



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

DRAFT BASIC ASSESSMENT REPORT
And
ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

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

NAME OF APPLICANT: KENNITH LEON BORAINÉ

TEL NO: 0766206151

FAX NO: 053-8410902

POSTAL ADDRESS: 7 Lime Street, Moghul Park, Kimberley, 8301

PHYSICAL ADDRESS: 7 Lime Street, Moghul Park, Kimberley, 8301

FILE REFERENCE NUMBER SAMRAD: NC 30/5/1/3/2/10697 MP

FILE REFERENCE NUMBER SAMRAD:

NC/30/5/1/3/2/10697MP

1. IMPORTANT NOTICE

In terms of the Mineral and Petroleum Resources Development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining “will not result in unacceptable pollution, ecological degradation or damage to the environment”.

Unless an Environmental Authorisation can be granted following the evaluation of an Environmental Impact Assessment and an Environmental Management Programme report in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of section 16(3)(b) of the EIA Regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the competent authority to the submission of applications.

It is therefore an instruction that the prescribed reports required in respect of applications for an environmental authorisation for listed activities triggered by an application for a right or a permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorisation being refused.

It is furthermore an instruction that the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure that the information required is placed correctly in the relevant sections of the Report, in the order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

2. Objective of the basic assessment process

The objective of the basic assessment process is to, through a consultative process—

- (a) determine the policy and legislative context within which the proposed activity is located and how the activity complies with and responds to the policy and legislative context;
- (b) identify the alternatives considered, including the activity, location, and technology alternatives;
- (c) describe the need and desirability of the proposed alternatives,
- (d) through the undertaking of an impact and risk assessment process inclusive of cumulative impacts which focused on determining the geographical, physical, biological, social, economic, heritage , and cultural sensitivity of the sites and locations within sites and the risk of impact of the proposed activity and technology alternatives on the these aspects to determine:
 - (i) the nature, significance, consequence, extent, duration, and probability of the impacts occurring to; and
 - (ii) the degree to which these impacts—
 - (aa) can be reversed;
 - (bb) may cause irreplaceable loss of resources; and
 - (cc) can be managed, avoided or mitigated;
- (e) through a ranking of the site sensitivities and possible impacts the activity and technology alternatives will impose on the sites and location identified through the life of the activity to—
 - (i) identify and motivate a preferred site, activity and technology alternative;
 - (ii) identify suitable measures to manage, avoid or mitigate identified impacts; and
 - (iii) identify residual risks that need to be managed and monitored.

ABBREVIATIONS

AIA: Archaeological Impact Assessment
ASAPA: Association of South African Professional Archaeologists
BH: Borehole
CRM: Cultural Resources Management
DEA: Department of Environmental Affairs
DMR: Department of Mineral Resources
DWA: Department: Water Affairs
DWS: Department of Water and Sanitation
EIA: Environmental Impact Assessment
EMPR: Environmental Management Programme Report
ESA: Early Stone Age
GN: Government Notice
GPS: Global Positioning System
HIA: Heritage Impact Assessment
HIR: Heritage Impact Report
HSR: Heritage Scoping Report
I&AP: Interested & Affected Party
LIA: Late Iron Age
LSA: Later Stone Age
MAE :Mean Annual Evaporation
mamsl: metres above mean sea level
MAP: Mean Annual Precipitation
MAR: Mean Annual Runoff
MIA: Middle Iron Age
MPRDA: Minerals and Petroleum Resources Development Act, 2002
MSA: Middle Stone Age
NEM:WA: National Environmental Management: Waste Amendment Act, 2008
NEMA: National Environmental Management Act, Act, 1998(Act 107 of1998) (as amended)
NGDB: National Groundwater Database
NHRA: National Heritage Resources Act
NWA: National Water Act, 1998 (as amended)
PASA: Petroleum Agency South Africa
PHRA: Provincial Heritage Resources Authority
PSSA: Palaeontological Society of South Africa
RoD: Record of Decision
SADC: Southern African Development Community
SAHRA: South African Heritage Resources Agency
SWL: Static Water Level
TMM: Trackless Mobile Machinery
TDS: Total Dissolved Solids
WMA: Water Management Area
WUL: Water Use Licence

PART A
SCOPE OF ASSESSMENT AND BASIC ASSESSMENT REPORT

3. Contact Person and correspondence address

a) Details of

i) Details of the EAP

Name of The Practitioner: M A Golaith

Tel No.: 0824523693

Fax No. : goliathmalcolm@yahoo.com

e-mail address: goliathmalcolm@yahoo.com

ii) Expertise of the EAP.

(1) The qualifications of the EAP

(with evidence). MMC/NHD/LSTD

(2) Summary of the EAP's past experience.

(In carrying out the Environmental Impact Assessment Procedure)

Occupation : Consulting Mine Engineer

Age : 51

Gender : Male

Nationality : South African

Language : English, Afrikaans

Current Employer : Self Employed

CONSULTING MINING ENGINEER-2007-Present

Responsibilities

- Provide geological information for mining
- Site visit for inspection in the mine
- Mining Work Programme
- Financial and technical ability
- Environmental management Plan/Programme
- Scoping Report
- Social and Labour Plan
- Prospecting work programme
- Report on Results of Consultation
- Section 11 and 102 Application
- Closure application
- Annual Reporting-Performance Assessment Report

Major Projects

- Mining Right application, Mining Permit application and Prospecting Right
-

1999 – 2006

Managing Director-Sedibeng Mining
Mine Manger

Responsibilities

- Reporting to the Board of Directors.
- Manage all Mining disciplines
- Site visit for inspection in the mine
- Mining Work Programme
- Financial and Technical ability
- Environmental Management Plan/Programme
- Social and Labour Plan
- Prospecting Work programme
- Report on Results of Consultation
- Section 11 and 102 Application
- Closure application
- Annual Reporting-Performance Assessment Report

1993-1998

Regional Co-ordinator Minerals and Policy Centre.

Responsibilities

- Responsible for the Kimberley Multi-Stakeholder Forum
- Consultant to the Small-Scale Miners Northern Cape- compile DME mining application
- Provide technical and geological information on mining
- Advise on Environmental, Geological, Mining, Health and Safety, Plant and other mining disciplines.
- Status Report on the DMR documents
- Compiling Prospecting Work Programme
- Site visit for inspection to the small-scale mining operations
- Field mapping
- Report writing and give recommendation

1992-1990 Assistant Inspector of Mines-DME Northern Cape

Responsibilities

- Mine Health, Safety and Environmental Inspections on mines in the Northern cape
- Reporting to the Administrator, Manager and the principal geologist

Pre-1998

De Beers Consolidated Mines-Finsch Mine

Mining Shiftboss/Secondary Teacher Biology and Science

b) Location of the overall Activity.

Farm Name:	A Portion of Portion 10 of the farm Dorstfontein 77
Application area (Ha)	4.1425 ha
Magisterial district:	Kimberley
Distance and direction from nearest town	Within the Kimberley town boundaries
21 digit Surveyor General Code for each farm portion	C03700000000007700000

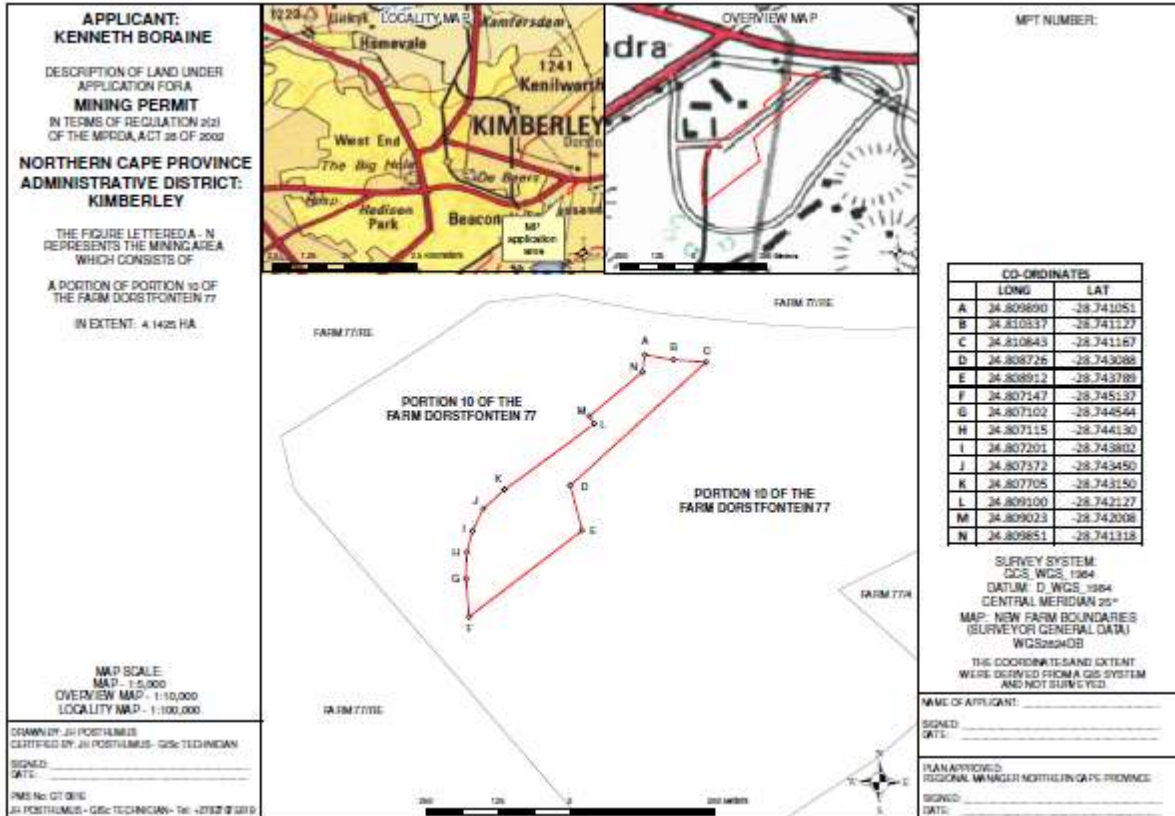
c) Locality map

(show nearest town, scale not smaller than 1:250000).



d) Description of the scope of the proposed overall activity.

Provide a plan drawn to a scale acceptable to the competent authority but not less than 1: 10 000 that shows the location, and area (hectares) of all the aforesaid main and listed activities, and infrastructure to be placed on site



Stockpiles 500m², Ablution Facilities 4m², Roads 300m², Site Office 25m²
Total 829m².

(i) Listed and specified activities

NAME OF ACTIVITY	Aerial extent of the Activity Ha or m ²	LISTED ACTIVITY	APPLICABLE LISTING NOTICE	WASTE MANAGEMENT AUTHORITY
(E.g. For prospecting - drill site, site camp, abluion facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc E.g. for mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, abluion, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)		(Mark with an X where applicable or affected).	(GNR 544, GNR 545 or GNR 546)	(Indicate whether an authorisation is required in terms of the Waste Management Act). (Mark with an X)
Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum	4.1425 ha	X	GNR 327 LN 1, Activity 21	

Development Act, 2002 (Act No.28 of 2002), including- (a) associated infrastructure, structures and earthworks directly related to the extraction of a mineral resource: or (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing: but exclude the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in Listing Notice 2 applies (Activity 21 of Listing Notice 1				
NOT LISTED				
Stockpiles	500m ²			
Ablution Facilities	4m ²			
Site Office	25m ²			
Roads	300m ²			

(ii) Description of the activities to be undertaken

(Describe Methodology or technology to be employed, including the type of commodity to be prospected/mined and for a linear activity, a description of the route of the activity)

The commodity that would be mined for is clay

- **Construction**

During the construction phase for the mining operation, the following infrastructure would be constructed on site: Production Stockpiles 250m², Topsoil Stockpiles 250m², Ablution Facilities 4m², Domestic Waste Facility 1m² and Site Office 25m², Roads 300m²

This infrastructure would be erected with the least disruption to the current economic activity of the land occupier and adjacent landowners.

- **Operational**

During the operational phase the topsoil will be removed and stored on a topsoil stockpile. The clay material will be excavated, screened to remove all oversize material and boulders. Excavations of dimensions 20mx20m x1m depth would be made and continuous backfill practised. There would at any time one time only be one production pit.

The screened material will be placed on a production stockpiles, where it will be loaded buy means of a Front End Loader onto dump trucks for supply to the consumers

- **Decommissioning**

Once the mining activities have been completed the mine will start with the decommissioning and closure phase. During these phases all infrastructure and equipment will be removed and the compacted ground ripped and rehabilitated.

LINEAR FLOW OF PROCESS

Excavation>>>>Screening>>>>>Load and Haul>>>>>>Stockpile>>>>>>>To Consumers

e) Policy and Legislative Context

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT (a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process)	REFERENCE WHERE APPLIED	HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE LEGISLATION AND POLICY CONTEXT. (E.g. In terms of the National Water Act a Water Use License has/ has not been applied for)
No person may...mine....for and produce any mineral.....or commence with any work incidental thereto on any area without-amining permit...	Section 5 (4)(b) read with Section 5A (b) of the Mineral and Petroleum Resource Development Act; 2002 (Act No.28 of 2002)	A Mining Permit has been applied at the DMR
No person may....mine....for and produce any mineral....or commence with any work incidental thereto on any area without-an approved environmental management programme or approved environmental management plan...	Section 5 (4)(a) of the Mineral and Petroleum Resource Development Act; 2002 (Act No.28 of 2002)	This document serves as the Basic Environmental Assessment and Environmental Management Programme
National Environmental Management Act, 1998(Act 107 of 1998) NEMA (as amended)	Section 28 of the National Environmental Management Act, Act No. 107 of 1998 required duty of care where reasonable measures are taken to prevent pollution or degradation from occurring, continuing or recurring, or, where this is not possible, to minimise and rectify pollution or degradation of the environment. Section 29 addresses the protection of workers refusing to do environmentally hazardous work. Section 30 addresses procedure to be followed in the event of emergency incident which may impact on the environment. Access to environmental information and protection of whistle blowers are addressed in Section 31.	Part of Environmental Management Programme
National Environmental Management Act, 1998(Act 107 of 1998) Environmental Impact Assessment Regulations, 2014(G38282-2982-985) (As amended)	GNR 983: 2014 Regulations promulgated in terms of NEMA, Act No.107 of 1998: GNR 982,983,984 and 985 Government Gazette No. 38282 Pretoria, in terms of Chapter 5 of the National Environmental Management	In the process of the DMR

	Act, Act No 107 of 1998 (as amended), contain the EIA Regulations, as well as a schedule of activities that may have substantial detrimental effects on the environment and therefor required authorisation from the competent environmental authority.	
National Environmental Management Act: Biodiversity Act, 2004 (Act 10 of 2004)	Reforms the law regulating waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.	To take note of
National Water Act, 1998 (Act36 of 1998)	In terms of the definitions contained in Section 1 of the National Water Act, Act No.36of 1998, a 'water resource' includes a watercourse, surface water, estuary or aquifer. "Aquifer" means a geological formation which has structures or textures that hold water or permit appreciable water movement though them. "Watercourse" means a river or spring; a natural channel in which water flows regularly or intermittently; a wetland, lake or dam into which, or from which, water flows; and any collection of water which the Minister may, by notice in the Gazette declare to be a watercourse, and a reference to a watercourse includes, where relevant, its bed and banks. The Minister of Water and Environmental Affairs is allowed to regulate activities which have a detrimental impact on water recourse by declaring them to be controlled activities. No person may undertake a controlled activity unless such person is authorised to do so by or under the Act. Duty of Care to prevent and remedy the effects of pollution to water recourse is addressed in Section 19. Section 20 addresses the procedure to be followed, as well as control of emergency incidents which may impact on a water resource.	Take note of.

	Recognised water uses are addressed in terms of section 21 and the requirements for registration of water uses are stipulated in Section 26 and 34.	
World Heritages Convention Act, 1999 (Act 49 of 1999)	Protection of Heritage	Take note
Environmental Conservation Amendment Act, 2003 (Act 50 of 2003) G26023	Section 25 of the Environmental Conservation Act, Act No 73 of 1989, as well as the National Noise Control Regulations GNR 154 dated 10 January 1992, regarding noise, vibration and shock, is applicable.	This is also legislated by Mine Health and Safety from DMR and will be adhered to.
In terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999)	In terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), any person who intends to undertake “any development or other activity which change the character of a site – exceeding 5000m3 in extent” and the “construction of a Linear development or barrier exceeding 300m in length” must at the very earliest stages of initiating the development, notify the responsible heritage resources authority, viz, the South African Heritage Resources Agency and /or the South African Heritage Resources Agency (SAHRA), as well as the Northern Cape department of Sports, Arts and Culture.	Take note
Conservation of Agricultural Resources Act, Act No 43 of 1983	Section 5 of the Conservation of Agricultural Resources Act, Act No 43 of 1983, prohibits the spreading off weeds and Section 6 and Regulation 15 and 15E of GNR 1048 address the implementation of control measures for alien and invasive plant species. This aspect has been addressed in the Environmental Management Programme. This Act also makes provision for the conservation of agricultural land.	Take note
National Forest Act, 190 (Act No. 84 of 1998)	National Forest Act, 190 (Act No. 84 of 1998) and Regulations, Section 7: No person may cut, disturb, damage or destroy any indigenous , living tree in a	Take note

	<p>natural forest, except in terms of a licence issued under Section 7(4) or Section 23: or an exemption from the provisions of this subsection published by the Minister in the Gazette. Sections 12 – 16 deal with protected trees, with the Minister having the power to declare a particular tree, a group of trees, a particular woodland, or trees belonging to a certain species, to be a protected tree, group of trees, woodlands or species. In terms of section 15, no person may cut, disturb, damage, destroy or remove any protected tree; or collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree, except under a licence granted by the Minister.</p>	
<p>Section 17 of the Fencing Act, Act No.31 of 1983</p>	<p>States that any person erecting a boundary fence may clean any bush along the line of the fence up to 1,5m on each side therefore and remove any tree standing in the immediate line of the fence. However, this provision must be read in conjunction with the environmental legal provisions relevant to protection of flora.</p>	<p>Take note</p>
<p>Section 8 of the Atmospheric Pollution Prevention Act, Act No.45 of 1965</p>	<p>Section 8 of the Atmospheric Pollution Prevention Act, Act No.45 of 1965 regulating controlled areas, as well as section 27, with regard to dust control is still applicable.</p>	<p>Take note</p>
<p>The Occupational Health and Safety act, Act 85 of 1993 GNR 22810f 1987-10-16</p>	<p>Environmental Regulations for Workplaces are applicable.</p>	<p>Take note</p>
<p>The South African Civil Aviation Regulation Act, Act 13 of 2009.</p>	<p>Controls marking of structures that may influence aviation through the Civil Aviation Technical Standards, SA-CATS-AH 139.01.33 Obstacle Limitations and Markings outside Aerodrome or Heliports. It states that any structure exceeding 45m above ground level, or structures exceeds 150m above the MEAN ground level, like on top of a hill, the mean ground level</p>	<p>Take note</p>

	<p>considered to be the lowest point in a 3km radius around such structure.</p> <p>Structures lower than 45m, which are considered as a danger or a potential danger to aviation, shall be marked as such when specified.</p> <p>Overhead wires, cables, etc., crossing a river, valley or major roads shall be marked and in addition, their supporting towers marked and lighted if an aeronautical study indicate that it constitute a hazard to aircraft.</p>	
--	---	--

f) Need and desirability of the proposed activities.

(Motivate the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred location).

The study area has clay bearing material that can be economically exploited. The operation will create much needed employment opportunities, especially to women, and will compliment BEE enterprise in the City of Kimberley from which equipment and consumables will be sourced.

The clay bearing sources is site specific and the mining program will ensure that these sources would not be sterilised.

g) Motivation for the overall preferred site, activities and technology alternative.

The proposed project area is demarcated to include the clay bodies as well as enough space for the construction of the offices and infrastructure. The activities and technology used is planned and designed to created and cause the minimal disturbance possible. Working hours is also kept within standard office hours for the purpose of minimizing noise disturbance. No other alternatives in regard to preferred site, activities and technology is considered as the current planning is be best possible option at this stage to ensure minimal environmental disturbance and cost effective prospecting operations

h) Full description of the process followed to reach the proposed preferred alternatives within the site.

NB!! – This section is about the determination of the specific site layout and the location of infrastructure and activities on site, having taken into consideration the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout.

i) Details of the development footprint alternatives considered.

With reference to the site plan provided as Appendix 4 and the location of the individual activities on site, provide details of the alternatives considered with respect to:

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

- (a) There is no alternative to the location as the clay bearing material is site specific in its location.
- (b) The activity would be opencast mining by means of TMM's and screening of the clay bearing material for commercial use.
- (c) (d) (e) and (f)

Stockpiles

The topsoil removed would be kept on a topsoil stockpile (250m² footprint) for final rehabilitation of the excavated areas. No specific technology is used other than ensuring no contamination of the topsoil. If this activity is not implemented the mining activities cannot continue fluently affecting the cost effectiveness of the mining operation. The option of not implementing the activity cannot be considered.

Mine Excavations

One block of 20 x 20 x 1m depth is proposed for optimal small scale mining.

The topsoil and overburden is removed where necessary and stored near the excavation for easier rehabilitation activities.

The technology used in this activity will be the screening of the clay bearing material to remove all boulders and big rocks. The oversize material would be replaced in the excavated areas as part of the rehabilitation process.

The screened clay material will be transported to the production stockpiles where it will loaded to dump trucks for supply to the consumers.

This activity is the most critical part of the proposed mining activities and therefore the option of not implementing the activity cannot be considered.

Office Site

The office block will be installed and have an approximate footprint of 25m². This site will house a general office, mine health and safety office and first aid room.

The office site will be mobile offices fitted with relevant equipment/furniture for its specific task.

All administrative activities, storing of files, mine financials and discussions will be occurring within this facility.

The best option is to keep the offices within the mine premises for proper managing, activity regulation, accident and damage control as well as optimizing productivity.

Ablution Facility

The ablution (with a total footprint of approximately 4m²), is installed before mining operations start and will be active till the decommissioning of the mine.

Contractual agreements will be made and basic flushing chemical toilets installed.

These facilities are to support the sanitation protocol of the mine. During the mining operations a mobile chemical toilets be available.

The implementation of this structure and related activities is absolutely compulsive and enforced by the Basic Conditions of Employment Amendment Act, 2013 (Act 20 of 2013) in conjunction with the Basic Conditions of Employment Act, 1997 (Act 75 of 1997), Basic Conditions of Employment Amendment Act, 2002 (Act 68 of 2002) and Basic Conditions of Employment Amendment Act, 2003 (Act 52 of 2003)

Domestic Waste Facility

The domestic waste facility (approximate footprint of 1m²) will be installed at the office sites.

The technology used shall be of local municipal standard including a tip-proof and scavenger proof bin. Agreements with the local municipality will signed for the removal of waste on their schedule.

All domestic waste on site will be place within these bins to keep the area clean and litter free.

The option of not implementing the activity can be taken into consideration and should the activity not be implemented a greater risk of littering results

(f) Income loss to the state and the local municipality in the form of taxes. Loss of job opportunities. No women in mining program that can be advanced.

ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. (Information to be provided to affected parties must include sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land.

(1) Landowner and Occupant

Eskom is the registered land owner. Consultation is currently on-going

(2) Notice Board Placed on Fence of the Property

A notice board was placed on the property fence as notification of the EIA Public Participation Process.



Photo 1.

Notice Placed at Sol Plaatje Local Municipal Notice Board



Photo 2

Sol Plaatje Local Municipality

DRAFT BASIC ASSESSMENT REPORT And ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT forwarded by mail on 25th August 2018 to the Municipal Manager.

**(4) Adjacent Property Owners
Consultation with De Beers**
Consultation is on-going

(5) Advertisement

An advertisement of the EIA Public Participation Process was placed in the Noordkaap on 15 August 2018

www.noordkaap.co.za | Noordkaap | 15 Augustus 2018

www.noordkaap.co.za OM TE ADVERTEER SKAKEL T: 053 631 2331 · F: 053 631 2330 · E: cesilia.victor@volksblad.com

Geklassifiseer

TE KOOP	BRIDGING CASH while waiting for pension/package/property sale. Payout (state sum only) 086 110 1368 086 754 3063	MAMA LUCKY 083 506 6290 * BRING BACK LOST LOVE * FINANCIAL PROBLEMS * MAGIC STICK AND WALLET * SEXUAL PROBLEMS * PROBLEMS AT WORK * WITCHCRAFT AND BAD LUCK Treats over phone 081 730 9685	FRED ADAMS POWER HEALER - GET MONEY IN BANK QUICK - BRING BACK LOST LOVER - HELP WITH PENSIONS - PLAY AND WIN LOTTO/POWERBALL - MEN'S CLINIC, COURT CASES - ALL LOVE AND MONEY PROBLEMS CALL 071 844 4451
ALLENLEI	REGSKENNISGEWINGS & TENDERS		
UTILITY RUBBER STAMPS: SAME-DAY SERVICE. TEL./FAX: 053 832 1951	OIS OMGEWINGSIMPAKSTUDIE		
ALGEMENE & HUIDSDIENSTE	EIA PUBLIC PARTICIPATION PROCESS	BABA CHIKU Pay after work is done HE PUT R7.1 IN INTO MY ACCOUNT, I ONLY GAVE HIM A DONATION. I used my R7.1m to pay off all my debt. I had tried so many doctors in the past but none of them helped. They only asked for more money and no help. Baba Chiku help people with financial problems, relationships and marriage. He also gives luck rings and wallets for money. * Financial problems * Magic wallet * Short boys to bring you R6000 every day in your house * Rate to put money in your account * Lost lover * Promotion at work * Men enlargements * Get money in your account within 24hrs Kimberley 073 670 4714	MAMA MUKALO VIR MY LEWENSVERHAAL, VIR AL JOU BEKOMMERNISSE EN UITDAGINGS: VIND VANDAG DIE FINALE OPLOSSINGS. ONVOLTOOIDE WERK, VERLORE LIEFDE, EGSKEIDING, HUWELIKSPROBLEME, BESIGHEID, BEVORDERING BY DIE WERK, MAGIC WALLET EN MAGIC RING OM JOU RYK TE MAAK, ONGELUK WEG TE NEEM. TEL 073 925 8950.
BOME	KENNETH LEON BORRAINE has in terms of the Mineral and Petroleum Resources Development Act, 2002, (Act 28 of 2002 as amended), the National Environmental Act, 1998, (Act 107 of 1998 as amended), lodged an application for a mining permit with the Department of Mineral Resources, Northern Cape Region, on a portion of portion 10 of the farm Dorstfontein 77, situated in the Administrative District of Kimberley, Northern Cape. DMR Reference: NC 30/5/1/3/2/10697MP LISTED ACTIVITIES: GNR 327, Listing Notice 1, Activity 21 Mineral: Clay Basic Assessment Report and Environmental Management Programme available at the Community Public Library, Kimberley, from 25 August 2018 for a period of 30 days. All interested and/or affected parties are hereby invited to register on the application database (goliathmalcolm@yahoo.com) or lodge any complaints in writing to MA Goliath, 23 Goedehoop Avenue, Rooydens, Kimberley 8301.		
BOOM AFSAAG / TREE-FELLING: Stump digging and removal. Affordable. Ryan. 071 993 1710			
SAKE GELEENTHEDE			
BEGIN U EIE STUDIE-TEGNIKESENTRUM.			
ESTUDAIR STUDIES BLOEMFONTEIN BIED DIE GELEENTHEID VIR BESIGHEIDSTAKKE IN Noord-Kaap.			
SKAKEL 079 509 5458 VIR MEER INLIGTING.			
VOERTUIE			
MOTORS TE KOOP			
AUDI A4 1.8: SUN-ROOF, FSH. 2009 = 072 441 7902. THOBELA.			
BETREKKINGS			
FINANSIEEL			

Maama Amina and Papa Simon's free prayers works for the people

Ivy Kros Centre for the Blind
ALGEMENE JAARVERGADERING
sal gehou word by Ivy Kros, Phakamile Mabijastraat 153, Kimberley, op Vrydag 24 Aug. 2018 om 10:00. Alle lede en belangstellende persone word vriendelik uitgenooi om teenwoordig te wees.

Lost hope in traditional healers? CHIEF AKIM IS THE ANSWER.
Get rich FAST, lost lover, court cases, win Lotto, bad luck, jealous people, penis enlargement.
Grow BIG in business and Bitcoin.
CALL 063 374 9538

King of Kings
in Gambling. Win Bitcoin, casinos and Lotto. Come with playing cards

(6) Government Departments

Departments of Water and Sanitation, Environment and Nature Conservation, Agriculture Land Reform and Rural Development. Commission for Land Restitution

DRAFT BASIC ASSESSMENT REPORT And ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT forwarded by mail on 25th August 2018.

.

(7) Mc Gregor Museum

DRAFT BASIC ASSESSMENT REPORT And ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT forwarded by mail on 25th August 2018.

(8) SAHRA

DRAFT BASIC ASSESSMENT REPORT And ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT will be forwarded by SAHRIS system on 25th August 2018.

(9) Kimberley Community Library

DRAFT BASIC ASSESSMENT REPORT And ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT will be placed at the Kimberley Community Library on 27th August 2018.

(10) DEPARMENT MINERAL RESOURCES

By SAMRAD 27th August 2018

(11)Objections

No objection received.

iii) **Summary of issues raised by I&Aps**
 (Complete the table summarising comments and issues raised, and reaction to those responses)

Interested and Affected Parties	Date	Comments Received	Issues raised	EAPs response to issues as mandated by the applicant	Section and paragraph reference in this report where the issues and or response were incorporated.
List the names of persons consulted in this column, and Mark with an X where those who must be consulted were in fact consulted.					
<u>AFFECTED PARTIES</u>					
Landowner/s	X				
ESCOM	X		Awaiting Input		
Lawful occupier/s of the land					
ESCOM	X		Awaiting Input		
Landowners or lawful occupiers on adjacent properties					
De Beers Mines	X		Awaiting Input		
Municipal councillor					
Municipality Sol Plaatje Local Municipality	X		Awaiting Input		
Organs of state					

(Responsible for infrastructure that may be affected Roads Department, Eskom, Telkom, DWA					
Departments: Eskom Environmental Division Telkom					
Communities					
No Communities					
Dept. Land Affairs					
Dept. Water and Sanitation	X		Awaiting Input		
Traditional Leaders					
No Traditional Leaders					
Dept. Environmental Affairs	X		Awaiting Input		
Other Competent Authorities affected					
Department of Agriculture, Land Reform and Rural Development	X		Awaiting Input		
<u>OTHER AFFECTED PARTIES</u>		Advertisement Placed	Awaiting Input		
<u>INTERESTED PARTIES</u>		Advertisement Placed	Awaiting Input		

- iv) **The Environmental attributes associated with the alternatives.**(The environmental attributed described must include socio-economic, social, heritage, cultural, geographical, physical and biological aspects)

(1) Baseline Environment

(a) Type of environment affected by the proposed activity.

(its current geographical, physical, biological, socio- economic, and cultural character).

Geographical Environment

The application area is situated within Central South Africa within the City of Kimberley boundaries. Kimberley lies at an elevation of approximately 1230m above sea level.

Physical Environment

The study area is relatively flat.

Biological Environment

Fauna: Mice, lizards, meercats, snakes, bats and rats have been recorded in the general study area.

ANIMALS	YES	NO
Red Data species		X
Protected species		X
Is it necessary to translocate any species?		X
Does breeding species occur on or near site?		X

The area falls within the Kimberley Thorn Bushveld biome.

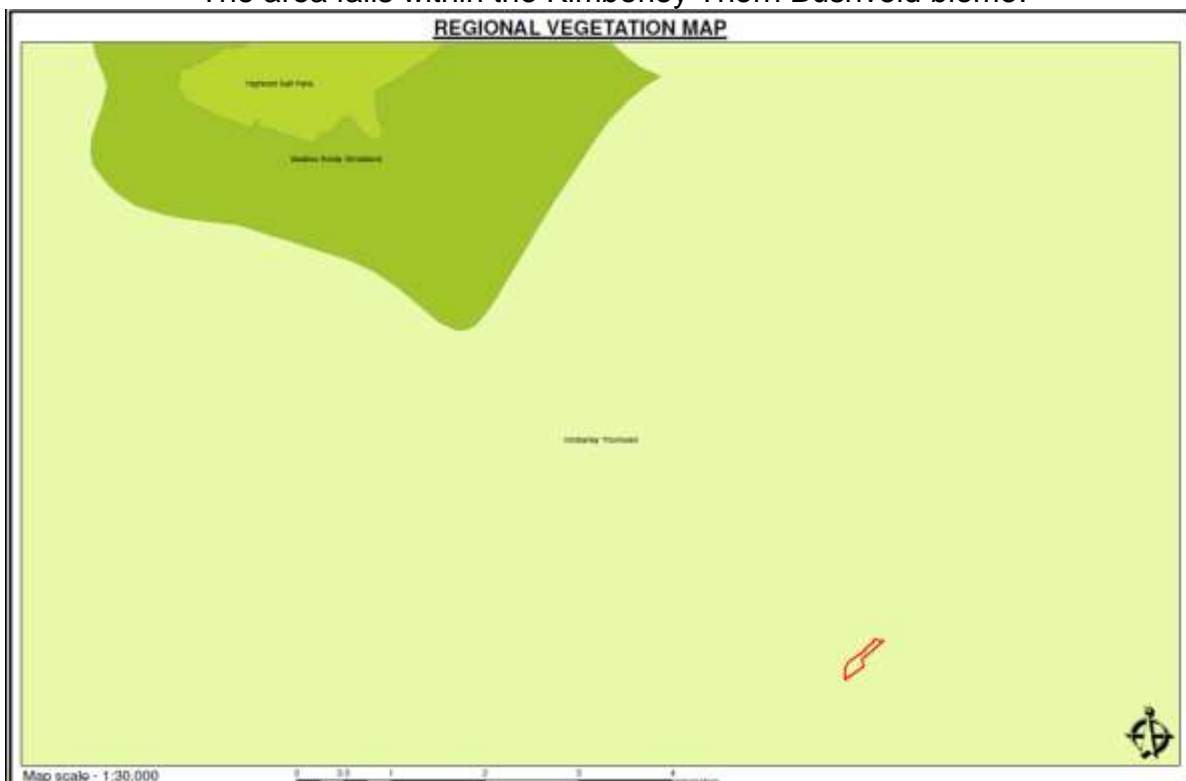




Photo 3

The application area falls within the Kimberley Thorn Bushveld. This area is an open savannah with deep, predominantly sandy to loamy sands. The dominant tree species are the Umbrella Thorn (*Acacia tortilis*) and the Camel Thorn (*Acacia erioloba*) with scattered individuals of Shepherd's Tree (*Boscia albitrunca*) and Sweet Thorn (*Acacia karroo*). The poorly to moderate srublayer comprises of individuals of Camphor Tree (*Tarchonanthus camphoratus*), Spike-flowered Black Thorn (*Acacia mellifera*) and Wild Raisin (*Grewia flava*). The grass layer is fairly well developed and grasses such as Redgrass (*Themeda triandra*), Common Nine awn Grass (*Enneapogon cenchroides*) and Lehmann's Lovegrass (*Eragrostis lehmanniana*) are conspicuous.

PLANTS	YES	NO
Red Data species		X
Protected species		X
Does any species have to be removed		X

Climate and Rainfall

The Study area is situated within the City of Kimberley boundaries, in the Northern Cape. The climate can generally be described as continental. The weather provides hot wet summers (December-February) and mild dry winters (June-August). The infrequent summer rains tend to take the form of occasional severe thunderstorms rather than prolonged soft showers. It is not unusual for winter night time temperatures to drop below freezing point.

Rainfall average 274 mm per annum.

Month	Jan	Feb	Mar	April	May	June	July	Aug	Sep	Oct	Nov	Dec
Average Rainfall mm	58	62	65	40	18	7	0	8	15	28	41	52
Temp Max	32	31	28	24	21	18	18	21	25	27	30	31
Temp Min	17	17	15	10	6	3	2	4	8	11	14	16
Relative Humidity Max %	91	94	96	96	96	97	94	91	89	92	90	94
Relative Humidity Min %	8	12	15	16	16	16	15	13	10	8	8	8

Source: Meteoblue

Wind

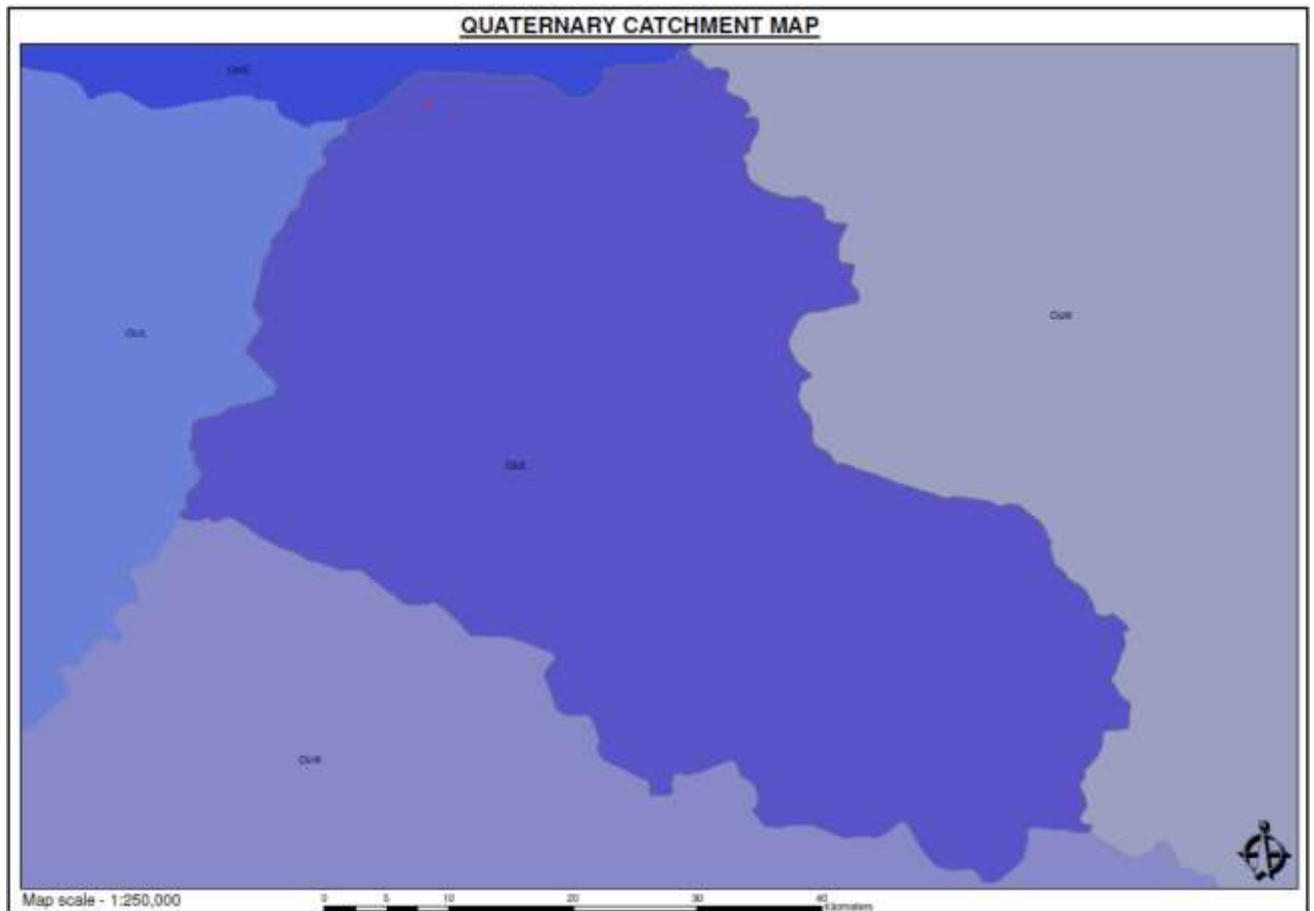
The prevailing wind direction is north to north-north west for the months January-September and changing from north to westerly winds during October-December averaging 3.5m/s

Soils





Quaternary Catchment Map



Surface water

Rivers or watercourses and dams:

No rivers or watercourses on or near the prospecting area

Details of surface water quality:

No surface water present

River diversions:

There will be no river diversions.

Wetlands:

A dry pan was observed on the study area.

Groundwater

Mean Depth of Water-Table

The mean depth of the water table is not known.

Boreholes

No boreholes are present on the property

Air Quality

Air Quality is good and generally unpolluted.

Areas of Impact

The prevailing wind direction being north to North West for the months January to September and changing from north to sometimes westerly winds during October to December.

Affected areas would be the adjacent commercial property directly bordering west.

The dust management programme recommended will include daily dosing of mine roads.

Noise

Noise on site will come from the self-propelled mobile machinery namely, Load Haul Dumper..

The operation would be conducted during daytime 07:00-17:00 on a 5 day week cycle.

Visual Impacts

The mining operation will be visible from the adjacent R64 road joining Kimberley with Boshof.

Socio-Economic Structure of Kimberley

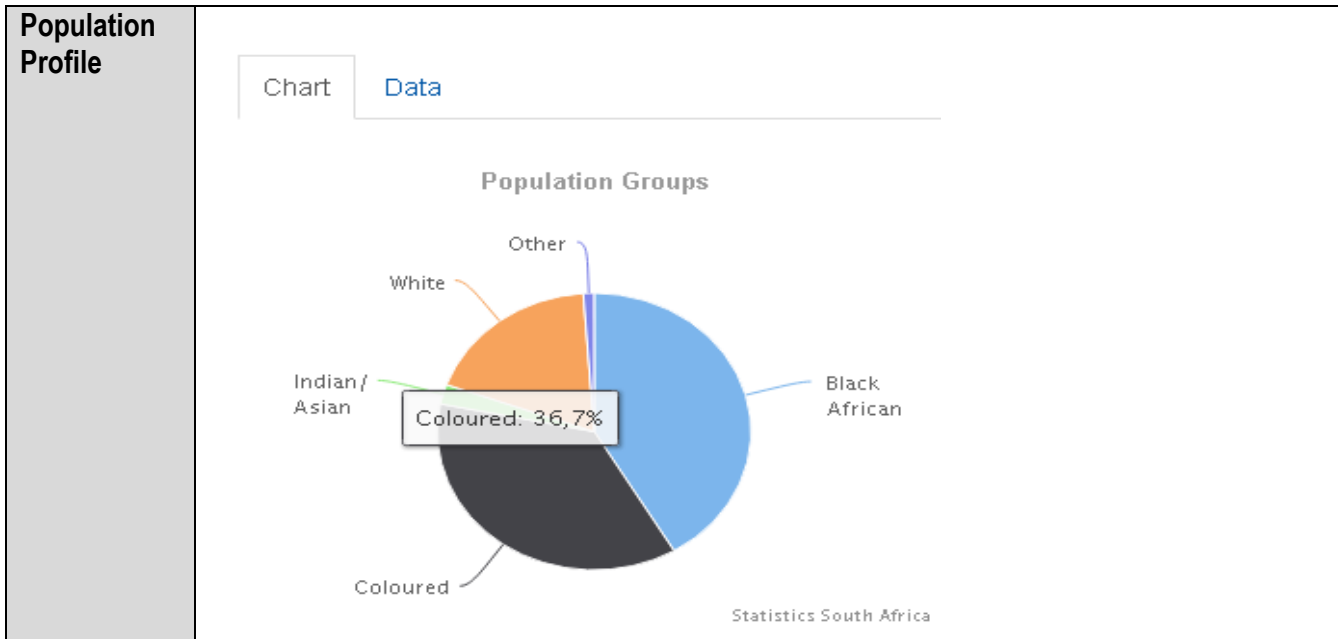
The Northern Cape is geographically the largest province in South Africa having a land mass increased from 361,830 km² to 373,239 km² with the introduction of the new provincial boundaries and covers approximately one third of the country's surface area.

The midyear population estimates

for 2001 was 822,829, which was 1.9% of the total population of South Africa (StatsSA 2001). The population has increased by 33% from 2001 (822,829) to 2006 (1,094,500) resulting in an increase in the population density, of a still sparsely populated province, from 2.27 to 2.93 persons per km². The Northern Cape population is estimated at 1,103,900 according to Statistics South Africa mid-year estimates of 2010, this is 2, 2% of the South Africa's population.

The Sol Plaatje Local Municipality is named after Solomon Tshekisho Plaatje who was a South African intellectual, journalist, linguist, politician, translator, and writer. Solomon Plaatje was born just outside Boshof, in the former Orange Free State (now Free State province, South Africa).

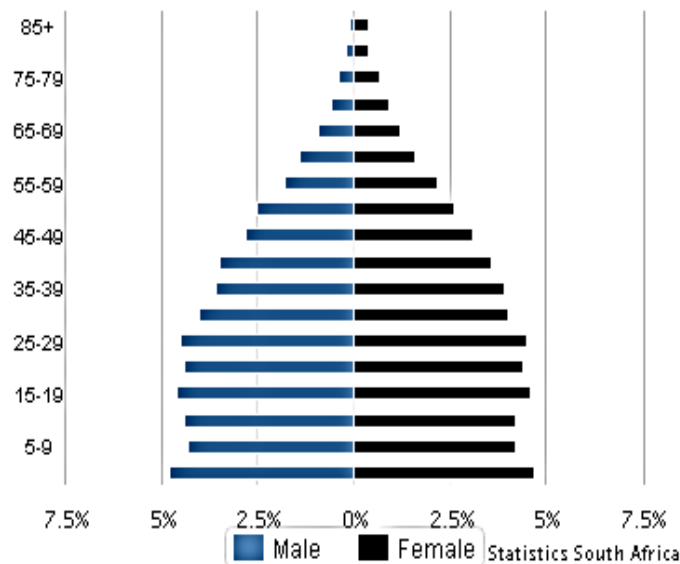
The Sol Plaatje Local Municipality is the second largest local municipality in the district with an area covering 3 145 km² and comprising a large urban node in the form of Kimberley, as well as villages and farms. Kimberley is the administrative centre of the municipality. Sol Plaatje Local Municipality is the largest local municipality in the Frances Baard District Municipality in terms of population size.



Key Statistics x011

Characteristics	
Total population	96,977
Young (0-14)	26,5%
Working Age (15-64)	67,6%
Elderly (65+)	5,8%
Dependency ratio	47,9
Sex ratio	95,7
Population density	679 persons/km2
No schooling aged 20+	4,7%
Higher education aged 20+	17%
Matric aged 20+	31,8%
Number of households	24,395
Average household size	3,7

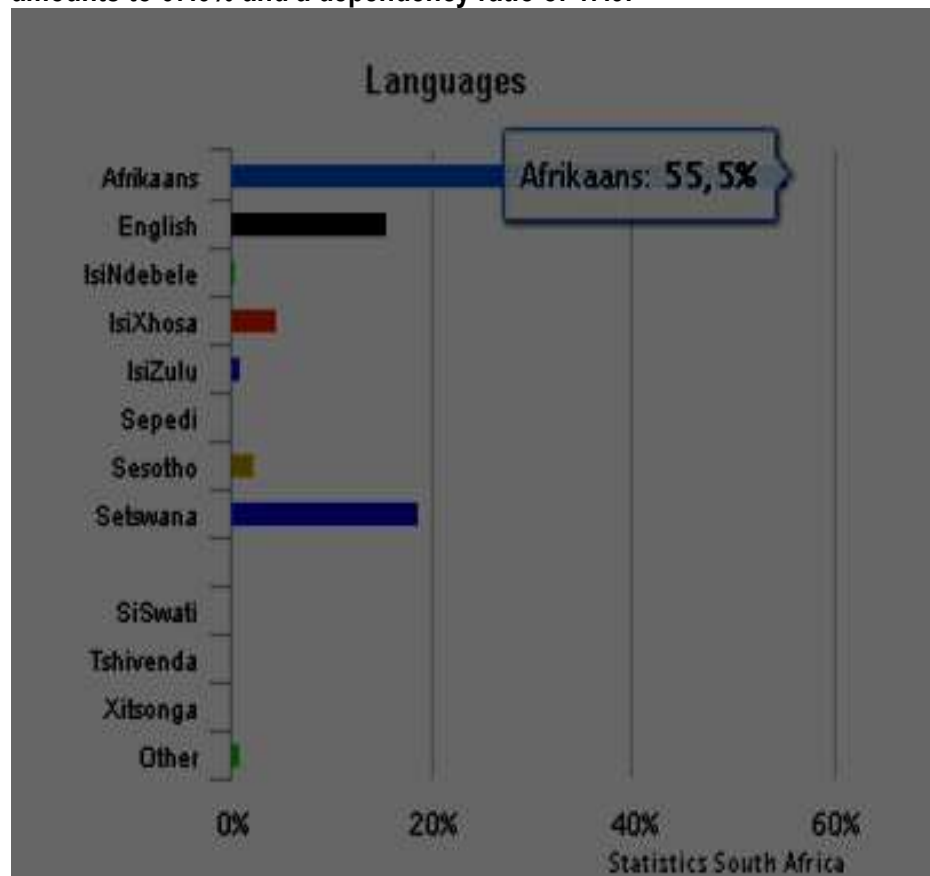
Sex and Age Distribution



Key Statistics 2011

Characteristics	
Total population	96,977
Young (0-14)	26,5%
Working Age (15-64)	67,6%
Elderly (65+)	5,8%
Dependency ratio	47,9
Sex ratio	95,7
Population density	679 persons/km2
No schooling aged 20+	4,7%
Higher education aged 20+	17%
Matric aged 20+	31,8%
Number of households	24,395
Average household size	3,7

The total population of Kimberley are 96 977 as at 2011 census. The working age group amounts to 67.6% and a dependency ratio of 47.9.



Economic Profile

The Northern Cape economy is anchored by the primary sector specifically the mining industry with the primary sector contributing 32.6%, secondary 6.2% and the tertiary sector 49.8% (Statistics SA: GDP p0441: 2010). Although the tertiary sector contributes almost 50%, the mining industry alone contributes 24, 6% to the provincial value addition.

Northern Cape recorded an average real annual economic growth rate of 2, 5% between 1996 and 2007. Average real annual economic growth rate of South Africa for the same period (1996 to 2007) was 3, 6%.

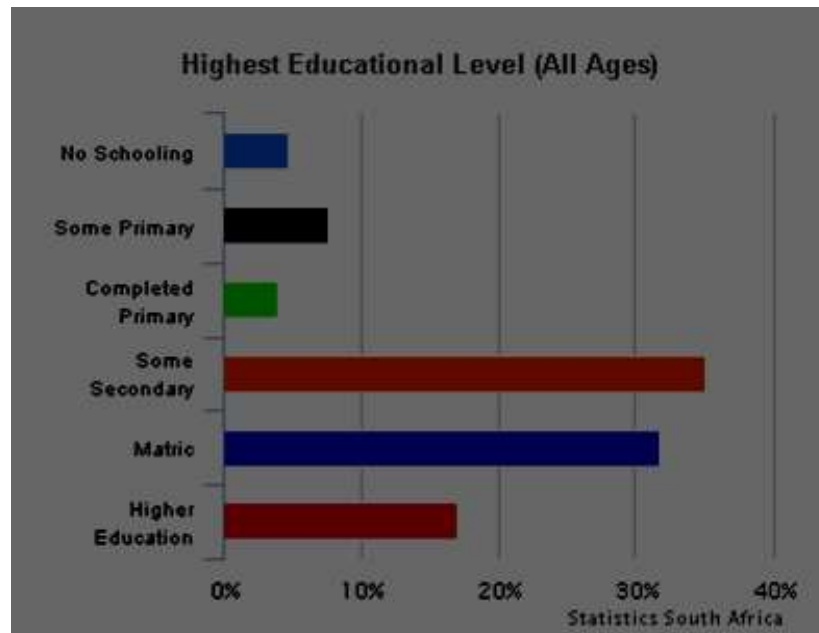
For the period 2005 to 2008 the Northern Cape Province had growth of 3,6%, 4,1%, 4% and 21% respectively.

This however, if put in perspective in terms of the average annual growth (see table below), the district is not comparing badly to the Province which had an average annual growth rate of 3,3% for the period 2002 to 2008 while South Africa for the same period had an average annual growth of 4,6% (Statistics SA: GDP p0441: 2010).

Average annual growth (% , Constant 2000 prices)
Sector 1996-2008
Agriculture 3.8%

Education Levels

Education prepares individuals so that they are able to play an active role in the labour market, which directly affects their quality of life as well as the economy of a country and the area they live in. Through the education level, one can then understand the skills that an area has and its potential to contribute positively to the economy (Stats SA).



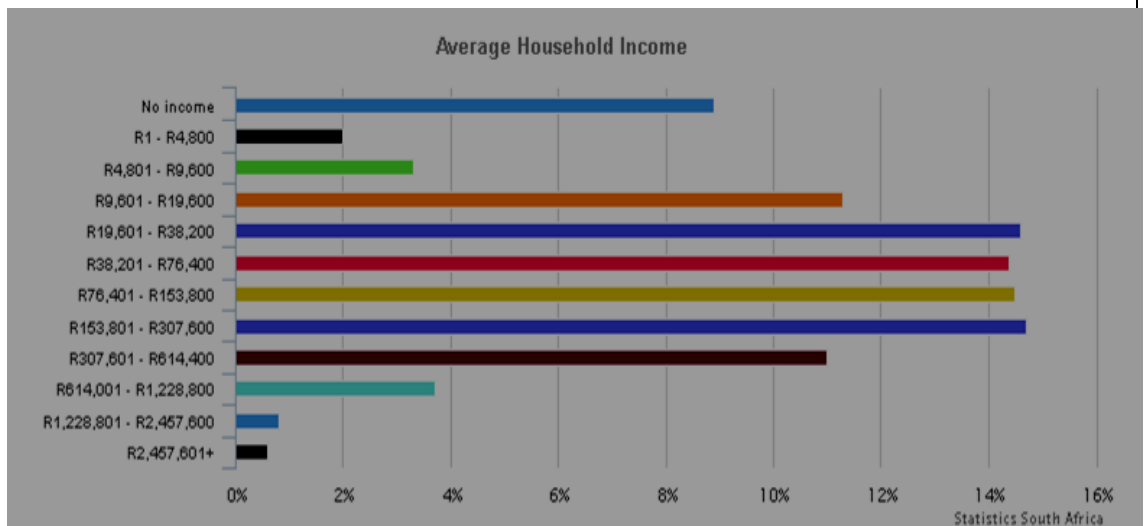
Key Statistics	
Characteristics	
Total population	96,977
Young (0-14)	26,5%
Working Age (15-64)	67,6%
Elderly (65+)	5,8%
Dependency ratio	47,9
Sex ratio	95,7
Population density	679 persons/km2
No schooling aged 20+	4,7%
Higher education aged 20+	17%
Matric aged 20+	31,8%
Number of households	24,395
Average household size	3,7

Employment Profile

The number of those who are not economically active is very high, which means a large portion of the population is highly dependent on social grants or on those that work. The Stats SA 2011 indicates that more men are employed than their female counterparts. Furthermore women are the most discourage work seekers. Additionally, the economical not active female population is also higher than their male counterparts. There is a need to have initiatives that make it easy for women to find employment.

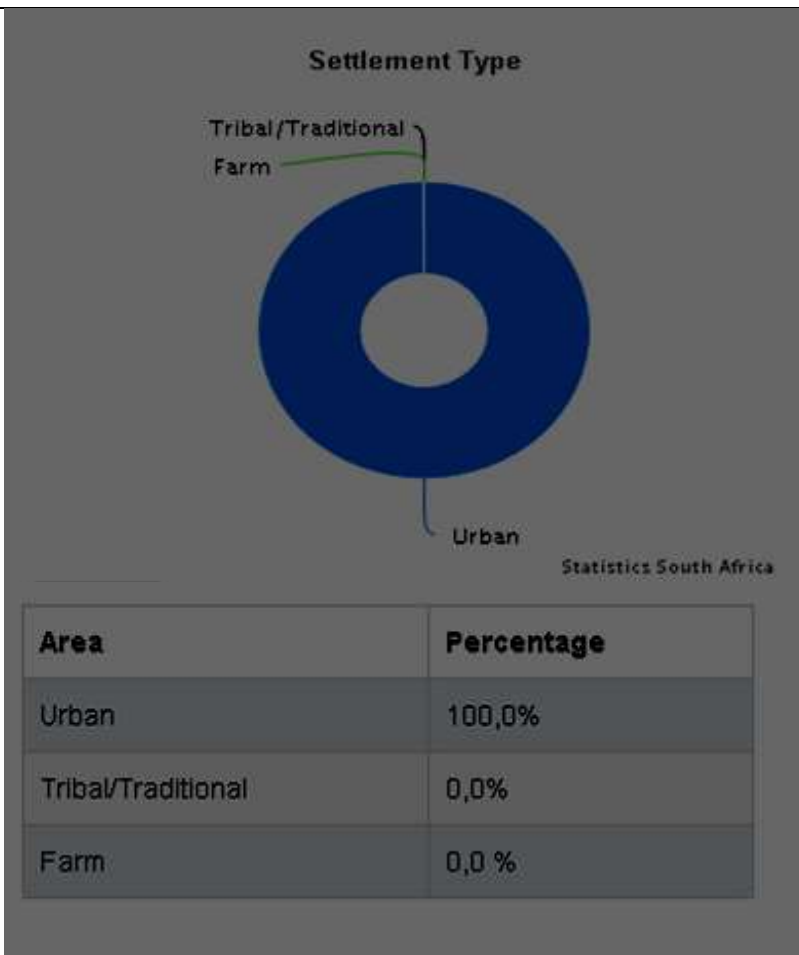
Income Profile

The majority of the population in the City of Kimberley earn between R4901-R614400 per annum. Around 5.2% is above average earners with approximately 9% without income.



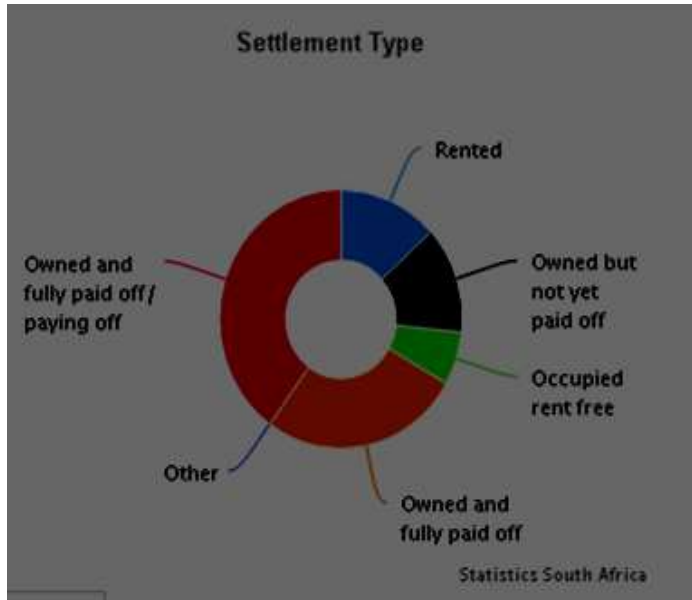
Income	Percentage
No income	8,9%
R1 - R4,800	2%
R4,801 - R9,600	3,3%
R9,601 - R19,200	11,3%
R19,201 - R38,400	14,6%
R38,401 - R76,800	14,4%
R76,801 - R153,600	14,5%
R153,601 - R307,200	14,7%
R307,201 - R614,400	11%
R614,401 - R1,228,800	3,7%
R1,228,801 - R2,457,600	6,8%
R2,457,601+	0,6%

Housing

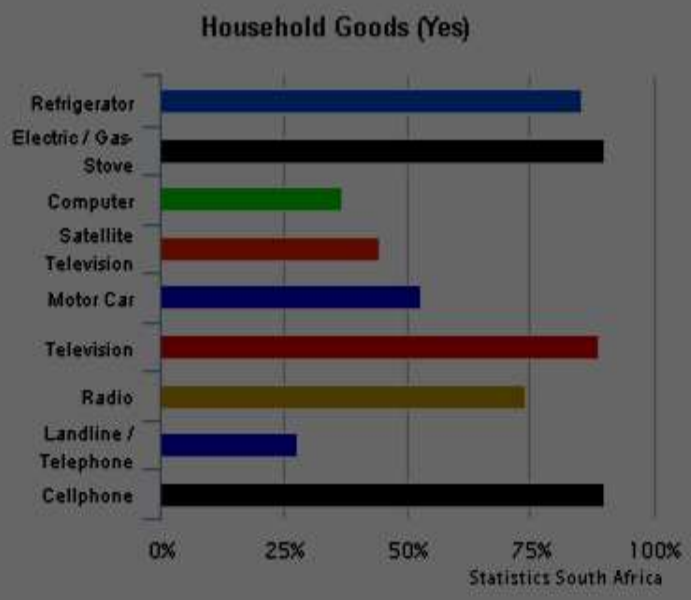


The population of the city of Kimberley lives in urban settlement type.

Tenure Status



Tenure Status	Percentage
Rented	13,3%
Owned but not yet paid off	13,3%
Occupied rent free	6,7%
Owned and fully paid off	26,7%
Other	0%
Owned and fully paid off/paying off	40%



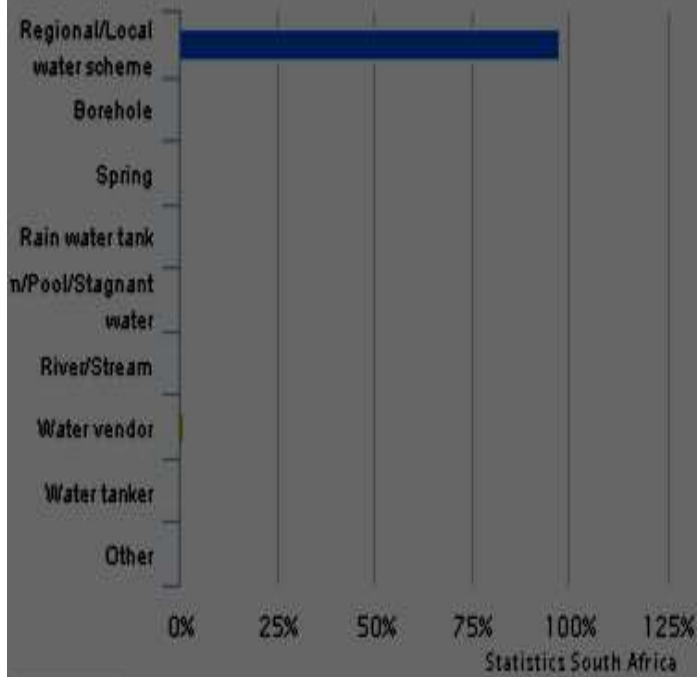
Item	Yes
Refrigerator	85,5%
Electric / Gas-Stove	90,3%
Computer	37%
Satellite Television	44,5%
Motor Car	52,9%
Television	88,8%
Radio	74,1%
Landline / Telephone	27,6%
Cellphone	90,1%

Water and Sanitation

Access to clean water and proper sanitation are key environmental elements that affect health outcomes of households

Access to water
 The majority of households (98%) have access to piped water inside their yard.

Source of Water

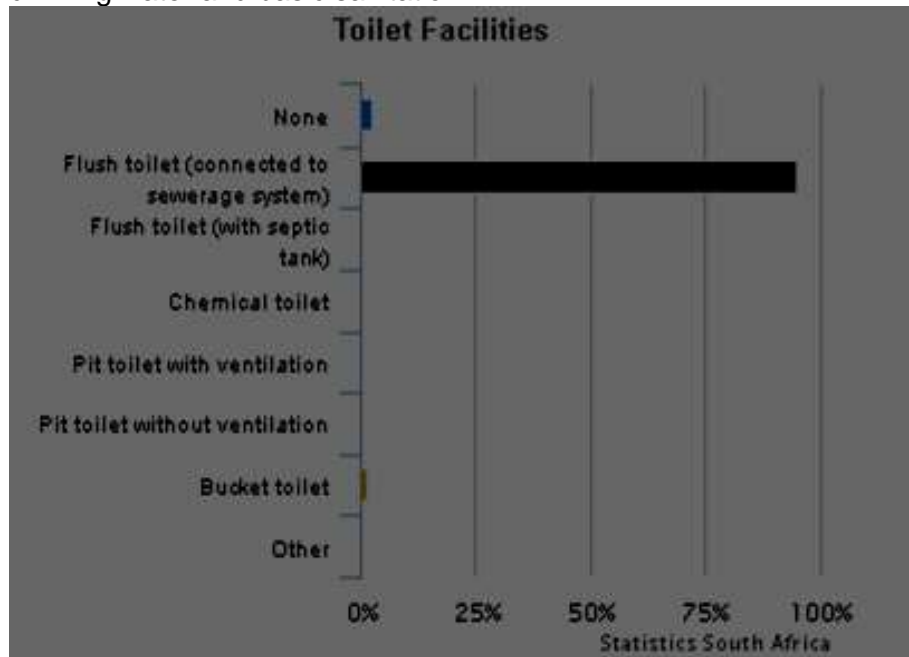


Toilet Facility	Percentage
None	2.2%
Flush toilet (connected to sewerage system)	95.2%
Flush toilet (with septic tank)	0.4%
Chemical toilet	0.1%
Pit toilet with ventilation	0.1%
Pit toilet without ventilation	0.3%
Bucket toilet	1.4%
Other	0.3%

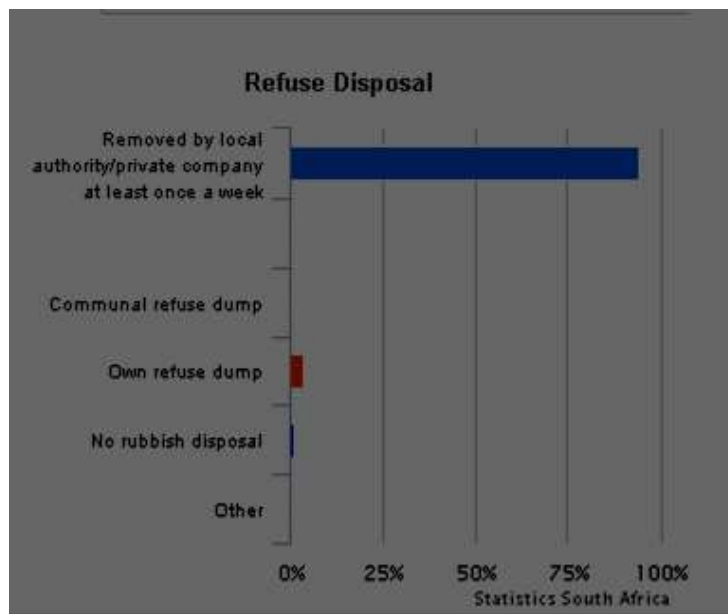
The only water sources are from regional /local water scheme. A small percentage is from a water vendor which amounts to less than 2%

Sanitation

The Millennium Development Goal states the need for “sustainable access to safe drinking water and basic sanitation.



REFUSE DISPOSAL



Heritage, Cultural-historical or Archaeological Interest

CURRENT PROTECTION STATUS:

Structures older than 60 years fall under the protection of Section 34(1) of the National Heritage Resources Act 25 of 1999. Additionally, in terms of Section 35(4) of the National Heritage Resources Act (25 of 1999), man-made features and artefacts older than 100 years are defined as being archaeological. In the same section, the act also states that such archaeological sites and objects may not be disturbed, altered, modified or destroyed without a suitable permit.

Graves and burial grounds fall under various legislative protections. Such legislation may include the National Heritage Resources Act 25 of 1999, the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925), the Human Tissue Act 65 of 1983, the Ordinance on Excavations (Ordinance no. 12 of 1980) as well as any local and regional provisions, laws and by-laws that may be in place.

Archaeological remains can be defined as human-made artefacts, which reflect past ways of life, deposited on or in the ground. All archaeological remains, artificial features and structures older than 100 years and historic structures older than 60 years are protected by the National Heritage Resources Act (NHRA) (Act No. 25 of 1999). No archaeological artefact, assemblage or settlement (site) may be moved or destroyed without the necessary approval from the South African Heritage Resources Agency (SAHRA).

The graveyards are protected under the South African Heritage Resources Act (Act no. 25 of 1999), and by the Human Tissues Act, 1983 (Act No. 65 of 1983). No disturbance to these sites is permitted. If it is inevitable that mining will have an impact on this site, mitigation measures (i.e. exhumation and reburial) will have to be proposed as part of a Phase 2 investigation.

The study area has kimberlitic floor material on certain portions of the farm. This is an indication that the area was previously disturbed by mining activity. Evidence of current artisanal mining activity is present on the farm.



Management Heritage and Cultural Program

Management will train the employees on a Heritage Program. This will ensure identification of artefacts, fossils and other sources of a heritage or cultural interest.

The following forms part of the induction programme of all employees and contractors employed to ensure the identification of any finds, the reporting thereof to the Mine Manger or Supervisor. Mine Management will report the finds to the relevant authorities.



Structures Older than 60 Years



Lithics scatter-Jaspilite flakes



Jaspilite flake and old sardine tin



Quartzite and Shell



Stone Age



Old Brookes Bottle



Age of Midden



All graves have high levels of emotional, religious and in some cases historical significance

(c) Description of specific environmental features and infrastructure on the site.

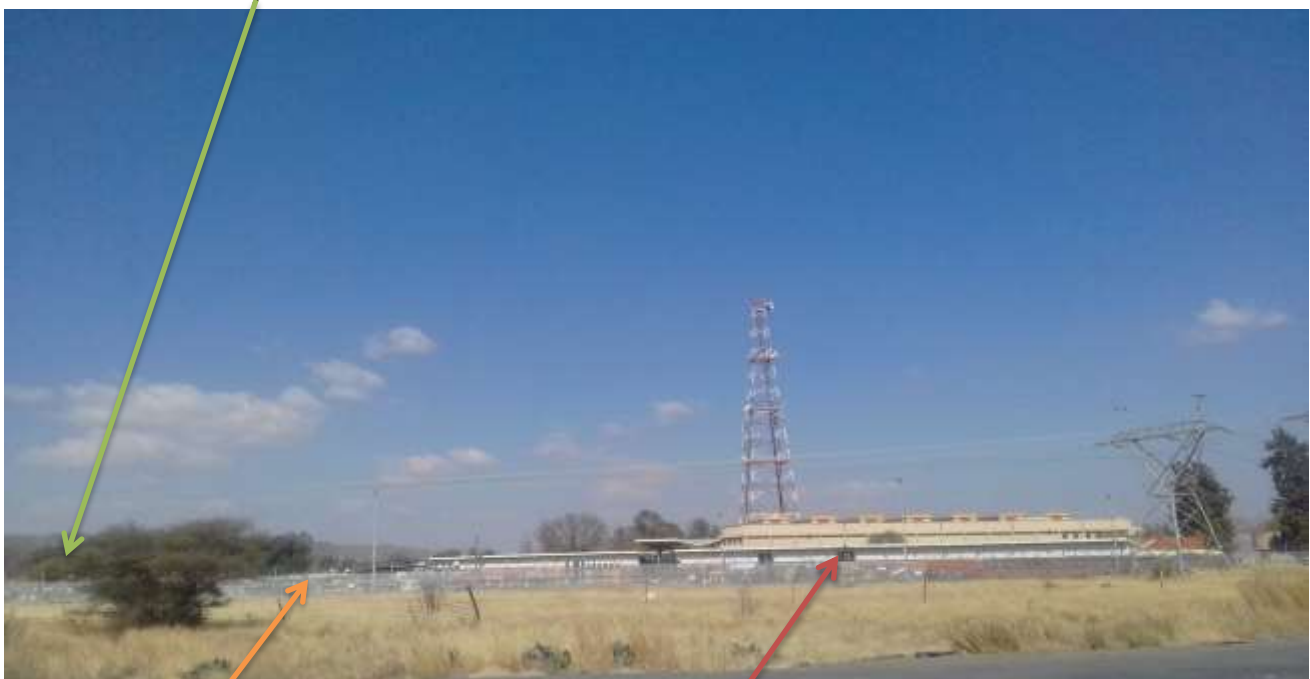
No specific environmental features occur on the study site. The Escom administration offices are adjacent to the study area.

(d) Environmental and current land use map.

(Show all environmental, and current land use features)

The portion of the farm which constitutes the study area is currently not use for any activity other than the ESCOM powerlines. The remaining area is used as the ESCOM Administration Building and Store area

Study Area



Store Area

Administration Block

v) **Impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts**

(Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability, and duration of the impacts. Please indicate the extent to which they can be reversed, the extent to which they may cause irreplaceable loss of resources, and can be avoided, managed or mitigated).

ACTIVITY	DESCRIPTION	Se	D	SP	C	P	Si
1.CONSTRUCTION PHASE IMPACTS							
Road Construction	Loss of vegetation + habitat	NOT APPLICABLE					
Plant Construction	Loss of vegetation + habitat	NOT APPLICABLE					
Offices	Loss of vegetation + habitat	NOT APPLICABLE					
2.OPERATIONAL PHASE IMPACTS							
Mining	Geological degradation	H	H	L	L	H	H
Mining	Topographic change - Pit	M	H	L	L	L	L
Mining	Soil pollution - accidental spills and leakages	M	L	L	H	M	H
Mining	Noise-Earth moving equipment	M	H	L	L	H	M
Mining	Sensitive landscapes	L	L	L	L	L	L
Mining	Visual impact	L	L	L	L	L	L
Operation	Soil pollution (workshop, store, parking)	H	M	L	H	M	H
Operation	Air Quality-Dust Transport	M	H	L	L	H	L
Disposal	Topographic change - dump	M	H	L	L	M	L
3.DECOMMISSIONING PHASE IMPACTS							
Demolition	Waste disposal	POSITIVE					
Rehabilitation	Topography	POSITIVE					
4.RESIDUAL IMPACTS AFTER CLOSURE							
Vacated Site	Rehabilitation of exposed areas	POSITIVE					
Vacated Site	Safety risks	POSITIVE					

vi) **Methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;**

(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process were determined in order to decide the extent to which the initial site layout needs revision).

The environmental evaluation is done with the assumption that all mitigatory measures and rehabilitation plans have been adhered to (Hacking, 1999).

The preceding list of identified impacts is evaluated hereunder in terms of the following criteria:

SEVERITY - *Low negative impact* (indicates a state of 'calmness' concluding that the effect that the operations may have on the environment is so insignificant that the wellbeing of the environment or any individual will not be degraded or prohibited.)

- *Medium negative impact* (describes as state of 'manageable stress', giving the idea of that the effect of the operations on the environment is significant enough to cause tolerable disturbance to the wellbeing or overall conditions of the environment or any individual.)

- *High negative impact* (indicating a state of 'high stress', meaning that the effect of the operations on the environment is so significant that the wellbeing and overall conditions of the environment or any individual will be degraded or prohibited.)

DURATION - *Short-term* (short-term duration is rated as a period less than two years and indicated as a low impact.)

- *Medium-term* (medium-term impact is rated as the period between 2 and 5 years and indicated as a medium impact.)

- *Long-term* (long term impact is rated as the any period exceeding 5 years and indicated as a high impact.)

SPATIAL SCALE - *Localized* (the disturbance occurs within a radius of 500 m from point of existence and indicated as low impact)

- *Fairly widespread* (the disturbance is carried over a short distance, between 500 m and 1 km radius from point of existence and indicated as medium impact)

- *Widespread* (disturbance exercise a negative affect over an area greater than 1 km radius from point of existence and indicated as high impact.)

CONSEQUENCE - *Low consequence* (meaning that the probability of cumulative impact occurrence is minimal with little to no lasting effects and is indicated as low impact)

- *Medium consequence* (meaning that the probability of cumulative impact occurring exists with a moderate, short-term lasting effect and is indicated as medium impact.)

- *High consequence* (meaning that the probability of cumulative impact occurrence is absolute with a short to medium-term lasting effect and indicated as high impact)

PROBABILITY- Low probability-1%-30% sure of particular fact or likelihood of impact occurring

Moderate – 31%-70% sure of particular fact or likelihood of impact occurring

High - 71%-100% sure of particular fact or likelihood of impact occurring

SIGNIFICANCE - *Low overall significance* (the disturbance caused by the impact is minimal with an excellent probability for total recovery after operations ceased.)

- *Medium overall significance* (the disturbance caused by the impact is moderate with a good chance for total recovery over an intermediate period after operations ceased.)

- *High overall significance* (the disturbance caused by the impact is severe with a poor to no probability for recovery after operations ceased.).

LEGEND FOR TABLES			
Se	Severity	L	Low negative impact
SP	Spatial Scale	M	Medium negative impact
Si	Significance	H	High negative impact
D	Duration		POSITIVE

P	Probability		NOT APPLICABLE
---	-------------	--	----------------

i. The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected.

(Provide a discussion in terms of advantages and disadvantages of the initial site layout compared to alternative layout options to accommodate concerns raised by affected parties)

Positive Impacts

The socio –economic through the creation of job opportunities would be a major positive impact.

The general topography after of the study area will be improved.

There will be an improved visual impact after project.

The current commercial use as scrapyard can be continued after the mining operation.

Negative Impacts

Increase noise and air pollution

Possible disturbance to drainage patterns during project.

Possible ground water pollution.

The negative impacts in terms of noise, air, and water pollution is for the duration of the project. At the completion of the project these impacts would be positive.

ii. The possible mitigation measures that could be applied and the level of risk.

(With regard to the issues and concerns raised by affected parties provide a list of the issues raised and an assessment/ discussion of the mitigations or site layout alternatives available to accommodate or address their concerns, together with an assessment of the impacts or risks associated with the mitigation or alternatives considered).

No issues were raised by Interested and Affected Parties. The following concerns are intrinsic of a mining operation:

The following issues and concerns were raised by the Interested and affected Parties:

1.1 Noise:

Mitigation measures

As a minimum, ambient noise levels emanating from the mining area will not exceed

82dB (A) at the site boundary.

Compliance to the Occupational Health and Safety Act, Act 85 of 1993.

Hearing protection to employees.

Machinery and Plant properly maintained and fitted with a silencer.

1.2 Air quality:

Mitigation measures

Daily routine spraying of unpaved site areas and roads with water.

iii. Motivation where no alternative sites were considered.

The applicant considered the treatment of the diamondiferous material on a alternate site which is 15km away from the application area. The negative impacts of the removed material that would be used for rehabilitation proof to be the biggest challenge.

Statement motivating the alternative development location within the overall site. (Provide a statement motivating the final site layout that is proposed)

As detailed in Part A Section (vi) points (i), (ii) and (iii) of this document no alternative developments towards mine processes and site plan are considered and will be kept as originally as proposed due to the fact that any alterations proof not to significantly minimize impacts but may rather add to it.

i) Assessment of each identified potentially significant impact and risk

(This section of the report must consider all the known typical impacts of each of the activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered interested and affected parties).

ACTIVITY Whether listed or not listed (E.g. Excavations, blasting or dams, loading hauling and transport, water supply dams and, boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, beams, roads, pipelines, power lines, conveyers, etc...etc...etc...)	POTENTIAL IMPACT (E.g. dust, noise ,drainage surface Disturbance, fly rock, surface water contamination, air pollution etc...etc)	ASPECTS AFFECTED	PHASE In which impact is anticipated (e.g. Construction, commissioning, operational Decommissioning, closure, post-closure)	SIGNIFICANCE if not mitigated	MITIGATION TYPE (modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc) E.g. Modify through alternative method. Control through noise control Control through management and monitoring through rehabilitation.	SIGNIFICANCE if mitigated
Mining	Geological	Loss	Operational	Medium	-	Medium
	Topographic	Change		Low	Rehabilitation	Low
	Soil	Pollution		High	Immediate rehabilitation Continuous Inspection	Low
	Water table	Depressed		-	-	-
	Fauna	Migration		-	-	-
	Water Quality	Loss		-	-	-
	Noise	Elevated levels		Low	Operation during office hours only	Low
	Air quality	Degradation		Low	Damping of mine roads. Speed restriction	Low
	Archaeological items	Loss		Low	Avoid sites of significance	Low
	Sensitive landscape	Destruction	-	-	-	
	Visual impact	Scenery loss	Low	Within Wall enclosure	Low	
	Waste	Disposal	Decommissioning	Low	Management standards	Positive

	Re-vegetation	Re-growth	After closure	-	No Vegetation required for after use	Positive
	Safety Risks	Waste disposal		Positive	Closure standards	Positive
Topsoil Dump	Vegetation	Loss	Construction	-	No Vegetation	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		Low	Rehabilitation	Low
	Soil	Pollution		Low	Immediate rehabilitation	Low
	Vegetation	Invader plants		Low	Regular Removal	Low
	Water table	Depressed		-	-	-
	Fauna	Migration	Low	-	Low	
	Water quality	Loss	-	-	-	
	Noise	Elevated levels	-	-	-	
	Air quality	Degradation	Low	Protect against wind erosion	Low	
	Archaeological items	Loss	Decommissioning	-	Avoid sites of significance	-
	Sensitive landscape	Destruction		Low	Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	-	Low
	Waste	Disposal		Low	Management standards	Positive
	Exposed area Rehab	Re-vegetation		After closure	Positive	No vegetation required for future use
Safety risks	Waste disposal		Positive	Closure standards	Positive	
Production Stock Piles	Vegetation	Loss	Construction	-	-	-
	Geological	Loss		-	-	-
	Topographic	Change		Low	Rehabilitation standards	Low
	Soil	Pollution		Medium	Regular inspection Immediate rehabilitation	Low
	Water table	Depressed		-	-	-
	Fauna	Migration		Low	-	Low
	Water quality	Loss		-	-	-
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Protect against wind erosion	Low
	Archaeological items	Loss		-	Avoid sites of significance	-
	Sensitive	Destruction		Low	Avoid significant sensitive	Low

	landscape				sites		
	Visual impact	Scenery loss		Low	In enclosed area behind a wall	Low	
	Safety risks	Waste disposal	After Closure	Positive	Closure standards	Positive	
Office Block	Geological	Loss	Operational	-	-	-	
	Topographic	Change		Medium	Rehabilitation	Low	
	Soil	Pollution		Low	Immediate rehabilitation	Low	
	Water table	Depressed		-	Water reticulation	Positive	
	Fauna	Migration		Low	-	Low	
	Water quality	Waste water		Low	Water reticulation	Low	
	Noise	Elevated levels		Low	-	Low	
	Air quality	Degradation		-	-	-	
	Archaeological items	Loss		-	Avoid sites of significance	-	
	Visual impact	Scenery loss		Low	Behind enclosed wall	Low	
	Waste	Disposal	Decommissioning	Low	Management standards	Positive	
	Safety risks	Waste disposal		Positive	Closure standards	Positive	
	Domestic waste	Vegetation	Loss	Construction	-	Vegetation clearing control	-
Geological		Loss	Operational	-	-	-	
Topographic		Change		Low	Rehabilitation	Low	
Soil		Pollution		Medium	Immediate rehabilitation	Low	
Grazing		Loss		Low	Rehabilitation	Low	
Vegetation		Loss/disturbance		Low	Vegetation clearing control	Low	
		Invader plants		Low	Regular removal	Low	
Water table		Depressed		-	Water reticulation	Positive	
Fauna		Migration		Low	-	Low	
Water quality		Waste water		Medium	Water reticulation	Low	
Noise		Elevated levels		Low	-	Low	
Air quality		Degradation	-	-	-		
Archaeological items		Loss	-	Avoid sites of significance	-		
Visual impact		Scenery loss	Low	-	Low		
Waste		Disposal	Decommissioning	Low	Management standards	Positive	
Safety risks		Waste disposal	After closure	Positive	Closure standards	Positive	
Mine and access roads Description of current site roads		Vegetation	Loss	Construction	Low	-	Low
		Geological	Loss	Operational	-	-	-
	Topographic	Change	Low		Rehabilitation	Low	
	Soil	Pollution	Medium		Immediate rehabilitation	Low	
	Water table	Depressed	-		Water reticulation	Positive	

	Fauna	Migration		-	-	-
	Water quality	Waste water		Medium	Water reticulation	Low
	Noise	Elevated levels		Low	-	Low
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		Medium	Avoid sites of significance	Low
	Visual impact	Scenery loss		Low	-	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Safety risks	Waste disposal	After closure	Positive	Closure standards	Positive

j) Summary of specialist reports.

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form):-

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT (Mark with an X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.
	No Specialist Studies Commissioned		

Attach copies of Specialist Reports as appendices

k) Environmental impact statement

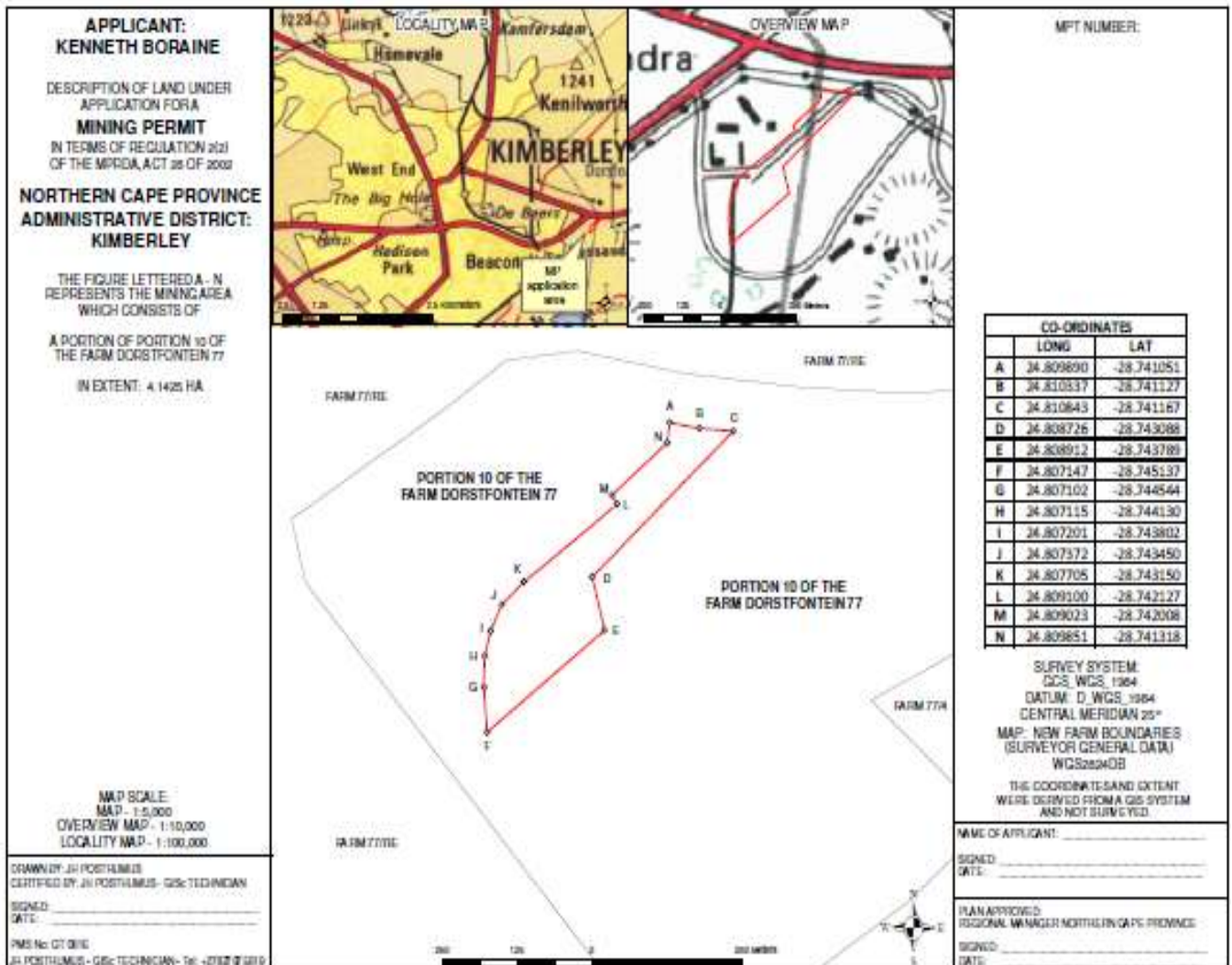
(i) Summary of the key findings of the environmental impact assessment;

The mining operation will definitely have an impact on the environment. The main impacts relate to the increased in noise levels and air quality degradation due to the dust pollution from the TMM's used in the operation. The increased dust pollution can to great extend be mitigated using the spraying of the road ways used by the Front End Loader. No vegetation exists on the study area and the fauna will temporary migrate. Absolute care should be given not to extend the operation after 17:00 daily.

The terrain has already been disturbed by historic mining operations in the form of kimberlitic dumps. Therefor no significant environmental or heritage traces are anticipated to require further mitigation.

(ii) Final Site Map

Provide a map at an appropriate scale which superimposes the proposed overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers .



Stockpiles 500m², Ablution Facilities 4m², Roads 300m², Site Office 25m²
Total 829m².

(iii) Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;

Once the proposed rehabilitation is finalised, the study area would have a nett positive result that the environment would be in an improved state and the land could be put to commercial use.

Positive Impacts and Risks	Description
Socio-economic. The creation of job opportunities.	No alternative- Creation of new jobs
Topography	Improved topography due to levelling and landscaping
Visual impact	Unightly stockpile dump
Land use	Alternative use-residential and commercial
Safety Risks	Hide out place for criminal activity
Increased revenue to state / Taxes	Taxes payable to state and local government
Negative Impacts and Risks	Description
Noise	Increased noise pollution during project
Dust Pollution	More Nuisance dust created during project. Currently during storms dust blown from tailings.
Surface and Ground water pollution	Low possibility of occurrence
Sterilisation of mineral resource	Clay resource sterilised

l) Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr;

Based on the assessment and where applicable the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorisation.

The proposed impact management objectives is to create environmental sustainable prospecting operation by the management, remediation or elimination of the environment impacts through the implementation and adherence of mitigation measures as legislatively required.

The above mentioned outcomes can be achieved through the implementation of the following impact specified objectives and their outcomes:

- Prevention of soil pollution due to chemical spillage
 - Regular maintenance of all TMM's
 - Immediate rehabilitation of an affected area
 - Suitable disposal of contaminated soil
 - Drip trays available and Spill kit on site.
- Reduction of noise levels caused by TMM's
 - Strict adherence to shift and operating hours
 - Noise reduction modifications to earth moving machinery
 - Zero tolerance approach to permissible
- Minimization of dust upliftment causing loss of air quality
 - Watering of all dirt roads
 - Adherence to speed limits
 - Proper loading practise
 - Dust suppression sprays on process transfer points
- Surface and ground water quality degradation
 - Storm water control
 - Adherence to water management guidelines

- Waste disposal
 - Implementation of domestic waste disposal facilities
 - Waste removal schedules
 - Practise of good housekeeping

m) Aspects for inclusion as conditions of Authorisation.

Any aspects which must be made conditions of the Environmental Authorisation

All the aspects which must be included in the authorization are detailed in this document. If any aspect arise that need inclusion, the document will be updated accordingly and submitted to the DMR.

n) Description of any assumptions, uncertainties and gaps in knowledge.

(Which relate to the assessment and mitigation measures proposed)

Any assumptions, uncertainties and gaps in knowledge that could arise during the operation of the mining activities will be addressed and mitigation measures implemented to prevent any damage to the environment. Such assumptions, uncertainties and gaps in knowledge will be described, implemented and handed to the relevant departments.

o) Reasoned opinion as to whether the proposed activity should or should not be authorised

i) Reasons why the activity should be authorized or not.

It is my opinion that the activity be authorised as the operation will positive impact on the on the upliftment of the Kimberley community. The project ensures a positive socio-economic, physical and especially land use after the mining operation. The project would also assist BEE companies through consumables supply. The environmental concerns, if mitigated as addressed in this EMP, should ensure no long term detrimental effects remain. It is therefore my opinion that there is no reason why the activity should not be authorized.

ii) Conditions that must be included in the authorisation

None other than the implementation of the EMP with particular reference to the mitigation measures as stipulated within the EMP.

Rehabilitation requirements.

Rehabilitation Requirements should include, but is not limited to the following:

- The area must be rehabilitated as close as possible to its original natural state as possible.
- Rehabilitation must be done to the complete satisfaction of all relevant departments
- A one year monitoring programme must be implemented to monitor subsided areas..
- All other rehabilitation measures as contained within the EMP, mitigation measures, inclusive must be adhered to or a grounded reason for why any of these could not be met.

p) Period for which the Environmental Authorisation is required.

2 Years

q) Undertaking

Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic assessment report and the Environmental Management Programme report.

The applicant, Kenneth Leon Boraine, confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic Assessment Report and the Environmental Management Report.

r) Financial Provision

State the amount that is required to both manage and rehabilitate the environment in respect of rehabilitation.

i) Explain how the aforesaid amount was derived.

Stockpiles 500m², Ablution Facilities 4m², Roads 300m², Site Office 25m²
Total 829m².

QUANTUM

No	Description	Unit	A	B	C	D	E=A*B*C*D
			Quantity	Master Rate	Multiplication factor	Weighting factor	Amount Rands
1	Dismantling of processing plant and structures	m ³	0	12.29	1	1	0
2(A)	Demolition of steel buildings and structures	m ²	0	171.18	1	1	0
2(B)	Demolition of reinforced concrete buildings and structures	m ²	0	252.25	1	1	0
3	Rehabilitation of access roads remain for future use	m ²	300	30.83	1	1	9249
4(A)	Demolition and rehabilitation of electrical railway lines	m	0	297.3	1	1	0
4(B)	Demolition and rehabilitation of non-electrical railway lines	m	0	162.16	1	1	0
5	Demolition of housing and/or administration facilities	m ²	25	342.34	1	1	8558.5
6	Opencast rehabilitation including final voids and ramps	ha	0.05	174238	1	1	8711.90
7	Sealing of shafts and inclines	m ³	0	91.89	1	1	0
8(A)	Rehabilitation of overburden and spoils	ha	0.05	119642.23	1	1	5982.11
8(B)	Rehabilitation of processing waste deposits and evaporation ponds(non-polluting potential)	ha	0	149012.22	1	1	0
8(C)	Rehabilitation of processing waste deposits and evaporation ponds(polluting potential)	ha	0	432802.16	1	1	
9	Rehabilitation of subsided areas	ha	0.015	100182.35	1	1	1402
10	General surface rehabilitation	ha	0.02	94776.82	1	1	2223
11	River diversions	ha	0	94776.82	1	1	0
12	Fencing	m	0	106.11	1	1	0
13	Water management	ha	0.	36036.81	1	1	
14	2 to 3 years of maintenance and after care	ha	0	12612.88	1	1	1000

15(A)	Specialist study	sum					
15(B)	Specialist study	sum					
					Subtotal		37126.51
	Preliminary and General			0	Weighing factor 1		
	Contingencies			Subtotal	37126.51		
				VAT(15%)	5568.97		
				Grand Total	42695.48		

The rehabilitation cost is determined by using DMR guideline. The estimation of rehabilitation cost is **R 42 695.48** due to the mining activities conducted. The financial provision quantum guarantee will be paid at the DMR rehabilitation account to cover the rehabilitation and/or management of negative environmental impacts.

ii) Confirm that this amount can be provided for from operating expenditure.

(Confirm that the amount, is anticipated to be an operating cost and is provided for as such in the Mining work programme, Financial and Technical Competence Report or Prospecting Work Programme as the case may be).

The above stated amount can be provided from, as part of, the 1st years operating expenditure and is in the submitted Financial and Technical Ability Report anticipated as an operating cost and was provided for as such.

s) Specific Information required by the competent Authority

i) Compliance with the provisions of sections 24(4)(a) and (b) read with section 24 (3) (a) and (7) of the National Environmental Management Act (Act 107 of 1998). the EIA report must include the:-

(1) Impact on the socio-economic conditions of any directly affected person.

(Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report as an **Appendix** .

Five measures of economic impacts can be used to demonstrate the potential positive effect of the proposed prospecting operation on the local economy:

- Employment – the extent of employment can be measured as number of jobs or in terms of full time equivalents
- Payroll income – the gross remuneration of employees in terms of salaries and wages
- Capital Expenditure (CAPEX) – the total amount spent on the purchasing of fixed assets and total spent on construction
- Operating expenditure and maintenance (OPEX) – the total amount spent locally by businesses on goods and services, excluding salaries and wages as well as rents or interest.
- Revenue – The total value of sales arising from business activity at the mine

(2) Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.

(Provide the results of Investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act, attach the investigation report as **Appendix 2.19.2** and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12.herein).

Current consultation on-going with SAHRA and the Mc Gregor Museum.

My conclusion will be incorporated in the final EMPr submitted.

t) Other matters required in terms of sections 24(4)(a) and (b) of the Act.

(the EAP managing the application must provide the competent authority with detailed, written proof of an investigation as required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(h), exist. The EAP must attach such motivation as **Appendix 4**).

The compiler of this document, also the appointed EAP, has extensive knowledge of the proposed project site. A field visit was conducted for investigation and an in-depth desktop study conducted using existing literature and data.

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

1) Draft environmental management programme.

- a) **Details of the EAP**, (Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 1(a) herein as required).

Confirmed by M A Goliath

- b) **Description of the Aspects of the Activity** (Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management programme is already included in PART A, section (1)(h) herein as required).

Confirmed by M A Goliath

c) **Composite Map**

(Provide a map (**Attached as an Appendix**) at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers)

Will be finalised after all consultations

d) **Description of Impact management objectives including management statements**

- i) **Determination of closure objectives.** (ensure that the closure objectives are informed by the type of environment described)

Closure Objectives:

The main objective would be to leave the environment in the same state as before the tailings were dumped on the property.

To prevent sterilization of ore reserves.

To prevent the erection of permanent structures.

To limit and rehabilitate any erosion features and prevent any damage to the soil capacity.

To limit and manage the visual impact.

Ensure health and safety of all humans and animals that may be affected by the activities.

The last closure objective is that the mine is closed efficiently, cost effectively and in accordance with government policy

- ii) **Volumes and rate of water use required for the operation.**

No water will be used in this mining operation.

iii) **Has a water use licence has been applied for?**

No authorisation required for this mining operation.

iv) Impacts to be mitigated in their respective phases

Measures to rehabilitate the environment affected by the undertaking of any listed activity

ACTIVITIES (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc E.g. For mining,- excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)	PHASE (of operation in which activity will take place. State; Planning and design, Pre-Construction, Construction, Operational, Rehabilitation, Closure, Post closure).	SIZE AND SCALE of disturbance (volumes, tonnages and hectares or m ²)	MITIGATION MEASURES (describe how each of the recommendations in herein will remedy the cause of pollution or degradation and migration of pollutants)	COMPLIANCE WITH STANDARDS (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)	TIME PERIOD FOR IMPLEMENTATION Describe the time period when the measures in the environmental management programme must be implemented Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. .With regard to Rehabilitation, therefore state either:- Upon cessation of the individual activity or. Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.
Mining					
Excavation	Construction	400m ²	No vegetation will be cleared <input type="checkbox"/> All infrastructure will be equipped with appropriate signs indicating function and potential dangers <input type="checkbox"/> Overburden and topsoil will be stored separately next to the excavation	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon commencement of activity
	Operational		When working on equipment outside the workshop the appropriate measure needs to be implemented to prevent chemical spillage <input type="checkbox"/> No vehicle repairs and maintenance will occur within	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon commencement of activity. Integrated into activity

			<p>the operational area and will be restricted to the workshop.</p> <ul style="list-style-type: none"><input type="checkbox"/> Old diesel and related chemicals must be discarded within appropriate marked close containers and stored in the chemical storage facility till removal thereof<input type="checkbox"/> On accidental spillage the contaminated soil will be removed and appropriately stored till the removal there off.<input type="checkbox"/> Stored topsoil / tailings will be evenly spread to the recover the area <p>The area must be continuously inspected for spillages and remediated immediately</p> <ul style="list-style-type: none"><input type="checkbox"/> All vehicle traffic are restricted to the roads and demarcated traffic areas<input type="checkbox"/> Washing of equipment shall be restricted to urgent maintenance requirements only.<input type="checkbox"/> Employees will be advised to stay clear from any reptiles and not to disturb or provoke them in any manner. <p>A site will be identified and colour coded water tanks will be erected for safe human consumption.</p> <ul style="list-style-type: none"><input type="checkbox"/> The mine shall be responsible for compliance with the relevant legislation in respect to noise.<input type="checkbox"/> Hearing protection will be made available to all employees where attenuation cannot be		
--	--	--	--	--	--

		<p>implemented.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Every vehicle in operation will be equipped with a silencer on the exhaust system. <input type="checkbox"/> Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh / recycled water. <input type="checkbox"/> Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated <input type="checkbox"/> The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers. The mine shall ensure that all vehicle and heavy vehicle drivers are aware of procedures and restrictions in terms of this document. <input type="checkbox"/> Fire extinguishers will be kept in good order and serviced regularly. <input type="checkbox"/> Hard hats, earplugs, safety glasses, dust masks, gloves, hard point boots, reflector vests and reflective overalls is compulsory before entering this area. <input type="checkbox"/> The entrance will be clearly marked will all regulatory signs, to indicate a potential dangerous zone. <input type="checkbox"/> Related waste/ scrap must be dispose of in the appropriate 		
--	--	--	--	--

			manner		
	Decommissioning		<p>The excavation will be filled with waste gravel and soil, with the topsoil and overburden in the correct order.</p> <ul style="list-style-type: none"> <input type="checkbox"/> All chemical spills will be rehabilitated immediately <input type="checkbox"/> Rip and rehabilitate all compacted areas. <p>Rehabilitation will be finalized by the spreading of tailing soil where necessary.</p>	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	<p>Integrated into activity Upon decommissioning of activity.</p>
	After Closure		<p>A 1 year after care plan is initiated to ensure no subsidence of ground.</p>	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	<p>During Closure of activity</p>
Stockpiles (Topsoil 250m ² and Production Stockpiles 250m ²)	Construction	500m ²	<p>Employees will be advised to stay clear from any reptiles and not to disturb or provoke them in any manner</p> <p>Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated</p>	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	<p>Upon commencement of activity</p>
	Operational		<ul style="list-style-type: none"> <input type="checkbox"/> Employees will be advised to stay clear from any reptiles and not to disturb or provoke them in any manner <p>Littering of any product, including cigarette buds, at any</p>	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation</p>	<p>Upon commencement of activity. Integrated into activity</p>

		<p>operational site shall be seen as an offence and will not be tolerated</p> <ul style="list-style-type: none"> □ The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers. □ The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document 	measures proofs successful in impact management	
Decommissioning		Rip and rehabilitate all compacted areas.	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	Integrated into activity Upon decommissioning of activity.
After Closure		A 1 year after care plan is initiated to ensure no subsidence of ground.	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	Upon closure of activity
Decommissioning		Rip and rehabilitate all compacted areas.	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	Integrated into activity Upon decommissioning of activity.

	After Closure		A 1 year after care plan is initiated to ensure no subsidence of ground	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon closure of the activity
Office Block	Construction	25m ²	All buildings will consist of appropriate signs indicating function and potential dangers <input type="checkbox"/> Soil shall be exposed for a minimum time a possible once cleared of vegetation. The timing in clearing shall be co-ordinated as much as possible to avoid prolonged exposure to wind and water erosion	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon commencement of activity
	Operational		Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh / recycled water. <input type="checkbox"/> Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated <input type="checkbox"/> The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers. <input type="checkbox"/> The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document. <input type="checkbox"/> Fire extinguishers will be kept	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon commencement of activity. Integrated into activity

			in good order and serviced regularly.		
	Decommissioning		All structures will be broken down and removed from site. <input type="checkbox"/> All chemical spills will be rehabilitated immediately <input type="checkbox"/> Rip and rehabilitate all compacted areas.	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Integrated into activity Upon decommissioning of activity.
	After Closure		A 1 year after care plan is initiated to ensure no subsidence of ground.	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon closure of activity
Ablution	Construction	4m ²	<input type="checkbox"/> Soil shall be exposed for a minimum time a possible once cleared of vegetation. The timing in clearing shall be co-ordinated as much as possible to avoid prolonged exposure to wind and water erosion	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon commencement of activity
	Operational		<input type="checkbox"/> Sanitary material within the bins provided will be closed in colour plastics and disposed of with domestic waste <input type="checkbox"/> Employees will be advised to stay clear from any reptiles and not to disturb or provoke them in any manner. <input type="checkbox"/> Littering of any product, including cigarette buds, at any	All mitigation measures within this document comply with the NEMA and DMR rules and regulations. Further does all mitigation measures proofs successful in impact management	Upon commencement of activity. Integrated into activity

			<p>operational site shall be seen as an offence and will not be tolerated</p> <ul style="list-style-type: none"> <input type="checkbox"/> The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers. <input type="checkbox"/> The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document. <input type="checkbox"/> The entrance will be clearly marked will all regulatory signs 		
	Decommissioning		<p>All structures will be broken down and removed from site.</p> <ul style="list-style-type: none"> <input type="checkbox"/> All spills will be rehabilitated immediately <p>Rip and rehabilitate all compacted areas.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Rehabilitation will be finalized by the spreading of tailing soil where necessary. <input type="checkbox"/> On closure Department of Water Affairs will be consulted in aiding with the rehabilitation of the facility 	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	<p>Integrated into activity Upon decommissioning of activity.</p>
	After Closure		<p>A 1 year after care plan is initiated to ensure no subsidence of ground.</p>	<p>All mitigation measures within this document comply with the NEMA and DMR rules and regulations.</p> <p>Further does all mitigation measures proofs successful in impact management</p>	<p>Upon closure of activity</p>

Roads	Air Quality	300m ²	Construction and Operational phase	Medium	To wet roads or use a dust agent.
	Flora		Construction	High	Re-establish self-sustaining vegetation units in rehabilitated areas; and control invasion by exotic and invasive plant species
	Fauna		Construction	High	Re-establish vegetation in cleared areas and therefore a habitat to wildlife and eliminate poaching and the extermination of animal species within the boundaries of the prospecting area.
	Ground Water		Construction	No Significance	To minimise and prevent the contamination of ground water
	Noise		Construction	Low	Control the incidence of unacceptable noise levels.
	Soil		Construction	No Significance	No Significance
	Surface Water		Construction	No Significance	Water conservation. Eliminate the contamination of run-off surface water.
	Topography		Construction	No Significance	
	Visual		Construction	Low	Minimise aesthetic disturbance. Reduce the visual impact through continuous rehabilitation. Institute a Waste Management program that will reduce the visibility effect. Introduce a dedicated waste disposal area.
	Archaeological		Construction	Medium	Archaeological awareness Program Artefacts chart and examples

e) Impact Management Outcomes

(A description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated in paragraph () ;

<p>ACTIVITY</p> <p>Whether listed or not listed</p> <p>(E.g. Excavations, blasting Stockpiles, discard dumps or dams, loading hauling and transport, water supply dams and, boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, beams, roads, pipelines, power lines, conveyers, etc...etc...etc...)</p>	<p>POTENTIAL IMPACT</p> <p>(E.g. dust, noise ,drainage surface Disturbance, fly rock, surface water contamination, air pollution etc...etc)</p>	<p>ASPECTS AFFECTED</p>	<p>PHASE</p> <p>In which impact is anticipated</p> <p>(e.g. Construction, commissioning, operational Decommissioning, closure, post-closure)</p>	<p>MITIGATION TYPE</p> <p>(modify, remedy, control, or stop) through</p> <p>(e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc)</p> <p>E.g. Modify through alternative method. Control through noise control Control through management and monitoring through rehabilitation.</p>	<p>STANDARDS TO BE ACHIEVED (IMPACT AVOIDED, NOISE LEVELS, DUST LEVELS, REHABILITATION STANDARDS, END USE OBJECTIVE ETC)</p>
<p>Mining</p>	<p>Geological</p>	<p>Loss</p>	<p>Operational</p>	<p>-</p>	<p>-</p>
	<p>Topographic</p>	<p>Change</p>		<p>Rehabilitation</p>	<p>Impact remedied</p>
	<p>Soil</p>	<p>Pollution</p>		<p>Immediate rehabilitation</p>	<p>Impact managed</p>
	<p>Water table</p>	<p>Depressed</p>		<p>Continuous Inspection</p>	<p>Impact avoided</p>
	<p>Fauna</p>	<p>Migration</p>		<p>-</p>	<p>-</p>
	<p>Water Quality</p>	<p>Loss</p>		<p>-</p>	<p>-</p>
	<p>Noise</p>	<p>Elevated levels</p>		<p>Operation during office hours only</p>	<p></p>
	<p>Air quality</p>	<p>Degradation</p>		<p>Damping of mine roads. Speed restriction</p>	<p>Impact minimised</p>
	<p>Archaeological items</p>	<p>Loss</p>		<p>Avoid sites of significance</p>	<p>Impact avoided</p>
	<p>Sensitive landscape</p>	<p>Destruction</p>		<p>-</p>	<p>Impact avoided</p>

	Visual impact	Scenery loss		Within Wall enclosure	Impact minimised
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Re-vegetation	Re-growth	After closure	No Vegetation required for after use	-
	Safety Risks	Waste disposal		Closure standards	Impact remedied
Topsoil Stock Pile	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		Immediate rehabilitation	Impact managed Impact avoided
	Vegetation	Invader plants		Regular Removal	-
	Water table	Depressed		-	-
	Fauna	Migration		-	-
	Water quality	Loss		-	
	Noise	Elevated levels		Maintenance, Silencer and hearing protection/Operations during office hours	Impact minimised
	Air quality	Degradation		Protect against wind erosion	Impact avoided
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Avoid significant sensitive sites	Impact avoided
	Visual impact	Scenery loss		-	Impact avoided
	Waste	Disposal	Decommissioning	Management standards	-
	Exposed area Rehab	Re-vegetation	After closure	No vegetation required for future use	-
	Safety risks	Waste disposal		Closure standards	
Production Stock Pile	Vegetation	Loss	Construction	-	-
	Geological	Loss		-	Impact remedied
	Topographic	Change		Rehabilitation standards	
	Soil	Pollution		Regular inspection Immediate rehabilitation	Impact managed Impact avoided
	Water table	Depressed		-	
	Fauna	Migration		-	
	Water quality	Loss		-	
	Noise	Elevated levels		Maintenance, Silencer and hearing	Impact minimised

				protection/Operations during office hours	
	Air quality	Degradation		Protect against wind erosion	Impact minimised
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Avoid significant sensitive sites	Impact avoided
	Visual impact waste	Scenery loss		In enclosed area behind a wall	Impact minimised
	Safety risks	Waste disposal	After Closure	Closure standards	
	Safety risks	Waste disposal	After Closure	Closure standards	Impact remedied
Site Office	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		Immediate rehabilitation	Impact managed Impact avoided
	Water table	Depressed		-	-
	Fauna	Migration		-	Impact minimised
	Water quality	Waste water		-	Impact minimised
	Noise	Elevated levels		Maintenance, Silencer and hearing conservation/Operations during office hours	Impact minimised
	Air quality	Degradation	-	Impact minimised	
	Archaeological items	Loss	Avoid sites of significance	Impact avoided	
	Visual impact	Scenery loss	Behind enclosed wall	Impact minimised	
	Waste	Disposal	Decommissioning	Management standards	Impact remedied
	Safety risks	Waste disposal		Closure standards	Impact remedied
	Domestic waste	Vegetation	Loss	Construction	-
Geological		Loss	Operational	-	Impact remedied
Topographic		Change		Rehabilitation	Impact managed Impact avoided
Soil		Pollution		Immediate rehabilitation	Impact remedied
Grazing		Loss		Rehabilitation	Impact minimised
Vegetation		Loss/disturbance		-	-
		Invader plants		-	-
Water table		Depressed			Water reticulation
Fauna	Migration		-	-	

	Water quality	Waste water		Water reticulation	Impact avoided	
	Noise	Elevated levels		-	Impact avoided	
	Air quality	Degradation		-	Impact minimised	
	Archaeological items	Loss		Avoid sites of significance	Impact remedied	
	Visual impact	Scenery loss		-	Impact remedied	
	Waste	Disposal		Decommissioning	Management standards	
	Safety risks	Waste disposal		After closure	Closure standards	
Mine and access roads (No Roads required)	Vegetation	Loss	Construction	-	-	
	Geological	Loss	Operational	-	Impact remedied	
	Topographic	Change		Rehabilitation	Impact managed Impact avoided	
	Soil	Pollution		Immediate rehabilitation	Impact remedied	
	Water table	Depressed		Water reticulation	Impact minimised	
	Fauna	Migration		-	-	
	Water quality	Waste water		Water reticulation	-	
	Noise	Elevated levels		-	-	
	Air quality	Degradation		-	-	
	Archaeological items	Loss		Avoid sites of significance	Impact avoided	
	Visual impact	Scenery loss		-	Impact avoided	
	Waste	Disposal		Decommissioning	Management standards	Impact minimised
	Safety risks	Waste disposal		After closure	Closure standards	Impact remedied
						Impact remedied

f) Impact Management Actions

(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (c) and (d) will be achieved).

ACTIVITY Whether listed or not listed (E.g. Excavations, blasting Stockpiles, discard dumps or dams, loading hauling and transport, water supply dams and, boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, beams, roads, pipelines, power lines, conveyers, etc...etc...etc...)	POTENTIAL IMPACT (E.g. dust, noise ,drainage surface Disturbance, fly rock, surface water contamination, air pollution etc...etc)	MITIGATION TYPE (modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc) E.g. Modify through alternative method. Control through noise control Control through management and monitoring through rehabilitation.	TIME PERIOD FOR IMPLEMENTATION Describe the time period when the measures in the environmental management programme must be implemented. Measures Must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation therefore state either. Upon cessation of the individual activity Or Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.	COMPLIANCE WITH STANDARDS (A description of how each of the recommendations in 2.11.6 read with 2.12.and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Mining	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-

Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv) of this document needs to be implemented.
Water quality loss	-	-	-
Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and in Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and in Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
Visual impact	-	-	-
Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and in Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv)of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality	Dampening of mine roads	Integrated into activity	The degradation of air quality must

	degradation	Speed restriction		be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
	Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and in Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and in Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
Stockpiles (Topsoil and Production)	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Section B1.4 of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) in this document needs to be implemented and strictly adhered to in order to achieve

				successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
Depressed water table	-	-	-	-
Fauna migration	Noise level control	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
Water quality loss	-	-	-	-
Noise disturbance	Operations during office hours	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity		The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity		Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity		The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
Visual impact	-	-	-	-
Waste disposal	Management standards	Upon commencement of activity. Integrated into activity.		Waste management procedures, as stipulated in Part B (d)(iv) will aid in

			Decommissioning of the activity.	the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
Site Office	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise

				control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
	Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Section B1.4 will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.

Ablution	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.

	Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
Domestic waste	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly

				adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
Depressed water table	-	-	-	-
Fauna migration	Noise level control	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
Water quality loss	-	-	-	-
Noise disturbance	Operations during office hours	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity		The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity		Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity		The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
Visual impact	-	-	-	-

	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
Mine and access roads	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised

				and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
	Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.

g. Impact Management Actions

(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplate in paragraphs (1.3) and (1.4) will be achieved)

ACTIVITY Whether listed or not listed (E.g. Excavations, blasting Stockpiles, discard dumps or dams, loading hauling and transport, water supply dams and, boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, beams, roads, pipelines, power lines, conveyers, etc...etc...etc...)	POTENTIAL IMPACT (E.g. dust, noise ,drainage surface Disturbance, fly rock, surface water contamination, air pollution etc...etc)	MITIGATION TYPE (modify, remedy, control, or stop) through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc) E.g. Modify through alternative method. Control through noise control Control through management and monitoring through rehabilitation.	TIME PERIOD FOR IMPLEMENTATION Describe the time period when the measures in the environmental management programme must be implemented. Measures Must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation therefore state either. Upon cessation of the individual activity Or Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.	COMPLIANCE WITH STANDARDS (A description of how each of the recommendations in 2.11.6 read with 2.12.and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Mining	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.

	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv) of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
	Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and in Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.

	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and in Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and in Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-

Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv)of this document needs to be implemented.
Water quality loss	-	-	-
Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and in Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and in Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
Visual impact	-	-	-
Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.

Stockpiles (Topsoil and Production)	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Section B1.4 of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) in this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
	Archaeological	Avoid sites of significance	Before commencement of activity	Impact must be avoided at all times,

	items		Integrated into activity	Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
Site Office	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly

				adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
Depressed water table	-	-	-	-
Fauna migration	Noise level control	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
Water quality loss	-	-	-	-
Noise disturbance	Operations during office hours	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity		The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity		Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity		The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
Visual impact	-	-	-	-
Waste disposal	Management standards	Upon commencement of activity.		Waste management procedures, as

			Integrated into activity. Decommissioning of the activity.	stipulated in Section B1.4 will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
Ablution	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised

				and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
	Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.

Domestic waste	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
	Depressed water table	-	-	-
	Fauna migration	Noise level control	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours	Integrated into activity	This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.

	Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity	Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
	Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity	The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
	Visual impact	-	-	-
	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.
Mine and access roads	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of the activity	The impact that may occur cannot be avoided, but minimized through the implementation of the mitigation measure as stipulated in Part B (d)(iv) of the document. E.g Mined-out areas needs to be backfilled and rehabilitated as mining commences.
	Soil pollution	Immediate rehabilitation Continuous Inspection	Integrated into activity Decommissioning of the activity	Impact must be avoided as far as possible or remediated immediately. Part B (d)(iv) of this document needs to be implemented and strictly

				adhered to in order to achieve successful impact avoidance and / or remediation, E.g immediate clean-up should any spillage occur
Depressed water table	-	-	-	-
Fauna migration	Noise level control	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented.
Water quality loss	-	-	-	-
Noise disturbance	Operations during office hours	Integrated into activity		This impact can only be minimised and the adherence to the noise control measures as stipulated in Part B (d)(iv) of this document needs to be implemented. E.g Restrict operations to standard business hours.
Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity		The degradation of air quality must be minimized as far as possible. Implementation and adherence to the mitigation measures as stipulated in Part B (d)(iv) needs to be done E.g Watering of the area with fresh/recycled water.
Archaeological items	Avoid sites of significance	Before commencement of activity Integrated into activity		Impact must be avoided at all times, Part A (iv) and Part B (d)(iv) of this document needs to be implemented And strictly adhered to in order to achieve successful impact avoidance.
Sensitive landscape	Operations outside wet season Adherence to all mitigation measures	Upon commencement of activity Integrated into activity		The degradation of any sensitive landscapes must be minimized as far as possible Implementation and adherence to Part A (iv) and Part B (d)(iv) needs to be done E.g avoidance of open surface water bodies.
Visual impact	-	-	-	-

	Waste disposal	Management standards	Upon commencement of activity. Integrated into activity. Decommissioning of the activity.	Waste management procedures, as stipulated in Part B (d)(iv) will aid in the avoidance and/or remediation when implemented and adhered to E.g Littering of any product will be seen as an offence and not tolerated.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity During closure of activity	Rehabilitation of a disturbed area is crucial. Within the mitigation measures stipulated in Part A (iv) and Part B (d)(iv) of this document are measures that when implemented will optimize this activity E.g rehabilitation of an area where no activity takes place.

i) Financial Provision

(1) Determination of the amount of Financial Provision.

(a) Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation.

Closure Objectives:

The main objective would be to leave the environment in the same state as before the tailings were dumped on the property.

To prevent sterilization of ore reserves.

To prevent the erection of permanent structures.

To limit and rehabilitate any erosion features and prevent any damage to the soil capacity.

To limit and manage the visual impact.

Ensure health and safety of all humans and animals that may be affected by the activities.

The last closure objective is that the mine is closed efficiently, cost effectively and in accordance with government policy.

(b) Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.

Confirmed by M A Goliath.

(c) Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main mining activities, including the anticipated mining area at the time of closure.

Rehabilitation Objectives

On completion of the prospecting operation, the various surfaces, including the access roads, the office area, storage area, will finally be rehabilitated as follows:-

All remaining material on the surface will be removed to the original topsoil

level. This material will then be backfilled into the depressions. Any compacted area will then be ripped to a depth of 300mm, where possible and landscaped.

All infrastructures, site office, ablution facilities and waste disposal bin and other items used during the operational period will be removed from the site.

On completion of operations, all structures or objects on the office site will be dealt with in the following manner:

The holder of the mining permit may not demolish or remove any building, structure or object —

(a) which may not be demolished or removed in terms of any other law;

(b) which has been identified in writing by the Minister for purposes of this section; or

(c) which is to be retained in terms of an agreement between the holder and the owner or occupier of the land, which agreement has been approved by the Minister in writing.

2. The provision of subsection (1) does not apply to bona fide prospecting equipment, which may be removed.

Topsoil and Stockpile Deposits: Disposal facilities

Waste material of all description inclusive of receptacles, scrap, rubble and tyres will be removed entirely from the prospecting area and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on the site.

On-going seepage, control of rain water

No monitoring of ground or surface water will take place, except if so requested by the DWS.

Long term stability and safety

It will be the objective of mine management to ensure the long term stability of all rehabilitated areas including the backfilled depressions. This will be done by the monitoring of all areas until a closure certificated has been issued.

Submission of information

Reports on rehabilitation and monitoring will be submitted annually to the Department of Mineral Resources — Kimberley, as described in Regulation 55.

Maintenance (Aftercare)

Maintenance after closure will mainly concern the regular inspection and monitoring and/or completion of the ground levelling and landscaping program and monitoring of the drainage pattern.

The aim of this Environmental Management Plan is to ensure that the tailings dump material is effectively removed to ensure that the erven is available for commercial use after the completion of the prospecting program

The aim with the closure of the mine will be to create an acceptable post-mine environment and land-use. Therefore all agreed commitments will be implemented by Mine Management.

After-effects following closure:

Acid mine drainage

No potential for bad quality leach ate or acid mine drainage development exist after mine closure (in this case all Kimberlitic material will be removed).

Long term impact on ground water

No after effect on the groundwater yield or quality is expected.

(d) Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.

The ultimate rehabilitation of the mining site involves the sloping, levelling and landscaping of the operation area for future commercial use. There should therefore not be any vegetation on the property after the operation

(e) Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.

QUANTUM

No	Description	Unit	A	B	C	D	E=A*B*C*D
			Quantity	Master Rate	Multiplication factor	Weighing factor	Amount Rands
1	Dismantling of processing plant and structures	m ³	0	12.29	1	1	0
2(A)	Demolition of steel buildings and structures	m ²	0	171.18	1	1	0
2(B)	Demolition of reinforced concrete buildings and structures	m ²	0	252.25	1	1	0
3	Rehabilitation of access roads remain for future use	m ²	300	30.83	1	1	9249
4(A)	Demolition and rehabilitation of electrical railway lines	m	0	297.3	1	1	0

4(B)	Demolition and rehabilitation of non-electrical railway lines	m	0	162.16	1	1	0
5	Demolition of housing and/or administration facilities	m ²	25	342.34	1	1	8558.5
6	Opencast rehabilitation including final voids and ramps	ha	0.05	174238	1	1	8711.90
7	Sealing of shafts and inclines	m ³	0	91.89	1	1	0
8(A)	Rehabilitation of overburden and spoils	ha	0.05	119642.23	1	1	5982.11
8(B)	Rehabilitation of processing waste deposits and evaporation ponds(non-polluting potential)	ha	0	149012.22	1	1	0
8(C)	Rehabilitation of processing waste deposits and evaporation ponds(polluting potential)	ha	0	432802.16	1	1	
9	Rehabilitation of subsided areas	ha	0.015	100182.35	1	1	1402
10	General surface rehabilitation	ha	0.02	94776.82	1	1	2223
11	River diversions	ha	0	94776.82	1	1	0
12	Fencing	m	0	106.11	1	1	0
13	Water management	ha	0.	36036.81	1	1	
14	2 to 3 years of maintenance and after care	ha	0	12612.88	1	1	1000
15(A)	Specialist study	sum					
15(B)	Specialist study	sum					
					Subtotal		37126.51
	Preliminary and General			0	Weighing factor 1		
					1		
	Contingencies			Subtotal	37126.51		
				VAT(15%)	5568.97		
				Grand Total	42695.48		

The rehabilitation cost is determined by using DMR guideline. The estimation of rehabilitation cost is **R 42695.48** due to the mining activities conducted. The financial provision quantum guarantee will be paid at the DMR rehabilitation account to cover the rehabilitation and/or management of negative environmental impacts.

(f) Confirm that the financial provision will be provided as determined.

Confirmed by K Borraine

Mechanisms for monitoring compliance with and performance assessment against the environmental management programme and reporting thereon, including

- g) Monitoring of Impact Management Actions
- h) Monitoring and reporting frequency
- i) Responsible persons
- j) Time period for implementing impact management actions
- k) Mechanism for monitoring compliance

i)

SOURCE ACTIVITY	IMPACTS REQUIRING MONITORING PROGRAMMES	FUNCTIONAL REQUIREMENTS FOR MONITORING	ROLES AND RESPONSIBILITIES (FOR THE EXECUTION OF THE MONITORING PROGRAMMES)	MONITORING AND REPORTING FREQUENCY and TIME PERIODS FOR IMPLEMENTING IMPACT MANAGEMENT ACTIONS
Mining	Soil pollution Noise disturbance Air quality loss Waste management	Visible spills on ground Monitoring of noise levels Monitoring of dust fall Monitoring waste management	Environmental Manager Noise monitoring specialist Air monitoring specialist Environmental Manager	Continuous 6 monthly 6 monthly 6 monthly
Topsoil Stockpile	Soil pollution Noise disturbance Air quality loss Waste management	Visible spills on ground Monitoring of noise levels Monitoring of dust fall Monitoring waste management	Environmental Manager Noise monitoring specialist Air monitoring specialist Environmental Manager	Continuous 6 monthly 6 monthly 6 monthly
Production Stock pile	Soil pollution Noise disturbance Air quality loss Waste management	Visible spills on ground Monitoring of noise levels Monitoring of dust fall Monitoring waste management	Environmental Manager Noise monitoring specialist Air monitoring specialist Environmental Manager	Continuous 6 monthly 6 monthly 6 monthly
Office block	Soil pollution Noise disturbance Air quality loss Waste management	Visible spills on ground Monitoring of noise levels Monitoring of dust fall Monitoring waste management	Environmental Manager Noise monitoring specialist Air monitoring specialist Environmental Manager	Continuous 6 monthly 6 monthly 6 monthly
Ablution	Soil pollution Noise disturbance Air quality loss	Visible spills on ground Monitoring of noise levels Monitoring of dust fall	Environmental Manager Noise monitoring specialist Air monitoring specialist	Continuous 6 monthly 6 monthly

	Waste management	Monitoring waste management	Environmental Manager	6 monthly
Domestic waste	Soil pollution Noise disturbance Air quality loss Waste management	Visible spills on ground Monitoring of noise levels Monitoring of dust fall Monitoring waste management	Environmental Manager Noise monitoring specialist Air monitoring specialist Environmental Manager	Continuous 6 monthly 6 monthly 6 monthly
Mine and access roads	Soil pollution Noise disturbance Air quality loss Waste management	Visible spills on ground Monitoring of noise levels Monitoring of dust fall Monitoring waste management	Environmental Manager Noise monitoring specialist Air monitoring specialist Environmental Manager	Continuous 6 monthly 6 monthly 6 monthly

m) Indicate the frequency of the submission of the performance assessment/ environmental audit report.

Annual Performance Assessment and Environmental Audit will be conducted and submitted to the DMR-Kimberley-Northern Cape Office

n) Environmental Awareness Plan

(1) Manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work.

- An Environmental, Health and Safety induction programme will be provided to all employees prior to commencing work, and they will sign acknowledgement of the induction
- A daily “toolbox talk” will be held prior to commencing work, which will include discussions on health, safety and environmental considerations. The toolbox talks should be led by the Site Manager.
- Implement a mandatory code of Practise and Safe Operating Procedures

ENVIROMENTAL AWARENESS TRAINING
PROGRAMME PROCEDURES

Natural resource is limited and not always renewable and it is the responsibility of management to ensure that all employees are trained to understand that impact of their tasks on the environment and to reduce them wherever possible.

Environmental awareness training must be given to new employees on the site and any contractors who may come onto the site for a short period of time. Refresher training must be given to permanent employees on an annual basis.

The objective of this procedure is to ensure that all employees on the, including contractors, are competent to perform their duties, thereby eliminating negative impacts on their safety, health and the environment

The Environmental topics to be covered in awareness training should include the following:

• **RESOURCE MANAGEMENT**

- (i) The importance of saving water
- (ii) South Africa is a water scares country and rivers are polluted
- (iii) Do not throw litter into river or water drains
- (iv) Do not dispose of oils in sewers
- (b) Air pollution- Climate changes**
 - (i) The use of fossil fuels is increasing the amount of greenhouse gases that are discharge to the atmosphere. Share transport or use public transport
 - (ii) Don't burn any rubbish, the smoke pollution the air
 - (iii) Plant trees, they clean the air, provide us with oxygen and removed the greenhouse gas carbon dioxide from the air
- (c) Soil conservation**
 - (i) Prevent over gazing of farmlands, keep vegetation on surface on the land to prevent soil erosion
 - (ii) Plant trees

• **HAZARDOUS SUBSTANCE USE AND STORAGE**

- a. Solvents, petrol, diesel, insecticides, chlorine, detergents, chemical fertilisers and harmful to the environment and to your health. Use them sparingly and do not let them get into the water system. Containers must be disposed of to a licensed hazardous waste disposal facility.
- b. Hazardous substances must be stored and used correctly
- c. Ensure that 16 points Material Substances Safety Data Sheets (MSDS) are available at point of store
- d. Compressed gas storage requirement
- e. Flammable substances store requirement

- **INCIDENT AND EMERGENCY REPORTING**

- a. The company must have an emergency/ incident reporting system whereby environmental incidents can be reported and actioned to mitigate and follow up on

- **OIL/DIESEL/PETROL SPILL CLEAN UP**

- a. All employees who work with machines and vehicles must be instructed how to prevent and clean up an oil or diesel spill appropriately. Spill kits must be available on site drip trays must be used when servicing vehicles

- **CONSERVATION OF WATER**

- a. Campaign to save water on site
- b. Clean water is expensive and potable water must be used carefully
- c. Prevent pollution of water by preventing spills and dispose of wastes properly

- **CONSERVATION OF VEGETATION**

Plants, grasses and trees are very important to our existence on the earth, they provide food, fuel, shelter, raw materials and they clean the air. Indigenous plants are especially important for the whole ecology of life. Human activities are destroying the natural forests of the earth. The natural forests are the "lungs" of the planet and unfortunately they are being cleared faster than they can be regenerated

- a. EIA's are to be done before virgin bush can be cleared
- b. Vegetation cover reduces water and topsoil loss from the ground, do not clear vegetation unnecessarily
- c. Indigenous trees provide shade that attract wild birds
- d. Do not chop down indigenous trees without good reason
- e. Implement a tree planting programme
- f. Remove alien invasion trees in your area such as Prosopis, Syringa and Pepper trees, Cactus plants.

WASTE MANAGEMENT

Employees must be instructed on how to tell the difference between hazardous waste and general waste.

(2) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

Air Quality:

Control the incidence of unacceptable dust pollution on site.

Surface water:

Conserve water and eliminate the contamination of run-off and sources of surface water.

Ground water:

Minimise and prevent as far as practically possible the contamination of ground water.

Noise:

Control the incidence of unacceptable noise levels on site.

Aesthetics:

Minimise aesthetics disturbance; and

Reduce the visual impact of the prospecting operation through continuous rehabilitation.

Soils:

Prevent soil pollution.

Limit soil compaction.

Curb soil erosion.

Reinstate a growth medium able to sustain plant life.

Sensitive landscapes:

Protect sensitive landscapes from potential negative impacts.

Waste Management.
Demarcated sites for waste.

o) Specific information required by the Competent Authority

(Among others, confirm that the financial provision will be reviewed annually).

Quarterly reports on fall-out and nuisance dust and noise monitoring will be conducted and incorporated into the annual reports forwarded to the Principle Inspector of Mine Health and Safety, Kimberley.

Fauna will be monitored annually for the Performance Assessment Report.

Annual performance Assessment and financial quantum reports will be conducted.

2) UNDERTAKING

The EAP herewith confirms

- a) the correctness of the information provided in the reports
- b) the inclusion of comments and inputs from stakeholders and I&APs ;
- c) the inclusion of inputs and recommendations from the specialist reports where relevant; and
- d) that the information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties are correctly reflected herein.



Signature of the environmental assessment practitioner:

Boraine's Transport

Name of company:

25 AUGUST 2018

Date:

-END-

REFERENCES:

South Africa. 2004. National Environmental Management: Biodiversity Act No. 10 of 2004. Pretoria: Government Printer.

ACOCKS, JPH 1998. Veld types of South Africa. 3rd Edition

Hutton Series: Established Series WDH/HBM/MEJ/GHL 05/2001

National Groundwater Quality Monitoring Programme- Department of Water and Sanitation

WORLDWEATHERONLINE.COM

Mine Health and Safety Act (Act 29) of 1996 (As Amended)

National Environmental Management Act, 1998 (Act 107 of 1998) (As Amended)