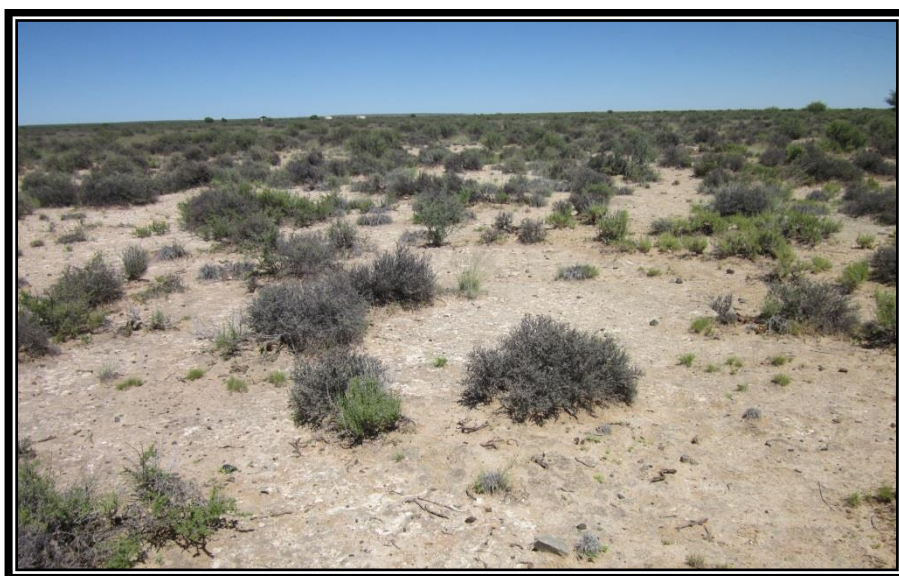




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PRIESKA GYPSUM MINE



DRAFT ENVIRONMENTAL SCOPING REPORT



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Ref. No. NC30/5/1/1/2/10104MR

This report is undertaken in compliance with Section 22 (Application for a Mining Right) of the Mineral and Petroleum Resources Development Act, Act 28 of 2002 ; and Regulation 21 of the Environmental Impact Assessment Regulations, 2014 of the National Environmental Management Act, 107 of 1998.

DORINGBERG GIPS (PTY) LTD

1. IDENTIFICATION OF THE APPLICATION IN RESPECT OF WHICH THE SCOPING REPORT IS SUBMITTED.

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2. INTRODUCTION AND EXECUTIVE SUMMARY

Doringberg Gips (Pty) Ltd has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Doringberg Gips (Pty) Ltd has appointed **Algoa Consulting Mining Engineers (ACME)**, as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 28 of 2002 and National Environmental Management Act, Act 107 of 1998.

Alternatives

No location alternatives are applicable to this project since the mineral resource is contained in the proposed development area. Locating the mine to another area will result in the resource not being utilised and the economy and society not benefitting from the mine. The mineral resource is limited to a narrow geological deposit, known as the Whitehill Formation.

Public Participation Process

The Public Participation Process undertaken is in accordance with the requirements of the EIA Regulations (2014) and SECTION 10 of the MPRDA 28 of 2002. The scoping phase of the project was advertised in English in the local newspaper the Express Northern Cape. On-site notices in were placed at the entrance of the property and community service centres. The neighbouring landowners were informed about the project at the local and a BID document was distributed in English via emails and/or during meeting to all I&APs on. meetings were held with landowner and Siyathemba Local Municipality. A copy of the Draft Scoping Report was made available to I&APs for comments.

Potential Impacts:

Topography

The mining activities will have impacts on the topography on the study site .

Geology and soil

There will be disturbance of soil properties

Flora and fauna

According to Mucina and Rutherford (2006) three vegetation units occur within the proposed project area namely Bushmanland Basin Shrubland, Bushmanland Vloere and Northern Upper Karoo. All these vegetation units are classified as **Least Threatened** .

Surface and Groundwater

The impact of the extended mining activities on the currently available water in the area is not expected to be significant.

Social economic

There will be positive and negative impacts on the social and cultural structure of the region, as local people will be used on the mine, thus providing jobs and income. As part of the local development strategy for the mine, trainings are to be conducted to improve workers skills, such as drivers licence training and handling of specialized vehicle training, this will improve the workers's marketability if the mine closes down.

Land Use

At present the proposed mining area is being utilised for grazing. Mining activities will utilise the site, but after rehabilitation it can again be used for grazing by livestock or game again.

Air Quality

Mining activities would cause a degradation of the air quality, in terms of vehicular emissions and dust generated from quarrying, raw material handling and haulage activities.

Noise

There would be an increase in noise on site as a result of quarrying and processing activities.

Visual Aspects

Excavated areas, stock piling and location of the topsoil heaps will have an impact on the visual environment.

Cultural Heritage Impacts

SAHRA is consulted as an Interested and Affected Party, and awaits their comments and recommendations, once received, they would be captured in the EIA report.

Cumulative impacts

There would probably be a minimal cumulative visual, dust and noise impact as a result of improper implementation of mitigation measures.

3. LIST OF ABBREVIATIONS :

AIA	Archaeological Impact Assessment
ASAPA	Association of Southern African Professional Archaeologists
BID	Background Information Document
CA	Competent Authority
CARA	Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)
CSA	Constitution of South Africa, 1996 (Act No. 108 of 1996)
DEA	Department of Environmental Affairs
DEAT	Department of Environmental Affairs and Tourism (currently known as DEA)
DWA	Department of Water Affairs
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECA	Environment Conservation Act (ECA), 1989 (Act No. 73 of 1989)
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
GN	Government Notice
HIA	Heritage Impact Assessment
I&APs	Interested and Affected Parties

IEM	Integrated Environmental Management
IWULA	Integrated Water Use License Application
IWWMP	Integrated Water and Waste Management Plan
MPRDA	Minerals and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (as amended)
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998, as amended)
NEMAQA	National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)
NEMBA	National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
NEMWA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
NHRA	National Heritage Resources Act, 1999 (Act No. 25 of 1999)
NWA	National Water Act, 1998 (Act No. 36 of 1998)
OHSA	Occupational Health and Safety Act, 1993 (Act No. 85 of 1993)
PPP	Public Participation Process
SAHRA	South African Heritage Resources Agency
SANBI	South African National Biodiversity Institute
SR	Scoping Report

4. GLOSSARY OF TERMS :

Anthropogenic : Change induced by human intervention.

Applicant : Any person who applies for an authorisation to undertake an activity or undertake an Environmental Process in terms of the Environmental Impact Assessment (EIA) Regulations – National Environmental Management Act, 1998 (Act No. 107 of 1998) [NEMA] and MPRDA – Act 28 of 2002.

Archaeological resources : This includes:

1. material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years including artefacts, human and hominid remains and artificial features and structures;

2. rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation;
3. wrecks, being any vessel or aircraft, or any part thereof which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the republic as defined in the Maritimes Zones Act, and any cargo, debris or artefacts found or associated therewith, which is older than 60 years or which South African Heritage Resources Agency (SAHRA) considers to be worthy of conservation; features, structures and artefacts associated with military history which are older than 75 years and the site on which they are found.

Biodiversity : The variety of life in an area, including the number of different species, the genetic wealth within each species, and the natural areas where they are found.

Cultural significance : This means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

Cumulative Impact : In relation to an activity, cumulative impact means 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.

Environment : All physical, chemical and biological factors and conditions that influence an object.

Environmental Impact Assessment : In relation to an application, to which Scoping must be applied, means the process of collecting, organising, analysing, interpreting and communicating information that is relevant to the consideration of the application.

Environmental Impact Assessment Report : In-depth assessment of impacts associated with a proposed development. This forms the second phase of an EIA and follows on the Scoping Report (SR).

Heritage resources : This means any place or object of cultural significance

Precipitation : Any form of water, such as rain, snow, sleet, or hail that falls to the earth's surface.

Red Data species : All those species included in the categories of endangered, vulnerable or rare, as defined by the International Union for the Conservation of Nature and Natural Resources.

Riparian : The area of land adjacent to a stream or river that is influenced by stream induced or related processes.

5. EXPERTISE OF THE EAP :

Pascaline Makofane has a BSc. Degree in Environmental and Resource Studies with more than 6 years relevant experience in conducting EIAs at Phakanani Water and Waste ; Algoa Consuting Mining Engineers and Phanky's Environmentals and Projects.

She has been extensively involved in environmental impact management within the ambit of the national context. Her field of expertise is environmental impact management, evaluation and review with analysis of processes used for environmental impact management as well as the mitigation of these impacts within the environmental management plan context.

6. LEGISLATION AND DOCUMENTS CONSIDERED

- Mineral and Petroleum Resources Development Act, 28 of 2002 (MPRDA)
- National Environmental Management Act, 107 of 1998 (NEMA) EIA regulations 2014
- National Environmental Management : Air Quality Act, 39 of 2004 (NEM: AQA)
- National Environmental Management: Biodiversity Act, 10 of 2004 (NEM:BA)
- National Heritage Resources Act, 25 of 1999 (NHRA)
- National Water Act, 36 of 1998 (NWA)
- Road Traffic Act, 93 of 1996

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List of triggered activities in terms of NEMA EIA Reg(2014) as Amended

EIA listed activities promulgated under NEMA listed activities that may be triggered are listed below. It is important to note that the table of potential triggered activities below is based on the description of proposed mining activities only. Any change or alteration to the proposed project and associated activities will require a revision of the activities likely to be triggered.

No.	Listing Notice
17	<p>Listing Notice 2 of No R. 984 (2014) Any activity including the operation of that activity which requires a mining right in terms of section 22 of the Mineral and Petroleum Resources Development Act , 2002 (Act No. 28 of 2002) , including associated infrastructure and structures and earthworks directly related to the extraction of a mineral resource , 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).</p>
21	<p>GNR 984, Listing notice 2 Listed activity 21 : Any activity including the operation of that activity associated with the primary processing of a mineral resource including winning, reduction, extraction, classifying, concentrating, crushing, screening and washing but excluding the smelting, beneficiation, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies.</p>
22	<p>Listing Notice 1: 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); or (ii) a prospecting right, mining right, mining permit, production right or exploration right, where the throughput of the activity has reduced by 90% or more over a period of 5 years excluding where the competent authority has in writing agreed that such reduction in throughput does not constitute closure</p>
27	<p>Listing Notice 1 The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan</p>
14	<p>Listing Notice 1 The development of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.</p>
Section 27	<p>List of triggered activities in terms of MPRDA , Act 28 of 2002</p>

7. NEED FOR THE PROJECT

The proposed minerals to be mined are Gypsum, Dolomite and Limestone for use in the agriculture sector.

8. LOCATION OF THE ACTIVITY

8.1 Location of the activity

Prieska Gypsum mine is located on Portion 1 of the Farm Bitter Put 113 approximately 71km South West of Prieska in the Northern Cape Province, at latitude 30° 3' 22.43" S and longitude 22° 7'24.77" E. See Figure 1 for an indication of the location of the mine. The extent of the Mining Right area is 3406,1060 hectares.

The current land use is agriculture : **Grazing**.

8.2 Physical address and farm name

Portion 1 of the Farm Bitter Put 113, Northern Cape. This property is privately owned by Mr Willem Petrus Smit. (Title Deed T21619/2005).

8.3 Registered description of land

Title deed	Extent	Owner	Administrative district	Local authority
T21619/2005	3406,1060 ha	Willem Petrus Smit	Prieska	Siyathemba Local Municipality

9. DESCRIPTION OF THE PROPOSED ACTIVITY

The minerals that will be mined are all found on the surface and only open cast mining methods will be deployed, i.e. all minerals will be free dug by means of excavators and front end loaders. The minerals will then be placed onto dump trucks, transported to stockpiles, and transported to customers.

Although this Mining Right application covers an area of approximately 3406,1060 ha, the mining operation would limit itself to a an area of only 10 to 15 hectares in size, of which half of it would be in the process of rehabilitation and the remaining half the mining site. This localised area would be fenced off to prevent unauthorised entry into the mine workings. As the rehabilitation is completed, the fence would be removed to exclude the rehabilitated ground from the mine workings and likewise the fence would be newly erected onto new ground so as to include new

development ground. These fences would display sign boards towards the outside of the quarry to warn any person of the prohibition of unauthorised entry.

Access : The site would be accessed via existing unsurfaced roads. Existing unsurfaced access roads also traverse the site, presumably created by landowners

Electricity : The mining methods do not utilise electricity as all machinery is diesel driven self-propelled vehicles but electricity would be required for office use.

Water : The only water required in the mining process is that to be used for dust suppression, and it is estimated that the water bowser would consume not more than 10 kilolitres per day.

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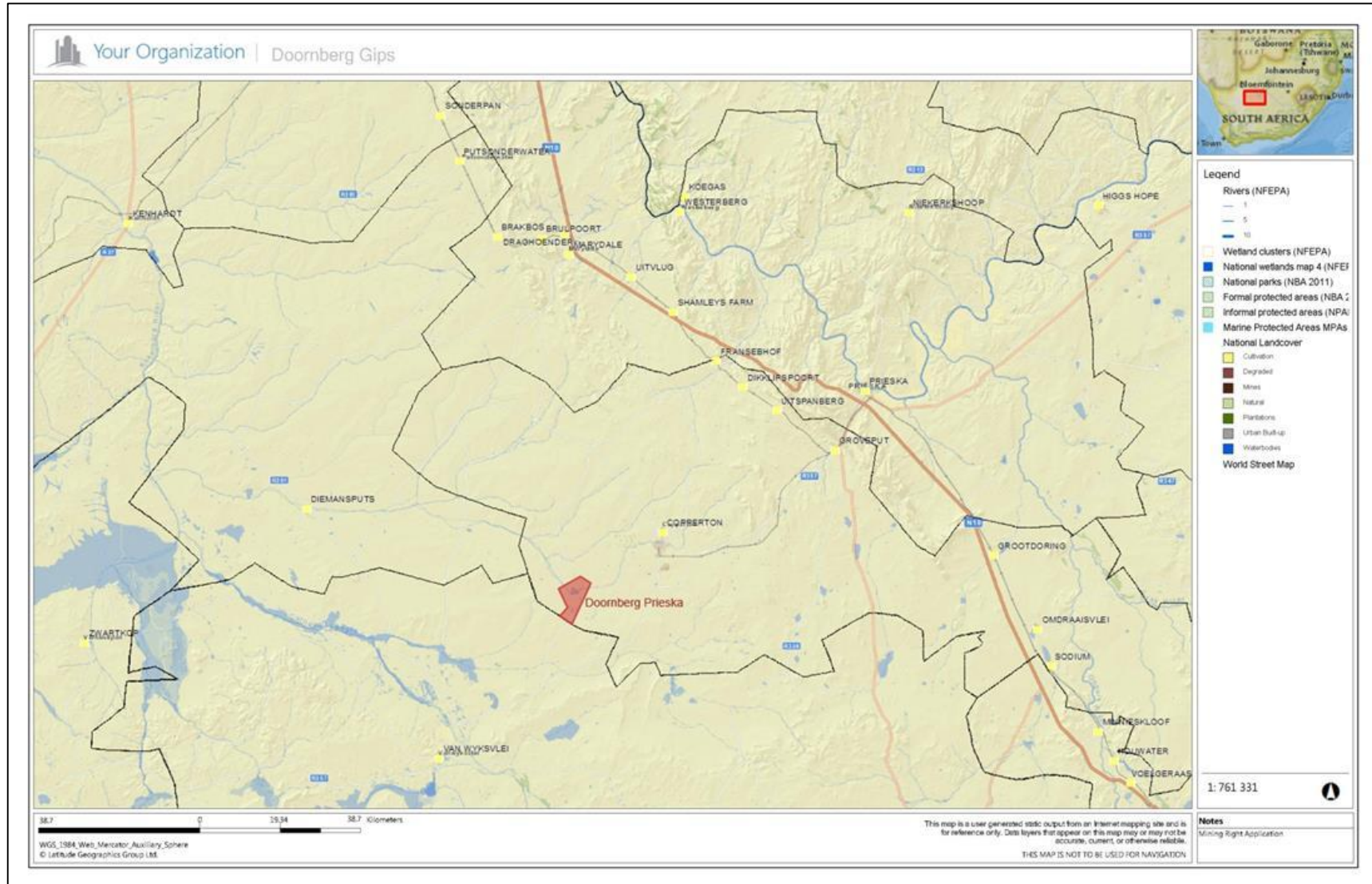


Figure 1. Locality of Prieska Gypsum Mine in relation to the broader area.

10. EXISTING STATUS OF THE ENVIRONMENT

10.1 Climate

Rainfall in the area occurs in late summer and early autumn with a mean annual rainfall ranging from about 100-200 mm. Mean maximum and minimum temperatures in Van Wyksvlei are - 4.6°C and 39.5°C.

10.2 Topography

The area is characterised as a flat to gently sloping landscape with isolated hills and interspersed pans, and is approximately 1000 m.a.m.s.l.

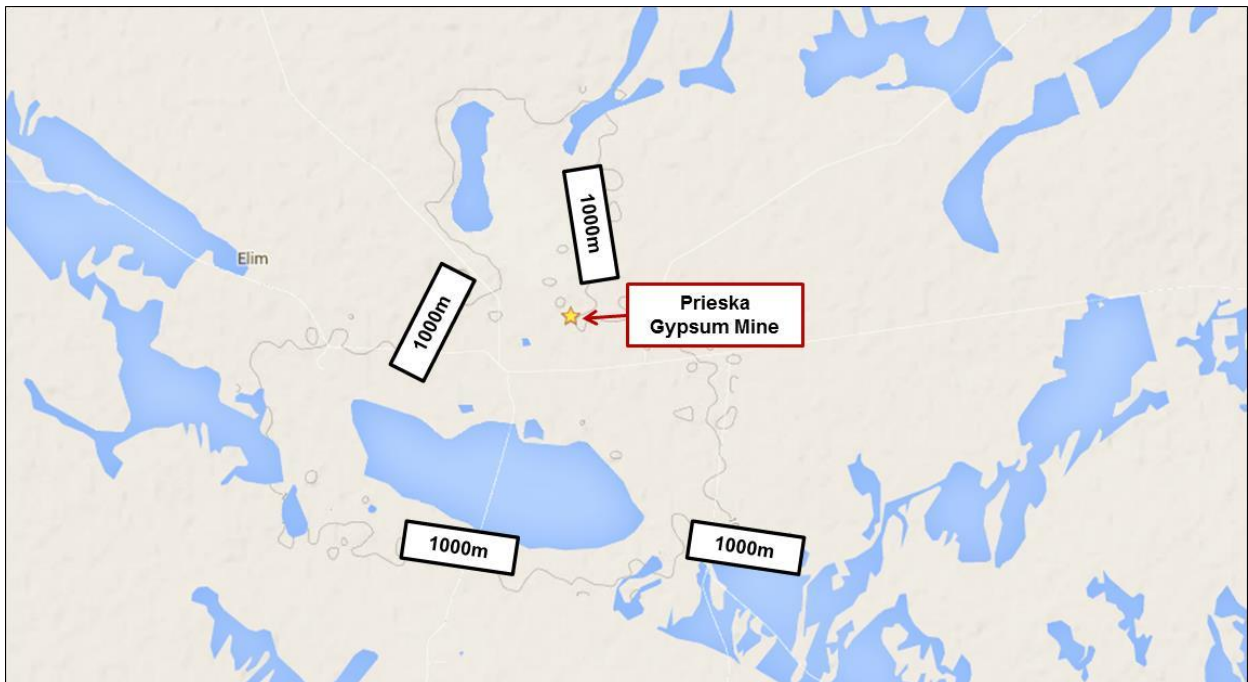


Figure 2. Surrounding topography of the mine area.



Figure 3. Topography of the surrounding area as indicated on Google Earth image.

10.3 Soils

The soils in this area range from shallow to deep and are both apedal and freely drained. The soil forms present include both Glenrosa and Mispah soil with a high base status, usually <15% clay. The salt content is very high.

10.4 Geology

The 1: 250 000 geological maps 2922 Prieska and 3022 Britstown, published by the Council of Geoscience. The geological legend indicates that the site is overlain by Quaternary Sands of the Algoa Group. Below is an extract of the geological map. The Dwyka Group is depicted in a grey colour and denoted as "C-Pd" (Carboniferous – Permian Age) whilst the sediments of the Algoa Formations (Quaternary Age) are shown in light yellow colour. The brighter yellow colour denoted by "T-Qc" (Tertiary – Quaternary Age) indicate the locations of calcrete (limestone) deposits. The "Gy" denotes the find of Gypsum.

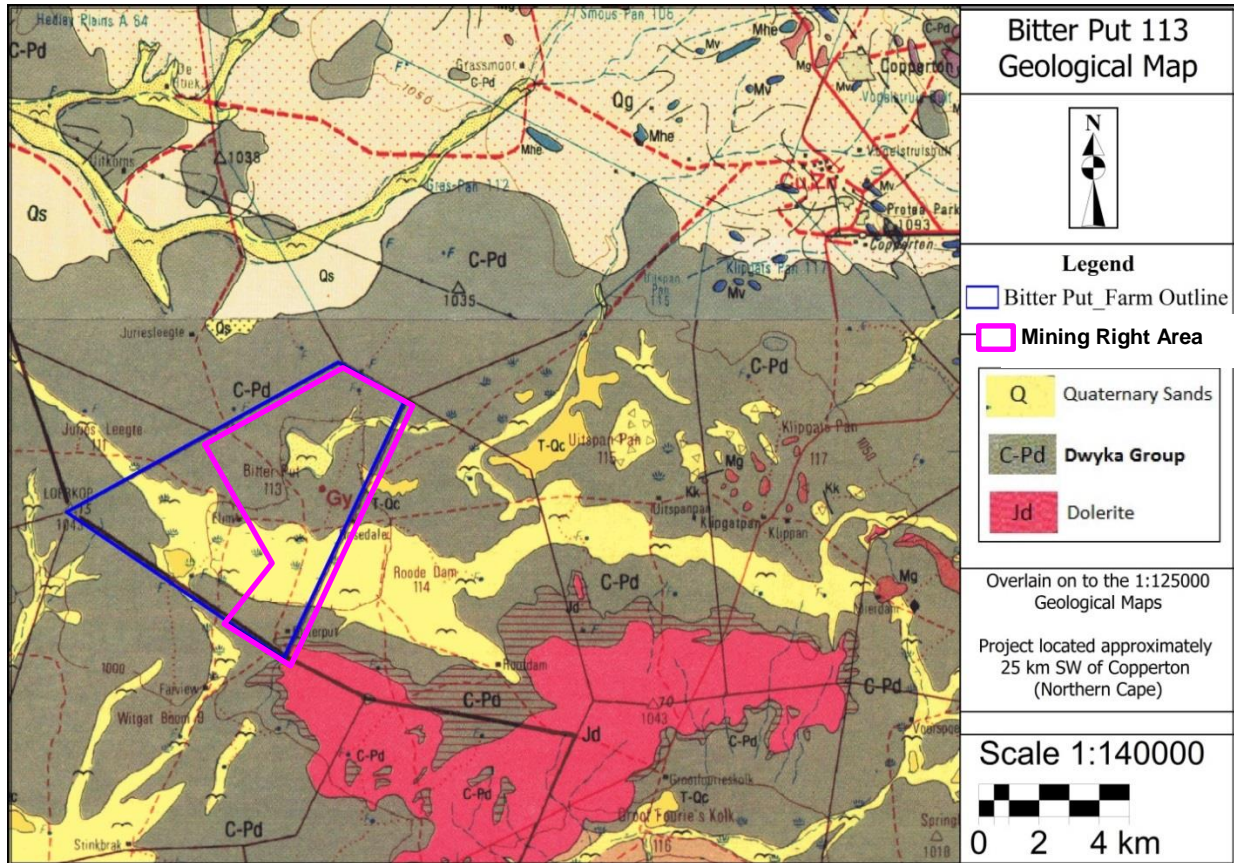


Figure 4. Extract of the 1 : 250 000 geological maps of 3022 Britstown and 2922 Prieska.

10.5 Flora

According to Mucina and Rutherford (2006) three vegetation units occur within the proposed project area namely Bushmanland Basin Shrubland, Bushmanland Vloere and Northern Upper Karoo. The dominant unit, Bushmanland Basin Shrubland, has an altitude of approximately 800 – 1200 meters above sea level (masl) and is consistent with irregular plains and grasses. The Bushmanland Vloere has an altitude of 850 – 1450 masl together with flat even surfaces with endorheic pans present. The smallest unit located within the project area is Northern Upper Karoo with an altitude of approximately 1000 – 1500 masl.

- **Bushmanland Basin Shrubland**

The Bushmanland Basin Shrubland has slightly irregular plains with dwarf shrubland dominated by a mixture of low sturdy and spiny shrubs and white grasses. Important Taxa include Tall Shrubs (*Lycium cinereum*, *Rhigozum trichotomum*); Low Shrubs (*Aptosimum spinescens*, *Hermannia spinosa*, *Pentzia spinescens*, *Zygophyllum microphyllum*, *Aptosimum elongatum*); Succulent Shrubs (*Salsola tuberculata*, *Aridaria noctiflora subsp. Straminea*, *Ruschia intricata*); Shrubs (*Thesium hystrix*); Herbs (*Leysera tenella*, *Dicoma capensis*, *Monsonia umbellata*); Succulent Herbs (*M. stenandrum*, *Trianthema parvifolia*); Graminoids (*Aristida adscensionis*,

Aristida congesta, *Tragus berteronianus*). Endemic Taxa include Herbs (*Cromidon minutum*) and Geophytic Herbs (*Ornithogalum bicornutum*, *O. ovatum* subsp. *Oliverorum*). Bushmanland Basin Shrubland is classified as **least threatened** and there are no signs of serious transformation of this vegetation unit.

- **The Bushmanland Vloere**

The Bushmanland Vloere consists of loosely patterned scrub dominated by *Rhigozum trichotomum* and various species of *Salsola* and *Lyccium* with a mixture of non-succulent dwarf scrubs of Nama- Karoo relationship. Loose thickets are also sporadically found. Important Taxa Include Tall Shrubs (*Parkinsonia Africana*, *Xerocladia viridiramis*); Low Shrubs (*Rhigozum trichotomum*, *Asparagus glaucus*, *Pegolettia retrofracta*); Succulent Shrubs (*Salsola aphylla*, *S. rabieana*, *Lycium pumilum*); Herbs (*Lotononis minima*, *Amaranthus dinteri*) and Graminoids (*Stipagrostis ciliate*, *S. obtuse*, *Sporobolus nervosus*). Bushmanland Vloere is classified as **least threatened** with an estimated 2% of this unit having been transformed mainly through cultivation or the building of dams.

- **Northern Upper Karoo**

Northern Upper Karoo is shrubland which is dominated by dwarf karoo shrubs, grasses and *Acacia mellifera* subsp. *detinens* and other low trees. Important Taxa Include: Small Trees (*Acacia mellifera* subsp. *detinens*, *Boscia albitrunca*); Tall Shrubs (*Lycium cinereum*, *L. horridum*, *L. oxycarpum*); Shrubs (*Pentzia calcarea*, *P. globosa*, *Rosenia humilis*); Succulent Scrub (*Hertia pallens*, *Salsola calluna*, *S. glabrescens*); Succulent Herb (*Psilocaulon coriarium*); Geophytic Herb (*Moraea pallida*) and Graminoids (*A. congesta*, *A. diffusa*, *E. obtuse*, *E. porosa*).

Biologically Important Taxa include : Herbs (*Convolvulus boedeckerianus*) and Tall Shrubs (*Gymnosporia szyszyłowiczii* subsp. *namibiensis*). Endemic Taxa Include Succulent Shrubs (*Lithops hookeri*, *Stomatium pluridens*); Low Shrubs (*Atriplex spongiosa*, *Galenia exigua*) and Herbs (*Manulea deserticola*). Northern Upper Karoo is also classified as **least threatened** with approximately 4 % of this unit has been transformed for cultivation purposes.

The mining area is not located within any National Environmental Management: Biodiversity Act, 10 of 2004, threatened or protected ecosystems.

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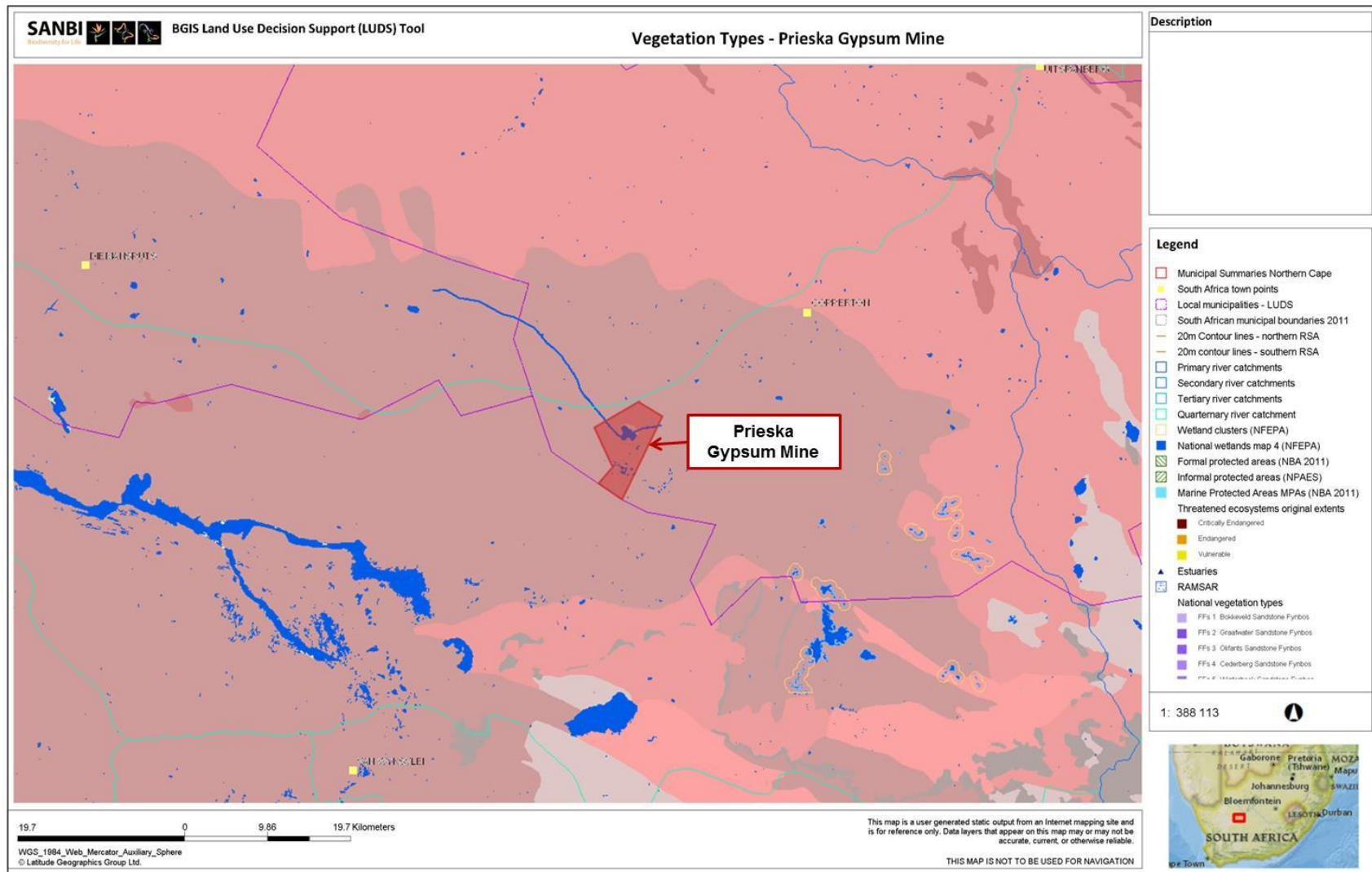


Figure 5. Vegetation Types of the area.

10.6 Fauna

A desktop search for protected or threatened fauna species was conducted using the SANBI Database. No animal records were available for this area and as such there is no indication of any threatened or protected species occurring on the site. Consultation with the landowner indicated that a number of large mammals are common in the area, most notably kudu (*Tragelaphus strepsiceros*), caracal (*Caracal caracal*), and jackal (*Canis mesomelas*).

10.7 Hydrology

The mine area falls within the Lower Orange Quaternary Catchment D54D, which is considered to be of low/marginal ecological sensitivity. The river Hartogskloof is located within this catchment and has tributaries extending from it which flow into and through the farm Bitter Put 113.

Endorheic pans are common features in the area. These pans are predominantly found in arid and semi-arid areas of southern Africa and generally have a higher salinity than the surrounding land. When evaporation increases, salt accumulation increases on the bottom and surface of the water body. Endorheic pans are not necessarily associated with signs of hydromorphic features, neither obligated or facultative hydrophytes, due to infrequent inundation cycles and limited periods of saturation. They do, however, form diagnostic landscape features that are recognisable based on vegetation cover patterns, while the inward draining depressions, even small depressions, form a unique terrain indicator. The separation of pans and their drainage in the Bushman land Vloere and Bushmanland Basin Shrubland vegetation units specifically is virtually impossible due to the closely related origin, geology and floristic composition of the vegetation that they support. These systems are vast and not readily identifiable on the ground. This is because they do not seem to be part of the underlying hydrology as there is virtually no change in topography which is generally used to identify pans at first glance. However, these endorheic systems are often filled by flash flood events of ancient river systems within the catchment. These pan systems are able to store water for long periods of time.

These endorheic pans are **considered of value to the surrounding ecosystem**, even though they are temporary and do not have typical watercourse features. These water courses are scattered thought the farm Bitter Put and are classed as National Freshwater Ecosystem Priority Areas (NFEPA) **protected wetlands**.

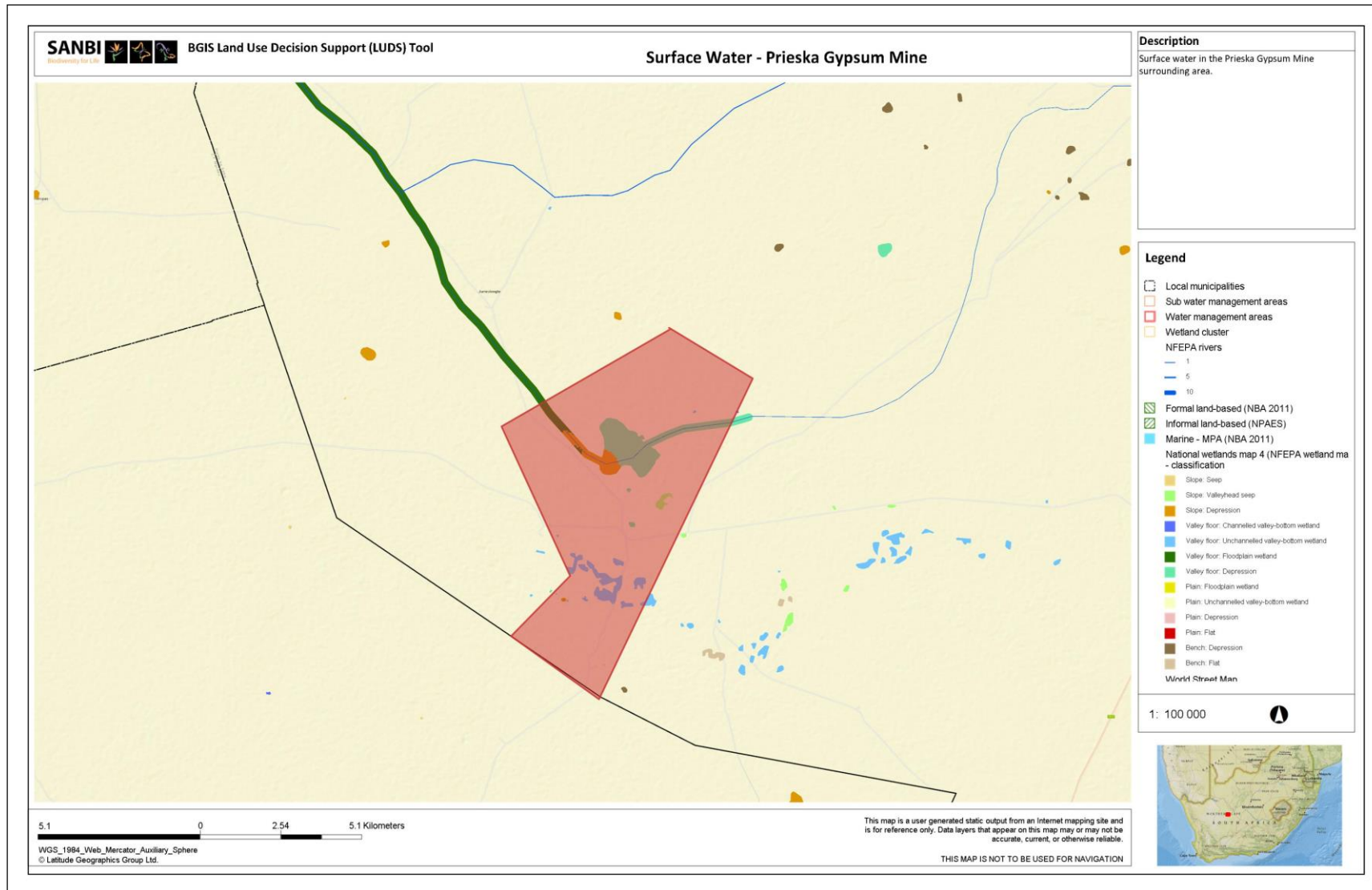


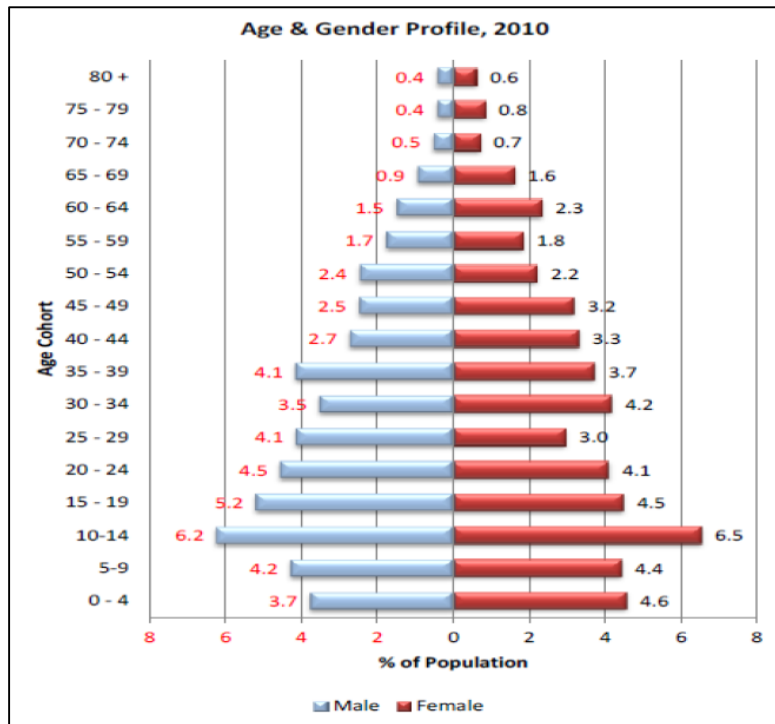
Figure 6. Surface water in the area.

10.8 Heritage

SAHRA is consulted as an Interested and Affected Party, and awaits their comments and recommendations, once received, they would be captured in the EIA.

10.9 Cultural environment

NOTE : The following information has been extrapolated from Integrated Development Plan for Siyathemba Municipality, dated 2013/14.



- There were slightly more females (51.4%) than males (48.6%) among the local population during 2010. It was, however, noted that the population became slightly less female dominant since 2000, when 52.4% of the population were female.
- The working age group (15 to 64) contributed 64.4% to the local population in 2010. This age group has increased proportionately (from 58.6% to 64.4%) in relation to the other age groups. Since 2000, this group increased by approximately 1,210 people.
- The working age population is slightly male dominant. Since 2000, male working age population increased by around 928 men in absolute terms while the number of women increased by about 282.
- Since 2000, the proportion of children under the age of 15 declined by 6.7%. This means that the age profile of the local population is becoming older. The number of children in the area also declined from around 14,700 during 2000 to just above 12,000 in 2010.

During 2010, the HIV/AIDS prevalence rate of the Siyathemba population was 6.0% compared to the District rate of 6.5%. These rates compared well to the Northern Cape (7.6%) and South African (12.6%) averages in the same year.

In the Siyathemba Municipal area, a total of 14% of the population had no schooling, while 34% had primary school education. Just 4% of the population has a degree or diploma.

10.10 Socio - economic environment

The Siyathemba Municipality falls within the Northern Cape Province. The area is approximately 195.52 km² and has a population of 14 246 people with an estimated 4 542 households.

Cultural environment

First languages (2011)	
Afrikaans	92.6%
Xhosa	4.4%
English	1.0%
Other	2.0%

Employment Profile

Employment by main Industries:

- Farming 1 974;
- Mining 29;
- Manufacturing 79;
- Utilities 26;
- Construction 313;
- Trade 423;
- Transport 169;
- Business Services 124;
- Social Services 827

Agriculture is mostly focused on sheep, wheat, maize, Lucerne, cotton, beans, vineyards and peanuts.

The Integrated Development Plan for Siyathemba Municipality, dated 2013/14 indicated that the Unemployment rate for Siyathemba Municipality during 2009 was 34.7%.

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Labour Indicators (2009)	Siyathemba Municipality (2009)
Labour Force ('000)	5
Unemployment rate (%)	34.7
Labour force participation rate (%)	57.4
Highly Skilled Workers (%)	10.4
Skilled Workers (%)	37.8
Semi – and unskilled workers (%)	51.8

Population Profile

The Population profile of Siyathemba Municipality can be seen in the table below.

Racial makeup (2011)	
Black African	23.6%
Coloured	67.4%
Indian/Asian	0.5%
White	8.0%
Other	0.4%

10.11 VISUAL

This mining area would be positioned on a flat setting and can be aesthetically displeasing only at a closer proximity. The mine will clearly be visible from, the access road and to adjacent land owners. This mine would therefore pose a visual impact.

11. ENVIRONMENT AFFECTED BY ALTERNATIVE LAND USE

The proposed mining area was selected because a geological assessment indicated that sufficient minerals are available to be mined for at least 30 years.

The “no-go” - option would mean that Doringberg Gips (Pty) Ltd would not commence with the mining operations and therefore would forego an opportunity to provide material to the agricultural sectors in the area. This would furthermore impede economic development as required by the South African Constitution.

12. ASSESSMENT OF THE POTENTIAL IMPACTS

Regulation 52 (2)(b) : assessment of the potential impacts of the proposed mining operation on the environment, socio-economic conditions and cultural .

12.1 DESCRIPTION OF THE PROPOSED MINING OPERATION

12.1.1 INFRASTRUCTURE

The main infrastructure, such as access roads, topsoil storage stockpiles and any other basic mining design features are discussed below.

12.1.1.1 Access

The site would be accessed via existing unsurfaced roads. Existing unsurfaced access roads also traverse the site, presumably created by landowners

12.1.1.2 Electricity

The mining methods do not utilise electricity, as all machineries is diesel driven self-propelled vehicles but electricity would be requires for office use.

12.1.1.3 Offices

No permanent structures would be constructed. pre-fabricated cubicles would be placed on site.

12.1.1.4 Waste

No industrial waste would be generated. The maintenance of all vehicle and / or mining equipment would be done at a demarcated area within the mining area. Drip-trays would be used to catch oil and lubricants in the case of emergency breakdowns. Oil spill kits would be available and on standby and Bay Wash would be constructed.

Minimal general waste would be generated. Waste would be securely stored in weather and scavenger proof containers in a demarcated area within the mine boundaries. It would be removed by the Mine personnel on a regular basis and disposed of at a registered Municipal waste disposal site

12.1.1.5 Water

Water usage process during the mining process would be very minimal. Dust generation due to the mining activities would be minimal as well. Water required for wetting of roads for dust suppression, if necessary, would be sourced and carted from the local municipality. Likewise,

potable water would be carted to the mine and stored in suitable containers for human consumption.

12.1.1.6 Sewage

Septic tank ablution facilities will be provided and maintained. The contents will be discarded on a regular basis at the existing bio-digester septic tank and soak-away

12.1.2 MINING ACTIVITIES

The following provides a description of construction - , operational - and decommissioning phases:

a) Construction Phase

Very little needs to happen for site establishment and the total mine development should be completed within three month of starting as fence and gate already exist. The construction phase entails:

- clearing of plants (very minimal) and stripping of top soil for stock piling, covering and marking.
- Installing sign boards to prevent unauthorised access.
- Placing of mining machineries, movable offices .
- Installation of septic tank for ablution
- Installation of diesel tank for storage of diesel
- Installation of electricity for office use

b) Operational Phase

Mining will take place in accordance with the mine plan. See ANNEXURE A: Regulation 2(2) Plan. Mining will take place on the proposed site for approximately 30 years. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Mining will only be conducted during daylight and nightshifts(if need arises) Monday to Friday, but during extraordinary circumstances of high production rates, and/or changing market requirements , the loading & hauling of material could be conducted from 06h00 to 22h00 Mondays to Saturdays.

- **Excavating , Loading & Hauling**

Excavation and loading of materials will take place with a hydraulic excavator placing the material directly into a dump truck for transport to processing plant.

- **Screening**

Doringberg Gips will have a self-propelled mobile screening plant. The material will be tipped into the feeder bin by means of the Front End Loader.

- **Dispatch from site**

The screened materials will be loaded onto trucks and transported to various customers in the area using the same front end loader as the one transporting the raw material to the screening plant.

c) Decommissioning Phase

At present, the closure objective being considered for the mine area is to rehabilitate the affected area for future utilisation as grazing land. The existing undulated topography will be used to blend the embankments in. It is expected that the pit would flood naturally over a period of time due to groundwater seepage.

Mining will be undertaken in a phased manner to allow rehabilitation concurrently with mining operations. The embankments will be blasted to ensure a safe slope stability and the highwalls of the pit will be barricaded off to prevent any accidental entrance to the pit. Indigenous plant species will be planted in line with the closure objectives. Alien vegetation will be actively controlled during the mining and rehabilitation phase and until 90% of the natural vegetation cover is achieved.

All machinery and equipment will be removed from site.

13. APPROACH TO EIA

The EIA identifies the environmental impacts of a proposed development and assists in ensuring that a project will be environmentally acceptable and integrated into the surrounding environment in a sustainable way. The EIA for this project complies with the NEMA (as amended) and the NEMA EIA Regulations (2014) of the DEA :

The following guiding principles of an EIA and its methodology was applied in compiling this EIA Report :

- Description of the existing environment and identification and description of potential environmental, social and cultural impacts.
- Consultation with Interested and Affected Parties
 - Property owners.
 - Identified interested and affected parties.
 - Surrounding landowners.
 - Mines in the vicinity.

14. GUIDING PRINCIPLES FOR AN EIA

The EIA must take an open participatory approach throughout. This means that there should be no hidden agendas, no restrictions on the information collected during the process and an open-door policy by the applicant.

Technical information must be communicated to stakeholders in a way that is understood by them and that enables them to meaningfully comment on the project. There should be ongoing consultation with interested and affected parties representing all walks of life. Sufficient time for comment must be allowed. The opportunity for comment should be announced on an on-going basis. There should be opportunities for input by specialists and members of the public. Their contributions and issues should be considered when technical specialist studies are conducted and when decisions are made. An EIA process comprises of 4 phases, which are set out and described in Figure below. Each phase consists of its own objectives and timeframes as set out in the NEMA.

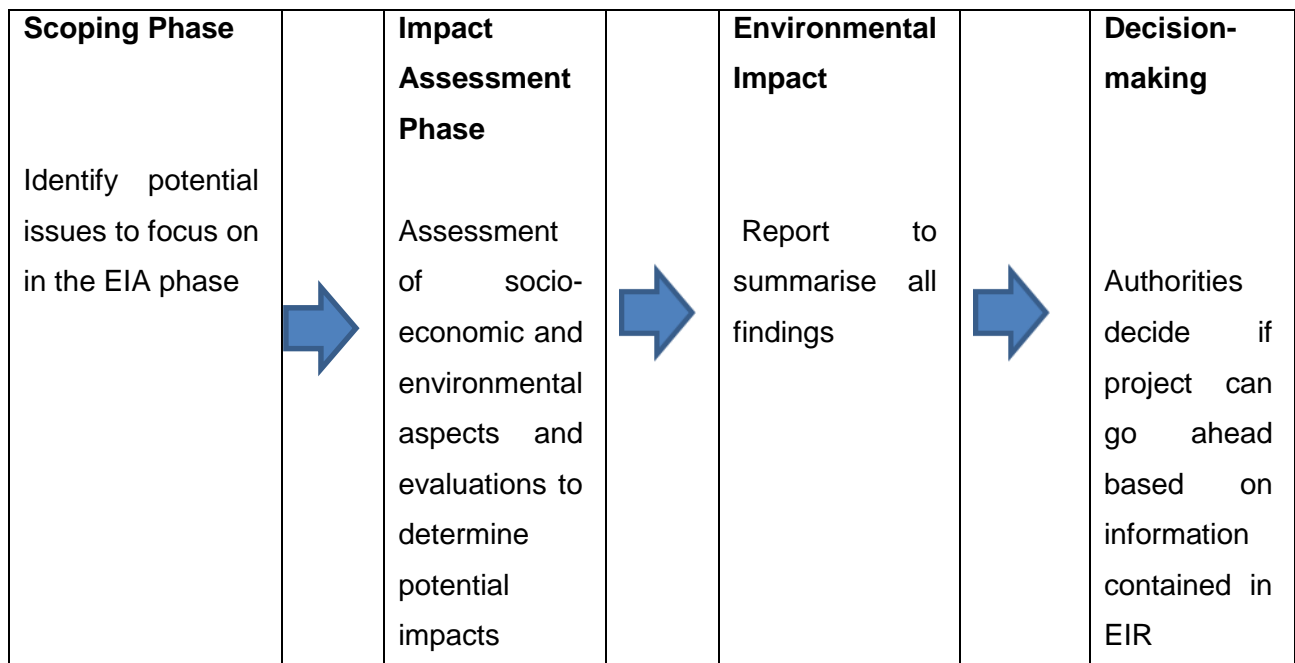


Figure 7 : The four project specific phases of an EIA.

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The figure above shows the various phases of an Environmental Impact Assessment. This Application is in its EIA Phase, during which interested and affected parties comment on the proposed project. These comments once received will be presented in the Comment and Response Report, appended to the Final EIA Report.

14.1 IDENTIFICATION OF POTENTIAL IMPACTS

The majority of the impacts to the environment are localised and associated with the area of disturbance. The environmental impacts associated with the mining operation have been assessed according to the guidelines provided by the NEMA and MPRDA. The following table lists the potential impacts applicable to each of the afore said main activities.

Description of Impact	Development	Production	Closure
<u>Geology:</u> Extraction of the mineral	Applicable	Applicable	N/A
<u>Topography:</u> Change in landforms	Applicable	Applicable	N/A
<u>Soils:</u> Loss of soil fertility	Applicable	Applicable	N/A
Increase in soil erosion	Applicable	Applicable	N/A
<u>Stockpiling</u>			
<u>Land capability:</u> Reduction in the agricultural potential of the area (cultivation).	N/A	N/A	N/A
Reduction in the agricultural potential of the area (grazing)	Applicable	Applicable	N/A
<u>Land use:</u> Constraint on future land use options as a consequence of mining operations.	N/A	N/A	N/A
<u>Flora:</u> Loss of indigenous vegetation cover	N/A	N/A	N/A
Loss of Red Data, protected or sensitive flora species	N/A	N/A	N/A
Removal of alien species	N/A	N/A	N/A
<u>Fauna:</u> Loss of habitat	Applicable	N/A	N/A

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Description of Impact	Development	Production	Closure
Loss of Red Data, protected - or sensitive fauna species	N/A	N/A	N/A
<u>Surface water resources:</u> Dewatering / Decanting of the aquifer	N/A	N/A	N/A
Contamination of surface water through spillage of diesel or hydrocarbon chemicals.	N/A	N/A	N/A
Contamination of surface water through waste / grey water	N/A	N/A	N/A
Contamination of surface water as a result of inappropriate management of waste	N/A	N/A	N/A
<u>Groundwater resources:</u> Potential increase in recharge to the lower aquifer due to excavations	N/A	N/A	N/A
Potential contamination of groundwater from poor quality leachate	N/A	N/A	N/A
Dewatering of the aquifers	N/A	N/A	N/A
Contamination of the groundwater through waste / grey water	N/A	N/A	N/A
Hydrocarbon contamination during mining operations	Applicable	Applicable	N/A
<u>Air quality:</u> Increase in dust emissions	Applicable	Applicable	N/A
Increase in gaseous emissions	Applicable	Applicable	N/A
<u>Noise:</u> Increase in ambient noise levels in the surrounding areas	Applicable	Applicable	N/A
<u>Archaeological, cultural and sites:</u> Loss of sites of archaeological, cultural or historical importance	N/A	Applicable	N/A
<u>Socio-economic:</u> Increase in employment / financial status of the local communities.	Applicable	Applicable	N/A
Benefits to the local economy	Applicable	Applicable	N/A

Description of Impact	Development	Production	Closure
Hazards posed to the local inhabitants as a result of increased traffic	Applicable	Applicable	N/A

14.2 POTENTIAL CUMULATIVE IMPACTS

A cumulative impact is considered a regional impact, rather than a local site specific impact. Cumulative impacts for the mining of the minerals will include a change of the soil composition that can create a change on the flora species, and consequently a change of the habitat available for faunal species. This disturbance will compromise ecosystem functioning. While the vegetation has already been transformed to some extent due to human activities, the loss of vegetation may lead to increased vulnerability and further damage of the habitat. Due to the negligible small mining area compared to the greater area where the vegetation type is found, these soil impacts are expected to be of a **low significance**, and can be mitigated on site by formal management actions.

14.3 POTENTIAL IMPACT ON RESOURCES

As there are no known sites of archaeological interest in the area, there should not be any impact upon cultural heritage.

14.4 IMPACTS ON COMMUNITIES , INDIVIDUALS OR COMPETING LAND USES

Considering the land is already degraded previous human activities, in fact, the mining of the minerals and rehabilitation of the land improves the land value for the land owner and prepares the land for grazing use thereafter.

14.5 CONFIRMATION OF SPECIALIST REPORT APPENDED

Not applicable.

15. SUMMARY OF THE ASSESSMENT

Regulation 52 (2)(c): summary of the assessment of the significance of the potential impacts and the proposed mitigation measures to minimise adverse impacts.

15.1 ASSESSMENT CRITERIA

The ranking of impacts / determination of significance is estimated consider the factors / criteria listed in the legislation. The definitions of each are provided below :

- **Extent of impact** : A spatial indication of the area impacted (i.e., how far from activity the impact is realised).
- **Duration of impact** : A temporal indication of how long the effects of the impact will persist, assuming the activity creating the impact ceases. For example, the impact of noise is short lived (impact ceases when activity ceases) whereas the impact of removing topsoil exists for a much longer period of time.
- **Probability of impact occurring** : An estimated indication of the potential for an impact to occur.
- **Intensity of the impact** : The magnitude of the impact in relation to the sensitivity of the receiving environment, taking into consideration the degree to which the impact may cause irreplaceable loss of resources.
- **Significance of an impact** : Considering the factors defined above, Significance is an indication of how serious a negative impact is anticipated to be and how beneficial a positive impact may be.

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Category	Category	Rating	Description
Extent	Site only	1	Project site
	Local	2	Effects immediate surrounding areas
	Municipal	3	Effects municipal area
	Regional	4	Effects regional area
	National	5	Effects R.S.A.
Duration	Very short term	1	Less than 1 year
	Short term	2	1 to 5 years
	Medium term	3	5 to 20 years
	Long term	4	Longer than 20 years
	Permanent	5	Permanent
Probability / Likelihood	Improbable	0	Less than 30% chance
	Possible	1	30 to 50% chance
	Probable	2	50 to 75% chance
	Definite	3	Greater than 75% chance
Intensity	Very low	1	No effect on natural, cultural or social conditions
	Low	2	Marginal effect on natural, cultural or social conditions
	Moderate	3	Modification of natural, cultural or social conditions
	High	4	Temporary threat to existence of natural, cultural or social conditions
	Very high	5	Permanent Threat to existence of natural, cultural or social conditions
Significance	Very low	0 to 24	The Significance is a measurement of the product of the individual ratings of the Extent, Duration, Probability and Intensity.
	Low	25 to 47	
	Medium	48 to 94	
	High	95 to 188	
	Very high	189 to 375	

15.2 IMPACT ASSESSMENT

Each Impact is evaluated using the criteria listed above and mitigating management measures are assigned to each impact in the table below :

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Table 1. Management Measures for Environmental Impacts identified.

DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
<u>Geology:</u>							
Extraction of mineral(s)	All the material within the permitted mine area will be removed during mining.	Site only (1)	Permanent (5)	Definite (3)	Low (2)	Low (30)	Mitigation of this impact is not possible.
<u>Topography:</u>							
Change in topography	As the topography is fairly flat ~, the mining process will alter the topography of the land.	Site only (1)	Permanent (5)	Definite (3)	Low (2)	Low (30)	<ul style="list-style-type: none"> • During mining, work will be carried out in such a way that slopes are not dangerously steep. • The general character of the area will be consistent with the character of the surrounding area. No high or dangerously steep slopes will be created.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
							<ul style="list-style-type: none"> Slopes will be profiled to a 1:3 gradient to ensure soil stability. Slope stability will be monitored continually.
Soils:							
Loss of soil fertility	soils in this area range from shallow to deep and are both apedal and freely drained.	Site only (1)	Medium term (3)	Probable (2)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> The mining operation will not influence the cultivation potential as the fertile topsoil stockpiled for rehabilitation purposes will not be tempered with .
Increase in soil erosion	Soils are considered shallow and rocky..	Site only (1)	Short term (2)	Probable (2)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> Steep slopes must be battered and stabilised. Wind erosion must be monitored. Road surfaces must be stabilised and

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
							<p style="text-align: right;">maintained during the mining operations.</p> <ul style="list-style-type: none"> • All vehicles must remain within the designated roads to prevent soil erosion.
<u>Land capability:</u>							
Reduction in the agricultural potential of the area.	The fertile topsoil is stockpiled by previous mining to be returned for rehabilitation purposes	Site only (1)	Long term (4)	Possible (1)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> • The mining operation will not have latent impacts upon the agriculture potential. It would be limited to a localised mining area only. The fertile topsoil is stockpiled by previous mining to be returned for rehabilitation purposes.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
Flora:							
Loss of indigenous vegetation cover	three vegetation units occur within the proposed project area namely Bushmanland Basin Shrubland, Bushmanland Vloere and Northern Upper Karoo. All these vegetation units are classified as Least Threatened .	Site only (1)	Long term (4)	Very low (0 - 24)	Very low (0 - 24)	Low (25 - 47)	<ul style="list-style-type: none"> • Top soil must be kept safe so it can be used for rehabilitation to re-establish indigenous vegetation • indigenous vegetation would be re-introduced through rehabilitation
Loss of Red Data, protected or sensitive flora species	No Red Data Book species occurs on the mining site.	Site only (1)	Long term (4)	Definite (3)	Low (25-47)	Low (25 - 47)	<ul style="list-style-type: none"> • Top soil must be kept safe so it can be used for rehabilitation to re-establish indigenous vegetation .

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
Removal of alien species	There are no alien species on site but further disturbance of the area would create opportunities for infestation by alien plant species (as these are generally pioneer species).	Site only (1)	Medium term (3)	Possible (1)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> The mining area must be monitored for the occurrence of alien plant species on regular basis and such alien species must be appropriately removed. Rehabilitated areas must be monitored on a continuous basis for the occurrence of alien plant species until 90% of the natural vegetation cover is established.
<u>Fauna:</u>							
Loss of habitat	Habitat loss will occur within the mine area.	Site only (1)	Medium term (3)	Possible (1)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> Implement concurrent rehabilitation. Apply a buffer zone of 100m around wetlands.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
							<ul style="list-style-type: none"> • Removal of exotic vegetation. • Disturbance should be limited to minimum mining footprint. Indigenous plant species must be planted during rehabilitation to attract indigenous fauna back to the area.
Loss of Red Data, protected - or sensitive fauna species	There are Red Data ,Protected or sensitive fauna on site.	Site only (1)	Medium term (3)	Possible (1)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> • No faunal species are allowed to be collected, hunted or killed on the site. • Illegal poaching and/or hunting must be addressed through an ENVIRONMENTAL AWARENESS PLAN.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
<u>Surface water resources:</u>							
Contamination of surface water through spillage of diesel or hydrocarbon chemicals.	This impact may occur as there are manmade wetland and surface water sources in the close proximity of the proposed mine	Site only (1)	Very short term (1)	Possible (1)	Very Low (1)	Very low (0 - 24)	<ul style="list-style-type: none"> • Wetlands are considered no-go area and a 100m buffer should be maintained. No disposal of waste water will be allowed in the nearby streams. • diesel / hydrocarbons stored onsite must be managed according to DWA&F Minimum Requirements for the Handling and Storage and Disposal of Hazardous Waste.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
							<ul style="list-style-type: none"> No significant impacts on the water courses are expected to occur. Drip trays must be used during refuelling of machineries on site
Contamination of surface water through waste / grey water	Wastewater generated on site has the potential to contaminate surface water. The mining operation does not use water in its process and no waste water will be produced.	Local (2)	Long term (4)	Probable (2)	High (4)	Very low (0 - 24)	<ul style="list-style-type: none"> Wetlands are considered no-go area and a 100m buffer should be maintained. The mining operation does not utilise water in its process, hence no wastewater would be generated on site. No significant impacts on the water courses are expected to occur.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
Contamination of surface water as a result of inappropriate management of waste	Inappropriate management of waste on site has the potential to impact on surface water resources.	Local (2)	Long term (4)	Probable (2)	Low (2)	Low (25 - 47)	<p>The following WASTE MANAGEMENT PRINCIPLES must be implemented:</p> <ul style="list-style-type: none"> • Waste must be stored, transported and disposed of at a registered waste disposal site. • Waste handling/ storage areas must be restricted to a designated waste handling area. • Waste bins must be weather and scavenger proof and securely placed to avoid waste overflows.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
<u>Groundwater resources:</u>							
Dewatering / Decanting of the aquifer	The mining operation is not expected to have any significant impacts on the aquifers.	Site only (1)	Medium term (3)	Possible (1)	Low (2)	Very Low (24)	The mining operation is not expected to have any significant impacts on the aquifers.
Potential increase in recharge to the lower aquifer due to excavations	As a result of the mining activities, topsoil and minerals will be removed. This will however, not lead to a significant increase in recharge to the aquifer from direct rainfall into the area.	Site only (1)	Medium term (3)	Possible (1)	Very low (1)	Very low (0 - 24)	The mining operations is not expected to have any significant impacts on the aquifers.
Potential contamination of groundwater from poor quality leachate	The mining process does not utilise water and no leachate is expected to occur.	Site only (1)	Medium term (3)	Possible (1)	Very low (1)	Very low (0 - 24)	The mining operations is not expected to have any significant impacts on the aquifers.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
Hydrocarbon contamination during mining operations	Diesel and oil spillages might occur in the event of a burst hydraulic pipe / hose.	Site only (1)	Short term (2)	Possible (1)	Low (2)	Very low (0 - 24)	<p>Appropriate spill response kits and plans must be in place to react appropriately and timeously in the case of an accidental spill.</p> <p>Wall/floor on the area around Diesel tank/pump must be bounded.</p>
<u>Air Quality:</u>							
Increase in dust emissions	An increase in dust emission is likely to result from mining activities and from increased vehicular traffic.	Site only (1)	Medium term (3)	Probable (2)	Very low (1)	Very low (0 - 24)	<ul style="list-style-type: none"> • Dust from gravel roads can be reduced through the use of appropriate dust suppression measures, such as wetting of the roads. • Dust fallout must be monitored by an independent consultant, in compliance with the

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
							<p>Mine Health and Safety Act.</p> <ul style="list-style-type: none"> • Work must cease during extreme windy conditions when excessive dust is liberated
Increase in gaseous emissions	Increased gaseous emissions may result at a local level from vehicles operating at the site and from those moving to and from the site.	Local (2)	Short term (2)	Definite (3)	Low (2)	Very low (0 - 24)	Vehicles must be maintained in a road worthy condition so as to limit the emissions to air.
<u>Noise:</u>							
Increase in ambient noise levels in the surrounding areas	Noise is generated from a number of activities being undertaken as part at the mining operation.	Site only (1)	Medium term (3)	Probable (2)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> • Equipment operating on site must be maintained in a workable condition in order to minimise noise emissions.

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
	For the duration of the mining operations, sources of noise resulting from activities at the quarry include: 1. Loading & hauling and Screening. Vehicle transport of final product to customers						
Visual impacts	This mining area is positioned in a remote setting and flat topography and therefore the visual impact would be limited. This mine would therefore pose a visual impact as a	Local (2)	Short term (2)	Definite (3)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> • Unnecessary lighting must be avoided • Machineries on must be neatly placed

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
	results excavated areas, lights, stock piles and machineries on site						
<u>Archaeological, cultural and sites:</u>							
Loss of sites of archaeological, cultural or historical importance.	Mining could destroy subsurface sites unbeknown. In this case the area is highly disturbed and it is therefore unlikely for heritage aspects to occur	Site only (1)	Permanent (5)	Definite (3)	Medium (3)	Low (25 - 47)	<ul style="list-style-type: none"> Mining must continually monitor the mine workings for any encountering of archaeological artefacts
Post mitigation		Site only (1)	Short term (2)	Possible (1)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> Removal of artefacts with significant conservation prior to mining

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
<u>Socio-economic:</u>							
Increase in employment / financial status of the local communities.	Permanent employment of approximately 10 people may occur, increasing their financial status and social upliftment in the process.	POSITIVE	POSITIVE	POSITIVE	POSITIVE	POSITIVE	No mitigation required
Benefits to the local economy	There is a demand for Gypsum and Limestone in the Prieska area. The mine will supply for agricultural sector in the area, which will ensure lower transport costs to the customers. This is considered to have a	POSITIVE	POSITIVE	POSITIVE	POSITIVE	POSITIVE	No mitigation required

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DESCRIPTION OF IMPACT	NATURE	EXTENT	DURATION	PROBABILITY/ LIKELIHOOD	INTENSITY	SIGNIFICANCE	MITIGATION/ MANAGEMENT MEASURES
	POSITIVE impact on the local economy.						
Safety and security for local inhabitants	Upon mine closure the mine excavations could pose a safety hazard to local inhabitants and animals.	Site only (1)	Long term (4)	Possible (1)	Low (2)	Very low (0 - 24)	<ul style="list-style-type: none"> • Rehabilitation must ensure that no dangerous excavations are left in an unsafe condition. • Entry and exist to the mining area must be controlled. • No fires will be allowed on the mine area. • The required heavy vehicle signs must be erected at the access to the mining area as per the Road Traffic Act in order to ensure road safety.

15.3 Specific environmental features that may require protection, remediation, management or avoidance

Specific environmental features identified on site which may require protection, remediation, management or avoidance includes the following identified sensitive receptors:

- Wetlands, specifically the endorheic pans; and
- Existing infrastructure such as the homestead, windmills, dams and concrete reservoirs.

Wetland systems are highly sensitive ecosystems. Each wetland system has a unique geomorphic and hydrological system. Both of which are easily affected by natural and anthropogenic influences. Wetlands also provide a unique habitat whereby large amounts of biodiversity are sustained either year round or seasonally depending if the wetland is permanent or temporary. Due to the intrusive nature of mining, a 100m buffer zone must be created around any water course, this includes the endorheic pans located on site as per the requirements of GN704 of the National Water Act, 36 of 1998.

15.4 Socio-Economic Conditions

Potential impacts on the existing socio-economic environment include:

- Interference with existing land uses such as sheep and cattle farming;
- Safety and security risks to landowners and lawful occupiers due to required access to properties by the applicant;
- Noise nuisance from mining techniques most notably digging, loading and hauling activities.
- Dust nuisance from mining techniques most notably loading and hauling; and
- Damage to existing infrastructure by the mining operation.

16. PLANNED MONITORING

The following impacts would require monitoring on a scheduled basis:

(a) Air quality monitoring (Dust fall-out)

Description	Fallout dust buckets will be installed in the 4 directions away from the mine area, but within a 2km radius ,but not closer than 150m from the mining area, as soon as this mining authorisation is granted.
Frequency	Quarterly
Standard	The results of the dust fall-out would be analysed at an accredited laboratory against SANS 1929: 2005
Responsibility	Mine Manager must consult with an Independent Consultant.
Report to	DMR

The results of the dust fall-out would be analysed against SANS 1929: 2005 at an accredited laboratory and reported to the Mine Manager for management action.

(b) Noise monitoring

Ambient noise levels would be measured by an independent consultant before the mining operation commence to establish the base level conditions prior to the mining venture. These tests would be repeated on a quarterly basis and / or when complaints have been received. The results would be reported to the Mine Manager for management action.

(c) Water quality monitoring

Water monitoring will be implemented on any water body that the mine may impact on. The parameters to be monitored will be selected, based on the elements within the operation, and / or DWAF requirements. Samples for chemical analysis will be taken in clean bottles, and for biological analysis will be taken in sterile bottles, and sent to an accredited laboratory for analysis. The results thereof would be reported to the Mine Manager for management action.

(d) EMP Performance Assessments

This EMP would be assessed on an **annual** basis for compliance from date of issuing the mining right. The EMP performance assessment would include assessment of the scheduled monitoring results. A performance assessment to the EMP will be conducted by a suitably qualified independent party at least every two years. This performance assessment will be available to the DMR and other regulatory authorities for their inspection, as required. Should the quarry life be extended and the permit renewed, then additional performance assessments will be undertaken every two years.

17. CUMULATIVE IMPACTS

There are no other cumulative impacts.

18. MITIGATION MEASURES

See Table 1 : EIA and mitigation measures for the mining activities at Prieska Gypsum Mine.

19. CRITICAL ACTIVITIES

See Table 1 : EIA and mitigation measures for the mining activities at Prieska Gypsum Mine that have significant impacts and require mitigation.

20. TECHNICAL OR MANAGEMENT OPTIONS

Concomitant list of appropriate technical or management options. Chosen to modify, remedy, control or stop any action, activity, or process which will cause significant impacts on the environment, socio-economic conditions and historical and cultural aspects as identified. Attach detail of each technical or management option as appendices.

See Table 1 : EIA and mitigation measures for the mining activities at Prieska Gypsum Mine

21. IMPACTS AFTER MITIGATION

See Table 1 : EIA and mitigation measures for the mining activities at Prieska Gypsum Mine

22. FINANCIAL PROVISION

22.1 PLANS FOR QUANTUM CALCULATION PURPOSES

Map indicating the location and aerial extent of the aforesaid main mining actions, activities, processes, for each of the construction operational and closure phases of the operation.

See the map contemplated in ANNEXURE A: Regulation 2(2) Plan loaded electronically onto the DMR's SAMRAD system.

22.2 ALIGNMENT OF REHABILITATION WITH CLOSURE OBJECTIVES

The closure objectives being considered at present is for the area to be returned its previous land use status.

The rehabilitated area must be monitored for 18 months after rehabilitation for the following items:

- Depth of soil after placement
- Soil erosion after rainfall events
- Slippage of soil profile
- Growth of natural vegetation over time.
- Invasive alien species infestation.

The financiers of the project is Njati Holdings (Pty) Ltd (formerly known as Chloorkop) and financial provision in the form of a bank guarantee and to the amount of R 253 000.00 will be made by the financier *in lieu* of the rehabilitation of the mine area. The environment affected

by the mining operations shall be rehabilitated on an ongoing basis as an operational expense by Doringberg Gips (Pty) Ltd and as far as is practicable, to its predetermined and agreed end use.

22.3 QUANTUM CALCULATIONS

The guideline to determine the pecuniary value for rehabilitation is used to calculate the amount needed for rehabilitation. This is shown in summary in the table below :

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Table 2. Financial Provision financial provision required to manage and rehabilitate Prieska Gypsum Mine (2016).

Financial provision for rehabilitation at Doringberg Gips as at May 2016								
Item	Task	Units	Quantity	April 2004 Master Unit Rate	Present Master Unit Rate	Multiplication Factor	Weighting Factors	Amount
1	Dismantling of processing plant and related structures, including overland conveyors & power lines.	m ³	0	R 6.82	R 10.93	1.000	1.050	R 0.00
2(A)	Demolition of steel buildings and structures	m ²	0	R 95.00	R 152.19	1.000	1.050	R 0.00
2(B)	Demolition of reinforced concrete buildings and structures	m ²	0	R 140.00	R 224.28	1.000	1.050	R 0.00
3	Rehabilitation of Access Roads	m ²	1200	R 17.00	R 27.23	1.000	1.050	R 34 314.84
4(A)	Demolition & rehabilitation of electrified railway lines	m ²	0	R 165.00	R 264.33	1.000	1.050	R 0.00
4(B)	Demolition & rehabilitation of non-electrified railway lines	m ²	0	R 90.00	R 144.18	1.000	1.050	R 0.00
5	Demolition of housing facilities	m ²	0	R 190.00	R 304.38	1.000	1.050	R 0.00
6	Opencast Rehabilitation including final voids & ramps	ha.	16.0	R 99 600.00	R 159 559.20	0.040	1.050	R 107 223.78
7	Sealing off of shafts, adits and inclines	m ³	0	R 51.00	R 81.70	1.000	1.050	R 0.00
8(A)	Rehabilitation of overburden & spoils	ha.	0	R 66 400.00	R 106 372.80	1.000	1.050	R 0.00
8(B)	Rehabilitation of processing waste deposits and evaporation ponds (basic, salt-producing waste)	ha.	0.0	R 82 700.00	R 132 485.40	1.000	1.050	R 0.00
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (acidic, metal-rich waste)	ha.	0.0	R 240 200.00	R 384 800.40	0.510	1.050	R 0.00
9	Rehabilitation of Subsided areas	ha.	0.0	R 55 600.00	R 89 071.20	1.000	1.050	R 0.00
10	General surface rehabilitation, including grassing of all denuded areas	ha.	0.0	R 52 600.00	R 84 265.20	1.000	1.050	R 0.00
11	River Diversions	ha.	0.0	R 52 600.00	R 84 265.20	1.000	1.050	R 0.00
12	Fencing	m	200	R 60.00	R 96.12	1.000	1.050	R 20 185.20
13	Water Management	ha.	0.0	R 20 000.00	R 32 040.00	0.170	1.050	R 0.00
14	2 to 3 Years of maintenance & aftercare	ha.	1.0	R 7 000.00	R 11 214.00	1.000	1.050	R 11 774.70
15(A)	Specialist Studies for closure	Sum	0	R 40 000.00	R 64 080.00	1.000	1.050	R 0.00
15(B,C)	Specialist Studies for closure	Sum	1	R 5 000.00	R 8 010.00	1.000	1.050	R 8 410.50
SUB-TOTAL 1 FOR MINE CLOSURE								R 181 909.02
a	Preliminary & General							R 21 829.08
b	Contingencies							R 18 190.90
SUB-TOTAL 2 FOR MINE CLOSURE								R 221 929.00
c	14 % Value Added Tax							R 31 070.06
TOTAL FINANCIAL PROVISION FOR REHABILITATION								R 252 999.06

23. ENVIRONMENTAL AWARENESS PROGRAMME

It is important to make the employees of Doringberg Gips (Pty) Ltd aware of the potential environmental impacts associated with their roles and how they can be mitigated or minimised through the implementation of the correct management procedures. This training, if effective, can drastically reduce the potential of occurrence of environmental negative incidents.

Responsibility: The Mine Manager is responsible for ensuring that the environmental awareness training is implemented by all employees and sub-contractors on the site.

Environmental awareness training needs should be identified before the project commences, based on the available and existing capacity of site and project personnel (including the applicant and Contractors) to undertake the required EMP management actions and monitoring activities. It is vital that all personnel are adequately trained to perform their designated tasks to an acceptable standard. In addition to these parties, general environmental awareness must be fostered among the general workforce to encourage the implementation of environmentally sound practices.

This ensures that environmental accidents are minimized and environmental compliance maximized. Environmental awareness could be fostered by induction course for all workers on site, before commencing work on site, as well as during regular “toolbox talks”. Workers should also be alerted to particular environmental concerns associated with their tasks for the area/habitat in which they are working. Courses must be given by suitably qualified personnel and in a language and medium understood by workers/employees. The environmental awareness training programme will include the following:

Environmental awareness training will focus on the following specific aspects and be undertaken monthly in “Tool box talk “topics:

- Protected – and exotic vegetation
- Fauna : All employees will be informed that poaching is illegal and taught to recognise snares which are to be removed if and when found.
- Hazardous Chemicals : All employees will be trained on the handling, use and disposal of the chemicals / hazardous substances used, and also the actions and reactions in the event of an accident.

- Soil contamination/pollution and remediation : All employees will be trained how to clean and dispose of accidental spillages.
- Water contamination/pollution and remediation
- Dust management;
- Noise nuisance; and
- EMP management options and application.

24. SPECIALIST REPORTS

Any findings and recommendations from specialist reports would be captured in the Final EIA Report.

25. CLOSURE AND ENVIRONMENTAL OBJECTIVES

Regulation 52 (2) (f) : closure and environmental objectives.

25.1 ENVIRONMENTAL POLICY AND OBJECTIVES

The company's Environmental Policy and Environmental Objectives are :

- To recognize the need to preserve and protect natural resources.
- To recognize their legal obligations to preserve the environment.
- dedicated to the proposition of maintaining good stewardship over all of its land holdings.

25.2 REHABILITATION PLAN

The closure objectives being considered at present is for the area to be used for grazing land purposes as its current land use status.

25.3 CLOSURE OBJECTIVES

The mining right would be valid for a period of up to 30 years. Based on the known mineral reserves in the area, there are enough minerals to continue mining for the full duration of the 30 year period, and as such, no detailed closure plan has been formulated to date. Mine closure will however, be undertaken in accordance with the process as outlined in Regulations 56 to 62 of the MPRDA.

An environmental risk report will accompany the application for closure. A closure plan will be compiled and accompany the application for closure. This closure plan will include :

- A description of the closure objectives and how these relate to the mining operation and its environmental and social setting;

- A plan contemplated in Regulation 2(2) showing the land or area under closure;
- A summary of the regulatory requirements and conditions for closure negotiated and documented in the environmental management plan;
- A summary of the results of the environmental risk report and details of identified residual and latent impacts;
- A summary of the results of rehabilitation undertaken;
- A description of the methods to decommission each mining component and the mitigation or management strategy proposed to avoid, minimise and manage residual or latent impacts;
- Details of any long-term management and maintenance expected;
- Details of financial provision for monitoring, maintenance and post closure management, if required;
- A plan or sketch at an appropriate scale describing the final land use proposal and arrangements for the site;
- A record of interested and affected persons consulted; and
- Technical appendices, if any.

The current objective will be to undertake concurrent rehabilitation for the life of mine, thereby ensuring that as and when mine closure is approached, the outstanding rehabilitation requirements will be limited to those areas that are mined immediately prior to closure.

26. PUBLIC PARTICIPATION

Regulation 52 (2) (g): Record of the public participation and the results thereof. Public participation forms part of this report.

26.1 COMMUNITY INVOLVEMENT

The proposed mining activities were discussed with the land owner and neighbouring land users. A copy of the BID was supplied to each for them to comment upon. Meetings were held with the IAP's and minutes thereof were kept. Comments from IAPs received are attached. The window for engaging with IAPs has not closed and the Applicant continues to engage with IAPs.

26.2 IDENTIFICATION OF IAPs

All identified IAPs including state departments were notified with and BID sent to them to make comment.

No land claims are involved in the proposed mine area

26.3 ENGAGEMENT PROCESS

The following steps have been followed in the public participation process to date :

- Advertisement was placed in English newspaper namely : EXPRESS NORTHERN CAPE , on 03 June 2016, which notified the public of the proposed activity. See ANNEXURE B : ADVERTISEMENTS PLACED IN “: EXPRESS NORTHERN CAPE”. All Interested and Affected Parties were invited to make comments and / or raise concerns regarding the application.
 - A meetings was held with the land owner and local municipality.
 - Bid document was sent to all relevant state departments with invite to send comments
 - Notice boards where erected on site and community service areas (see attached proof)

26.4 INFORMATION PROVIDED

A Background Information Document (BID) had been prepared and sent to stakeholders and adjacent land owners as accompanying information for them to comment upon. The last page of such BID document contained a reply form for them to comment upon to be sent back to the applicant's consultant.

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26.5 LIST OF REGISTERED IAP's

The following Interested and Affected Parties were consulted during the Public Participation Process :

No.	Surname and initials	Relation	Contacts and address
1	Willem Petrus Smit	Land owner	Cell :083 457 1860 Portion 1, Farm Bitter Put 113 Posbus 222 Prieska
2	FP Ekkerd	Adjacent land owner	053 353 5300
3	HJ Van Wyk	Adjacent land owner	072 477 6223
4	Mr. P. Swarts T Mthombeni	Department of Environmenta	pswarts@ncpg.gov.za tmthombeni@ncpg.gov.za
5	Wester Huyse	SKA	westerhuyse@ska.ac.za Tell: 021 506 7300
6	L. Sehularo	Department of Rural Developments	lsehularo@ruraldevelopment.gov.za
7	S. Shibambu S Cloete	Department of water and Sanitation	shibambus@dws.gov.za cloetes@dws.gov.za
8	N Corns	Department of Roads and Public Works	NCorns@ncpg.gov.za
9	K Smuts	South African Heritage Resources	021 462 4502 info@sahra.org.za

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No.	Surname and initials	Relation	Contacts and address
		Agency (SAHRA) - National	ksmuts@sahra.org.za
10	L Motsisi	ESKOM	motsisiL@eskom.co.za
11	Mandisi Nakase Christopher	Business Chamber In Prieska	0730968188 mcnakase@gmail.com
12	Mr. Piet Papier	Siyathemba Municipal Major	053 353 5345 major@siyathemba.gov.za

26.6 BASE LEVEL ENVIRONMENT AS VIEWED BY IAPs

Comments received to date from consulted parties supported the described views regarding the existing cultural, socio-economic or biophysical environment.

26.7 IMPACTS AS VIEWED BY IAPs

Impacts as viewed by consulted parties on how their existing cultural, socio-economic or biophysical environment potentially will be impacted on by the proposed mining operation are being addressed. Refer to APPENDIX C for all comments made by IAPs.

26.8 OTHER CONCERNS

There are no other concerns raised by IAPs.

26.9 APPENDED CORRESPONDENCE RECORDS

Refer to APPENDIX C for all correspondence with respective IAPs. The communication channels remain open between the applicant and the IAPs.

26.10 OBJECTIONS RECEIVED

No objections received to date.

26.11 DESCRIPTION OF SOLUTIONS TO RISKS

See Table 1 for mitigations measures for each impact identified.

27. ENVIRONMENTAL AWARENESS PLAN

Section 39 (3)(c) : develop an environmental awareness plan describing the manner in which the applicant intends to inform his / her employees of any environmental risks which may result from their work and the manner in which the risk must be dealt with in order to avoid pollution or the degradation of the environment

27.1 EMPLOYEE COMMUNICATION PROCESS

The appointed Mine Manger is the responsible person to ensure that this awareness plan is conveyed to each person entering the mine. One of the most important overall techniques of conveying the greater message of environmental awareness is the “multiplier-effect” in which people who are taught transmit what they learn to others. This means that messages are

spread further and faster. For example, educating labourers helps to get information to their friends and family and others in the surrounding community.

All employees will undergo induction and environmental training when they are employed by the mine. All employees will repeat the course at least once every two years. Similarly, as, and when, the mine makes use of contractors to conduct mining activities, this awareness plan forms part of the tender and contract documents that the contractor has to abide by. The aim of this is to convey the message of environmental awareness to all people entering the mine. This is doubly useful, because it is important to provide local people with the skills and information needed to contribute fully to the greater area's conservation plans.

It is important to remember that the environmental awareness programme is a living document and should be reviewed every two years to ensure that relevant environmental concerns and impacts are discussed and the potential of such impacts are minimised.

Information regarding environmental awareness needs to be presented in various formats to maximise the impact of the message. Useful materials that will be used, include, but are not limited to:

- Toolbox talks
- Induction sessions
- Brochures, and
- Posters & maps.

In order to make the person conversant with the contents of this environmental awareness plan, the language of the media need to be produced in Afrikaans, English and Setswana. The materials can be used in many different ways, with the eventual decision depending on the audience and the message that need to be conveyed, together with factors such as cost, time and practicality.

28. DESCRIPTION OF SOLUTIONS TO RISKS

28.1 SOIL EROSION

Soil erosion is described as soil particles being moved around due to the impact of rainfall and wind. It is a natural process but in most cases human activity, such as vehicle movement, speeds up the process. Once the soil particles move around it begins to cause gullies, cracks and severe dryness to the soil. Soil erosion will affect vegetation and crops because the soil does not contain enough nutrients or energy to help them growth healthily

Soil erosion prevention begins with soil erosion controlling methods, such as planting vegetation. Plants act as protective shields to the soil lessening the impact of rainfall, wind, and human activities. The plants will also help stabilise the soil and prevent it from becoming prone to soil erosion. Some popular soil erosion prevention plants are: wild flowers, shrubs, small trees and herbs. Plants which spread sideways instead of growing upwards are also great soil erosion prevention plants.

Soil erosion prevention products are available. Soil binders are typically applied to disturbed areas requiring short term temporary protection. Soil binders are a good alternative to mulches in areas where grading activities will soon resume, because soil binders can often be incorporated into the work activities. Soil binders are also suitable for use on stockpiles

28.1.1 FLORA

The World Conservation Union (IUCN) has developed Red Data Book categories based on the need for conservation of species of special concern. The categories are described as follows :

- **Threatened species** are critically endangered, endangered, vulnerable or data deficient.
- **Critically endangered species** are when the best available evidence is that it is considered to be facing an extremely high risk of extinction in the wild.
- **Endangered species** are when the best available evidence is that it is considered to be facing a very high risk of extinction in the wild.
- Vulnerable species are when the best available evidence is that it is considered to be facing a high risk of extinction in the wild.
- **Near threatened species** are when it is close to qualifying for or is likely to qualify for a threatened category in the near future.
- Rare species have small world populations, but are not at present Threatened. They are at risk, because some unexpected threat could easily cause a critical decline.

Protected species are species recognised by law as worthy of conservation. These include the Red Data list species (all species listed above), but also species considered to be worthy of protection because of economic, aesthetic or historical value. These species also contribute to the conservation value of the ecosystem.

28.1.2 ALIEN INVASIVE SPECIES

An invasive species is a species that does not naturally occur in a specific area and whose introduction does or is likely to cause economic or environmental harm or harm to human health.

The person appointed by the Mine Manager must ensure that the mining area, and especially rehabilitated area, are continuously monitored for the occurrence of alien invasive plant species on a continuous basis and that such species are appropriately removed

28.1.3 HAZARDOUS SUBSTANCES

All forms of lubricants, oil, grease and fuel are examples of hydrocarbons. Once these elements are spilt or spread onto the ground, they contaminate the water resources through diffusion. For example five litres of diesel will contaminate 1000 kilolitres of water so that its trace elements could become measurable. The hydrocarbons poison the water quality and alter the pH in many cases. This will lead to numerous negative impacts upon vegetation, habitats and the quality of water resources. Even users of these contaminated water resources some kilometres downstream of the point of spillage could become affected. No Hydrocarbons would be stored on-site. Should hydrocarbons be necessitated to be stored on-site, authorisation should first be obtained from the DMR's Regional Manager. Such an application would be inclusive of a risk assessment ; a design of the storage area and enclosures specifically to combat the risks ; the management and operation of the stored hydrocarbons ; the necessary signage displayed ; and the emergency procedures for handling spillages.

28.1.4 WASTE MANAGEMENT

Waste generated must be reduced and recycled where possible. No solid waste, such as rubber and general refuse, may be burnt or buried at the mine. All solid waste must be placed in drums strategically placed by the person appointed by the Mine Manager. These drums must either have incorporated lids that cannot be separated from the drum, or the drum must be prevented from being filled more than half-way - to prevent the refuse from blown away by winds. This refuse must be removed from site at least once a week, or more frequently when needed, and disposed thereof at a registered dumping site for general refuse. No articles containing hazardous waste, such as oil filters, batteries or containers that housed paint or hydrocarbons, may be disposed of in these drums. They must be removed off-site before the end of the shift and disposed of at a registered hazardous waste disposal dump.

28.1.5 SANITATION

As no full-time employees are stationed at the mine premises, the need for permanent ablution facilities is not required. The appointed person by the Mine Manager shall provide and maintain sufficient and suitable septic tank facilities of a high hygienic standard. This tank must be emptied, serviced and cleaned on a regular basis. According to the regulations of the MH&SA it is therefore

illegal for any person to pollute the workings with faeces or urine, nor wantonly misuse or foul any latrine.

28.1.6 AIR QUALITY

The mining activities would pollute the air with harmful exhaust gasses and dust liberated from the mining production vehicles. The liberation of dust could be windblown to neighbouring areas impacting upon the vegetation and its habitat. The exhaust gasses are negligibly small in concentration and poses no risk to the environment. However, people should not stand close to mining equipment (especially in confined areas) as the concentration could then become harmful. All people required to approach any vehicle, or work in the vicinity of vehicles, are required to wear type FFP-2 dust masks. The person appointed by the Mine Manager must apply dust suppression methods on the roads to combat the liberation of dust whilst the mining activities are in process. Strict speed limits must be adhered to on all roads to limit the amount of dust generated. Alternatively the mining production must temporarily cease during windy conditions



Type FFP-2 dust mask

28.2 ENVIRONMENTAL AWARENESS TRAINING

The main objective is to help promote a better understanding of natural features, ecology, resources, human interactions, culture and history of the area. Visitors and employees will have a more rewarding time at the mine if they are given access to interesting information regarding their environment. Another important objective of the awareness plan is to ensure that all those who enter the mine are aware of the regulations and the reasons why these regulations are necessary. People are more likely to comply with regulations if an effort has been made to explain these beforehand and the reason(s) why they have been introduced.

All visitors, contractors and full-time employees would be required to undergo this Environmental Awareness Training as part of their induction course when entering the mine for the first time.

Follow-up training would to all employees would be rendered upon returning from their annual leave cycle as part of their induction and refresher courses.

All accidental spillages of hydrocarbons (such as a burst hydraulic hose for example) must be treated with an emergency oil spill kit provided by the mine manager. The contaminated soil must be scraped together ; removed from site and disposed of at a registered hazardous waste disposal dump. All employees and contractors would have to be able to apply the emergency spill kit to combat hydrocarbon pollution.

29. REHABILITATION

Section 39 (4) (a) (iii):The applicant has the capacity to rehabilitate and manage negative impacts on the environment

29.1 ANNUAL AMOUNT REQUIRED TO MANAGE REHABILITATION

The environment affected by the mining operations shall be rehabilitated by Prieska Gypsum Mine, as far as is practicable, to its natural state or to a predetermined and agreed standard or land use which conforms with the concept of sustainable development. These activities would happen concurrently with the mining production process and not left to the last upon mine closure

29.2 CONFIRMATION OF FINANCIAL PROVISION

Financial provision will calculated and must be made by Prieska Gypsum Mine for rehabilitation of this mine area. This financial provision will be made in the form of a bank guarantee upon acceptance of this EIA and instruction from the DMR. This financial guarantee must be issued by Prieska Gypsum Mine in favour of the DMR and provided specifically for rehabilitation and environmental management of grounds in lieu of this mining permit application

DORINGBERG GIPS (PTY) LTD

20. REGULATION 52 (2) (h) : UNDERTAKING TO ADHERE TO EMP

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report comprises EIA and EMP compiled in accordance with the guideline on the Departments official website and the directive in terms of sections 29 and 39 (5) in that regard, and the applicant undertakes to execute the Environmental Scoping Report as proposed.

I, **Mr Denzel Janse van Vuuren, ID 630416 5051 087**, the undersigned and duly authorised thereto by **DORINGBERG GIPS (PTY) LTD**

Hereby undertake to implement all the aspects contained in the EMPr and accept full responsibility therefore.

SIGNED at **RANDBURG** this **04** day **July** 2016.



SIGNATURE

WITNESS

Official use

APPROVAL

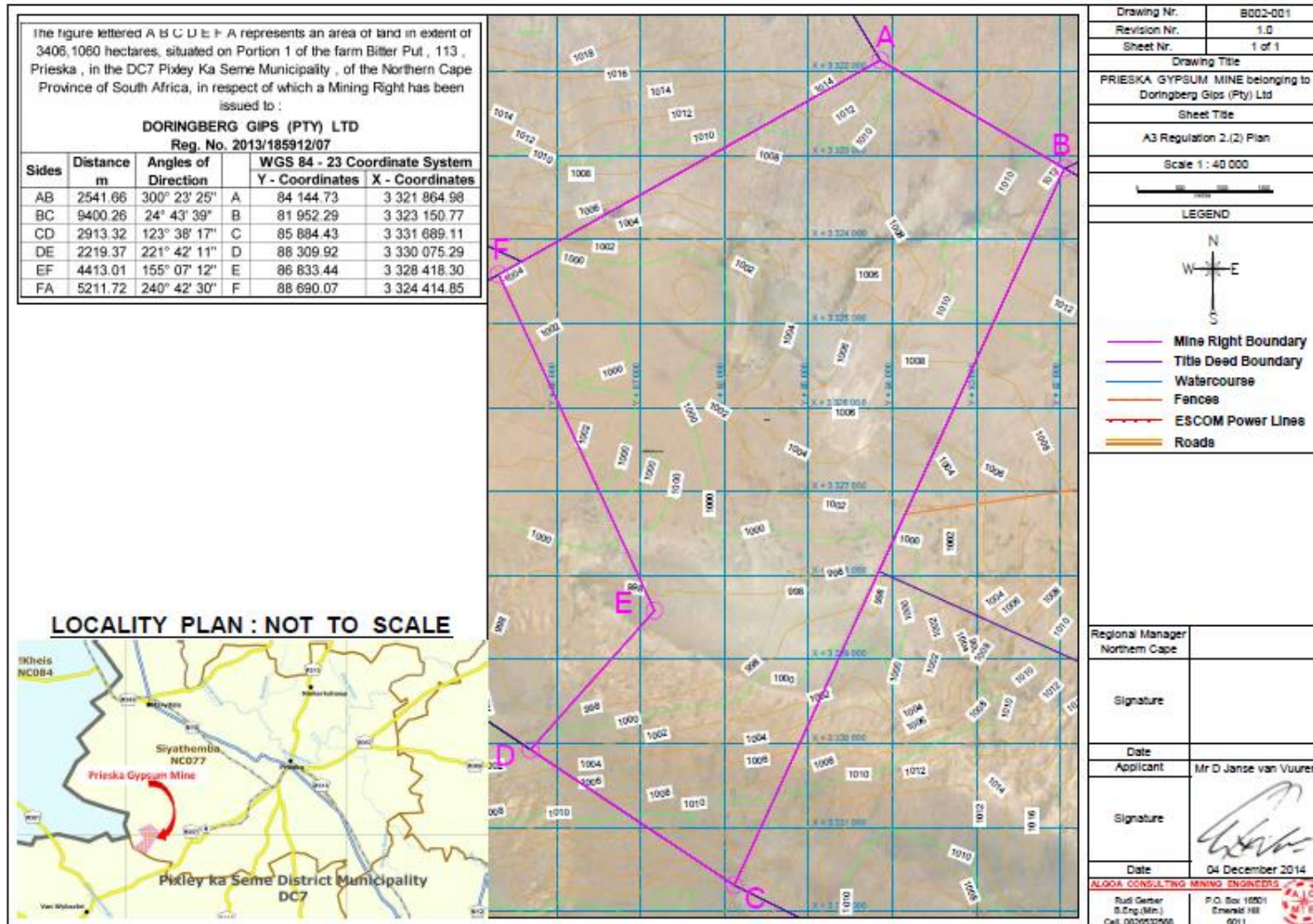
Approved in terms of the provisions of the Minerals and Petroleum Resources Development Act, 2002, (Act 28 of 2002) and Environmental Management Act 107 of 1998.

SIGNED at _____ this _____ day _____ 2016.

**REGIONAL MANAGER
NORTHERN CAPE**

DORINGBERG GIPS (PTY) LTD

30. ANNEXURE A: Regulation 2(2) Plan



31. ANNEXURE B : Proof of notice in EXPRESS NORTHERN CAPE newspaper

Youth gets centre

Boipelo Mere

THE Black Converse Youth Centre in John Daka Phase 2 is expected to host their official opening launch on Saturday, 18 June. The centre was established by the Black Converse Pant-sula dance crew. Boasting about the difference the centre is set to make to the youth in Galesbewe, Joey Steenkamp, the treasurer of the group, said the youth centre had more than one purpose. It will serve as a dance academy and skills development centre. Educational and awareness programmes will also be presented. Steenkamp said the mission of the centre was, amongst others, working in partnership with the community, businesses and government to strive for excellence in meeting the needs of the youth.

SIYANCUMA MUNICIPALITY
PUBLIC NOTICE
PUBLIC INSPECTION ON THE 2016/2017 BUDGET

Notice is hereby given in terms of Section 29 (1) of the Local Government Municipal Structures Act, 1998, Act no. 117 of 1998 for a public document of the Siyancuma Local Municipality to be viewed.

The honourable Mayor, Cllr. L. Oliphant, of the Siyancuma Municipality, hereby invites the broader public of Siyancuma to do inspection/view on the 2016/2017 capital and operating budget of the Municipality.

Date: 1 June to 30 June 2016
Time: 07:30 to 16:00

Venue: All Siyancuma satellite offices and public libraries.

The following document is available to be viewed at all Municipal offices of Siyancuma.

- Annual Budget for 2016/17

Members of the public are all invited and welcome to view the document.

NOTICE OF CONSULTATION PROCESS WITH INTERESTED AND AFFECTED PARTIES

Doringberg Gips (Pty) Ltd
Reference No. NC30/5/1/2/2/10104MR.

Notice is hereby given in terms of Section 10 of the Mineral and Petroleum Resources Development Act, Act 28 of 2002 and National Environmental Management Act 107 of 1998 Section 41 (c) and (d) of Environmental Impact Assessment Regulations 2014 as amended on intent to carry out the following activity.

Doringberg Gips (PTY) LTD, Prieska Gypsum Mine, has submitted a mining right application for the mining of gypsum, dolomite and limestone on Portion 1 of the farm Bitter Put 113 in the district of Prieska within the Siyathemba Local Municipality.

In order to be identified as an interested and/or affected party, submit your name, contact information, details of your interest and your comments in the matter to **Mr Rudi Gerber** by **18 June 2016**. Submission should be made in writing to:

Algoa Consulting Mining Engineers
PO Box 16501
Emerald Hill
6011
or by fax to 086 657 7703
or e-mail: rudi@algoacme.co.za

NOTICE OF CONSULTATION PROCESS WITH INTERESTED AND AFFECTED PARTIES

Doringberg Gips (Pty) Ltd
Reference No. NC30/5/1/2/2/10104MR.

Notice is hereby given in terms of Section 10 of the Mineral and Petroleum Resources Development Act, Act 28 of 2002 and National Environmental Management Act 107 of 1998 Section 41 (c) and (d) of Environmental Impact Assessment Regulations 2014 as amended on intent to carry out the following activity.

Doringberg Gips (PTY) LTD, Prieska Gypsum Mine, has submitted a mining right application for the mining of gypsum, dolomite and limestone on Portion 1 of the farm Bitter Put 113 in the district of Prieska within the Siyathemba Local Municipality.

In order to be identified as an interested and/or affected party, submit your name, contact information, details of your interest and your comments in the matter to **Mr Rudi Gerber** by **18 June 2016**. Submission should be made in writing to:

Algoa Consulting Mining Engineers
PO Box 16501
Emerald Hill
6011
or by fax to 086 657 7703
or e-mail: rudi@algoacme.co.za

32. ANNEXURE C : Correspondence with IAPs

12 May 2016

Mining Right Application Ref: 10104 MR

Atgoa Consulting Mining Engineers Reps met with the land owner of farm Bitter Put 133, Prieska SA Mr. Willem Smit on the 12th May 2016 to discuss the Mining Right application and the project as a whole.

Willem Smit - Requested that he be notified on regular basis on status of the application.

I Willem Smit, Confirms the statement above and I am in support of the project.


Signature

12-05-2016 4802155001089
Date ID NO

DORINGBERG GIPS (PTY) LTD

ALGOA CONSULTING MINING ENGINEERS CC



No. 2 Deer Park Lane, Deer Park Estate, Port Elizabeth 6000
 PO Box 16501, Emerald Hill, 6011
 Republic of South Africa
 Telephone : +27 (0) 41 367 5501
 Facsimile : +27 (0) 86 657 7703
 e-mail : rudi@algoacme.co.za

ATTENDANCE REGISTER

MEETING HELD AT PRIESKA (LANDOWNER) ON 12/05/2016 IN
 LIEU OF MINING RIGHT APPLICATION REF: 10104MR

Name	Company	Email address	Contact Number	Signature
Pascaline Makoyane	ACME	pascaline@algoacme.co.za	072 189 1948 041 379 1899	
Rudi Gerber	A.C.M.E.	rudi@algoacme.co.za	0826532568	
Willem Smit	Land Owner	—	0834571860	

DORINGBERG GIPS (PTY) LTD

DORINGBERG GIPS (PTY) LTD



NO. 2 Deer Park Lane, Deer Park Estate, P.E., 6001
PO Box 18501, Emerald Hill, 8011
Republic of South Africa
Telephone : +27 (0) 41 367 5501
Facsimile : +27 (0) 88 857 7703
e-mail : rudi@algoacme.co.za

MINUTES OF MEETING

WITH SIYATHEMBA LOCAL MUNICIPALITY

@ MUNICIPAL OFFICES IN PRIESKA on 12 May 2016 at 09h30

MEETING ATTENDEES

Name	Company	E-mail address	Contact number
Rudi Gerber (RGR)	ACME	rudi@algoacme.co.za	082 653 2568
Pascaline Makofane (PME)	ACME	pascaline@algoacme.co.za	0721891948
Jakob Basson (JBN)	SLM	jakob@siyathemba.gov.za	053 353 5306 071 574 4146

NO.	ISSUE / DISCUSSION			
1.	<p>PURPOSE OF THE MEETING</p> <p>RGR explained that the purpose of the meeting was for consultation with Interested and Affected Parties, and neighboring land users, regarding the submission of a new Mining Right applications. He explained that the previous application did not go through due some technicalities occurred but highlighted that new application is still for same mineral on same piece of land. He further explained that Algoa Consulting mining Engineers is an independent consultant which does not benefit financially from approval of this application. He further indicated that the SLP project suggested on the previous application may still remain if the municipality is happy with it.</p> <p>(JBN) thanked Rudi for update meeting and highlighted what was discussed on the previous meeting is still valid. He further indicated that area in question falls within Square Kilometre Array (SKA) area and therefore it must be consulted</p>			
	<table border="1"><thead><tr><th>ACTION REQUIRED</th><th>RESPONSIBLE PERSON(S)</th><th>DUE DATE</th></tr></thead></table>	ACTION REQUIRED	RESPONSIBLE PERSON(S)	DUE DATE
ACTION REQUIRED	RESPONSIBLE PERSON(S)	DUE DATE		

DORINGBERG GIPS (PTY) LTD

DORINGBERG GIPS (PTY) LTD

NO.	ISSUE / DISCUSSION	PME	
	<ul style="list-style-type: none"> To send comments 		Municipality
3	Meeting Closure @ 11h10		

ALGOA CONSULTING MINING ENGINEERS CC



No. 2 Door Port Lane, Deer Park Estate, Port Elizabeth 6000
 PO Box 15501, Emerald Hill, 6011
 Republic of South Africa
 Telephone : +27 (0) 41 567 5501
 Facsimile : +27 (0) 41 567 7703
 e-mail : rud@algoacme.co.za

ATTENDANCE REGISTER

MEETING HELD AT Siyathemba Municipality ON 12/05/2016 IN
 LIEU OF Mining Right application Ref: 10104 MP

Name	Company	Email address	Contact Number	Signature
Pascaline Makofane	ACME	Pascaline@algoacme.co.za	072 189 1948 041 377 1899	
Jacob Basson	Siyathemba Municipality	jacob@siyathemba.gov.za	053 553 5306 071 574 4146	
Rudj Gerber	A.C.M.E.	rudj@algoacme.co.za	0826532568	
Owethu Ishakela	Siyathemba Municipality	ehp@siyathemba.gov.za	083 458 3749	

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: Pascaline Makofane <pascaline@algoacme.co.za>
Sent: 27 June 2016 10:37 AM
To: 'Mandisi Nakase Christopher'
Subject: RE: Prieska Gypsum mine

Good morning

Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Doringberg Gips (PTY) LTD has appointed Algoa Consulting Mining Engineers (ACME), as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 28 of 2002 and National Environmental Management Act, 107 of 1998.

The purpose of this email is to consult with Interested and Affected Parties of the proposed project and to provide you with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application. Kindly submit your comments before 08 JULY 2016 in writing to :

Algoa Consulting Mining Engineers
P.O. Box 16501 ; Emerald Hill ; 6011
Email : rudi@algoacme.co.za / pascaline@algoacme.co.za
Fax : 086 657 7703
Cell : 082 653 2568

Thank you

Algoa Consulting Mining Engineers

Pascaline Makofane
Environmental Specialist
041 379 1899 / 072 189 1948

From: Mandisi Nakase Christopher [mailto:mcnakase@gmail.com]
Sent: 06 June 2016 03:25 PM
To: Pascaline@algoacme.co.za
Subject: Fwd: Prieska Gypsum mine

----- Forwarded message -----

From: Mandisi Nakase Christopher <mcnakase@gmail.com>
Date: Mon, Jun 6, 2016 at 3:18 PM
Subject: Prieska Gypsum mine
To: pascaline@algoacme.co.za

Hi Pascaline

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: Pascaline Makofane <pascaline@algoacme.co.za>
Sent: 15 June 2016 11:10 AM
To: 'westerhuyse@ska.ac.za'
Cc: 'rudi@algoacme.co.za'
Subject: FW: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR
Attachments: Prieska Gypsum Draft EMP 20160428.pdf

Good morning Wellem

Our telecom refers: Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

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The purpose of this email is to consult with Interested and Affected Parties of the proposed project and to provide you with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application. Please find the Consultation Report attached for your perusal. Kindly submit your comments before 08 JULY 2016 in writing to :

Algoa Consulting Mining Engineers
P.O. Box 16501 ; Emerald Hill ; 6011
Email : rudi@algoacme.co.za / pascaline@algoacme.co.za
Fax : 086 657 7703
Cell : 082 653 2568

Thank you

Algoa Consulting Mining Engineers

*Pascaline Makofane
Environmental Specialist
041 379 1899 / 072 189 1948*

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: Willem Esterhuyse <westerhuyse@ska.ac.za>
Sent: 15 June 2016 11:14 AM
To: Adrian Tiplady
Cc: rudi@algoacme.co.za; Pascaline Makofane
Subject: RE: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR
Attachments: Prieska Gypsum Draft EMP 20160428.pdf

Adrian

Can you please engage with ACME regarding the belowmentioned mining application.

Regards

Willem Esterhuyse

MeerKAT Project Manager

T | +27 (0) 21 506 7300
E | westerhuyse@ska.ac.za
W | www.ska.ac.za

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: Pascaline Makofane <pascaline@algoacme.co.za>
Sent: 10 June 2016 09:32 AM
To: 'motsisl@eskom.co.za'; 'mongezi.ntsokolo@eskom.co.za'; 'noaha@eskom.co.za'
Cc: 'rudi@algoacme.co.za'
Subject: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR
Attachments: Prieska Gypsum Draft EMP 20160428.pdf

Good morning

Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Doringberg Gips (PTY) LTD has appointed Algoa Consulting Mining Engineers (ACME), as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 28 of 2002 and National Environmental Management Act, 107 of 1998.

The purpose of this email is to consult with Interested and Affected Parties of the proposed project and to provide you with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application. Please find the Consultation Report attached for your perusal. Kindly submit your comments before 08 JULY 2016 in writing to :

Algoa Consulting Mining Engineers
P.O. Box 16501 ; Emerald Hill ; 6011
Email : rudi@algoacme.co.za / pascaline@algoacme.co.za
Fax : 086 657 7703
Cell : 082 653 2568

Thank you

Algoa Consulting Mining Engineers

*Pascaline Makofane
Environmental Specialist
041 379 1899 / 072 189 1948*

Pascaline Makofane

From: Lungile Motsisi <MotsisL@eskom.co.za>
Sent: 13 June 2016 09:34 AM
To: Pascaline Makofane
Cc: Rene De Bruin
Subject: RE: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR

Good morning,

Please note that Eskom Transmission services are not affected by the proposed mining right application. I am forwarding this application to Eskom Distribution for them to double check on the services that might be affected.

Regards,
Lungile Motsisi

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: Pascaline Makofane <pascaline@algoacme.co.za>
Sent: 10 June 2016 09:11 AM
To: 'NCorns@ncpg.gov.za'
Cc: 'rudi@algoacme.co.za'
Subject: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR
Attachments: Prieksa Gypsum Draft EMP 20160428.pdf

Dear Mr. Nogwili

Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Doringberg Gips (PTY) LTD has appointed Algoa Consulting Mining Engineers (ACME), as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 28 of 2002 and National Environmental Management Act, 107 of 1998.

The purpose of this email is to consult with Interested and Affected Parties of the proposed project and to provide you with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application. Please find the Consultation Report attached for your perusal. Kindly submit your comments before 08 JULY 2016 in writing to :

Algoa Consulting Mining Engineers
P.O. Box 16501 ; Emerald Hill ; 6011
Email : rudi@algoacme.co.za / pascaline@algoacme.co.za
Fax : 086 657 7703
Cell : 082 653 2568

Thank you

Algoa Consulting Mining Engineers

*Pascaline Makofane
Environmental Specialist
041 379 1899 / 072 189 1948*

Pascaline Makofane

From: Pascaline Makofane <pascaline@algoacme.co.za>
Sent: 09 June 2016 03:19 PM
To: 'cloetes@dws.gov.za'; 'shibambus@dws.gov.za'
Cc: 'rudi@algoacme.co.za'
Subject: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR
Attachments: Prieska Gypsum Draft EMP 20160428.pdf

Good afternoon

Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Doringberg Gips (PTY) LTD has appointed Algoa Consulting Mining Engineers (ACME), as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 28 of 2002 and National Environmental Management Act, 107 of 1998.

The purpose of this email is to consult with Interested and Affected Parties of the proposed project and to provide you with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application. Please find the Consultation Report attached for your perusal. Kindly submit your comments before 08 JULY 2016 in writing to :

Algoa Consulting Mining Engineers
P.O. Box 16501 ; Emerald Hill ; 6011
Email : rudi@algoacme.co.za / pascaline@algoacme.co.za
Fax : 086 657 7703
Cell : 082 653 2568

Thank you

Algoa Consulting Mining Engineers

*Pascaline Makofane
Environmental Specialist
041 379 1899 / 072 189 1948*

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: Pascaline Makofane <pascaline@algoacme.co.za>
Sent: 09 June 2016 03:04 PM
To: 'pswartz@ncpg.gov.za'; 'tmthobeni@ncpg.gov.za'
Cc: 'rudi@algoacme.co.za'
Subject: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR
Attachments: Prieska Gypsum Draft EMP 20160428.pdf

Hello Paballo

Our telecon refers:Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum,Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Doringberg Gips (PTY) LTD has appointed Algoa Consulting Mining Engineers (ACME), as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 28 of 2002 and National Environmental Management Act, 107 of 1998.

The purpose of this email is to consult with Interested and Affected Parties of the proposed project and to provide you with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application. Please find the Consultation Report attached for your perusal. Kindly submit your comments before 08 JULY 2016 in writing to :

Algoa Consulting Mining Engineers
P.O. Box 16501 ; Emerald Hill ; 6011
Email : rudi@algoacme.co.za / pascaline@algoacme.co.za
Fax : 086 657 7703
Cell : 082 653 2568

Thank you

Algoa Consulting Mining Engineers

*Pascaline Makofane
Environmental Specialist
041 379 1899 / 072 189 1948*

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: PSwarts <Pswarts@ncpg.gov.za>
Sent: 09 June 2016 04:02 PM
To: Pascaline Makofane
Subject: Re: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR

Received with thanks

Ms. Pabalelo Swarts
Environmental Officer
Compliance Monitoring
Department of Environment and Nature Conservation
90 Long Street, Kimberley, 8300
Private Bag X6102, Kimberley, 8300
Tel: 053 807 7487
Cell: 076 920 2978
Fax: 053 831 3530
Email: Pswarts@ncpg.gov.za

>>> "Pascaline Makofane" <pascaline@algoacme.co.za> 09/06/2016 15:03 >>>
Hello Paballo

Our telecon refers:Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum,Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: TMthombeni <Tmthombeni@ncpg.gov.za>
Sent: 13 June 2016 11:40 AM
To: Pascaline Makofane
Subject: Re: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR

Hi Papie,

The attached document appears to be an EMP for mining right application in terms of MPRDA. DENC is then the commenting authority. DMR should send the hard copy of the EMP to DENC requesting comments in respect of this proposed operation. The EIA official usually receive such documents and submit their comments (if any) to DMR within the prescribed time period.

Kind regards

Mr Thulani Mthombeni

Principal Environmental Officer: Impact Management Department of Environment and Nature Conservation
90 Long Street
Private Bag X 6102
Kimberley
8300
Tel: (053) 807 7430
Fax: (053) 831 3530
Cell: 071 673 7525

>>> "Pascaline Makofane" <pascaline@algoacme.co.za> 09-Jun-16 3:03 PM

>>> >>>

Hello Paballo

DORINGBERG GIPS (PTY) LTD

Pascaline Makofane

From: Pascaline Makofane <pascaline@algoacme.co.za>
Sent: 09 June 2016 11:20 AM
To: 'Isehularo@ruraldevelopment.gov.za'; 'cjdmons@ruraldevelopment.gov.za'
Cc: 'rudi@algoacme.co.za'
Subject: MINING RIGHT APPLICATION REF: NC 30/5/1/2/2/10104MR
Attachments: Prieska Gypsum Draft EMP 20160428.pdf

Good morning

Doringberg Gips (Pty) Ltd, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.

Doringberg Gips (PTY) LTD has appointed Algoa Consulting Mining Engineers (ACME), as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act, 28 of 2002 and National Environmental Management Act, 107 of 1998.

The purpose of this email is to consult with Interested and Affected Parties of the proposed project and to provide you with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application. Please find the Consultation Report attached for your perusal. Kindly submit your comments before 08 JULY 2016 in writing to :

Algoa Consulting Mining Engineers
P.O. Box 16501 ; Emerald Hill ; 6011
Email : rudi@algoacme.co.za / pascaline@algoacme.co.za
Fax : 086 657 7703
Cell : 082 653 2568


Thank you

Algoa Consulting Mining Engineers

*Pascaline Makofane
Environmental Specialist
041 379 1899 / 072 189 1948*

33. ANNEXURE D: NOTICE BOARDS ERECTED

Doornberg Gips (PTY) LTD



No. 2 Deer Park Lane, Seaview Road P.E. : 6001
P.O. Box 16501 ; Emerald Hill ; 6011
Telephone : +27 (0) 41 367 5501
Facsimile : +27 (0) 86 657 7703
Mobile : +27 (0) 82 653 2568
mail : rud@algoacme.co.za

PRIESKA GYPSUM MINE

NOTICE OF AN ENVIRONMENTAL IMPACT ASSESSMENT PROCESS AND MINING APPLICATION FOR PRIESKA GYPSUM MINE MINING RIGHT REF NO. NC30/5/1/2/2/10104MR

Project name : Proposed mining rights application on the farm Bitter Put, 113, Prieska within the magisterial district of Carnarvon in the Northern Cape Province

Applicant: Doringberg Gips (Pty Ltd)

Location of the activity: Prieska Gypsum mine is located on Portion 1 of the Farm Bitter Put 113 approximately 71km South West of Prieska in the Northern Cape Province, at latitude 30° 3'22.43" S and longitude 22° 7'24.77" E. See Figure 1. for an indication of the location of the mine. The extent of the Mining Right area is 3406, 1060 hectares.

BACKGROUND

Doornberg Gips (PTY) LTD, Prieska Gypsum Mine, has submitted a mining right application for the mining of Gypsum, Dolomite and Limestone on Portion 1 of the Farm Bitter Put 113 in the District of Prieska within the Siyathemba Local Municipality. The minerals to be mined are all found on the surface and only opencast open pit mining methods are to be deployed.


Doornberg Gips (PTY) LTD has appointed Algoa Consulting Mining Engineers (ACME), as independent consultants, to undertake the work necessary to apply for a mine right in terms of Section 22 of the Mineral and Petroleum Resources Development Act (Act 28 of 2002) (MPRDA).

The purpose of this document is to consult with all Interested and Affected Parties (I&AP's) of the proposed project and to provide them with the opportunity to receive information, provide comments, and raise concerns in relation to the mining right application, as required in terms of the MPRDA 28 of 2002 and NEMA 107 of 1998.

This notice is given in terms of National Environmental Management Act 107 of 1999: **Section 41(3) & 41 (4) EIA Regulation 2014 as amended**,

Registration of I&AP: all interested and affected parties are invited to the register within 40 days from the date of this notice by post or fax to:

P.O. Box 16501; Emerald Hill ; 6011.
Fax : 0) 86 657 7703



12 MAY 2016





34. ANNEXURE E: CURRICULUM VITAE OF ENVIRONMENTAL PRACTITIONER

CURRICULUM VITAE
OF
MAKOFANE, PASCALINE PHANKI MAHLAGAUME

Pascaline possesses a BSc degree in Environmental and Resource Studies with six years environmental management working experience obtained from both public and private sector Currently working as an Environmental specialist at Algoa Consulting Mining Engineers

Postal Address: P.O Box 246
BURGERFORT
1150

Residential Address: 301 Ext 17, Moeding Street
Mokopane

Cell number: 072 189 1948
Alternative number: 073 139 3598

1. PERSONAL INFORMATION

Surname: Makofane
First names: Pascaline Phanki Mahlagaume
ID number: 840501 086 008 1
Home language: sepedi

Drivers license: code 10 (c1) in active driving

2. EDUCATIONAL BACKGROUND

2.1 Secondary Education

Last school attended: Morwasi High School
Certificate obtained: Senior Certificate (Exemption)
Year: 2001

Tertiary Education

Institution attended: University of Limpopo (Turfloop Campus)
Degree obtained: **BSc Environmental and Resource Studies**
Duration: 2002-2005
Subject passed: Environmental Resource Management and Planning
Natural Resource Ecology
Solid Waste Management
Water Treatment Processes
Environmental Impact Studies/Assessment (EIA)
Applied GIS and Remote Sensing
Applied Climatology and Geomorphology
Soil Analysis, Elementary survey
Tourism studies

Population and Medical Geography
Project management

3. TRAINING ATTENDED

- Environmental Impact Management Regulation Orientation Course
- Environmental Impact Management Multistakeholder workshop
- Team Building Session
- Life Orientation
- NEMA (Act 107 of 1998)EIA regulation training course(all attended with Department of Economic Development Environment and Tourism –Limpopo)
- Research Methodology(with Conflict and Governance Facility and University of Limpopo)

4. WORKING EXPERIENCE

4.1 Current work

Name of the employer: Algoa Consulting Mining Engineers
Position held: Environmental Specialist
Duration: April 2014 to date

Duties and responsibilities

- Compile Environmental Management Plans and Environmental Impact Assessment Reports (EMPs and EIAs)
- Facilitate Mining permits, Mining rights, Prospecting rights applications
- Research for information that promotes compliance of environmental legislations and regulations
- Ensuring Environmental compliance in relation to EMP and Environmental Authorisation's conditions, Pollution and waste management, (air, solid and effluents pollution)
- Monitoring and evaluating environmental Authorizations (conditions)
- Conducting compliance/Environmental audits e.g. new developments etc.
- Facilitate Public Participation Process
- Undertake site visits/inspections
- Compile compliance monitoring reports
- Giving advices on environmental issues
- Facilitate Social and Labour Plans (SLP) Process
- Water use licences,
- Report Writing and presentations

4.2 Name of the employer: Phaki Phakanani Environmentals
Position held: Environmental Officer
Duration: June 2010 to 30 March 2014

Duties and responsibilities

- Compile Environmental Management Plans and Environmental Assessment Reports (EMPs and EIAs)
- Research for information that promotes compliance of environmental legislations and regulations
- Ensuring Environmental compliance in relation to Environmental Impact Assessment, Pollution and waste management, (air, solid and effluents pollution)
- Monitoring and evaluating environmental Authorizations (conditions)
- Conducting compliance/Environmental audits e.g. new developments etc.
- Compile audit reports
- Giving advices on environmental issues
- Conduct site visits and inspections
- Water use licences, site and retail applications, etc.
- Report Writing and presentations

4.3
Name of the employer: Department of Economic Development Environment and Tourism
Directorate: Environmental Compliance and Enforcement
Position held: environmental officer (internship)
Duration: 01 august 2006 to 31 July 2007

Duties and responsibilities

- Research for information that promotes compliance and enforcement of environmental legislations and regulations (both GREEN AND BROWN Projects)
- Ensuring Environmental compliance in relation to Environmental Impact Assessment, Pollution and waste management, (air, solid and effluents pollution)
- Monitoring and evaluating environmental Authorizations
- Conducting compliance/Environmental audits
- Report Writing and presentations

4.4
Name of the employer: Pomby Construction and Projects
Position held: Senior Administration officer
Duration: September 2009 to February 2010

Duties and responsibilities

- Taking calls
- Data capturing
- Taking minutes in meetings

3

- Responsible for all correspondence with stake holders
- Preparing pay slips and timesheets and calculation of salaries for company's employees,
- Responsible for director's diary
- Manning the office in general
- Making bookings and orders for the company
- Managing petty cash
- Making payment for company's depts.

4.5

Name of the employer: University of Limpopo
Position held: Tutor
Duration: February 2005 to December 2005

4.6

Name of the employer: Greater Tubatse Municipality
Position held: waste management officer (training)
Duration: December 2004 to February 2005

5. SKILLS AND COMPETANCIES

- Knowledge in conducting field inspections in relation to EIA (especially monitoring ROD's Environmental Authorisation's conditions) Pollution and Waste (Landfill audits), Biodiversity Management and Protected Areas.
- Knowledge on Environmental Legislation that includes NEMA (Act 107 of 1998), National water Act (Act 36 of 1998) and other relevant Environment Legislation.
- Knowledge on EIA (Process and procedures)
- Knowledge on National waste Management Strategy(Reuse,Recycle,Reduce)
- Good background of project management
- Knowledge of families of ISO
- Highly computer literate (Microsoft word, excel, PowerPoint. Internet and Emails
- Strong background of GIS(map creation, interpretation, data analysis and capturing)
- report writing skills
- presentation skills

6. STRENGTH

- I have got a very good sense of responsibility and accountability
- Passionate about the environment
- Ability to work independently and as a team
- Able to work under pressure
- Self-starter

7. REFERENCES

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Name: Mr Rudi Gerber
Position: Managing Director at Algoa Consulting Mining Engineers
Contact numbers: 041 367 5501/ 082 653 2568

Name: Mr Hatlane T
Position: Director at Phaki Phakanani Environmental
Contact numbers: 015 295 7391/ 0796820421

Name: Mr. Morwaswi T.S
Position: Deputy Manager Department of Economic Development,
Environment and Tourism
Contact numbers: 015 295 4869/0824639519

Name: Mr Tselane SJ
Position: Manager Pomby Construction and Projects
Contact numbers: 015 409 7114/072 491 8582

Name: Mrs. S Burger
Position: Lecturer University of Limpopo
Contact numbers: 015 268 2030

35. ANNEXURE F: DISCLOSURE OF VESTED INTEREST

I, Pascaline Makofane, declare that – 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 the environmental assessment practitioner

Algoa Consulting Mining Engineers

Name of company (if applicable)

July 2016

Date

36. REFERENCES

- SANBI, 1999. Further development of a proposed national wetland classification system for South Africa, Pretoria: South African Biodiversity Institute.
- DWAF (Department of Water Affairs) 2005. A level I river Eco regional classification system for South Africa, Lesotho and Swaziland- final.
- Google Earth. [Online] Available at: www.googleearth.com [Accessed April
- Statistics SA
- Siyathemba local Municipality IDP 2014/2015
- Visser, D.J.L. 1989. The geology of the Republics of South Africa, Transkei, Bophuthatswana, Venda and Ciskei and the Kingdoms of Lesotho and Swaziland. Explanation: geological map 1: 1 000 000, 491 pp. Council for Geoscience, Pretoria.
- Mucina, L. & Rutherford, R. M., 2006. The vegetation of South Africa, Lesotho and Swaziland. Strelitzia 19. ed. Pretoria: South African National Biodiversity Institute.

37. ANNEXURE G: CORRESPONDANCES WITH DMR



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Private Bag X 6093, Kimberley, 8300, 65 Phokamile Mabile Street, Fern Building, Kimberley, 8301
Tel: 053 807 1722 Fax: 053 832 5671 Email: turnalo.sedupane@dmr.gov.za Ref: NC3015/1/2/2/10104 MR
From: Mineral Regulation Enquiries: TK Sedupane

PER REGISTERED MAIL

The Directors
Doringberg Gips (Pty) Ltd
PO Box 16501
Emerald Hill
Port Elizabeth
6011

Fax no: 086 6577 703

Dear: Sir/Madam

APPLICATION FOR MINING RIGHT IN TERMS OF SECTION 22 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 AS AMENDED BY SECTION 18 OF ACT 49 OF 2008 AND ENVIRONMENTAL AUTHORIZATION IN TERMS OF NATIONAL ENVIRONMENTAL MANAGEMENT ACT, AS AMENDED: PORTION 1 OF THE FARM BITTER PUT NO.113: WITHIN THE ADMINISTRATIVE DISTRICT OF PRIESKA.

1. This is to inform you that your application for a mining right in terms of section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) ("Act") as amended and the Environmental Authorization in line with NEMA Regulations for Gypsum, Dolomite and Limestone has been accepted.
2. In terms of section 18 (e) of the Act, you are directed to comply with the following instructions:
 - a. Implement the processes prescribed by the National Environment Management Act, as amended and submit the Scoping Report within 44 days from the date of acceptance of the Environmental Authorization.

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- b. Submit the relevant Environmental Impact and Environmental Management Programme reports as required in terms of the National Environment Management Act, (as amended) within 106 days from the date of acceptance of the scoping report, as prescribed.
 - c. Notify and consult with the landowners, lawful occupiers and any other interested and affected parties as required in terms of Regulation 41(2) read with Section 24J of National Environment Management Act, as amended.
 - d. Lodge a notice of intent to apply for a Water Use Licence in terms of Water Use Licence Act with the Department of Water and Sanitation with immediate effect and confirm that with the Regional Manager.
3. Be advised that the Minister may having regard to the type of mineral concerned and the extent of the proposed prospecting project, direct the applicant to give effect to the objects of the section 2(d) of the Act. In order to comply with section 2(d) you are **thus** directed to submit the following documents on or before **20th August 2016**.
- a. Duly signed shareholders agreements with your empowerment partner in which provision **shall** be made for entrepreneurs, local community and employees,
 - b. Share certificates,
 - c. Details relating to the equity by the BEE shareholders,
 - d. Any other agreement relating to the BEE shareholding including the voting pool agreement where applicable,
 - e. Articles and memorandum of association of the company,
4. Further note that the acceptance of your application does not grant you the right to commence with mining activities. It only signify that your application will be processed, evaluated and the Minister or his delegate will make a decision within 300 days from the acceptance of your application.

Yours faithfully



REGIONAL MANAGER:

MINERAL REGULATION: NORTHERN CAPE

DATE: 26/05/16