is Open Space, conservation or equivalent zoning.

2.6 Hydrocarbon storage	Less than 30m³	No	NA: Will be less volume than limits for EA	No
2.7. Prepare dressing areas, dispatch yards accommodation and logistics areas. Note: • The dispatch yard is an existing disturbed area at the Yellow quarry to be shared by both quarries. • Some dressing yards are existing disturbed areas in historic mines, other dressing yards will require vegetation clearance. • Accommodation and logistics will require vegetation clearance.	Less than 5ha	X	**GNR 983 (dated 8/12/2014) LN1 Activity 27, as amended by GNR 327 (dated 7/04/2017) LN1 Activity 27:** The clearance of an area of 1 hectare or more but less than 20 hectares of indigenous vegetation. **GNR 983 (dated 8/12/ 2014) LN1 Activity 28, as amended by GNR 327 (dated 7/04/2017) LN1Activity 28:** Commercial or industrial developments where such land was used for agriculture on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare. **GNR 985 (dated 12/8/2014) LN3 Activity 12, as amended by GNR 324 (dated 7/04/2017) LN3 Activity 12(g) iv.[3]:** The clearance of an area of 300 square metres or more of indigenous vegetation (g) in the Northern Cape iv. on land where at the time of coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning	No
2.8 Prepare areas for compressors and generators install compressors and generators	±3 000m²	X	**GNR 985 (dated 8/12/2014) LN3 Activity 12, as amended by GNR 324 (dated 7/04/2017) LN3 Activity 12(g) iv.[4]:** The clearance of an area of 300 square metres or more of indigenous vegetation (g) in the Northern Cape iv. on land where at the time of coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning.	No

[3] Status of land's zoning to be determined. Only applies if zoning is Open Space, conservation or equivalent zoning.
[4] Status of land's zoning to be determined. Only applies if zoning is Open Space, conservation or equivalent zoning.

3. **OPERATIONAL PHASE ACTIVITIES**	It is important to note that this mine is already in operation as a prospecting operation under cover of an environmental authorization approved in terms of the MPRDA			
3.1. Develop flat mining floor using wire line cutting saws	± 5ha	X	**GNR 983 (dated 8/12/2014) LN1 Activity 27, as amended by GNR 327 (dated 7/04/2017) LN1 Activity No. 27[5]:** The clearance of an area of 1 hectare or more but < 20 hectares of indigenous vegetation. **GNR 983 (dated 8/12/2014) LN1 Activity 28, as amended by GNR 327 (dated 7/04/2017) LN1 Activity 28:** Commercial or industrial developments where such land was used for agriculture on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is > 1 hectare. **GNR 985 (dated 12/8/2014) LN3 Activity 12, as amended by GNR 324 (dated 7/04/2017) LN3 Activity 12(g) iv.[6]:** The clearance of an area of 300 square metres or more of indigenous vegetation (g) in the Northern Cape iv. on land where at the time of coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning	No
3.2. Place rails for rotary saws	NA	No	NA	No
3.3. Cut blocks from ore body in 1.7m lifts / cuts	NA	No	NA	No
3.4. Plug and feather bottom of block	NA	No	NA	No
3.5. Lift block out from exaction with block carrying front end loader or derrick crane	NA	No	NA	No
3.6. Transport waste to waste rock dump	NA	No	NA	No

[5] A large percentage of the new disturbance area is exposed granite but for sake of caution such listed activity has been included here.
[6] Status of land's zoning to be determined. Only applies if zoning is Open Space, conservation or equivalent zoning.

3.7. Remove vegetation and sand ahead of waste rock dump to be used in future rehabilitation of waste rock dump	±2ha Yellow quarry with heaped filled dump. Cape Spring quarry will be valley filled toe	X	**GNR 983 (dated 8/12/2014) LN1 Activity 27, as amended by GNR 327 (dated 7/04/ 2017) LN1 Activity 27:** The clearance of an area of 1 hectare or more but less than 20 hectares of indigenous vegetation. **GNR 983 (dated 8/12/2014) LN1 Activity 28, as amended by GNR 327 (dated 7/04/2017) LN1 Activity 28:** Commercial or industrial developments where such land was used for agriculture on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare. **GNR 985 (dated 8/12/2014) LN3 Activity 12, as amended by GNR 324 (dated 7/04/2017) LN3 Activity 12(g) iv.[7]:** The clearance of an area of 300 square metres or more of indigenous vegetation (g) in the Northern Cape iv. on land where at the time of coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning	No

[7] Status of land's zoning to be determined. Only applies if zoning is Open Space, conservation or equivalent zoning.

3.8. Dump waste granite rock onto waste rock dump as extension of existing dumps	±2ha	X	**GNR 983 (dated 8/12/2014) LN1 Activity 27, as amended by GNR 327 (dated 7/04/ 2017) LN1 Activity 27:** The clearance of an area of 1 hectare or more but less than 20 hectares of indigenous vegetation. **GNR 983 (dated 8/12/ 2014) LN1 Activity 28, as amended by GNR 327 (dated 7/04/ 2017) LN1 Activity 28:** Commercial or industrial developments where such land was used for agriculture on or after 01 April 1998 and where such development: (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.	**GNR 921 (dated 29/11/ 2013) Category B: Disposal of waste on land** **(8)** The disposal of general waste to land covering an area in excess of 200m² and with a total capacity exceeding 25 000 tons. *General waste includes insert waste, as defined in the NEM:WA; Act 59 of 2008, as amended.* **GNR 921 (dated 29/11/ 2013) Category B: Disposal of waste on land** **(9)** The disposal of inert waste to land in excess of 25 000 tons, excluding the disposal of such waste for the purposes of levelling and building which has been authorized by or under other legislation. *Inert waste as defined in the NEM:WA; Act 59 of 2008, as amended.*
3.9. Suitable blocks to be transported to dressing area for dressing	NA	No	NA	No
3.10. Dressing of blocks	NA	No	NA	No
3.11. Transport to dispatch area	NA	No	NA	No
3.12. Dispatch of blocks to market	NA	No	NA	No
3.13. Use of Hydrocarbon storage	NA	No	NA	No
3.14. Use of workshop	NA	No	NA	No
3.15. Personnel amenity use	NA	No	NA	No

4. **DECOMMISSIONING PHASE ACTIVITIES**				
4.1. Cover waste rock dump leading edge with sand removed prior to extension.	Leading edge	X	NA	No
4.2. Fence excavation securely	±800m	No	NA	No
4.3. Remove all structures, foundations and footings not required by landowner	NA	No	NA[8]	No
4.4. Rip all hardened areas and allow to revegetate naturally	±1ha	No	NA	No
5. **AFTERCARE PERIOD**				
5.1. Remove alien vegetation, if present	Unknown	No	NA	No
5.2. Monitor revegetation success and continue	Unknown	No	NA	No
5.3. Conduct final environmental audit	NA	No	NA	No
5.4. Lodge closure Application	3991 Ha	X	**GNR 983 (dated 8/12/2014) LN1 Activity 22, as amended by GNR 327 (dated 7/04/2017) Activity 22:** The decommissioning of any activity requiring – (i) a closure certificate in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002). Only applies at time of final closure.	No

[8] Decommissioning activity is covered by Activity 22, Closure Certificate listed activity.

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?	X	
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?		NA
Will the landowners or lawful occupiers of neighbouring properties been identified?	X	
Will the local municipality be consulted?	X	
Will the Authority responsible for power lines within 100 meters of the area be consulted?	X	
Will Authorities responsible for public roads or railway lines within 100 meters of the area applied for be consulted?		NA
Will authorities responsible for any other infrastructure within 100 meters of the area applied for be consulted? (Specify)		NA
Will the Provincial Department responsible for the environment be consulted?	X	
Will all of the parties identified above be provided with a description of the proposed mining operation as referred above?	X	
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	SAHRA	

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 consultations. 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)	**PROVIDE DESCRIPTION HERE** Draft Scoping report including preliminary project description (and all information as required in table entry below) will be compiled as a background information document for information dissemination purposes. The landowner will be consulted in person. Adjacent landowners will be sent documentation by registered mail and at least a follow up phone call. Broader public will be alerted to the application through the newspaper advert and notices placed at locations to be determined. Such notifications and consultation may also include invitation to Public Open Day (if such POD is deemed appropriate). Respondents will then be provided with a 30-day window to give input into the Scoping report and the Scoping report will be lodged to DMR timeously. Once approval to continue the EIR process has been obtained, a draft EIR and EMP (including specialist studies) will be compiled and once again be subject to public participation (including a second public open day if there is deemed to be sufficient interest) with an additional advert in the local newspaper (and specific invitation to I&AP's registered in the earlier round of public participation). Respondents will then be provided a 30-day window to give input into the final reporting (EIR) which will be lodged with DMR timeously.

Information to be provided to Interested and Affected Parties.	**Compulsory** **Background Information Document (BID):** The site plan. List of activities to be authorized. Scale and extent of activities to be authorized. Typical impacts of activities to be authorised (e.g. surface disturbance, dust, noise, drainage, fly rock etc.) 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: Registration Form with the BID.
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: To provide any additional Environmental attributes which have not yet been listed or described.

7. Description of the assessment process to be undertaken

ITEM	DESCRIPTION
Environmental attributes. Describe how the Environmental attributes associated with the development footprint will be determined.	An initial list of environmental attributes will be compiled based on experience of the EAP in similar development types and through site visits and appraisals, desktop screening via Geographical Information System (GIS) and aerial photography, incorporating existing information from previous studies, and input received from authorities and I&APs. This list and description will be scoped and I&AP's will be requested to provide additional Environmental Attributes.
Identification of impacts and risks. (Describe the process that will be used to identify impacts and risks.	The potential environmental impacts associated with the proposed project will be identified during the Scoping phase through an appraisal of the following: • Proposed locations and footprint of the project infrastructure and components, which will include a desktop evaluation referencing the SANBI BGIS database, and aerial photography, as well as site investigations. • Activities associated with the project life-cycle (i.e. pre-construction, construction, operation and decommissioning): • Nature and profile of the receiving environment and potential sensitive environmental features and attributes; • Input received during public participation from authorities and I&APs; and • Legal and policy context.
Consideration of alternatives. Describe how alternatives, and in particular the alternatives to the proposed site layout and possible alternative methods or technology to be applied will be determined.	A draft set of alternatives will be compiled in the draft scoping report based on past experience of the EAP and expert guidance by knowledgeable industry / applicant representatives. The alternatives will be subject to public participation for further refinement.

Process to assess and rank impacts. Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.	Each impact will be assessed in terms of the following, and as detailed in the table below: • The NATURE (character status) • The EXTENT (spatial scale) • The DURATION (time scale) • The PROBABILITY (likelihood) of occurring • The REVERSIBILITY of the impact • The DEGREE to which the impact may cause irreplaceable loss of resources • The SIGNIFICANCE (size or magnitude scale) prior to mitigation • The DEGREE to which the impact can be mitigated, and • The SIGNIFICANCE (size or magnitude scale) after mitigation.

ASSESSMENT CRITERIA

NATURE	
Positive	Beneficial to the receiving environment
Negative	Harmful to the receiving environment
Neutral	Neither beneficial or harmful
EXTENT (GEOGRAPHICAL)	
Site	The impact will only affect the site
Local/ district	Will affect the local area or district
Province/region	Will affect the entire province or region
International and National	Will affect the entire country
CONSEQUENCE	
Loss/gain	The impact will result in loss or gain of resource
No loss/gain	The impact will result in no loss or no gain of resource
DURATION	
Construction period/Short term	Up to 3 years
Medium term	Up to 6 years after construction
Long term	More than 6 years after construction
PROBABILITY	
Definite	Impact will certainly occur (>75% probability of occurring)
Probable	Impact likely to occur (50 - 75% probability of occurring)
Possible	Impact may occur (25 - 50% probability of occurring)
Unlikely	Impact unlikely to occur (0 - 25% probability of occurring)
REVERSIBILITY	
Reversible	Impacts can be reversed though the implementation of mitigation measures
Irreversible	Impacts are permanent and can't be reversed by the implementation of mitigation measures
IRREPLACEABLE LOSS OF RESOURCE	
High	The impact is result in a complete loss of all resources
Medium	The impact will result in significant loss of resources
Low	The impact will result in marginal loss of resources
No Loss	The impact will not result in the loss of any resources
CUMULATIVE EFFECTS	
High	The impact would result in significant cumulative effects
Medium	The impact would result in moderate cumulative effects
Low	The impact would result in minor cumulative effects
SIGNIFICANCE RATINGS	
Very High	Major to permanent environmental change with extreme social importance.
High	Long term environmental change with great social importance.
Medium	Medium to long term environmental change with fair social importance.
Low	Short to medium term environmental change with little social importance.
Very low	Short-term environmental change with no social importance
None	No environmental change
Unknown	Due to lack of information

DEGREE TO WHICH IMPACT COULD BE AVOIDED/MANAGED/MITIGATED

High	The impact could be significantly avoided/managed/mitigated.
Medium	The impact could be fairly avoided/managed/mitigated.
Low	The impact could be avoided/managed/mitigated to a limited degree.
Very Low	The impact could not be avoided/managed/mitigated; there are no mitigation measures that would prevent the impact from occurring.

Contribution of specialist reports Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.	Specialist studies will only be conducted after the Draft BAR has been assessed by the competent authority. The selected specialists will be briefed to follow the guidelines for specialists and inter alia, provide a description of the environmental attribute under consideration, identify and assess the impacts, determine applicable standards and suggest remediation measures. These specialist's studies will be made available in a public participation exercise and the final studies / comments thereon will be included in the final document to be lodged.
Determination of impact management objectives and outcomes. Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.	Standards for each impact type will be determined through literature review, and specialist contribution (if applicable). Impact management objectives will initially be determined through past experience of the EAP and will be based on standards for that activity type / environmental attribute. Such information will be made available to public process for comment and inclusion into the EMP.

8. OTHER AUTHORISATIONS REQUIRED

LEGISLATION	**Mark with an X where applicable**			
	AUTHORISATION REQUIRED		**APPLICATION SUBMITTED**	
	YES	NO	YES	NO
SEMAs				
National Environmental Management: Air Quality Act		X		
National Environmental Management: Biodiversity Act		X		
National Environmental Management: Integrated Coastal Management Act		X		
National Environmental Management: Protected Areas Act		X		
National Environmental Management: Waste Act	X		X	
National legislation				
Mineral Petroleum Development Resources Act	X		X	
National Water Act	To be determined		Possibly	
National Heritage Resources Act	X			X
Others: Please specify				

Please provide proof of submission of applications in Appendix 5.

In the event that an authorization in terms of the National Environmental Waste Management 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.

9. DRAFT EMPr

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

ACTIVITIES	PHASE	SIZE AND SCALE (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
Application for Mining Right				
1. POST-APPROVAL ACTIVITIES				
1.1 Negotiate access with landowner – roads to be used and open or close status of gates to be used	Planning and design	Not applicable	Unnecessary destruction of vegetation avoided by ensuring that traffic and personnel movement is restricted to demarcated areas. No traffic should be allowed on the rehabilitated areas.	
1.2 Demarcate mining area as defined in MWP and EMP			Ensure that mining activities are contained within approved boundaries.	
2. **ESTABLISHMENT ACTIVITIES**				
2.1. Conduct Environmental Induction training of staff	Construction	Not applicable	Hydrocarbon management, dust control, traffic safety	
2.2 All access roads are already in place	Construction	NA	NA	
2.3. Electrical supply by gensets	Construction	NA	NA	
2.4. Upgrade existing accommodation and waste management structures. Develop new accommodation and waste management structures at Cape Spring quarry	Construction	Less than 2ha	Dust reduction, hydrocarbon management	
2.5 Construct new workshop	Construction	±5 000m²	NA	
2.6 Hydrocarbon storage	Construction	Less than 30m³	Dust reduction, hydrocarbon management	To be designed and built in accordance with national standards/regs
2.7. Prepare dressing area and dispatch yard (existing disturbance areas)	Construction	Less than 5ha Note that existing disturbance footprint will be used. No topsoil or vegetation disturbance	Remove vegetation, remove topsoil and stockpile. Dust reduction, hydrocarbon management	Dust standards apply

2.8 Prepare areas for compressors and generators install compressors and generators	Construction	±3 000m²	Remove vegetation, remove topsoil and stockpile. Dust reduction, hydrocarbon management	Dust standards apply
2.9 Resurrect boreholes and upgrade if required	Construction	Status of boreholes (including legal status) and pumps yet to be determined	Groundwater	May require licensing or registration.

3. **OPERATIONAL PHASE ACTIVITIES**				
3.1. Develop flat mining floor using wire line cutting saws	Operational	± 5ha	Remove vegetation and topsoil if required and stockpile topsoil. Limit size of excavation. Backfill with waste rock if feasible (unlikely).	
3.2. Place rails for rotary saws	Operational	NA	None required	
3.3. Cut blocks from ore body in 1.7m lifts / cuts	Operational	NA	Dust control, Hydrocarbon management. Hearing protection	Dust standards apply
3.4. Plug and feather bottom of block	Operational	NA	None required	
3.5. Lift block out from exaction with block carrying front end loader or derrick crane	Operational	NA	None required	
3.6. Transport waste to waste rock dump	Operational	NA	Dust control, Waste rock dump management	Dust standards apply
3.7. Remove sand ahead of waste rock dump to be used in future rehabilitation of waste rock dump	Operational	± 2ha	Remove vegetation and topsoil if required and stockpile topsoil. Dust control, soil management protocol, Waste rock dumping management	Dust standards apply
3.8. Dump waste onto waste rock dump as extension of existing dumps except for Cape Spring quarry	Operational	± 2ha	Remove vegetation and topsoil if required and stockpile topsoil. Waste rock dumping management	

3.9. Suitable blocks to be transported to dressing area for dressing	Operational	NA	Dust control, Hydrocarbon pollution prevention	Dust standards apply
3.10. Dressing of blocks	Operational	NA	None required	
3.11. Transport to dispatch area	Operational	NA	Dust control, Hydrocarbon pollution prevention	Dust standards apply
3.12. Dispatch of blocks to market	Operational	NA	Dust control, Hydrocarbon pollution prevention	Dust standards apply
3.13. Use of Hydrocarbon storage	Operational	No	Hydrocarbon pollution prevention	
3.14. Use of workshop	Operational	No	Hydrocarbon pollution prevention	
3.15. Personnel amenity use	Operational	No	Water and soil pollution prevention	
3.16 Use of boreholes	Operational	Unknown	Groundwater and recycling policy	
4. **DECOMMISSIONING PHASE ACTIVITIES**				
4.1. Cover waste rock dump leading edge with sand removed prior to extension.	Decommissioning Rehabilitation	Leading edge	Waste rock dumping management and rehabilitation	
4.2. Fence excavation securely	Decommissioning Rehabilitation	±800m	Safety	
4.3. Remove all structures, foundations and footings not required by landowner	Decommissioning Rehabilitation	NA	Rehabilitation	
4.4. Rip all hardened areas and allow to revegetate naturally	Decommissioning Rehabilitation	±1ha	Rehabilitation	
5. **AFTERCARE PERIOD**				
5.1. Remove alien vegetation, if present	Closure and Aftercare		Revegetation and aftercare management	
5.2. Monitor revegetation success and continue	Closure and Aftercare			
5.3. Conduct final environmental audit	Closure and Aftercare			
5.4. DMR Grant Closure Application	Closure and Aftercare			

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 cognizance of the current land uses and or existing biophysical environment	Draft scoping report will be produced which will contain preliminary description of baseline environment. Gaps in knowledge will be obtained through later specialist study. Draft Scoping and draft EIA / EMPr will be made available to the public with direct request for their input and further baseline environment determination.
Closure objectives Describe the closure objectives and the extent to which they will be aligned to the baseline environment	**Objective 1 - To create a safe and healthy post-mining environment** □ Safe excavations - Slope stability of remaining excavation - No potentially dangerous areas secured if required □ Limited residual environmental impact - Develop a landscape that reduces the requirement for long term monitoring and management - No surface and/or groundwater contamination - Waste management practices not creating or leaving legacies **Objective 2 - To create a stable, free draining post mining landform, which is compatible with the surrounding landscape** □ Economically viable and sustainable land, as close as possible to its natural state. - Prepare area to promote natural re-establishment of vegetation that is self-sustaining, perpetual and provides a sustainable habitat for local fauna and successive flora species - Prevent long term changes in land use by implementing prompt rehabilitation and maintenance of disturbances when possible as part of annual rehabilitation plan. □ Stable, free draining post mining landform - Prevent alteration or diverting natural drainage lines and reduced natural runoff. - Prevent concentration of runoff, mixing of clean runoff with contaminated runoff and creation of large open water bodies. **Objective 3 – To provide optimal post-mining social opportunities** □ Optimised benefits for the social environment - Positive and transparent relationships with stakeholders and maintaining communication channels, providing stakeholders including government authorities with relevant information as per legislative requirements. - Undertaking environmental management according to approved EMP and Closure plans and regular auditing of the environmental management system. □ Minimal negative aesthetic impact - Mitigate the nuisance effects of air emissions (dust), visual intrusion and the cumulative effect of a raise in the ambient noise levels - Prevent disturbance of archaeological sites and implement mitigating measures according to the archeological assessment.

Rehabilitation Plan Describe the 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.	The draft EMPr will contain a full rehabilitation plan to minimize impact of the excavation and recommissioning of activities at this site.
Rehabilitation Cost Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof	**Determination of financial provision by applicant** An applicant must— (a) ensure that a determination is made of the financial provision and the plans contemplated in regulation 6 are submitted as part of the information submitted for consideration by the Minister responsible for mineral resources of an application for environmental authorisation, the associated environmental management programme and the associated right or permit in terms of the Mineral and Petroleum Resources Development Act, 2002; and (b) provide proof of payment or arrangements to provide the financial provision prior to commencing with any prospecting, exploration, mining or production operations. **Method for determining financial provision** An applicant must determine the financial provision through a detailed itemisation of all activities and costs., calculated based on the actual costs of implementation of the measures required for - (a) annual rehabilitation, as reflected in an annual rehabilitation plan; (b) final rehabilitation, decommissioning and closure of the prospecting, exploration, mining or production operations at the end of the life of operations, as reflected in a final rehabilitation, decommissioning and mine closure plan; and| (c) remediation of latent or residual environmental impacts which may become known in the future, including the pumping and treatment of polluted or extraneous water, as reflected in an environmental risk assessment report.
	Preparation and submission of plans and reports (1) The annual rehabilitation plan contemplated in regulations 6(a) and 11(1)(a) must contain all information set out in Appendix 3 to these Regulations. (2) The final rehabilitation, decommissioning and mine closure plan contemplated in regulations 6(b) and 11(1)(b) must contain all information set out in Appendix 4 to these Regulations. (3) The environmental risk assessment report contemplated in regulations 6(c) and 11 (1)(c) must contain all information set out in Appendix 5 to these Regulations. (4) An applicant and holder of a right or permit must include the sum of the financial provision and an indication of how the sum was determined in the environmental management programme

Decommissioning Considering that rehabilitation must take place upon cessation of an activity, describe when each of activities applied for will be rehabilitated in terms of either the cessation of the individual activity or the cessation of the overall prospecting or mining activity.	The draft EMPr will contain a full rehabilitation plan to minimize impact of the excavation and recommissioning of activities at this site.

The calculation below is for the current scale of operations on site. The financial guarantee is already in place with DMR as part of current operations and will be reviewed annually.

Cost Factor 1

Demolish and remove Buildings/Infrastructure including subsurface structures and bunded fuel storage - Salvage useable material, break structure and dispose in waste dump

Risk based criteria and assumptions with regard to rehabilitation of mining area

All structures will be demolished and terracing and foundations removed to the lesser of 500 mm below the original ground level.
Inert waste, which is more than 500 mm underground, such as pipes, will be left in place
All services related to the mining operation, water supply lines and storage on site will have to be demolished; the closure cost is therefore included in this estimate.

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow Logistical facilities 0.72 Ha	Areas	1.00	R15 064.00	**R15 064.00**
Cape Spring Logistical facilities 0.5 Ha	Areas	1.00	R15 064.00	**R15 064.00**
			Sub-Total	**R30 128.00**

Cost Factor 2

Remove waste from temporary storage and scrap from salvage yard

Risk based criteria and assumptions with regard to rehabilitation of mining area

A hazardous disposal site will not be constructed and all hazardous waste will be removed from site and transported to the nearest licensed facility.
Waste will be dispose/recycled every 3 month and there will never be more than 3 month worth of waste in the temporary storage areas

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow	Areas	1.00	R25 024.00	**R25 024.00**
Cape Spring	Areas	1.00	R25 024.00	**R25 024.00**
			Sub-Total	**R50 048.00**

Cost Factor 3

Final cleanup - remove all mining related waste walk through with landowner

Risk based criteria and assumptions with regard to rehabilitation of mining area

Removal of all structures and infrastructure not to be retain by the landowner in terms of section 44 of the MPRDA.
All fixed assets that can be profitably removed will be removed for salvage or resale.
Any item that has no salvage value to the mine, but could be of value to individuals, will be sold (zero salvage assumed in cost estimation) and the remaining treated as waste and removed from site.

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow	Area <10 Ha	1.00	R4 872.00	**R4 872.00**
Cape Spring	Area <10 Ha	1.00	R4 872.00	**R4 872.00**
			Sub-Total	**R9 744.00**

Cost Factor 5

Shape waste dumps (Terracing)

Risk based criteria and assumptions with regard to rehabilitation of mining area

It is assumed that the post-mining stability and waste dump profile will be addressed as part of the operation and necessary remedial actions implemented prior to closure.
Shaping of historic wastedumps to be used needs to be done and the closure cost is therefore included in this estimate.
Heaped fill dumps will be divided in <0.4Ha segments to facilitate shaping on a concurrent basis.
The first tier will be buried and the second tier will be ±6 m above natural surface level
Valley fill will only require shaping of the toe to assist natural revegetation taking into account the surrounding topography and vegetation cover
Diversion of drainage channels due to historic waste dumps or agricultural practices will not be reinstated but mitigation to prevent damming of water will be implemented as part of annual rehabilitation.

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow (Heaped fill dump 2 Tier)	m²	8 000.00	R13.13	**R105 040.00**
Cape Spring (Side hill Fill)	no shaping required natural angle of repose 37°			
			Sub-Total	**R105 040.00**

Cost Factor 6

Spreading topsoil level area (Top of wastedump)

Risk based criteria and assumptions with regard to rehabilitation of mining area

It is assumed that the post-mining stability and waste dump profile will be addressed as part of the operation and necessary remedial actions implemented prior to closure.
Spreading of sub-soil is done as part of operations to improve traficability on the top of the wastedump.
Heaped fill dumps will be developed in segments < 0.4Ha to provide for concurrent rehabilitation as part of the annual rehabilitation plan.

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow (Heaped fill dump 2 Tier)	Ha	0.80	R3 432.19	**R2 745.75**
Cape Spring (Side hill Fill)	Ha	0.50	R3 432.19	**R1 716.10**
			Sub-Total	**R4 461.85**

Cost Factor 7

Spreading topsoil dump slopes

Risk based criteria and assumptions with regard to rehabilitation of mining area

It is assumed that the post-mining stability and waste dump profile will be addressed as part of the operation and necessary remedial actions implemented prior to closure.
The sides of heaped fill dumps will be covered with topsoil but vally filled dumps will be evaluated in terms of natural topography and vegetation requirements at final footprint.

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow (Heaped fill dump 2 Tier)	Ha	6.40	R7 692.46	**R49 231.74**
Cape Spring (Side hill Fill)	no topsoil on toe required only rock shading			
			Sub-Total	**R49 231.74**

Cost Factor 8

Sloping Sides gravel pit 18°

Risk based criteria and assumptions with regard to rehabilitation of mining area

Only heaped fill dumps wll require excavations to burry the first tier and obtain sub-soil for covering surface section of waste dump

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow (Heaped fill dump 2 Tier)	Ha	1.20	R11 642.70	**R13 971.24**
Cape Spring (Side hill Fill)	no gravel pit to burry waste			
			Sub-Total	**R13 971.24**

Cost Factor 9

Ripping and levelling Roads and all compacted areas

Risk based criteria and assumptions with regard to rehabilitation of mining area

Existing tracks will be used and no new roads will be developed.
The stockpile and logistics area will not exceed the planned footprint.

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow	Ha	1.00	R350.00	**R350.00**
Cape Spring	Ha	1.00	R350.00	**R350.00**
			Sub-Total	**R700.00**

Cost Factor 10

Loading and transport of 0.5m soil cover

Risk based criteria and assumptions with regard to rehabilitation of mining area

Excavations to burry waste only applicable to heapfill and area will not exceed the planned footprint.

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow (Heaped fill dump 2 Tier)	m^3	3 500.00	R10.07	**R35 245.00**
Cape Spring (Side hill Fill)	No excavations planned			
			Sub-Total	**R35 245.00**

Cost Factor 11

Rockshading wastedump

Risk based criteria and assumptions with regard to rehabilitation of mining area

No rock shading required on heapfill dumps
Shading on toe of valley fill to be evaluated at final footprint taking into account surrounding topography and visual impact

Mining/Sampling Area	Unit	No Units	Unit Cost	Cost per Element
Yellow (Heaped fill dump 2 Tier)	no rock shading required			
Cape Spring (Side hill Fill)	m^2	5 000.00	R2.68	**R13 400.00**
			Sub-Total	**R13 400.00**

Cost Factor 12				
Rockshading rockface				
Risk based criteria and assumptions with regard to rehabilitation of mining area				
Shading on high wall to be evaluated at final footprint taking into account surrounding topography and visual impact				
Mining/Sampling Area	**Unit**	**No Units**	**Unit Cost**	**Cost per Element**
Yellow	No highwall rock shading will be determined as mine develop			
Cape Spring	No highwall rock shading will be determined as mine develop			
			Sub-Total	**R0.00**
Cost Factor 13				
Blasting of highwalls				
Risk based criteria and assumptions with regard to rehabilitation of mining area				
Blasting of high wall to be evaluated at final footprint taking into account surrounding topography and pit stability				
Mining/Sampling Area	**Unit**	**No Units**	**Unit Cost**	**Cost per Element**
Yellow	No highwall present for blasting will be determined as mine develop			
Cape Spring	No highwall present for blasting will be determined as mine develop			
			Sub-Total	**R0.00**
Cost Factor 14				
Moving of blocks to designated areas				
Risk based criteria and assumptions with regard to rehabilitation of mining area				
Placing of blocks in designated areas to be done as part of housekeeping in the anual rehabilitation plan. Removal of blocks used for demarcation and low grade product to the demarcated waste dump at final closure. Removal of safety barrier to be evaluated at final footprint and depth of mine pit				
Mining/Sampling Area	**Unit**	**No Units**	**Unit Cost**	**Cost per Element**
Yellow	Blocks	300.00	R98.50	**R29 550.00**
Cape Spring	Greenfields – To be address as part of production and housekeeping			
			Sub-Total	**R29 550.00**
Total estimated cost to fully decommissioned the mining site at final closure				**R341 519.83**

Signed at Cape Town on this 30st day of November 2017.
Signature of responsible person

.....

Designation
CEO Sizisa Ukhanyo Trading 830 CC

APPENDIX 1a: DECLARATION OF THE EAP

I, **Jennifer Anne Barnard**, 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

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;

Signature of EAP: 

Name of company: Green Direction Sustainability Consulting (Pty) Ltd

Date: 4 December 2017

APPENDIX 1b: CV indicating experience with relevant application processes

The qualifications of the EAP

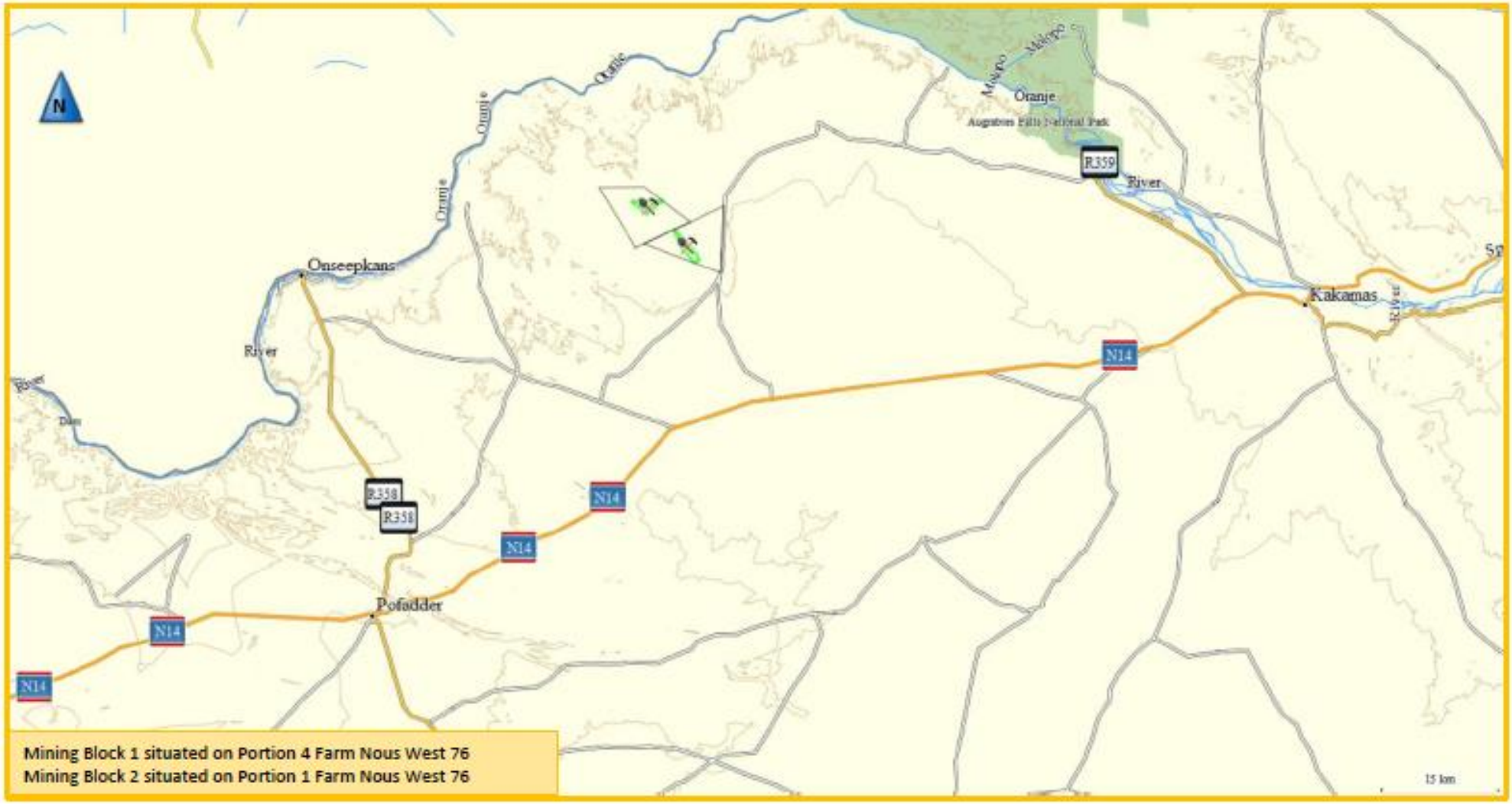
- Masters in Environmental Science: University of KwaZulu-Natal, Durban
- SACNASP: Pr. Nat. Sci. Reg. No.: 400197/09 as a Professional Natural Scientist.
- EAPASA: Registered with Interim Certification Board of Assessment Practitioner in South Africa

Summary of the EAP's Experience

Ms. Barnard has been registered with the South African Council for Natural Scientific Professions since 2009, and was awarded certification as an Environmental Assessment Practitioner (EAP) by the Interim Certification Board of South Africa in 2010. She has worked on numerous Environmental Impact Assessments, both in South Africa and the United Kingdom and has considerable experience in the preparation and compilation of Environmental Impact Reports, Environmental Management Programs, Environmental Audits, and Environmental Management Frameworks, including construction monitoring where required.

Specific examples include: Project Manager and Lead EAP of the Eskom Transnet Coal Link Suite of Projects (in terms of the NEC2 Contract with EIA project value of R6 million), which spanned both Mpumalanga and KwaZulu-Natal; Project Manager and Lead EAP of two SANRAL Road Upgrades on the N7, that included Borrow Pits; and, EAP for various Basic Assessments and EIAs in the Northern Cape for agricultural activities; and, Water Use Applications for sand mining activities in various rivers near Upington, in terms of the General Authorisation for Section 21(c) and 21(i). DMR Basic Assessment applications include a sand mining permit in Kakamas-South in conjunction with a Water Use General Authorisation Application, and for a Kaoline mine permit outside Garies in the Northern Cape.

Appendix 2: Locality Map



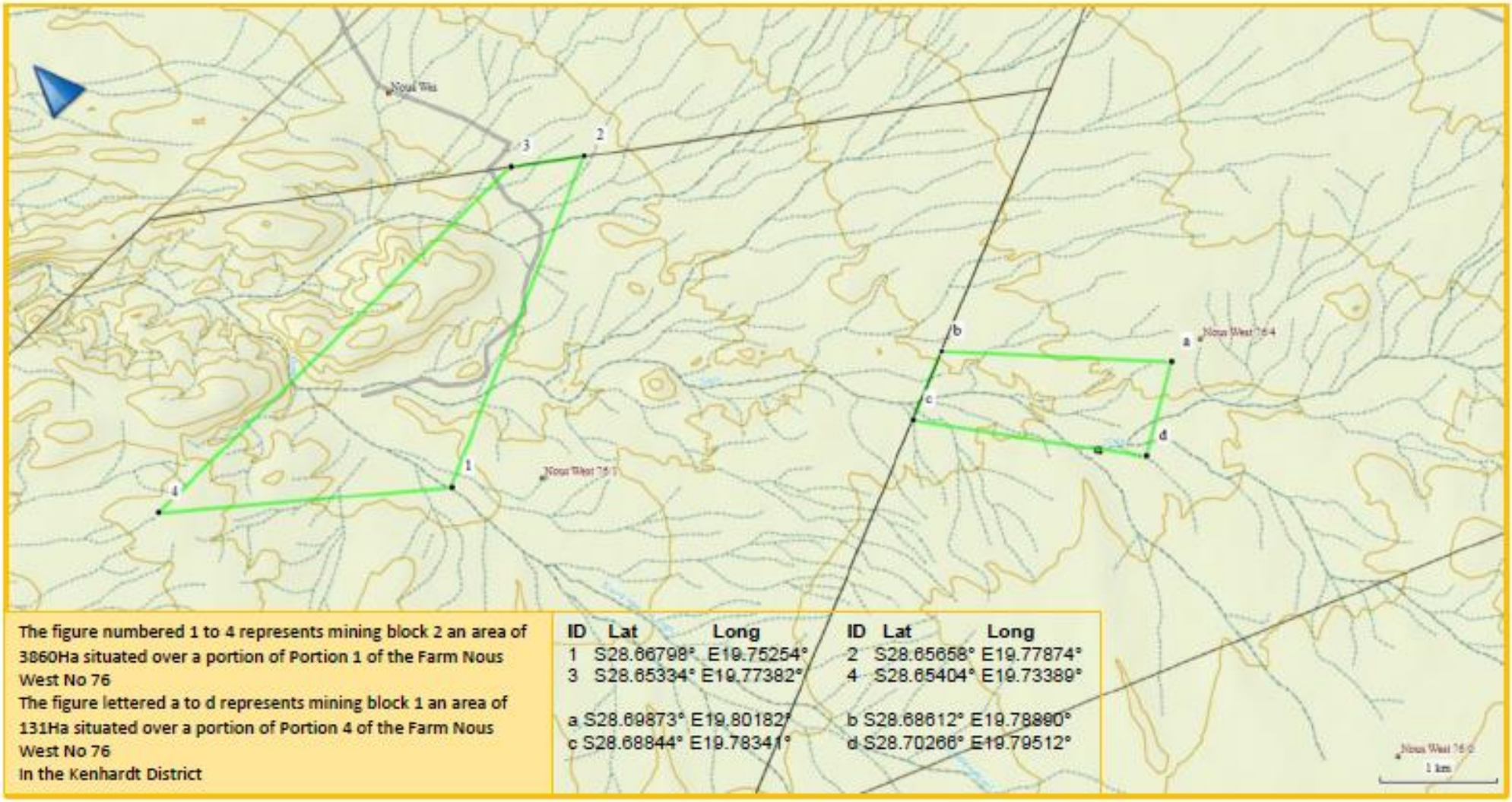
Appendix 3: Existing Environmental Authorisations

The mining operation will include all the previous mining operations carried out under cover of the following permits or prospecting rights:

- Mining Permit MP 013/2014 File reference NC30/5/1/3/2/10232MP issued to Million Rise Trading (Pty) Ltd over 5Ha portion of Portion 4 of the Farm Nous West 76.
- Mining Permit MP 022/2013 File reference NC30/5/1/3/2/10104MP issued to Sizisa Ukhanyo Trading 830 CC over 5Ha portion of Portion 4 of the Farm Nous West 76.
- Prospecting Right MPTRO 29/2015 File reference NC30/5/1/3/2/10610PR issued to Sizisa Ukhanyo Trading 830 CC over the Remainder Farm Lower Zwart Modder 79 and a Portion of Portion 1 of the Farm Nous West 76.

The above operations in terms of the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) is conducted under cover of an approved Environmental Management Plan (EMP). In terms of section 38B of the Mineral and Petroleum Resources Development Amendment Act, 2008 (Act 49 of 2008) this EMP is now deemed to have been approved and an environmental authorisation been issued in terms of the National Environmental Management Act, 1998.

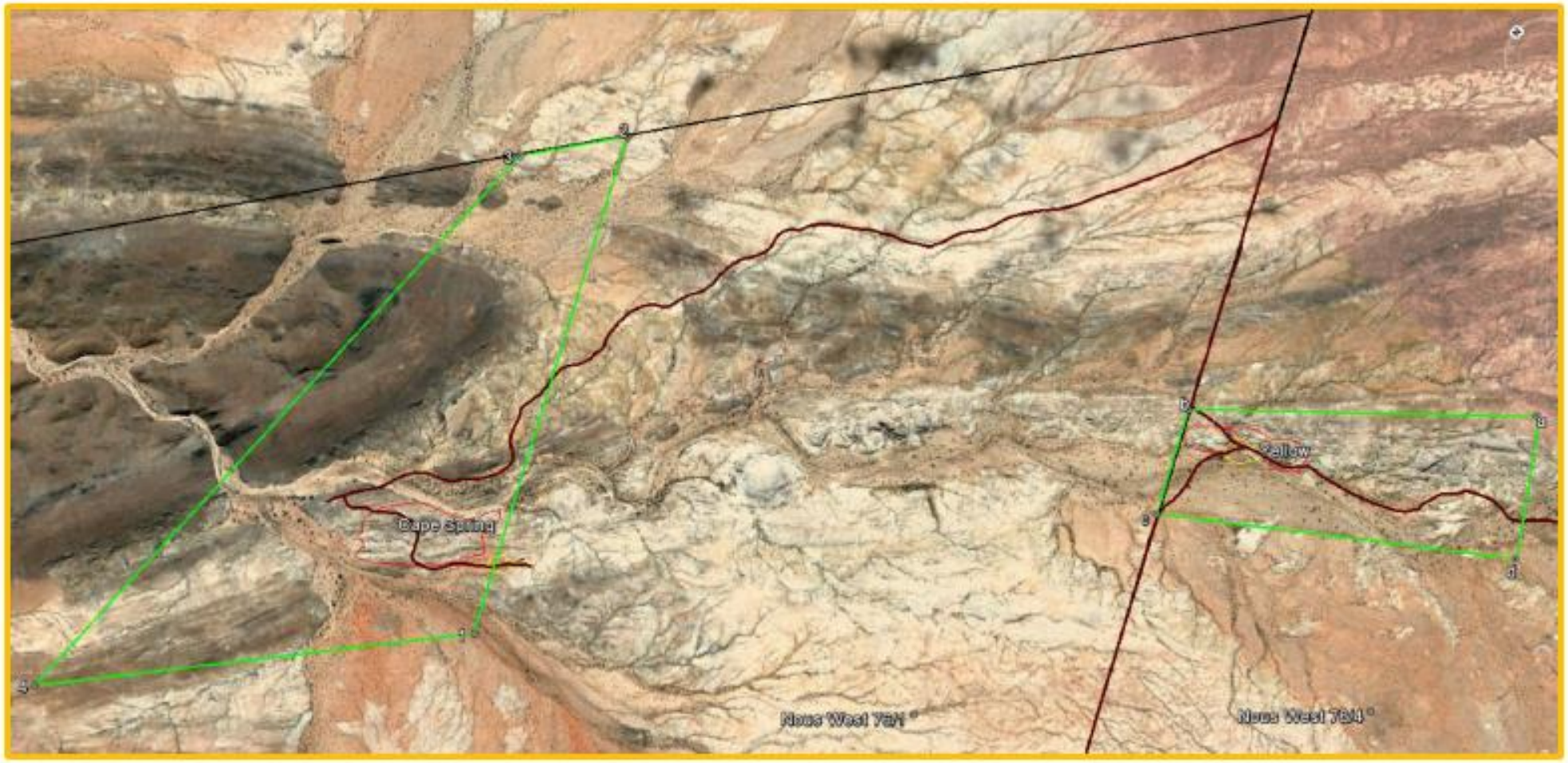
Appendix 4a: Site Plan Mine Layout showing properties and co-ordinates



The figure numbered 1 to 4 represents mining block 2 an area of 3860Ha situated over a portion of Portion 1 of the Farm Nous West No 76
The figure lettered a to d represents mining block 1 an area of 131Ha situated over a portion of Portion 4 of the Farm Nous West No 76
In the Kenhardt District

ID	Lat	Long	ID	Lat	Long
1	S28.66798°	E19.75254°	2	S28.65658°	E19.77874°
3	S28.65334°	E19.77382°	4	S28.65404°	E19.73389°
a	S28.69873°	E19.80182°	b	S28.68612°	E19.78890°
c	S28.68844°	E19.78341°	d	S28.70266°	E19.79512°

Appendix 4b: Mine Landscape showing mineral resource location of infrastructure (yellow outline) and quarries (red outline)



Appendix 5: Proof of submission of applications

The only application submitted is the application for a mining right in terms of section 22 of the MPRDA and then this application for an Environmental Authorization and Waste License in terms of NEMA.

As part of the consultation process permission from SAHRA will be applied for.

As part of the consultation process a Water Use License from DWS will be applied for.

Appendix 6: Title deed data of properties that form part of this application

1. Portion of Portion 1 of the Farm Nous West 76 (Cape Spring quarry)
- registered in the name of Pieta & Fanie Boerdery CC by virtue of Title Deed T65170/2007

2. Portion of Portion 4 of the Farm Nous West 76 (Yellow quarry)
- registered in the name of Nelsrust Trust by virtue of Title Deed T64629/1997