



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

NAME OF APPLICANT: BLUE LOUNGE TRADING 107 (PTY) LTD

REFERENCE NUMBER: (NC) 30/5/1/1/2/10970 PR

ENVIRONMENTAL MANAGEMENT PLAN

**SUBMITTED
IN TERMS OF SECTION 39 AND OF
REGULATION 52 OF THE MINERAL AND
PETROLEUM RESOURCES DEVELOPMENT
ACT, 2002,
(ACT NO. 28 OF 2002) (the Act)**

OCTOBER 2013

STANDARD DIRECTIVE

Applicants for prospecting rights or mining permits, are herewith, in terms of the provisions of Section 29 (a) and in terms of section 39 (5) of the Mineral and Petroleum Resources Development Act, directed to submit an Environmental Management Plan strictly in accordance with the subject headings herein, and to compile the content according to all the sub items to the said subject headings referred to in the guideline published on the Departments website, within 60 days of notification by the Regional Manager of the acceptance of such application. This document comprises the standard format provided by the Department in terms of Regulation 52 (2), and the standard environmental management plan which was in use prior to the year 2011, will no longer be accepted.

IDENTIFICATION OF THE APPLICATION IN RESPECT OF WHICH THE ENVIRONMENTAL MANAGEMENT PLAN IS SUBMITTED.

ITEM	COMPANY CONTACT DETAILS
Name	<u>Blue Lounge Trading 107 (Pty) Ltd</u>
Tel no	<u>053 874 3820</u>
Fax no:	<u>053 874 3820 (Tel/Fax)</u>
Cellular no	<u>076 150 8054 – Mr. B.N. Ruiters</u> <u>083 516 1231 – Mr. T. Ruiters</u>
E-mail address	<u>bradleyruiters@gmail.com</u>
Postal address	<u>P.O. Box 1776</u> <u>Kimberley</u> <u>8300</u>

ITEM	CONSULTANT CONTACT DETAILS (If applicable)
Name	<u>M&S Consulting</u>
Tel no	<u>053 861 1765</u>
Fax no:	<u>086 636 0731</u>
Cellular no	<u>084 444 4474 – Tanja Jooste</u>
E-mail address	<u>ms.consulting@vodamail.co.za</u>
Postal address	<u>P.O. Box 2473</u> <u>Kimberley</u> <u>8300</u>

1 REGULATION 52 (2): Description of the environment likely to be affected by the proposed prospecting or mining operation

1.1 The environment on site relative to the environment in the surrounding area.

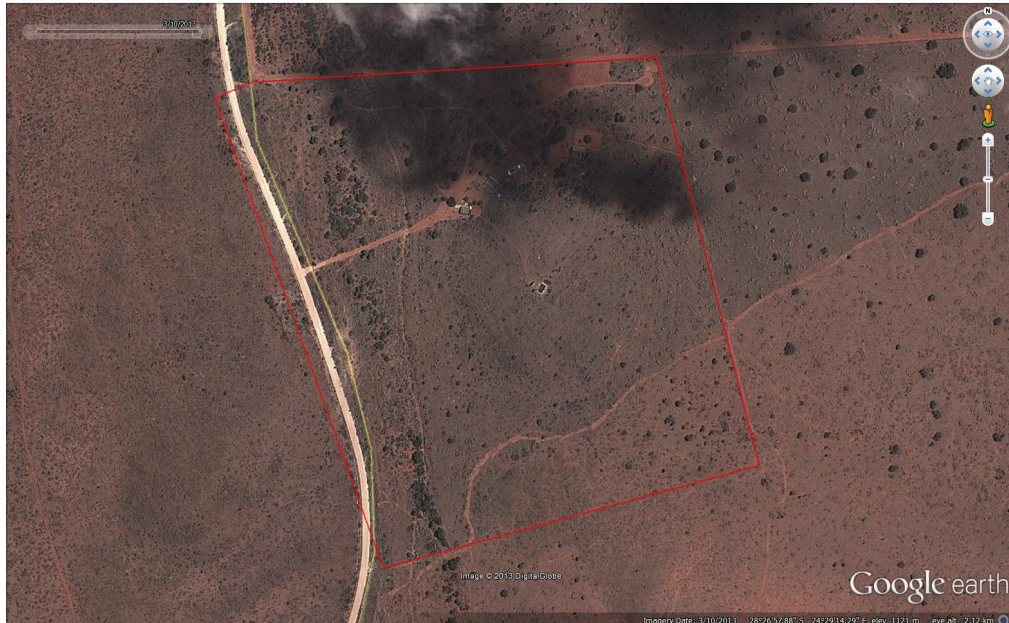


Figure 1 - Google image showing environment surrounding the application area.

It should be noted that this Google image is dated 10 March 2013 (the newest image available).

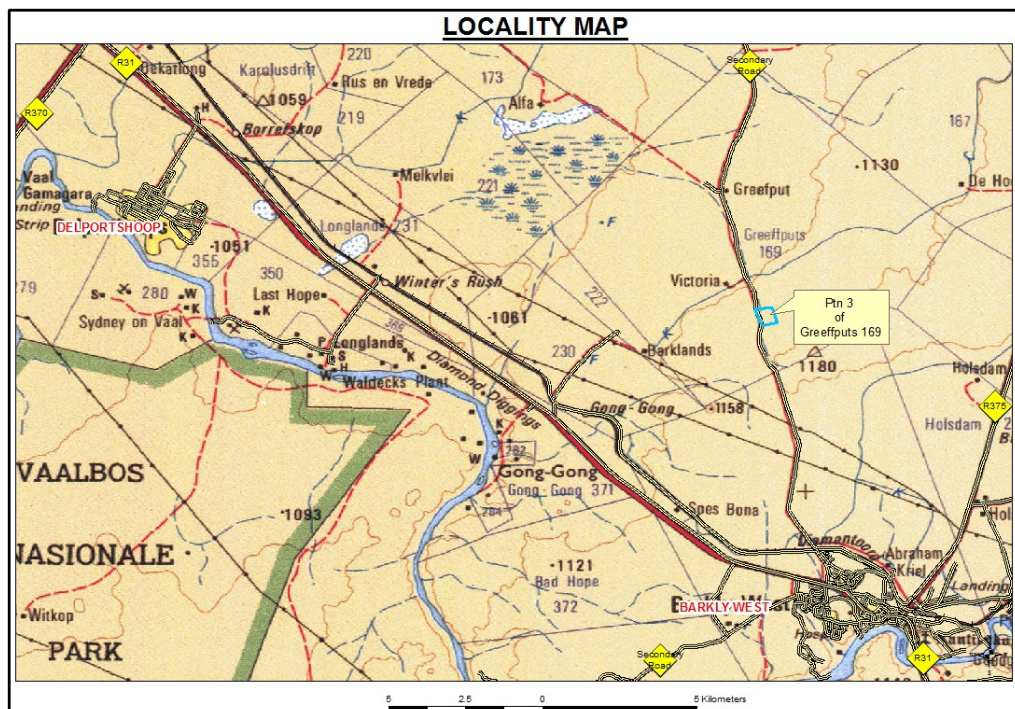


Figure 2 – Locality of the application area

- Air Quality:

Current sources of impacts on air quality are:-

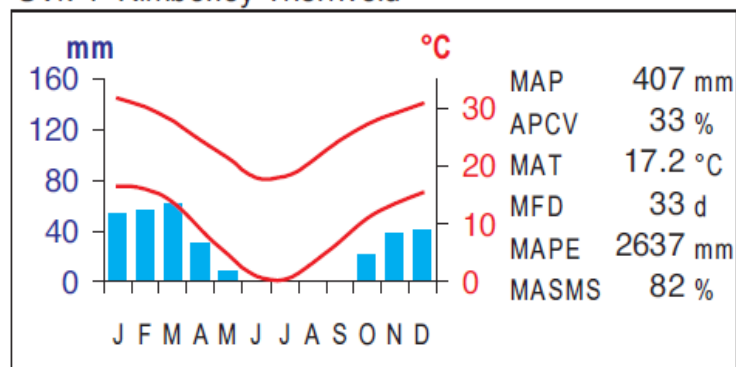
- Dust from the farm roads on the property.
- Dust from the secondary gravel road in the area utilized by farm owners for access to and on their farms.
- Dust from whirl winds which are common in the area.
- Dust induced by wind and wind gusts.

The general air quality on the property is expected to be good.

- Climate:

Summer and autumn rainfall and very dry winters. MAP from about 300mm in the southwest to about 500mm in the north-east. Frost frequent in winter. Mean monthly maximum and minimum temperatures for Kimberley 37.5°C and -4.1°C for January and July, respectively.

SVk 4 Kimberley Thornveld



Note: The blue bars show the median monthly precipitation. The upper and lower red lines show the mean daily maximum and minimum temperature respectively. MAP: Mean Annual Precipitation; APCV: Annual Precipitation Coefficient of Variation; MAT: Mean Annual Temperature; MFD: Mean Frost Days (days when screen temperature was below 0°C), MAPE: Mean Annual Potential Evaporation; MASMS: Mean Annual Soil Moisture Stress (% of days when evaporative demand was more than double the soil moisture supply).

- Fauna:

Most large antelope species are absent from the area, although nomad Kudus occasionally traverses the property. The normal array of small mammals and birds that are associated with the Kimberley Thornveld Vegetation Type might be expected.

- Flora:

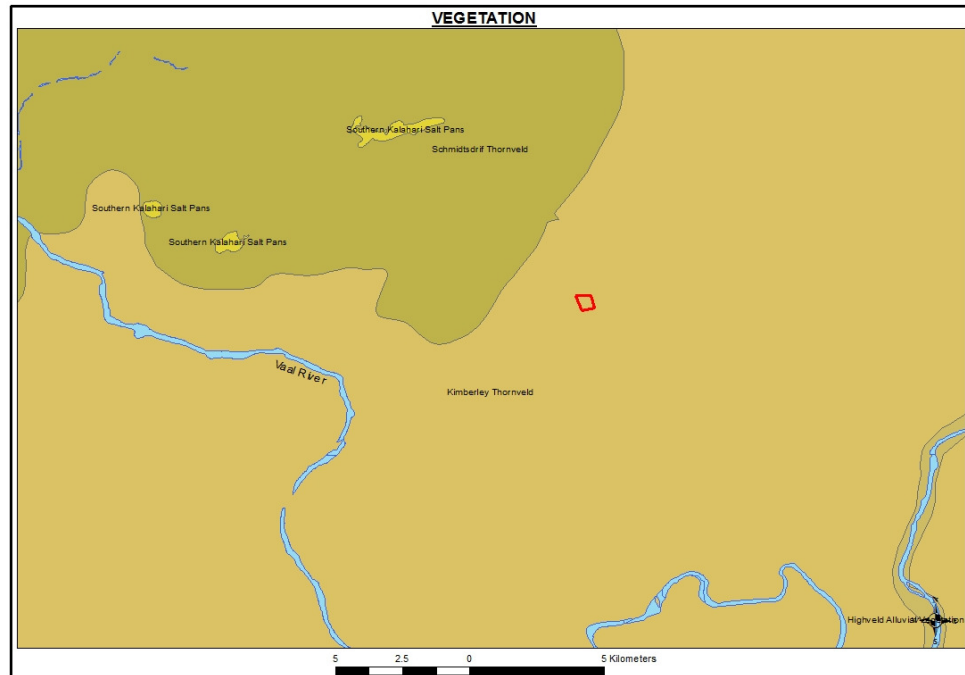


Figure 3 - Vegetation Map

The area under application falls within the Kimberley Thornveld Vegetation type, part of the Savannah Biome (SVk4).

The following is normally found under the Kimberley Thornveld vegetation type:

- Tall Tree: *Acacia erioloba* (d)
- Small Trees: *Acacia karroo* (d), *A. mellifera* subsp. *detinens* (d), *A. tortilis* subsp. *heteracantha* (d), *Rhus lancea*
- Tall Shrubs: *Tarchonanthus camphoratus* (d), *Diospyros pallens*, *Ehretia rigida* subsp. *rigida*, *Euclea crispa* subsp. *ovata*, *Grewia flava*, *Lycium arenicola*, *L. hirsutum*, *Rhus tridactyla*
- Low Shrubs: *Acacia hebeclada* subsp. *hebeclada* (d), *Anthospermum rigidum* subsp. *pumilum*, *Helichrysum zeyheri*, *Hermannia comosa*, *Lycium pilifolium*, *Melolobium microphyllum*, *Pavonia burchellii*, *Peliostomum leucorrhizum*, *Pinthus sericeus*, *Wahlenbergia nodosa*
- Succulent Shrubs: *Aloe hereroensis* var. *hereroensis*, *Lycium cinereum*
- Graminoids: *Eragrostis lehmanniana* (d), *Aristida canescens*, *A. congesta*, *A. mollissima* subsp. *argentea*, *Cymbopogon pospischilii*, *Digitaria argyrograpta*, *D. eriantha* subsp. *eriantha*, *Enneapogon cenchroides*, *E. scoparius*, *Eragrostis rigidior*, *Heteropogon contortus*, *Themeda triadra*
- Herbs: *Barleria mactrostegia*, *Dicoma schinzii*, *Harpagophytum procumbens* subsp. *procumbens*, *Helichrysum ceratioides*, *Hermbsaetdia odorata*, *Hibiscus*

- Succulent Herbs: *Aloe grandidentata*, *Piранthus decipiens*

- Geology:

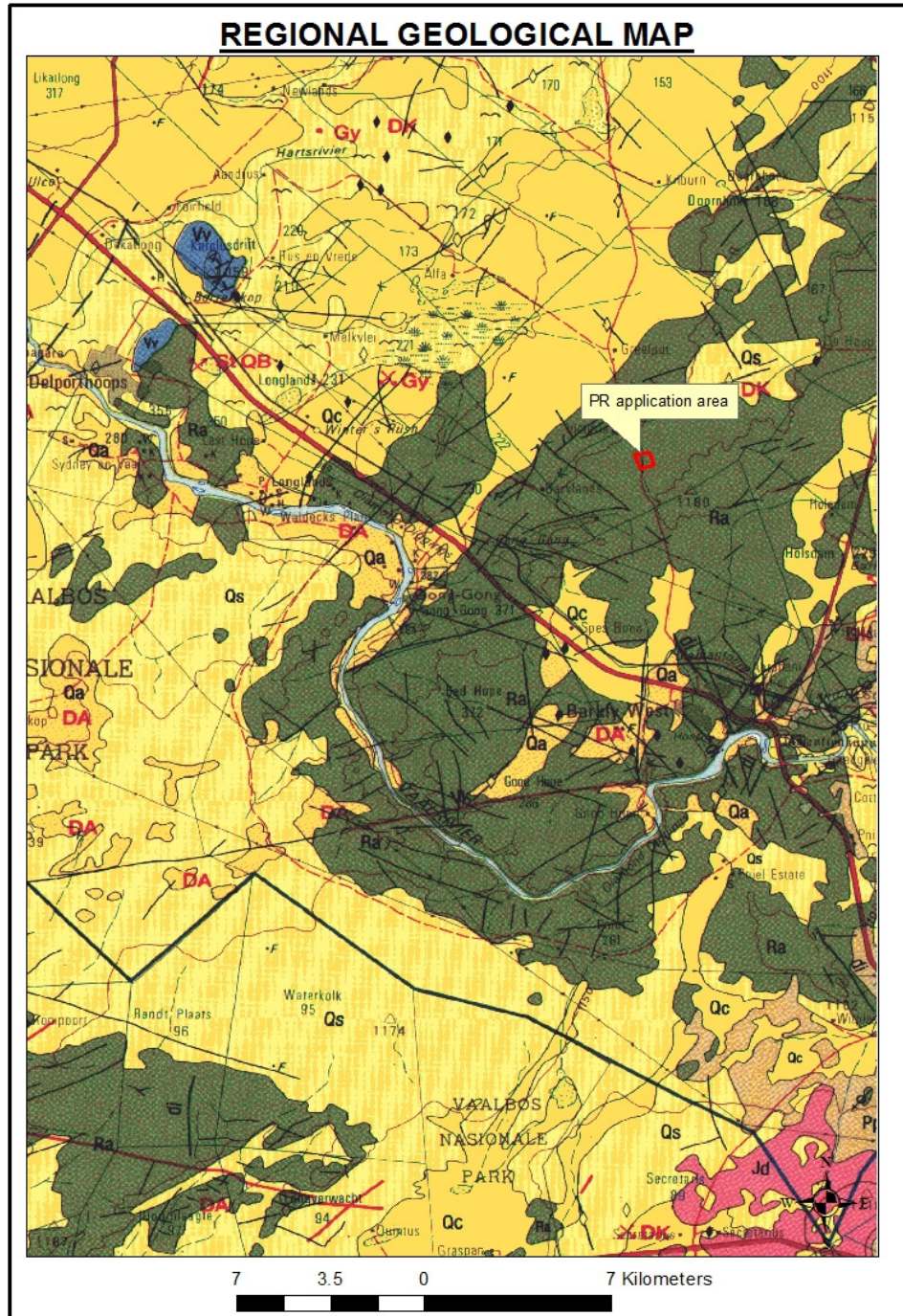


Figure 4 – Regional geology

Adesitic lavas of the Allanridge Formation in the north and west and fine-grained sediments of the Karoo Supergroup in the south and east. Deep (0.6 – 1.2m) sandy to loamy soils of the Hutton soil form (Ae and Ah land types) on slightly undulating sandy plains.

Stratigraphy

The application area is within the Kaapvaal Craton, although near to its inferred western margin. The surrounding rocks belong to the Karoo Supergroup with intrusions of dolerite. The basement rock is andesitic lavas of the Ventersdorp Group which could be up to 3800 meters thick. On top of the Ventersdorp we find Karoo formation from the Karoo Supergroup – Dwyka tillites and/or Ecca shales. Intrusive dolerite in the form of concordant sills and dykes can be found in the area. The recent alluvial deposits from the Pleistocene age belongs to the Riverton formation and the gravels itself to the Rietputs formation.

Structural geology

There are no dolerite dykes found or known to occur on or around the prospecting area although numerous other structural features in the form of joints, fault and some major fracture zones like the Dikbosch fracture can be found in the area. The Ventersdorp lava's and its basement erosion surface dominates the structural geology of the area. The joint pattern is associated with the Dikbosch Fault system. The scale and impact of the joint and fracture system can be seen in the numerous sharp turns of the Vaal River as it runs over and along the different fracture and fault zones.

- Ground Water:

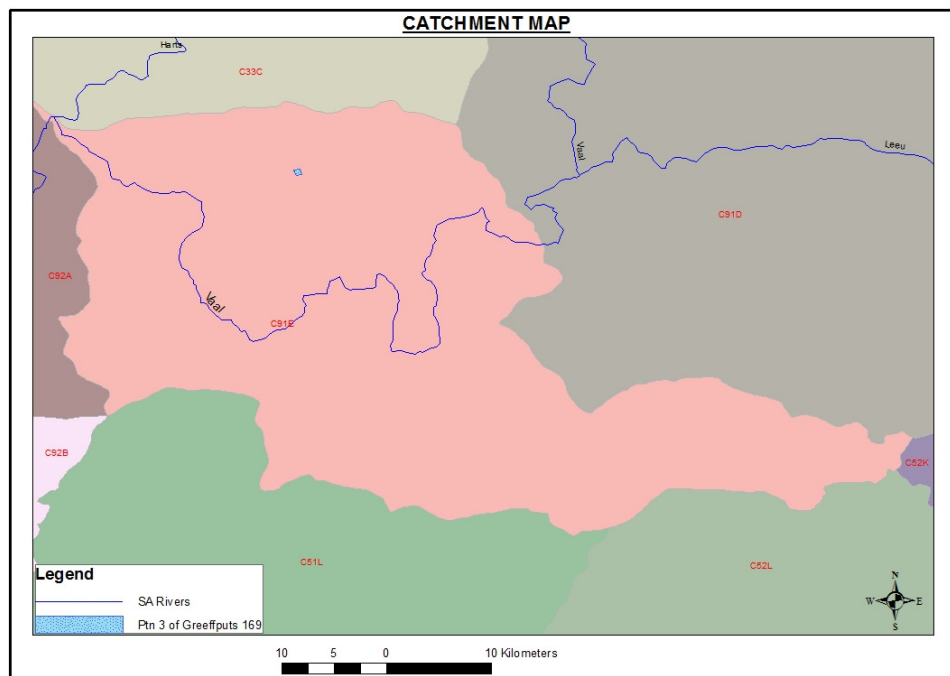


Figure 5 - Catchment Map

The application area is located in the tertiary drainage region C91E. The drainage region forms part of the Lower Vaal Water Management Area (nr. 10 in terms of the National Water Act,

1998 (Act no. 36 of 1998) as published in the Government Gazette, 1 October 1999).



Figure 6 - Borehole

Water for domestic use by the surface owner at the residence and water for livestock watering is obtained from a borehole. The water is stored in a dam and two 10 000 liter tanks from where it is utilized by the surface owner. The ground water quality is expected to be good.



Figure 7 – Water tanks utilized by the surface owner

- Noise:

The only current sources of noise are from:

- Traffic on the farm roads transecting the property.
- Traffic on the secondary gravel road in the area utilized by farm owners for access to and on their farms.

- Soil:

Deep (0.6 – 1.2m) sandy to loamy soils of the Hutton soil form (Ae and Ah land types) on slightly undulating sandy plains.

- Surface Water:

There is one non-perennial drainage line on the application area which traverses the property from the south to the north. The area is susceptible to single heavy showers that often result in flash flooding of small parts the area, which could result in water flowing through non-perennial water courses. No prospecting will be allowed within 20m from this drainage line.

There is no other surface water on the application area or in the immediate vicinity of the application area.

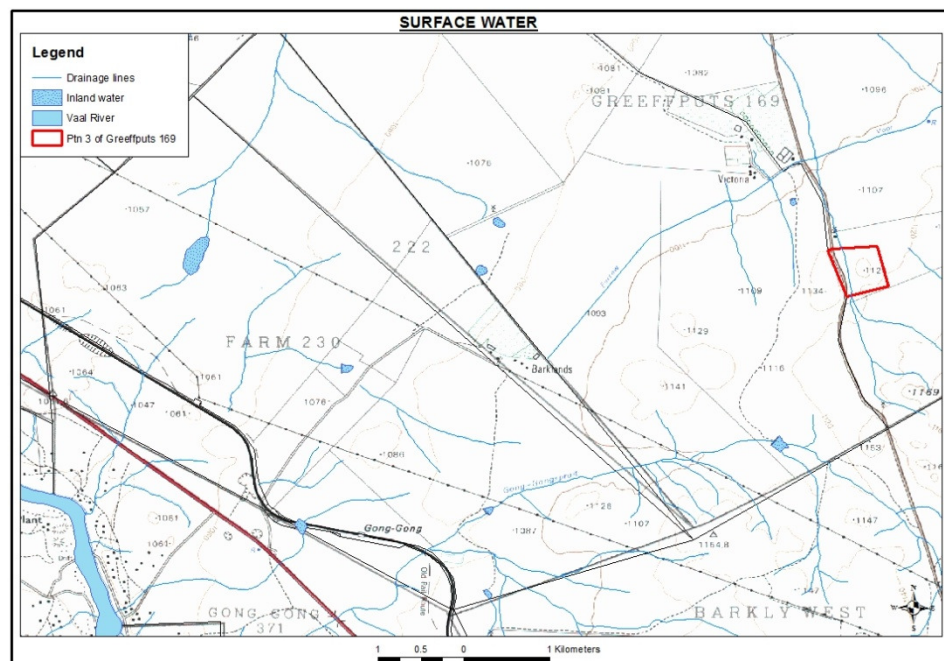


Figure 8 – Surface drainage in the application area and surrounding area



Figure 9 – Drainage channel on the property

- Topography:

Gently sloping area with elevations in the order of 1110 - 1 120 m.a.s.l.

The prospecting activities will be visible to some degree from the secondary gravel road utilized by farm owners for access to their farms.

1.2 The specific environmental features on the site applied for which may require protection, remediation, management or avoidance.

There is one non-perennial drainage line on the application area which traverses the property from the south to the north. The area is susceptible to single heavy showers that often result in flash flooding of small parts the area, which could result in water flowing through non-perennial water courses. No prospecting will be allowed within 20m from this drainage line.

1.3 Map showing the spatial locality of all environmental, cultural/heritage and current land use features identified on site.

Environmental:

There is one non-perennial drainage line on the application area which traverses the property from the south to the north. The area is susceptible to single heavy showers that often result in flash flooding of small parts the area, which could result in water flowing through non-perennial water courses. No prospecting will be allowed within 20m from this drainage line.

Cultural / heritage:

There is a grave yard on the property with one grave. This grave yard has been fenced and a 5m no prospecting buffer zone has been placed around the fence.

Current land uses:

The farm is utilized for livestock farming purposes.

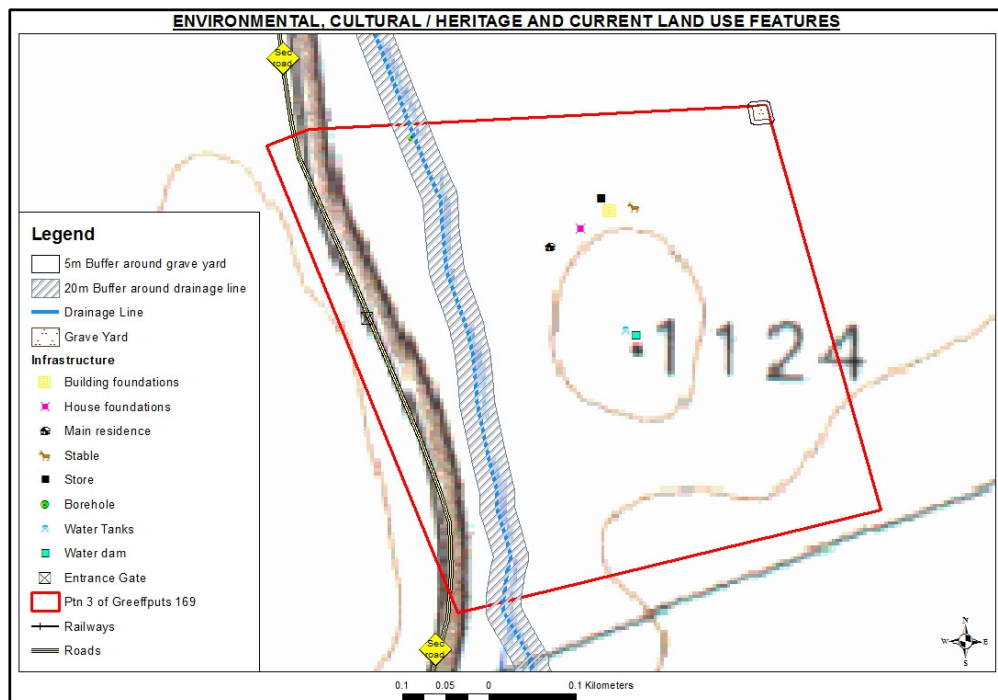


Figure 10 – Environmental, cultural/heritage and current land use features on application area

Infrastructure:

- The on-site gravel (farm) roads are in a good condition.
- The secondary gravel road accessing the planned prospecting operation is in a very poor condition and will see a minimal increase in traffic.
- The R31, between Barkly West and Delportshoop, is situated approximately 7km to the south of the application area. The secondary road that provides access to the site turns from this road. As the prospecting activities of Blue Lounge will be on a small scale, no impact to this road is expected.
- The nearest towns are Barkly West approximately 10km south-east and Delportshoop, which is situated approximately 16km north-west of the application area. Contractors, and other specialists who will be contracted to conduct the prospecting activities, will reside in Barkly West and/or Kimberley (which is situated approximately 40km south-east) while active prospecting activities are taking place on site.
- It is not anticipated that Blue Lounge's planned prospecting operation will have an impact to the power grid, as Blue Lounge

will make use of generators in their operation, if needed. There are two single line Eskom Power lines, which are situated 2.8km and 3.7km respectively, south of the application area. There is no Eskom power on the site.

- There is a railway line approximately 5.5km south-west of the application area. The prospecting operation of Blue Lounge will not utilize this railway line.
- The residential house and related structures and buildings of the surface owner will not be impacted on as no prospecting activities will be allowed within 100m from any structure.

1.4 Confirmation that the description of the environment has been compiled with the participation of the community, the landowner and interested and affected parties,

The surface owner of the property under application, all surrounding landowners and various other identified interested and affected parties were notified by means of registered post as well as by advertisements that were placed in the DFA (Local newspaper) and Volksblad (Regional newspaper). Attached as Annexure 'A' find hereto proof of the notification process.

Further consultation included a meeting that was held with the surface owner on 17 September 2013. The surface owner verbally agreed with the description of the existing status of the environment as contained in the 'Report on Results of Consultation with Communities and Interested and Affected Parties'. Find attached hereto the attendance register and minutes of the meeting as Annexure 'B'.

Property description	Owner	Description	Notification by
Portion 3 of the Farm Greeffputs 169, Barkly West	Wendy Etresia Ruiters	Surface owner	Registered letter, newspaper & meeting
Remaining Extent of the Farm Greeffputs 169, Barkly West	Zelpy 2648 (Pty) Ltd	Surrounding owner	Registered letter + newspaper
Portion 1 (Victoria) of the Farm Greeffputs 169, Barkly West	Referendum Landgoed (Pty) Ltd	Surrounding owner	Registered letter + newspaper
Dikgatlong Local Municipality	-	Local Municipality	Registered letter + newspaper
Frances Baard District Municipality	-	District Municipality	Registered letter + newspaper
ESKOM	-	Parastatal	Registered letter + newspaper
SANRAL	-	National Agency	Registered letter + newspaper
Transnet	-	Parastatal	Registered letter + newspaper
Department of Rural Development and Land Reform	-	Government Department	Registered letter + newspaper
Department of Environment and Nature Conservation	-	Government Department	Registered letter + newspaper
Department of Agriculture and Land Reform	-	Government Department	Registered letter + newspaper
Department of Water Affairs	-	Government Department	Registered letter + newspaper

Responses / Concerns received to date:

- Ms. W.E. Ruiters (surface owner):
The planned prospecting operation was discussed in detail with Ms. Ruiters during the meeting held on 17 September 2013. Ms. Ruiters understands what the prospecting operation will entail on her property and have no concerns or objections towards the proposed prospecting activities. Find attached as under Annexures 'B' and 'C' the minutes of the meeting as well as Ms. Ruiters' response letter to the EMP.

- Zelpy 2648 (Pty) Ltd:
No response has been received to date.
- Referendum Landgoed (Pty) Ltd:
No response has been received to date.
- Dikgatlong Local Municipality:
No response has been received to date.
- Frances Baard District Municipality:
No response has been received to date.
- Eskom:
No response has been received to date.
- SANRAL:
No response has been received to date.
- Transnet:
Mr. Andre Bodenstein of Transnet sent an e-mail to M&S Consulting on 12 September 2013 stating that Transnet has no objection or comments to raise towards the proposed prospecting application of Blue Lounge Trading 107 (Pty) Ltd. Find attached as Annexure 'D1' Transnet's response.
- Department of Rural Development and Land Reform:
A fax was received from Mr. Ryan Oliver of the Department stating that there are no restitution claims lodged against the property under application. Find attached as Annexure 'D2' the Department's response.
- Department of Environmental Affairs:
No response has been received to date.
- Department of Agriculture and Land Reform:
A letter, dated 8 October 2013, was received from Mr. W. De Bruyn of this Department. Find attached as Annexure 'D3' the Department's letter. The letter listed the following conditions and comments:
 - No natural storm water pattern or flow may be altered, restricted or blocked with the new development on the proposed site.
 - The removal of protected Thorn trees must be done with the relevant approval and permits.
 - Adherence to Act 43 of 1983, the conservation of agricultural resources.
 - Adherence to Act 70 of 1970, the change of ownership on agricultural used land.
 - Applicable erosion control.
 - No contamination of soil, groundwater and surface water.

- Fire control.
 - Conservation of topsoil and rehabilitation thereof.
 - General rehabilitation after mining.
 - Only applicable, as proposed, areas on farm for mining.
- Department of Water Affairs:
No response has been received to date.

No responses were received from the newspaper advertisements that were placed in the DFA and Volksblad.

A draft Environmental Management Plan was provided per hand to the surface owner for comment. Find attached hereto as Annexure ‘C’ the surface owner’s response letter.

Any other comments / concerns received will be submitted to DMR as and when it is received.

2 REGULATION 52 (2) (b): Assessment of the potential impacts of the proposed prospecting or mining operation on the environment, socio-economic conditions and cultural heritage.

2.1 Description of the proposed prospecting or mining operation.

2.1.1 The main prospecting activities (e.g. access roads, topsoil storage sites and any other basic prospecting design features)

Phase	Activity <small>(what are the activities that are planned to achieve optimal prospecting)</small>	Skill(s) required <small>(refers to the competent personnel that will be employed to achieve the required results)</small>	Timeframe <small>(in months) for the activity)</small>	Outcome <small>(What is the expected deliverable, e.g. geological report, analytical results, feasibility study, etc.)</small>	Timeframe for outcome <small>(deadline for the expected outcome to be delivered)</small>	What technical expert will sign off on the outcome? <small>(e.g. geologist, mining engineer, surveyor, economist, etc)</small>
1	Reconnaissance visit	Geologist	Month 1 - 3	Memorandum to address any problems	Month 3	Geologist
2	<ul style="list-style-type: none"> • Desktop study • Geological Mapping • Report 	Geologist	Month 4 - 9	Maps/Plans and detailed report on available information	Month 9	Geologist
3	Percussion Drilling	Drilling contractor	Month 10 - 11	Drill logs	Month 12	Drilling contractor
4	Analysis of drill samples	Laboratory	Month 12 - 15	Analyses Sheets Laboratory Report	Month 16	Laboratory
5	Bulk sampling	Geologist	Month 16 - 22	Detailed report on size of deposit and average carat / 100 tonnes	Month 23	Geologist
6	Consolidation and interpretation of all results/data	Geologist	Month 23 - 24	Detailed results and feasibility reports including resource statements and geological maps/plans	Month 24	Geologist

The planned prospecting operation will create the following:

- Five drilling sites (each disturbing approximately 10m x 10m);
- Two trenches (for bulk sampling) (50m x 20m x 5m deep each)
- Dedicated topsoil storage area (temporary);
- Mobile plant & processing area;
- Slimes dam;
- Mobile office-, workshop- & storage area; and
- A minimum of haulage roads.

2.1.2 Plan of the main activities with dimensions

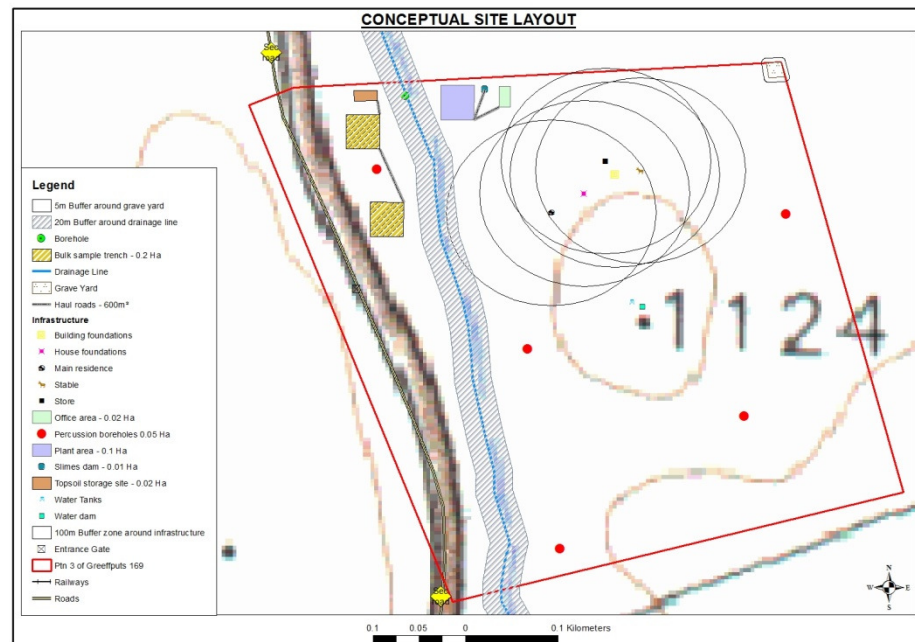


Figure 11 – Locality of planned prospecting activities

2.1.3 Description of construction, operational, and decommissioning phases.

- Construction phase:
The only invasive prospecting activities planned are the percussion drilling and bulk sampling activities. These activities are planned for phases 3 and 5 of the prospecting work programme. The site establishment of the drilling phase will entail the moving of the drill rig to the identified borehole sites. The site establishment for the bulk sampling phase will entail the establishment of the mobile plant and processing area, slimes dam and mobile office, workshop- and storage area for this operation.

Care will be taken to utilize existing roads as far as practically possible as to minimize the impact on the vegetation cover.

- Operational phase:
The operational phase will be conducted in six phases.
 - Phase one – Reconnaissance visit:
A Geologist will be appointed to conduct a reconnaissance visit where after phase two will commence.
 - Phase 2 – Desktop study:
 - Desktop study – A comprehensive study will be done researching all available information.

- Geological mapping - The geology of the area will be interpreted by using aerial photo's and Landsat data – target areas will be identified. The area will then be mapped by a qualified and registered geologist.
- Report – A report, making recommendations regarding further investigations of the mineralized areas will be compiled.
- Phase 3 – Percussion drilling:
 - Conventional drilling equipment will be used for drilling.
 - Down the hole and inclined air percussion drilling will be undertaken at selected points within the prospecting area.
 - Holes will be drilled to various depths between 0 – 20 meters to a maximum of 100m.
 - It is proposed that five (5) boreholes be drilled on the properties by use of the percussion drilling method.
 - The locality of the boreholes will be verified during a site reconnaissance visit.
 - Samples will be obtained from the boreholes and will be used as follows:
 - Samples will be obtained and sent for laboratory analysis. The samples will be used for various investigations including indicator mineral analyses as well as geotechnical studies including density and rock strength.
 - Existing roads and pathways will be utilised as far as possible in moving the drill equipment around the property.
 - The number of boreholes is subject to a site visit of the area.
- Phase 4 – Analysis of drill samples:

The drill samples will be sent to a laboratory for analysis.
- Phase 5 – Bulk sampling:

Two trenches will be excavated (50m x 20m x 5m deep) and bulk samples taken and processed to determine the recovery grade.
- Phase 6 – Consolidation of results:

Detailed results and a feasibility report including resource statements and geological maps plans will be compiled by the appointed Geologist.

- Decommissioning phase:
The decommissioning phase will only commence once all physical prospecting activities have been completed and the site rehabilitated.

During decommissioning all prospecting related infrastructure and equipment will be removed from the site and final backfilling and profiling rehabilitation of the disturbed areas will take place.

Blue Lounge Trading 107 (Pty) Ltd will apply for a Mining Right should the findings of the prospecting activities prove feasible. Should the outcome of the prospecting activities not prove feasible, Blue Lounge Trading 107 (Pty) Ltd will apply for a closure certificate.

2.1.4 Listed activities (in terms of the NEMA EIA regulations)

According to Listing Notice 1: List of activities and competent authorities identified in terms of Sections 24(2) and 24D of the National Environmental Management Act, 1998 (Act no. 107 of 1998) of Government Gazette no 33306, No. R. 544 the following activities are applicable according to NEMA EIA regulations:

Activity 19	Any activity requiring a prospecting right or renewal thereof in terms of Section 16 and 18 respectively of the Mineral and Petroleum Resources Development Act, 2002 (Act no 28 of 2002).
Activity 23	<p>The transformation of undeveloped, vacant or derelict land to:</p> <p>i) residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares, or</p> <p>ii) residential, retail, commercial, recreational, industrial or institutional use, outside an urban area, and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares;</p> <p>except where such transformation takes place for linear activities.</p>

2.2 Identification of potential impacts

(Refer to the guideline)

2.2.1 Potential impacts per activity and listed activities.

Activity	Potential impact on:	Type of impact	Description
Bulk sampling activities	Air quality	Negative Medium	<ul style="list-style-type: none"> Nuisance dust will be created by the prospecting equipment during bulk sampling activities.
	Fauna	Negative High	<ul style="list-style-type: none"> Where new excavations will be created the natural habitat of the animals will be disturbed and/or destroyed. Potential 'road' kills.
	Flora	Negative High	<ul style="list-style-type: none"> Where new excavations will be created the vegetation will be disturbed and/or destroyed.
	Ground Water	Negative Low	<ul style="list-style-type: none"> Possible hydrocarbon spills from vehicles and equipment in open excavations.
	Noise	Negative Medium	<ul style="list-style-type: none"> Noise from the prospecting equipment and vehicles during excavation activities.
	Soil	Negative Medium	<ul style="list-style-type: none"> Removal and disturbance of soil structure by excavation activities. Possible hydrocarbon spills from vehicles and equipment in and around open excavations.
	Surface Water	Negative Low	<ul style="list-style-type: none"> Collection of water in open excavations during and after thunderstorms. Possible hydrocarbon spills from vehicles and equipment in open excavations.
	Topography	Negative low	<ul style="list-style-type: none"> Minimal changing of natural slopes will take place.
	Visual	Negative Low	<ul style="list-style-type: none"> Changing of natural aesthetic view of environment could take place. The prospecting activities will only be visible to a small extent from the immediate surrounding area.

Activity	Potential impact on:	Type of impact	Description
Drilling activities	Air quality	Negative Medium	<ul style="list-style-type: none"> Nuisance dust will be created by the drill rig.
	Fauna	Negative High	<ul style="list-style-type: none"> Where new drill sites will be created the natural habitat of the animals will be disturbed and/or destroyed. Potential 'road' kills.
	Flora	Negative High	<ul style="list-style-type: none"> Where new drill sites will be created the vegetation will be disturbed and/or destroyed.
	Ground Water	Negative Low	<ul style="list-style-type: none"> Possible hydrocarbon spills from drill rig.
	Noise	Negative Medium	<ul style="list-style-type: none"> Noise from the drill rig.
	Soil	Negative Medium	<ul style="list-style-type: none"> Removal and disturbance of soil structure Possible hydrocarbon spills from the drill rig.
	Surface Water	Negative Low	<ul style="list-style-type: none"> Possible hydrocarbon spills from drill rig.
	Topography	Not applicable	<ul style="list-style-type: none"> No impact expected
	Visual	Negative Low	<ul style="list-style-type: none"> Changing of natural aesthetic view of environment could take place.

Activity	Potential impact on:	Type of impact	Description
Haul Roads	Air quality	Negative Low	<ul style="list-style-type: none"> Nuisance dust will be created by the prospecting equipment hauling material between the open excavation areas and the plant area.
	Fauna	Negative High	<ul style="list-style-type: none"> Where new haulage roads will be created the natural habitat of the animals will be disturbed and/or destroyed. Road kills.
	Flora	Negative High	<ul style="list-style-type: none"> Where new haulage roads will be created the vegetation will be disturbed and/or destroyed.
	Ground Water	Negative Low	<ul style="list-style-type: none"> Possible hydrocarbon spills from vehicles and equipment.
	Noise	Negative Low	<ul style="list-style-type: none"> Noise from the prospecting equipment on the haulage roads.
	Soil	Negative Low	<ul style="list-style-type: none"> Compaction of soil is expected on the roads that are used by the prospecting operation. Possible hydrocarbon spills from equipment and vehicles.
	Surface Water	Negative Low	<ul style="list-style-type: none"> If roads are not properly maintained, water erosion after thunder storms can occur. Possible hydrocarbon spills from equipment and vehicles.
	Topography	Not applicable	<ul style="list-style-type: none"> No impact to the topography is expected from the roads that will be created and used by the prospecting operation.
	Visual	Negative Low	<ul style="list-style-type: none"> The haulage roads will visible to some extent from the immediate surroundings.

Activity	Potential impact on:	Type of impact	Description
Office-, workshop & storage area (mobile containers)	Air quality	Negative Low	<ul style="list-style-type: none"> Vehicle and equipment emissions in these areas.
	Fauna	Negative High	<ul style="list-style-type: none"> The natural habitat of the animals will be disturbed and/or destroyed where these mobile containers will be placed. Potential 'road' kills in these areas.
	Flora	Negative High	<ul style="list-style-type: none"> The vegetation cover will be disturbed and / or destroyed in the areas where these mobile containers will be placed.
	Ground Water	Negative Low	<ul style="list-style-type: none"> Possible hydrocarbon spills from equipment and vehicles in these areas.
	Noise	Negative Low	<ul style="list-style-type: none"> Minimal noise impact.
	Soil	Negative Low	<ul style="list-style-type: none"> Disturbance of soil structure where the mobile containers will be placed. Possible hydrocarbon spills from vehicles and equipment in these areas.
	Surface Water	Negative Low	<ul style="list-style-type: none"> Potential pollution of surface water through hydrocarbon spills from vehicles and equipment in these areas during a rain event.
	Topography	Not applicable	<ul style="list-style-type: none"> No change in topography is expected.
Visual	Negative Low	<ul style="list-style-type: none"> Changing of natural view will take place. 	

Activity	Potential impact on:	Type of impact	Description
Processing Plant (Mobile)	Air quality	Negative Medium	<ul style="list-style-type: none"> Nuisance dust will be created by the mobile plant operations. Nuisance dust will be created from vehicles and equipment in this area.
	Fauna	Negative High	<ul style="list-style-type: none"> The natural habitat of the animals will be disturbed and/or destroyed where the mobile processing plant will be established.
	Flora	Negative High	<ul style="list-style-type: none"> The vegetation cover will be disturbed and / or destroyed where the mobile processing plant will be established.
	Ground Water	Negative Medium	<ul style="list-style-type: none"> Groundwater will be utilized for processing purposes. Potential pollution of groundwater through hydrocarbon spills.
	Noise	Negative High	<ul style="list-style-type: none"> A high noise impact is expected in the immediate vicinity of the processing plant.
	Soil	Negative Low	<ul style="list-style-type: none"> Disturbance of soil structure where the mobile processing plant will be established. Possible hydrocarbon spills from vehicles and equipment in these areas.
	Surface Water	Negative Medium	<ul style="list-style-type: none"> Potential pollution of surface water through hydrocarbon spills during a rain event.
	Topography	Not applicable	<ul style="list-style-type: none"> No change in topography is expected.
	Visual	Negative Medium	<ul style="list-style-type: none"> Changing of natural view will take place where the mobile processing plant will be established. Breaking of natural skyline.

Activity	Potential impact on:	Type of impact	Description
Slimes dam	Air quality	Negative Low	<ul style="list-style-type: none"> Nuisance dust will be created when the slimes dam is built. Nuisance dust will be experienced when the dam dries out and during rehabilitation thereof.
	Fauna	Negative High	<ul style="list-style-type: none"> The natural habitat of the animals will be disturbed and/or destroyed where the slimes dam will be established.
	Flora	Negative High	<ul style="list-style-type: none"> The vegetation cover will be disturbed and / or destroyed where the slimes dam will be established.
	Ground Water	Positive Low	<ul style="list-style-type: none"> Water collected in the slimes dam will infiltrate into the groundwater table and will have a potential positive effect on groundwater levels.
	Noise	Not applicable	<ul style="list-style-type: none"> No noise impact is expected.
	Soil	Negative Low	<ul style="list-style-type: none"> Disturbance of soil structure where the slimes dam will be established.
	Surface Water	Not applicable	<ul style="list-style-type: none"> No impact to surface water is expected.
	Visual	Negative Low	<ul style="list-style-type: none"> Changing of natural slopes. Changing of natural view will take place.

Activity	Potential impact on:	Type of impact	Description
Topsoil storage site (Temporary)	Air quality	Negative Low	<ul style="list-style-type: none"> Nuisance dust will be created by the vehicles and equipment in this area.
	Fauna	Negative High	<ul style="list-style-type: none"> The natural habitat of the animals will be disturbed/destroyed in this area.
	Flora	Negative High	<ul style="list-style-type: none"> The vegetation will be disturbed/destroyed in this area.
	Ground Water	Negative Low	<ul style="list-style-type: none"> Possible hydrocarbon spills by vehicles and equipment in this area.
	Noise	Negative Low	<ul style="list-style-type: none"> Noise will be created by the vehicles and equipment in this area.
	Soil	Negative Low	<ul style="list-style-type: none"> Disturbance of the soil structure.
	Surface Water	Negative Low	<ul style="list-style-type: none"> Possible hydrocarbon spills by vehicles and equipment in this area.
	Visual	Negative Low	<ul style="list-style-type: none"> Changing of natural slopes. Changing of natural view.

2.2.2 Potential cumulative impacts.

Description	
Air Quality	<ul style="list-style-type: none"> ○ Nuisance dust created by prospecting activities. ○ Nuisance dust created from the farm roads and gravel roads surrounding the property.
Fauna	<ul style="list-style-type: none"> ○ Disturbance and/or destruction of habitat by prospecting activities. ○ Potential road kills.
Flora	<ul style="list-style-type: none"> ○ Disturbance and/or destruction of vegetation by prospecting activities.
Ground Water	<ul style="list-style-type: none"> ○ Minimal utilization of groundwater for domestic and livestock watering purposes by the surface. ○ Usage of groundwater for processing purposes by prospecting activities.
Noise	<ul style="list-style-type: none"> ○ Noise created by prospecting activities. ○ Noise from traffic on farm roads and surrounding gravel roads.
Soil	<ul style="list-style-type: none"> ○ Removal and disturbance of soil structure by prospecting activities.
Surface Water	<ul style="list-style-type: none"> ○ No impact is expected as there is no surface water in the application area, or in the immediate vicinity thereof.
Topography	<ul style="list-style-type: none"> ○ Potential changing of natural slopes by prospecting activities.
Visual	<ul style="list-style-type: none"> ○ Changing of natural view by prospecting activities.

2.2.3 Potential impact on heritage resources

There is a grave yard on the property with one grave. This grave yard has been fenced and a 5m no prospecting buffer zone has been place around the fence.

2.2.4 Potential impacts on communities, individuals or competing land uses in close proximity.

(If no such impacts are identified this must be specifically stated together with a clear explanation why this is not the case.)

There are no communities or individuals residing in close proximity of the area under application who could be potentially impacted on.

The only competing land use on the application area is livestock farming. The only potential impact to these activities is the temporally limited dust and noise created by some of the prospecting activities.

2.2.5 Confirmation that the list of potential impacts has been compiled with the participation of the landowner and interested and affected parties,

A meeting was held with the surface owner on 17 September 2013. The surface owner verbally agreed with the description of the potential impacts as identified in the 'Report on Results of Consultation with Communities and Interested and Affected Parties'. Find attached hereto the attendance register and minutes of the meeting as Annexure 'B'.

A draft Environmental Management Plan was provided per hand to the surface owner for comment. Find attached hereto as Annexure 'C' the surface owner's response letter.

A letter, dated 8 October 2013, was received from Mr. W. De Bruyn of the Department of Agriculture. Find attached as Annexure 'D3' the Department's letter. The letter listed the following conditions and comments:

- No natural storm water pattern or flow may be altered, restricted or blocked with the new development on the proposed site.
- The removal of protected Thorn trees must be done with the relevant approval and permits.
- Adherence to Act 43 of 1983, the conservation of agricultural resources.
- Adherence to Act 70 of 1970, the change of ownership on agricultural used land.
- Applicable erosion control.
- No contamination of soil, groundwater and surface water.
- Fire control.
- Conservation of topsoil and rehabilitation thereof.
- General rehabilitation after mining.
- Only applicable, as proposed, areas on farm for mining.

No further responses were received from the registered letters or newspaper advertisements that were placed in the DFA and Volksblad.

Any other comments / concerns received will be submitted to DMR as and when it is received.

2.2.6 Confirmation of specialist report appended.

(Refer to guideline)

There are no specialist reports appended. The following was observed on the application area during the site visit:

- Environmental:
There is one non-perennial drainage line on the application area which traverses the property from the south to the north. The area is susceptible to single heavy showers that often result in flash flooding of small parts the area, which could result in water flowing through non-perennial water courses. No prospecting will be allowed within 20m from this drainage line.
- Cultural / heritage:
There is a grave yard on the property with one grave. This grave yard has been fenced and a 5m no prospecting buffer zone has been place around the fence.

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

3.1 Assessment of the significance of the potential impacts

3.1.1 Criteria of assigning significance to potential impacts

ASSESSMENT CRITERIA TERMINOLOGY

The assessment of the impacts has been conducted according to a synthesis of criteria required by the integrated environmental management procedure.

Nature of impact

This is an appraisal of the type of effect the activity would have on the affected environmental component. Its description should include what is being affected, and how.

Extent

The physical and spatial size of the impact. This is classified as follows:

- **Local**
The impacted area extends only as far as the activity, e.g. a footprint.
- **Site**
The impact could affect the whole, or a measurable portion of the property.
- **Regional**
The impact could affect the area including the neighbouring farms, transport routes and the adjoining towns.
- **Cumulative**
The impact could have a cumulative effect with the surrounding land uses.

Duration

The lifetime of the impact which is measured in the context of the lifetime of the proposed phase (i.e. construction or operation).

- **Short term**
The impact will either disappear with mitigation or will be mitigated through natural process in a short time period.
- **Medium term**
The impact will last up to the end of the prospecting period, where after it will be entirely negated.
- **Long term**
The impact will continue or last for the entire operational life of the operation, but will be mitigated by direct human action or by natural processes thereafter.

- **Permanent**

The only class of impact, which will be non-transitory. Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient.

Intensity

This describes how destructive, or benign, the impact is. Does it destroy the impacted environment, alter its functioning, or slightly alter it. These are rated as:

- **Low**

This alters the affected environment in such a way that the natural processes or functions are not affected.

- **Medium**

The affected environment is altered, but function and process continue, albeit in a modified way.

- **High**

Function or process of the affected environment is disturbed to the extent where it temporarily or permanently ceases.

This will be a relative evaluation within the context of all the activities and the other impacts within the framework of the project.

Probability

This describes the likelihood of the impacts actually occurring. The impact may occur for any length of time during the life cycle of the activity, and not at any given time. The classes are rated as follows:

- **Improbable**

The possibility of the impact occurring is very low, due either to the circumstances, design or experience.

- **Probable**

There is a possibility that the impact will occur to the extent that provisions must be made therefore.

- **Highly probable**

It is most likely that the impacts will occur at some or other stage of the development.

- **Definite**

The impact will take place regardless of any preventative plans, and mitigation measures or contingency plans will have to be implemented to contain the impact.

Determination of significance

Significance is determined through a synthesis of impact characteristics. Significance is an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. The classes are rated as follows:

- **No significance**
The impact is not likely to be substantial and does not require any mitigatory action.
- **Low**
The impact is of little importance, but may require limited mitigation.
- **Medium**
The impact is of importance and therefore considered to have a negative impact. Mitigation is required to reduce the negative impacts to acceptable levels.
- **High**
The impact is of great importance. Failure to mitigate, with the objective to reduce the impact to acceptable levels, could render the entire development option or entire project proposal unacceptable. Mitigation is therefore essential.

3.1.2 Potential impact of each main activity in each phase, and corresponding significance assessment

Prospecting activity	Impact on	Extent	Duration	Intensity	Probability	Significance
Bulk sampling activities	Air quality	Site	Medium	Medium	Definite	Medium
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Medium	Medium	Definite	Medium
	Soil	Local	Long	Medium	Definite	Medium
	Surface water	Local	Short	Low	Improbable	Low
	Topography	Site	Long	Low	Definite	Low
	Visual	Regional	Long	Low	Definite	Low
	Prospecting activity	Impact on	Extent	Duration	Intensity	Probability
Drilling activities	Air quality	Site	Medium	Medium	Definite	Medium
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Medium	Medium	Definite	Medium
	Soil	Local	Long	Medium	Definite	Medium
	Surface water	Local	Short	Low	Improbable	Low
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Regional	Long	Low	Definite	Low
	Prospecting activity	Impact on	Extent	Duration	Intensity	Probability
Haul Roads	Air quality	Site	Short	Low	Definite	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Short	Low	Definite	Low
	Soil	Local	Medium	Low	Definite	Low
	Surface water	Local	Short	Low	Improbable	Low
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Site	Long	Low	Definite	Low
	Prospecting activity	Impact on	Extent	Duration	Intensity	Probability
Office-, workshop & storage area (mobile containers)	Air quality	Local	Short	Low	Probable	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Short	Low	Definite	Low
	Soil	Local	Medium	Low	Definite	Low
	Surface water	Local	Short	Low	Improbable	Low
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Site	Long	Low	Definite	Low
Prospecting activity	Impact on	Extent	Duration	Intensity	Probability	Significance
Processing Plant (Mobile)	Air quality	Site	Medium	Medium	Definite	Medium
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Medium	Improbable	Medium
	Noise	Site	Medium	Medium	Definite	High
	Soil	Local	Medium	Medium	Definite	Low
	Surface water	Local	Medium	Medium	Definite	Medium
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Regional	Long	High	Definite	Medium

Prospecting activity	Impact on	Extent	Duration	Intensity	Probability	Significance
Slimes dam	Air quality	Site	Short	Medium	Definite	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Local	Long	Low	Probable	Low
	Noise	N/A	N/A	N/A	N/A	N/A
	Soil	Local	Medium	Medium	Definite	Low
	Surface water	N/A	N/A	N/A	N/A	N/A
	Topography	Site	Medium	Medium	Definite	Low
	Visual	Regional	Long	Medium	Definite	Low
Prospecting activity	Impact on	Extent	Duration	Intensity	Probability	Significance
Topsoil storage site (temporary)	Air quality	Local	Short	Low	Probable	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Short	Low	Definite	Low
	Soil	Local	Medium	Medium	Definite	Low
	Surface water	Local	Short	Low	Improbable	Low
	Topography	Site	Medium	Medium	Definite	Low
	Visual	Site	Long	Medium	Definite	Low

3.1.3 Assessment of potential cumulative impacts.

The only competing land use is small scale livestock farming. No impact to the environment is expected from the livestock farming activities.

The cumulative impact to the environment, before any mitigation measures are implemented, from both the prospecting activities and livestock farming activities can be summarised as follows:

Prospecting activity	Impact on	Extent	Duration	Intensity	Probability	Significance
Bulk sampling activities	Air quality	Site	Medium	Medium	Definite	Medium
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Medium	Medium	Definite	Medium
	Soil	Local	Long	Medium	Definite	Medium
	Surface water	Local	Short	Low	Improbable	Low
	Topography	Site	Long	Low	Definite	Low
	Visual	Regional	Long	Low	Definite	Low
Drilling activities	Air quality	Site	Medium	Medium	Definite	Medium
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Medium	Medium	Definite	Medium
	Soil	Local	Long	Medium	Definite	Medium
	Surface water	Local	Short	Low	Improbable	Low
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Regional	Long	Low	Definite	Low
Haul Roads	Air quality	Site	Short	Low	Definite	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Short	Low	Definite	Low
	Soil	Local	Medium	Low	Definite	Low
	Surface water	Local	Short	Low	Improbable	Low
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Site	Long	Low	Definite	Low
Office-, workshop & storage area (mobile containers)	Air quality	Local	Short	Low	Probable	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Short	Low	Definite	Low
	Soil	Local	Medium	Low	Definite	Low
	Surface water	Local	Short	Low	Improbable	Low
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Site	Long	Low	Definite	Low
Processing Plant (Mobile)	Air quality	Site	Medium	Medium	Definite	Medium
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Medium	Improbable	Medium
	Noise	Site	Medium	Medium	Definite	High
	Soil	Local	Medium	Medium	Definite	Low
	Surface water	Local	Medium	Medium	Definite	Medium
	Topography	N/A	N/A	N/A	N/A	N/A
	Visual	Regional	Long	High	Definite	Medium
Slimes dam	Air quality	Site	Short	Medium	Definite	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Local	Long	Low	Probable	Low
	Noise	N/A	N/A	N/A	N/A	N/A
	Soil	Local	Medium	Medium	Definite	Low
	Surface water	N/A	N/A	N/A	N/A	N/A
	Topography	Site	Medium	Medium	Definite	Low
	Visual	Regional	Long	Medium	Definite	Low
Topsoil storage site (temporary)	Air quality	Local	Short	Low	Probable	Low
	Fauna	Local	Long	High	Definite	High
	Flora	Local	Long	High	Definite	High
	Groundwater	Site	Short	Low	Improbable	Low
	Noise	Site	Short	Low	Definite	Low
	Soil	Local	Medium	Medium	Definite	Low
	Surface water	Local	Short	Low	Improbable	Low
	Topography	Site	Medium	Medium	Definite	Low
	Visual	Site	Long	Medium	Definite	Low

3.2 Proposed mitigation measures to minimise adverse impacts.

3.2.1 List of actions, activities, or processes that have sufficiently significant impacts to require mitigation.

- Air quality
 - Nuisance dust created by prospecting activities.
 - Nuisance dust created from the farm roads and gravel roads surrounding the property.
- Fauna
 - Disturbance and/or destruction of habitat by prospecting activities.
 - Potential road kills.
- Flora
 - Disturbance and/or destruction of vegetation by prospecting activities.
- Groundwater
 - Minimal utilization of groundwater for domestic and livestock watering purposes by the surface.
 - Usage of groundwater for processing purposes by prospecting activities.
- Noise
 - Noise created by prospecting activities.
 - Noise from traffic on farm roads and surrounding gravel roads.
- Soil
 - Removal and disturbance of soil structure by prospecting activities.
- Surface water
 - No impact is expected as there is no surface water in the application area, or in the immediate vicinity thereof.
- Topography
 - Potential changing of natural slopes by prospecting activities.
- Visual
 - Changing of natural view by prospecting activities.

3.2.2 Concomitant list of appropriate technical or management options

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

- Air quality:
To limit the creation of nuisance dust the following management guidelines will be followed:
 - Avoidance of unnecessary removal of vegetation;
 - Routine spraying of unpaved site areas and roads utilized by the prospecting operation with water;
 - Speed limits of vehicles inside the application area will be strictly controlled to avoid excessive dust or the excessive deterioration of the roads to be used.
 - All cleared, disturbed or exposed areas to be re-vegetated as soon as practically possible to prevent the formation of additional sources of dust.

- Fauna
Most large antelope species are absent from the area, although nomad Kudus occasionally traverses the property. The normal array of small mammals and birds that are associated with the Kimberley Thornveld Vegetation Type might be expected.

To ensure a minimum of impact to these animals the following management guidelines will be followed:
 - Speed limits of vehicles inside the application area will be strictly controlled to avoid road kills.
 - Continuous backfilling of open excavations (created by the bulk sampling activities).
 - Operational areas will be low angled as a preventative measure to ensure an escape route for animals.
 - No hunting (snares) will be allowed at the application area.

- Flora
 - No trees or shrubs will be felled or damaged for the purpose of obtaining firewood.
 - Management will take responsibility to control declared invader or exotic species on the site. The following control methods will be used:
 - "The plants will be uprooted, felled or cut off and can be destroyed completely."
 - "The plants will be treated with an herbicide that is registered for use in connection therewith and in accordance with the directions for the use of such an herbicide."

- Valid permits from Northern Cape Nature Conservation will be obtained before any protected plant species are removed.
 - Continuous backfilling of open excavations (created by bulk sampling activities) and spreading of previously stored topsoil over the rehabilitated areas.
 - All rehabilitated areas, where applicable and possible, will be seeded with a vegetation seed mix adapted to reflect the local indigenous flora that was present prior to prospecting activities commenced, if the natural succession of vegetation is unacceptably slow.
 - Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a firebreak will be cleared around the perimeter of the site.
 - The end objective of the re-vegetation program will be to achieve a stable self-sustaining habitat unit.
- Groundwater
 - Vehicle- and equipment maintenance will only be allowed within the maintenance area. Only emergency breakdowns will be allowed in other areas.
 - The following procedure will be followed if a vehicle or piece of equipment would break down inside an excavation and outside of the maintenance area. Drip pans will be placed at all points where diesel, oil or hydraulic fluid may drip and in so doing contaminate the soil.
 - All efforts will be made to move the broken down vehicle or piece of equipment to the maintenance area.
 - If the vehicle/piece of equipment cannot be moved, the broken part will firstly be drained of all fluid. The part will then be removed and taken to the maintenance area.
 - No repairs will be allowed outside the maintenance area except for emergencies.
 - Equipment used as part of the proposed operation will be adequately maintained so as to ensure that oil, diesel, grease or hydraulic fluid does not leak during operation.
 - Fuel and other petrochemicals will be stored in steel receptacles that comply with SANS 10089-1:2003 (SABS 089-1:2003) standards. An adequate bund wall, 150% of volume of the largest storage receptacle, will be provided for fuel and diesel areas to accommodate any spillage or overflow of these substances. The area inside the bund wall will be lined with an impervious lining to prevent infiltration of

the fuel into the soil (and ultimately groundwater). The latter will be covered by an approved bacterial hydrocarbon digestion agent that is effective in water.

- Proper sanitation facilities will be provided for employees. No person will pollute the workings with faeces or urine, misuse the facilities provided or inappropriately foul the surrounding environment with faeces or urine. Acceptable hygienic and aesthetic practices will be adhered to.
- Noise
 - Working hours will be kept between sunrise and sunset as far as possible.
 - As a minimum, ambient noise levels emanating from the prospecting activities will not exceed 82 dBA at the site boundary.
 - Blue Lounge will comply with the occupational noise Regulations of the Occupational Health and Safety Act, Act 85 of 1993.
 - Blue Lounge will comply with the measures for good practice with regard to management of noise related impacts during construction and operation.
 - The management objective will be to reduce any level of noise, shock and lighting that may have an effect on persons or animals, both inside the plant area and that which may migrate outside the plant area.
 - When the equivalent noise exposure, as defined in the South African Bureau of Standards Code of Practice for the Measurement and Assessment of Occupational Noise for Hearing Conservation Purposes, SABS 083 as amended, in any place at or in any mine or works where persons may travel or work, exceeds 82 dB (A), the site manager will take the necessary steps to reduce the noise below this level.
 - Hearing protection will be available for all employees where attenuation cannot be implemented.
 - If any complaints are received from the public or state department regarding noise levels the levels will be monitored at prescribed monitoring points.

Mechanical equipment:

- All mechanical equipment will be in good working order and vehicles will adhere to the relevant noise requirements of the Road Traffic Act.
- All vehicles in operation will be equipped with a silencer on their exhaust system.
- Safety measures, which generate noise such as reverse gear alarms on large vehicles, will be appropriately calibrated/adjusted.

Screening/Migration control:

- Appropriate measures will specifically be installed and or employed at the plant to act as screen and to reflect/reduce the noise.
 - Appropriate non-metallic washers/insulation will be used with any joining of apparatus made from materials such as corrugated iron. Such apparatus will be maintained in a fixed position.
- Soil
 - In all places of development the first 300mm of loose or weathered material found will be classified as a growth medium. The topsoil will be removed, where possible, from all areas where physical disturbance of the surface will occur.
 - In all areas where the above growth medium will be impacted on, it will be removed and stockpiled on a dedicated area. The maximum height of stockpiles will be 2 meters.
 - The growth medium/topsoil will be used during the rehabilitation of any impacted areas, after sloping in order to re-establish the same land capability.
 - If any soil is contaminated during the life of the prospecting period, it will either be treated on site or be removed together with the contaminant and placed in acceptable containers to be removed with the industrial waste to a recognized facility or company.
 - Erosion control in the form of re-vegetation and contouring of slopes will be implemented on disturbed areas in and around the site.
 - Topsoil will be kept separate from overburden and will not be used for building or maintenance of access roads.
 - The stored topsoil will be adequately protected from being blown away or being eroded.
 - Compacted areas will be ripped to a depth of 300mm, where possible, during the continuous rehabilitation, decommissioning and closure phases of the operation in order to establish a growth medium for vegetation.
 - Vehicle movement will be confined to established roads for as far as practical in order to prevent the compaction of soils.
 - Surface water
 - The disposal of oil, grease and related industrial waste will be transported to the stores area where it will be stored in steel containers supplied by an oil recycling contractor. All oil and grease will be removed on a regular basis from the operation by a registered approved contractor.

- All refuse and waste from the different sections will be handled according to NEMA Guidelines. Recycling of waste is encouraged in all the consumer sections of the operation, where recyclable materials will be collected before dumping them in the domestic waste disposal area.
 - All non-biodegradable (recyclable) refuse such as glass bottles, plastic bags and metal scrap will be stored in a container in the waste area and collected on a regular basis and disposed of at a recognized disposal facility.
 - Erosion and storm water control measures will be implemented.
 - The slimes dam will have a bund wall to prevent overflow/spillages.
 - An application for an Integrated Water Use License will be submitted at the Department of Water Affairs for all actions to be performed which requires authorization in terms of water uses.
 - Vehicle repairs will only take place within the maintenance area for vehicles. Repairs within open excavations will be limited to emergency break downs with drip trays.
 - Re-fuelling will only take place in the re-fuelling area. If this is found not be practical, drip trays will be used whenever re-fuelling takes place outside of this area.
 - During rehabilitation the applicant will endeavour to reconstruct flow patterns in such a way that surface water flow is in accordance with the natural drainage of the area as far as practically possible.
- Topography
 - All open excavations will be backfilled if and when possible and made safe so as to reflect as far as possible the pre-prospecting topography of the area.
 - All temporary features, e.g. plant, containers and stockpiling, will be removed and handled in the prescribed manner during rehabilitation.
- Visual
 - Open excavations will be subject to progressive backfilling and made safe (including the re-establishment of vegetation).
 - Permanent structures or features that are part of the proposed prospecting operation will be kept neat and well presented.
 - Waste material of any description will be removed from the prospecting area upon completion of the operation and be disposed of at a recognized landfill facility.

- All the plant and equipment will be removed from the site upon completion of the prospecting operation.

3.2.3 Review the significance of the identified impacts

(After bringing the proposed mitigation measures into consideration).

Prospecting activity	Impact on	Extent	Duration	Intensity	Probability	Significance (without mitigation)	Significance (with mitigation)
Bulk sampling activities	Air quality	Site	Medium	Medium	Definite	Medium	Low
	Fauna	Local	Long	High	Definite	High	Medium
	Flora	Local	Long	High	Definite	High	Medium
	Groundwater	Site	Short	Low	Improbable	Low	Low
	Noise	Site	Medium	Medium	Definite	Medium	Low
	Soil	Local	Long	Medium	Definite	Medium	Low
	Surface water	Local	Short	Low	Improbable	Low	Low
	Topography	Site	Long	Low	Definite	Low	Low
	Visual	Regional	Long	Low	Definite	Low	Low
Drilling activities	Air quality	Site	Medium	Medium	Definite	Medium	Low
	Fauna	Local	Long	High	Definite	High	Medium
	Flora	Local	Long	High	Definite	High	Medium
	Groundwater	Site	Short	Low	Improbable	Low	Low
	Noise	Site	Medium	Medium	Definite	Medium	Low
	Soil	Local	Long	Medium	Definite	Medium	Low
	Surface water	Local	Short	Low	Improbable	Low	Low
	Topography	N/A	N/A	N/A	N/A	N/A	N/A
	Visual	Regional	Long	Low	Definite	Low	Low
Haul Roads	Air quality	Site	Short	Low	Definite	Low	Low
	Fauna	Local	Long	High	Definite	High	Medium
	Flora	Local	Long	High	Definite	High	Medium
	Groundwater	Site	Short	Low	Improbable	Low	Low
	Noise	Site	Short	Low	Definite	Low	Low
	Soil	Local	Medium	Low	Definite	Low	Low
	Surface water	Local	Short	Low	Improbable	Low	Low
	Topography	N/A	N/A	N/A	N/A	N/A	N/A
	Visual	Site	Long	Low	Definite	Low	Low
Office-, workshop & storage area (mobile containers)	Air quality	Local	Short	Low	Probable	Low	Low
	Fauna	Local	Long	High	Definite	High	Medium
	Flora	Local	Long	High	Definite	High	Medium
	Groundwater	Site	Short	Low	Improbable	Low	Low
	Noise	Site	Short	Low	Definite	Low	Low
	Soil	Local	Medium	Low	Definite	Low	Low
	Surface water	Local	Short	Low	Improbable	Low	Low
	Topography	N/A	N/A	N/A	N/A	N/A	N/A
	Visual	Site	Long	Low	Definite	Low	Low
Processing Plant (Mobile)	Air quality	Site	Medium	Medium	Definite	Medium	Low
	Fauna	Local	Long	High	Definite	High	Medium
	Flora	Local	Long	High	Definite	High	Medium
	Groundwater	Site	Short	Medium	Improbable	Medium	Low
	Noise	Site	Medium	Medium	Definite	High	Medium
	Soil	Local	Medium	Medium	Definite	Low	Low
	Surface water	Local	Medium	Medium	Definite	Medium	Low
	Topography	N/A	N/A	N/A	N/A	N/A	N/A
	Visual	Regional	Long	High	Definite	Medium	Low
Slimes dam	Air quality	Site	Short	Medium	Definite	Low	Low
	Fauna	Local	Long	High	Definite	High	Medium
	Flora	Local	Long	High	Definite	High	Medium
	Groundwater	Local	Long	Low	Probable	Low	Low
	Noise	N/A	N/A	N/A	N/A	N/A	N/A
	Soil	Local	Medium	Medium	Definite	Low	Low
	Surface water	N/A	N/A	N/A	N/A	N/A	N/A
	Topography	Site	Medium	Medium	Definite	Low	Low
	Visual	Regional	Long	Medium	Definite	Low	Low
Topsoil storage site (temporary)	Air quality	Local	Short	Low	Probable	Low	Low
	Fauna	Local	Long	High	Definite	High	Medium
	Flora	Local	Long	High	Definite	High	Medium
	Groundwater	Site	Short	Low	Improbable	Low	Low
	Noise	Site	Short	Low	Definite	Low	Low
	Soil	Local	Medium	Medium	Definite	Low	Low
	Surface water	Local	Short	Low	Improbable	Low	Low
	Topography	Site	Medium	Medium	Definite	Low	Low
	Visual	Site	Long	Medium	Definite	Low	Low

4 REGULATION 52 (2) (d): Financial provision. The applicant is required to-

4.1 Plans for quantum calculation purposes.

(Show the location and aerial extent of the aforesaid main mining actions, activities, or processes, for each of the construction, operational and closure phases of the operation).

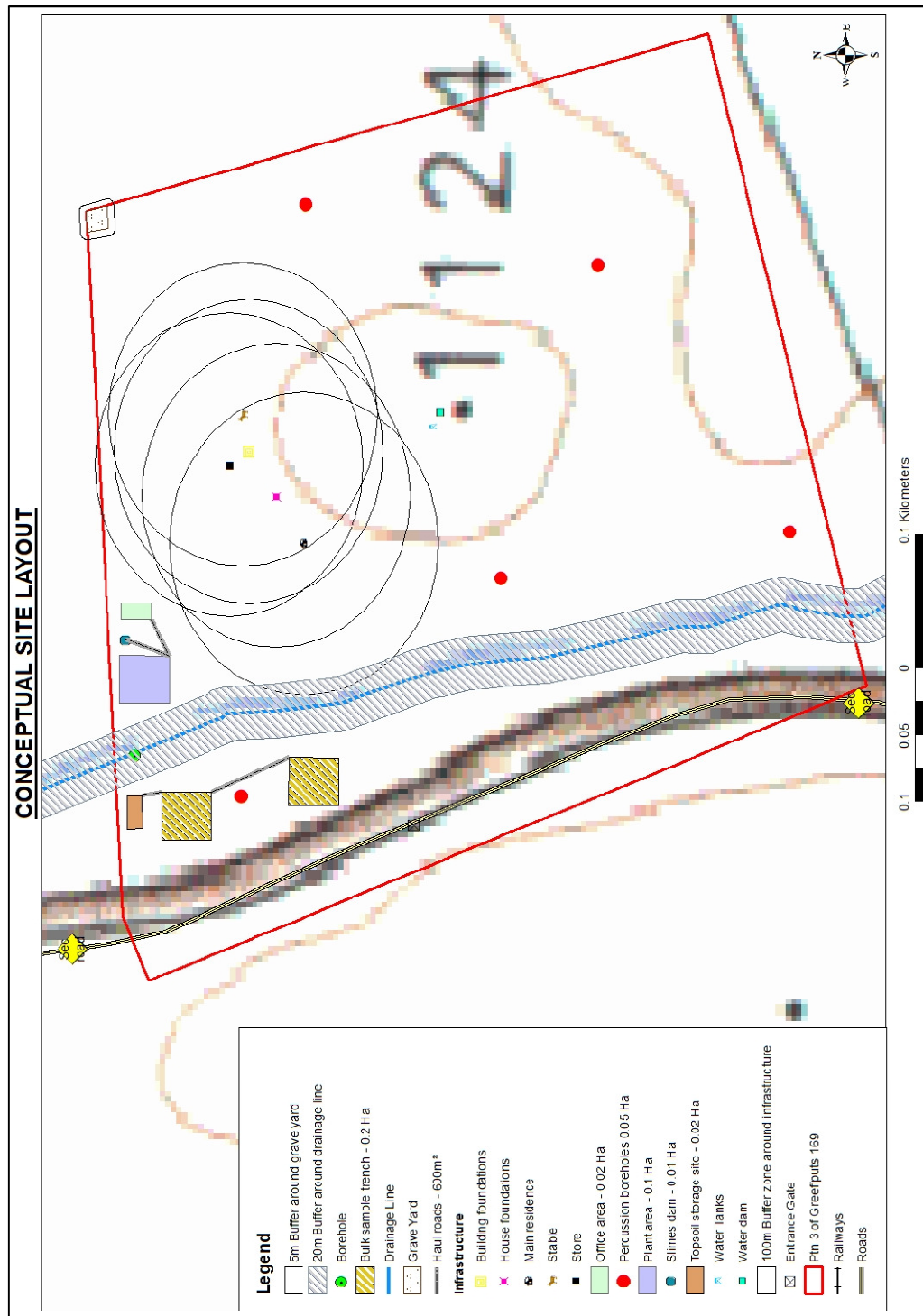


Figure 12 – Conceptual site layout

The following calculations were used for the financial quantum.

No.	Description (According to DMR guideline)	Calculation - Description	Calculation - area
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	Not applicable – A mobile plant will be utilized.	0
2(A)	Demolition of steel buildings and structures	There will be no steel buildings and/or structures at the planned prospecting operation that will have to be demolished upon closure.	0
2(B)	Demolition of reinforced concrete buildings and structures	There will be no reinforced concrete buildings and/or structures at the planned prospecting operation that will have to be demolished upon closure.	0
3	Rehabilitation of access roads	A total of 150m of roads is anticipated to be created by the prospecting operation, which roads will not exceed 4m in width. Existing farm roads will be used as far as practical.	150m x 5m <u>600m²</u>
4(A)	Demolition and rehabilitation of electrified railway lines	Not applicable	0
4(B)	Demolition and rehabilitation of non-electrified railway lines	Not applicable	0
5	Demolition of housing and/or administration facilities	Not applicable – No housing and/or administration facilities will be established on the site. Mobile containers will be utilized.	0
6	Opencast rehabilitation including final voids and rams	Two trenches (50m x 20m x 5m deep) are planned	0.2 Ha
7	Sealing of shafts adits and inclines	No applicable	0
8(A)	Rehabilitation of overburden and spoils	Temporary topsoil storage site	0.02 Ha
8(B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	Slimes dam	0.01 Ha
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	Not applicable	0
9	Rehabilitation of subsided areas	Not applicable	0
10	General surface rehabilitation	Boreholes - Percussion boreholes (5 boreholes x 10m x 10m) Office area	0.05 Ha 0.02 Ha

		Plant area Total	<u>0.1 Ha</u> <u>0.17 Ha</u>
11	River diversions	Not applicable	0
12	Fencing	Not applicable	0
13	Water management	Not applicable	0
14	2 to 3 years of maintenance and aftercare	Continuous rehabilitation by the applicant will ensure that the land use is returned to its pre-prospecting status.	0
15(A)	Specialist study	Not applicable	0
15(B)	Specialist study	Not applicable	0

4.2 Alignment of rehabilitation with the closure objectives

(Describe and ensure that the rehabilitation plan is compatible with the closure objectives determined in accordance with the baseline study as prescribed).

Closure objectives:

- The main closure objective of Blue Lounge's planned prospecting operation is to restore the site to its current land capability in a sustainable matter.
- To prevent the sterilization of any ore reserves.
- To prevent the establishment of any permanent structures or features.
- To manage and limit the impact to the surface and groundwater aquifers in such a way that an acceptable water quality and yield can still be obtained, when a closure certificate is issued.
- The prospecting operation also has the objective to establish a stable and self sustainable vegetation cover in areas affected by the prospecting activities.
- To limit and rehabilitate any erosion features caused by the prospecting activities and prevent any permanent impact to the soil capability thereof.
- To limit and manage the visual impact of the prospecting activities.
- To safeguard the safety and health of humans and animals on the site.
- To close the prospecting operation efficiently, cost effectively and in accordance with Government Policy.

Rehabilitation Plan:

○ Infrastructure areas

On completion of the prospecting operation, the various surfaces, including the access roads, the office area, storage areas and the plant site, will finally be rehabilitated as follows: All tailings or other material on the surface will be removed to the original topsoil level. This material will then be backfilled into the open excavations. Any compacted area will then be ripped to a depth of 300mm, where possible, the topsoil or growth medium returned and landscaped.

All infrastructure, equipment, plant, and other items used during the operational period will be removed from the site.

On completion of operations, all buildings, structures or objects on the office site will be dealt with in accordance with Regulation 44 of the Minerals and Petroleum Resources Development Act, 2002, which states:

Regulation 44:

1. *When a prospecting right, mining right, retention permit or mining permit lapses, is cancelled or is abandoned or when any prospecting or mining operation comes to an end, the holder of such right or 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 mining equipment, which may be removed.*

○ Rehabilitation of the mobile office, workshop & storage areas

On completion of the prospecting operation, the mobile containers will be removed from site where after the above areas will be cleared of any remaining contaminated soil which will be placed in acceptable containers and removed with the industrial waste to a recognized disposing facility or by a waste removal company.

All buildings, structures or objects in the secured storage areas shall be dealt with in accordance with Regulation 44 of the Minerals and Petroleum Resources Development Act, 2002.

The surface will be ripped or ploughed to a depth of at least 300mm, where possible, and the topsoil, previously stored adjacent the site, distributed evenly to its original depth over the whole area.

The site will be seeded, should the need arise, with a vegetation seed mix adapted to reflect the local indigenous flora.

Any other disturbed areas will be rehabilitated as described under the relevant activities.

○ Residue 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 recognized landfill facility. It will not be permitted to be buried or burned on the site.
- Ongoing seepage, control of rain water.
No monitoring of ground or surface water will take place, except if so requested by the DWA - Kimberley.
- Long term stability and safety
It will be the objective of prospecting management to ensure the long term stability of all rehabilitated areas including the backfilled excavations. This will be done by the monitoring of all areas until a closure certificate has been issued.
- Final rehabilitation in respect of erosion and dust control
Self sustaining vegetation will result in the control of erosion and dust and no further rehabilitation is planned.

- Rehabilitation of dangerous excavations
Due to the removal of surface ore material, excavations will be created that can be classified as dangerous. All available material will be used during backfilling to avoid the existence of dangerous open excavations.
- Final rehabilitation of opencast haul ramps and roads and final voids
After rehabilitation has been completed, all roads will be ripped or ploughed, providing the landowner does not want them to remain that way and with written approval from the Director Mineral Development of the Department of Mineral Resources.
- 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 re-vegetation programme.

The aim of this Environmental Management Plan is for rehabilitation to be stable and self-sufficient, so that the least possible aftercare is required.

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

- After-effects following closure
 - Acid drainage
No potential for bad quality leach ate or acid drainage development exists.
 - Long term impact on ground water and / or surface water.
No after effect on the groundwater yield or quality or surface water quality is expected.
 - Long-term stability of rehabilitated land
One of the main aims of any rehabilitated ground will be to obtain a self-sustaining and stable end result. As the open excavations will be backfilled these areas will have long term stability.

4.3 Quantum calculations.

(Provide a calculation of the quantum of the financial provision required to manage and rehabilitate the environment, in accordance with the guideline prescribed in terms of regulation 54 (1) in respect of each of the phases referred to).

CALCULATION OF THE QUANTUM

Applicant: BLUE LOUNGE TRADING 107 (PTY) LTD

Ref No: (NC) 10970 PR
Date: 25 September 2013

No.	Description	Unit	A	B		102.065	102.096	105.181	108.273	108.386	105.899	103.562	106.437	105.42	C	D	E=A*B*C*D	
			Quantity	Master Rate	2004	January 2005	January 2006	January 2007	January 2008	January 2009	January 2010	January 2011	January 2012	January 2013	Multiplication factor	Weighting factor 1	Amount (Rands)	
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	0.00	10.79	6.82	6.96	7.11	7.47	8.09	8.77	9.29	9.62	10.24	10.79	1	1	0.00	
2 (A)	Demolition of steel buildings and structures	m2	0.00	150.37	95.00	96.96	98.99	104.12	112.74	122.19	129.40	134.01	142.63	150.37	1	1	0.00	
2(B)	Demolition of reinforced concrete buildings and structures	m2	0.00	221.59	140.00	142.89	145.89	153.44	166.14	180.07	190.69	197.49	210.20	221.59	1	1	0.00	
3	Rehabilitation of access roads	m2	600.00	26.91	17.00	17.35	17.71	18.63	20.17	21.87	23.16	23.98	25.52	26.91	1	1	16 144.49	
4 (A)	Demolition and rehabilitation of electrified railway lines	m	0.00	261.16	165.00	168.41	171.94	180.85	195.81	212.23	224.75	232.75	247.73	261.16	1	1	0.00	
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m	0.00	142.45	90.00	91.86	93.78	98.64	106.80	115.76	122.59	126.96	135.13	142.45	1	1	0.00	
5	Demolition of housing and/or administration facilities	m2	0.00	300.73	190.00	193.92	197.99	208.25	225.47	244.38	258.80	268.02	285.27	300.73	1	1	0.00	
6	Opencast rehabilitation including final voids and ramps	ha	0.20	153 056.09	96 700.00	98 696.86	100 765.54	105 986.20	114 754.44	124 377.75	131 714.79	136 406.47	145 186.96	153 056.09	1	1	30 611.22	
7	Sealing of shafts adits and inclines	m3	0.00	80.72	51.00	52.05	53.14	55.90	60.52	65.60	69.47	71.94	76.57	80.72	1	1	0.00	
8 (A)	Rehabilitation of overburden and spoils	ha	0.02	101 931.88	64 400.00	65 729.86	67 107.56	70 584.40	76 423.85	82 832.75	87 719.06	90 843.61	96 691.21	101 931.88	1	1	2 038.64	
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0.01	130 896.99	82 700.00	84 407.76	86 176.94	90 641.77	98 140.56	106 370.63	112 645.43	116 657.86	124 167.13	130 896.99	1	1	1 308.97	
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	0.00	380 186.90	240 200.00	245 160.13	250 298.69	263 266.66	285 046.71	308 950.73	327 175.73	338 829.73	360 640.20	380 186.90	1	1	0.00	
9	Rehabilitation of subsided areas	ha	0.00	88 003.30	55 600.00	56 748.14	57 937.58	60 939.33	65 980.84	71 513.99	75 732.60	78 430.20	83 478.75	88 003.30	1	1	0.00	
10	General surface rehabilitation	ha	0.17	83 254.92	52 600.00	53 686.19	54 811.45	57 651.23	62 420.72	67 655.32	71 646.31	74 198.35	78 974.50	83 254.92	1	1	14 153.34	
11	River diversions	ha	0.00	83 254.92	52 600.00	53 686.19	54 811.45	57 651.23	62 420.72	67 655.32	71 646.31	74 198.35	78 974.50	83 254.92	1	1	0.00	
12	Fencing	m	0.00	94.97	60.00	61.24	62.52	65.76	71.20	77.17	81.73	84.64	90.08	94.97	1	1	0.00	
13	Water management	ha	0.00	31 655.86	20 000.00	20 413.00	20 840.86	21 920.62	23 734.11	25 724.46	27 241.94	28 212.30	30 028.33	31 655.86	1	1	0.00	
14	2 to 3 years of maintenance and aftercare	ha	0.00	11 079.55	7 000.00	7 144.55	7 294.30	7 672.22	8 306.94	9 003.56	9 534.68	9 874.31	10 509.91	11 079.55	1	1	0.00	
15 (A)	Specialist study	Sum														1	0.00	
15 (B)	Specialist study	Sum														1	0.00	
Total of 1 - 15 above																		64 256.65
weighting factor 2																		
1																		
Subtotal 1																		64 256.65
1	Preliminary and General								3 855.40								3 855.40	
2	Contingencies								6 425.67								6 425.67	
Subtotal 2																		74 537.72
VAT (14%)																		10 435.28
Grand Total																		84 973.00

Please note that an escalation at inflation cost per annum of the master rate was calculated from 2004 to 2013 according to the Consumer Price Index as is published on the Internet.

4.4 Undertaking to provide financial provision

(Indicate that the required amount will be provided should the right be granted).

Attached as Annexure 'E' find an undertaking to provide the required amount as calculated in the financial quantum as well as proof of financial ability.

5 REGULATION 52 (2) (e): Planned monitoring and performance assessment of the environmental management plan.

5.1 List of identified impacts requiring monitoring programmes.

- Air quality will have to be monitored throughout the life of the operation to ensure that the levels are within the prescribed Legislation levels.
- Flora will have to be monitored throughout the life of the operation to ensure that the land capability returns to its current state.
- Noise will have to be monitored throughout the life of the operation to ensure that the levels are within the prescribed Legislation levels.

5.2 Functional requirements for monitoring programmes.

- Air quality
 - The National Environment Management: Air Quality Act, 2004 (Act No.39 of 2004) (All Sections of this Act, except Section 21,22,36 to 49, 51 (1)(e), 51(1)(f), 51(3), 60 and 61 have taken effect on 11 September 2005);
 - The Atmospheric Pollution Prevention Act, 1965 (Act No. 45 of 1965) (This Act will be repealed by the national Environment management: Air Quality Act, 2004 (Act No. 39 of 2004);
 - Regulations to the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) – Regulation 64.
 - The Mining Health and Safety Act, 1996 (Act No. 29 of 1996) as amended; and
 - The Occupational Diseases in Mines and Works Act, 1973 (Act No 78 of 1973).
- Flora
 - The Mine Health and Safety Act, 1996 (Act No. 39 of 1996) as amended;
 - The National Forests Act, 1998 (Act No. 84 of 1998), as amended;
 - The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983) – Section 7(1);
 - Government Notice No. 27306 of 18 February 2005, issued in terms of Section 56(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)
 - Nature Conservation Ordinance, Ord 19 of 1974

- Noise
 - The Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) – Section 7.
 - The Mine Health and Safety Act, 1996 (Act No. 39 of 1996) as amended.
 - The Road Traffic Act, 1997 (Act No. 93 of 1997);
 - The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) – Section 34. and
 - Regulations of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) – Regulation 66.

5.3 Roles and responsibilities for the execution of monitoring programmes.

The Operations Manager will be responsible for the execution of the air quality, flora and noise monitoring programmes.

5.4 Committed time frames for monitoring and reporting.

Quarterly monitoring of air quality and noise will be conducted as required by Legislation. The results of these studies will be compiled into annual reports and forwarded to the Principle Inspector of Mine Health and Safety, Department of Mineral Resources, Kimberley.

6 REGULATION 52 (2) (f): Closure and environmental objectives.

6.1 Rehabilitation plan

(Show the areas and aerial extent of the main prospecting activities, including the anticipated prospected area at the time of closure).

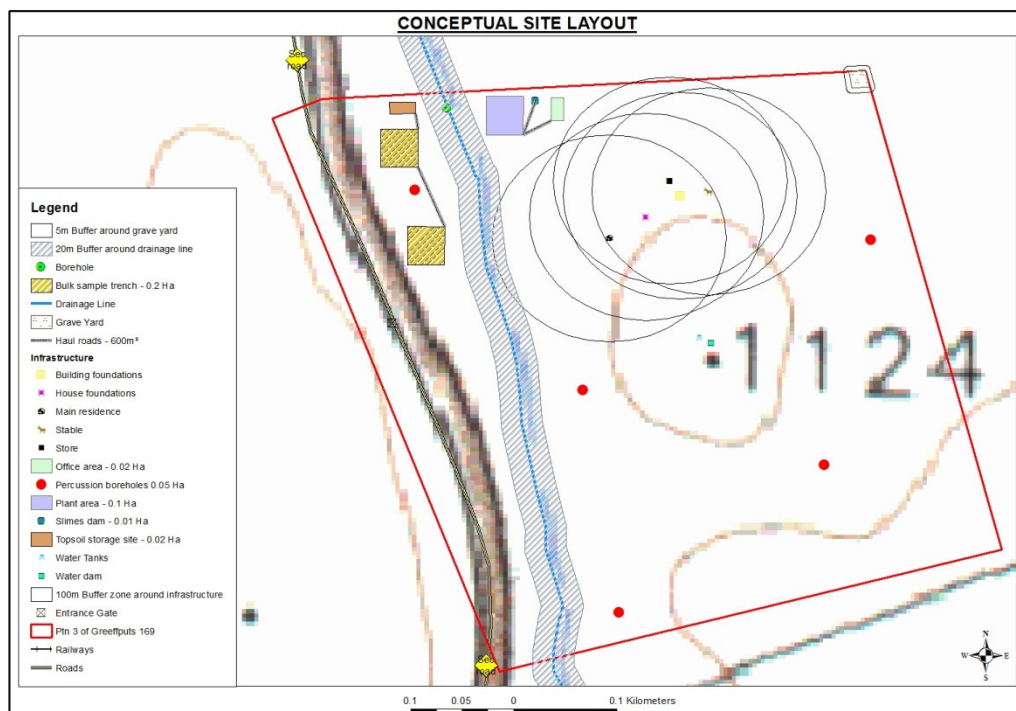


Figure 13 - Conceptual site layout map indicating the prospecting activities to be rehabilitated

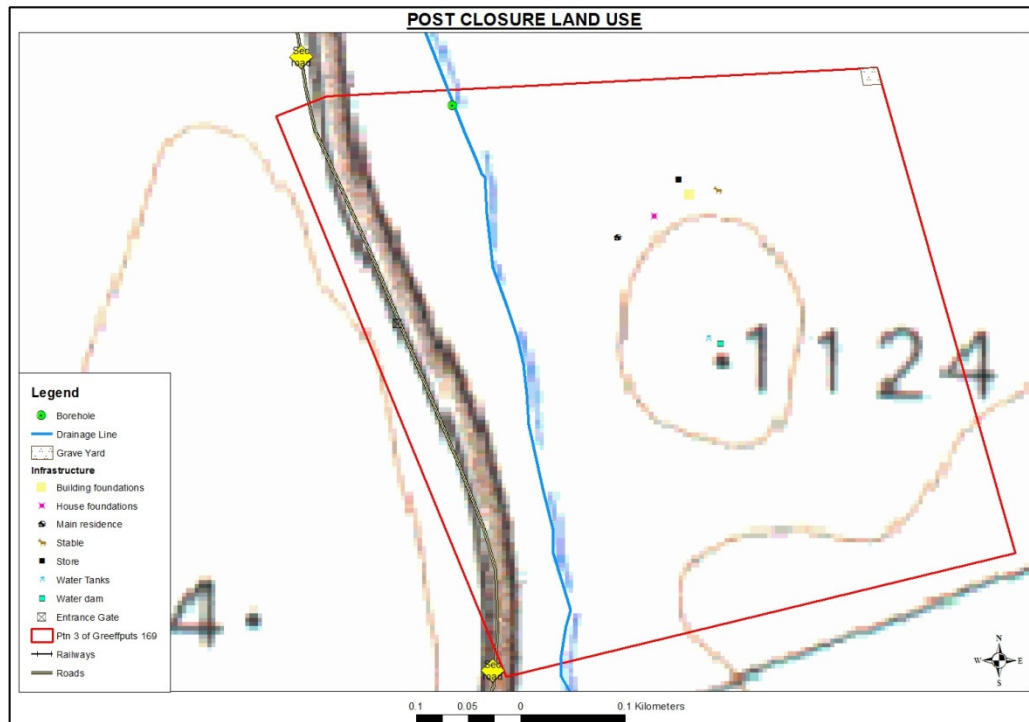


Figure 14 - Post-closure land use

Blue Lounge undertakes to rehabilitate all areas impacted on by its prospecting activities to allow the land use to return to livestock grazing.

6.2 Closure objectives and their extent of alignment to the pre-prospecting environment.

Closure objectives

- The main closure objective of Blue Lounge's planned prospecting operation is to restore the site to its current land capability in a sustainable matter.
- To prevent the sterilization of any reserves.
- To prevent the establishment of any permanent structures or features.
- To manage and limit any impact to the surface and groundwater aquifers in such a way that an acceptable water quality and yield can still be obtained, when a closure certificate is issued.
- The prospecting operation also has the objective to re-establish the vegetation cover on affected areas.
- To limit and rehabilitate any erosion features caused by the prospecting activities and prevent any permanent impact to the soil capability thereof.
- To limit and manage the visual impact of the prospecting operation.
- To safeguard the safety and health of humans and animals on the site.
- To close the prospecting operation efficiently, cost effectively and in accordance with Government Policy.

The closure objectives are aligned in such a manner as to ensure the current land capability is achieved upon closure.

6.3 Confirmation of consultation

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

The surface owner of the property under application, all surrounding landowners and various other identified interested and affected parties were notified by means of registered post as well as by advertisements that were placed in the DFA (Local newspaper) and Volksblad (Regional newspaper). Attached as Annexure 'A' find hereto proof of the notification process.

Further consultation included a meeting that was held with the surface owner on 17 September 2013. The surface owner verbally agreed with the description of the existing status of the environment as contained in the 'Report on Results of Consultation with Communities and Interested and Affected Parties'. Find attached hereto the attendance register and minutes of the meeting as Annexure 'B'.

Property description	Owner	Description	Notification by
Portion 3 of the Farm Greeffputs 169, Barkly West	Wendy Etesia Ruiters	Surface owner	Registered letter, newspaper & meeting
Remaining Extent of the Farm Greeffputs 169, Barkly West	Zelvy 2648 (Pty) Ltd	Surrounding owner	Registered letter + newspaper
Portion 1 (Victoria) of the Farm Greeffputs 169, Barkly West	Referendum Landgoed (Pty) Ltd	Surrounding owner	Registered letter + newspaper
Dikgatlong Local Municipality	-	Local Municipality	Registered letter + newspaper
Frances Baard District Municipality	-	District Municipality	Registered letter + newspaper
ESKOM	-	Parastatal	Registered letter + newspaper
SANRAL	-	National Agency	Registered letter + newspaper
Transnet	-	Parastatal	Registered letter + newspaper
Department of Rural Development and Land Reform	-	Government Department	Registered letter + newspaper
Department of Environment and Nature Conservation	-	Government Department	Registered letter + newspaper
Department of Agriculture and Land Reform	-	Government Department	Registered letter + newspaper
Department of Water Affairs	-	Government Department	Registered letter + newspaper

Responses / Concerns received to date:

- Ms. W.E. Ruiters (surface owner):
The planned prospecting operation was discussed in detail with Ms. Ruiters during the meeting held on 17 September 2013. Ms. Ruiters understands what the prospecting operation will entail on her property and have no concerns or objections towards the proposed prospecting activities. Find attached as under Annexures 'B' and 'C' the minutes of the meeting as well as Ms. Ruiters' response letter to the EMP.
- Zelvy 2648 (Pty) Ltd:
No response has been received to date.
- Referendum Landgoed (Pty) Ltd:
No response has been received to date.
- Dikgatlong Local Municipality:
No response has been received to date.

- Frances Baard District Municipality:
No response has been received to date.
- Eskom:
No response has been received to date.
- SANRAL:
No response has been received to date.
- Transnet:
Mr. Andre Bodenstein of Transnet sent an e-mail to M&S Consulting on 12 September 2013 stating that Transnet has no objection or comments to raise towards the proposed prospecting application of Blue Lounge Trading 107 (Pty) Ltd. Find attached as Annexure 'D1' Transnet's response.
- Department of Rural Development and Land Reform:
A fax was received from Mr. Ryan Oliver of the Department stating that there are no restitution claims lodged against the property under application. Find attached as Annexure 'D2' the Department's response.
- Department of Environmental Affairs:
No response has been received to date.
- Department of Agriculture and Land Reform:
A letter, dated 8 October 2013, was received from Mr. W. De Bruyn of the Department of Agriculture. Find attached as Annexure 'D3' the Department's letter. The letter listed the following conditions and comments:
 - No natural storm water pattern or flow may be altered, restricted or blocked with the new development on the proposed site.
 - The removal of protected Thorn trees must be done with the relevant approval and permits.
 - Adherence to Act 43 of 1983, the conservation of agricultural resources.
 - Adherence to Act 70 of 1970, the change of ownership on agricultural used land.
 - Applicable erosion control.
 - No contamination of soil, groundwater and surface water.
 - Fire control.
 - Conservation of topsoil and rehabilitation thereof.
 - General rehabilitation after mining.
 - Only applicable, as proposed, areas on farm for mining.
- Department of Water Affairs:
No response has been received to date.

No responses were received from the newspaper advertisements that were placed in the DFA and Volksblad.

A draft Environmental Management Plan was provided per hand to the surface owner for comment. Find attached hereto as Annexure 'C' the surface owner's response letter.

Any other comments / concerns received will be submitted to DMR as and when it is received.

7 REGULATION 52 (2) (g): Record of the public participation and the results thereof.

7.1 Identification of interested and affected parties.

(Provide the information referred to in the guideline)

7.1.1. Name the community or communities identified, or explain why no such community was identified.

There are no communities residing on the property under application.

7.1.2. Specifically state whether or not the Community is also the landowner.

There are no communities residing on the property under application.

The surface owner of the farm under application is:

Farm	Owner	Title deed
Portion 3 of the Farm Greeffputs 169, Barkly West District	Wendy Etresia Ruiters	T2029/2008

7.1.3. State whether or not the Department of Land Affairs has been identified as an interested and affected party.

Yes, the Department of Rural Development and Land Reform has been identified as an interested and affected party. A notification letter, regarding the acceptance of the prospecting right application by Blue Lounge Trading 107 (Pty) Ltd, was sent to the Department by registered post. Please find attached the response received from this Department as Annexure 'D2'.

7.1.4. State specifically whether or not a land claim is involved.

There is no known land claim over the property under application.

7.1.5. Name the Traditional Authority identified.

Not applicable - There is no Traditional Authority on the property under application.

7.1.6. List the landowners identified by the applicant. (Traditional and Title Deed owners).

The surface owner of the farm under application is:

Farm	Owner	Title deed
Portion 3 of the Farm Greeffputs 169, Barkly West District	Wendy Etresia Ruiters	T2029/2008

7.1.7. List the lawful occupiers of the land concerned.

Ms. W.E. Ruiters occupies Portion 3 of the Farm Greeffputs 169 lawfully, although no one currently resides on the property.

7.1.8. Explain whether or not other persons' (including on adjacent and non-adjacent properties) socio-economic conditions will be directly affected by the proposed prospecting or mining operation and if not, explain why not.

Yes. Socio-economic upliftment will take place due to the creation of employment opportunities as well as economic support to the surrounding business community.

7.1.9. Name the Local Municipality identified by the applicant.

Dikgatlong Local Municipality

7.1.10. Name the relevant Government Departments, agencies and institutions responsible for the various aspects of the environment, land and infrastructure which may be affected by the proposed project.

- (i) Dikgatlong Local Municipality
- (ii) Frances Baard District Municipality
- (iii) The Department of Rural Development and Land Reform
- (iv) The Department of Environmental Affairs
- (v) The Department of Agriculture and Land Reform
- (vi) The Department of Water Affairs
- (vii) South African National Roads Agency Ltd
- (viii) Eskom
- (ix) Transnet

7.1.11. Submit evidence that the landowner or lawful occupier of the land in question, and any other interested and affected parties including all those listed above, were notified.

The surface owner of the property under application, all surrounding landowners and various other identified interested and affected parties were notified by means of registered post as well as by

advertisements that were placed in the DFA (Local newspaper) and Volksblad (Regional newspaper).

Attached as Annexure 'A' find hereto proof of the notification process.

7.2 The details of the engagement process.

7.2.1 Description of the information provided to the community, landowners, and interested and affected parties.

A meeting was held with the surface owner on 17 September 2013. The planned prospecting operation was discussed in detail with the surface owner. The surface owner understands what the prospecting operation will entail on her property. Find attached hereto the attendance register and minutes of the meeting as Annexure 'B'.

A draft Environmental Management Plan was provided per hand to the surface owner for comment. Find attached hereto as Annexure 'C' the surface owner's response letter.

7.2.2 List of which parties indentified in 7.1 above that were in fact consulted, and which were not consulted.

All of the below parties have been notified of the prospecting right application:

Property description	Owner	Description	Notification by
Portion 3 of the Farm Greeffputs 169, Barkly West	Wendy Etresia Ruiters	Surface owner	Registered letter, newspaper & meeting
Remaining Extent of the Farm Greeffputs 169, Barkly West	Zelvy 2648 (Pty) Ltd	Surrounding owner	Registered letter + newspaper
Portion 1 (Victoria) of the Farm Greeffputs 169, Barkly West	Referendum Landgoed (Pty) Ltd	Surrounding owner	Registered letter + newspaper
Dikgatlong Local Municipality	-	Local Municipality	Registered letter + newspaper
Frances Baard District Municipality	-	District Municipality	Registered letter + newspaper
ESKOM	-	Parastatal	Registered letter + newspaper
SANRAL	-	National Agency	Registered letter + newspaper
Transnet	-	Parastatal	Registered letter + newspaper
Department of Rural Development and Land Reform	-	Government Department	Registered letter + newspaper
Department of Environment and Nature Conservation	-	Government Department	Registered letter + newspaper
Department of Agriculture and Land Reform	-	Government Department	Registered letter + newspaper
Department of Water Affairs	-	Government Department	Registered letter + newspaper

The following parties have been consulted with:

- Ms. Ruiters (surface owner)

A letter, dated 8 October 2013, was received from Mr. W. De Bruyn of the Department of Agriculture. Find attached as Annexure 'D3' the Department's letter. The letter listed the following conditions and comments:

- No natural storm water pattern or flow may be altered, restricted or blocked with the new development on the proposed site.

- The removal of protected Thorn trees must be done with the relevant approval and permits.
- Adherence to Act 43 of 1983, the conservation of agricultural resources.
- Adherence to Act 70 of 1970, the change of ownership on agricultural used land.
- Applicable erosion control.
- No contamination of soil, groundwater and surface water.
- Fire control.
- Conservation of topsoil and rehabilitation thereof.
- General rehabilitation after mining.
- Only applicable, as proposed, areas on farm for mining.

The above concerns were all addressed in this EMP document.

No other responses were received from the notification letters and/or the adverts that were placed.

7.2.3 List of views raised by consulted parties regarding the existing cultural, socio-economic or biophysical environment.

Responses / Concerns received to date:

- Ms. W.E. Ruiters (surface owner):
The planned prospecting operation was discussed in detail with Ms. Ruiters during the meeting held on 17 September 2013. Ms. Ruiters understands what the prospecting operation will entail on her property and have no concerns or objections towards the proposed prospecting activities. Find attached as under Annexures 'B' and 'C' the minutes of the meeting as well as Ms. Ruiters' response letter to the EMP.
- Zelpy 2648 (Pty) Ltd:
No response has been received to date.
- Referendum Landgoed (Pty) Ltd:
No response has been received to date.
- Dikgatlong Local Municipality:
No response has been received to date.
- Frances Baard District Municipality:
No response has been received to date.
- Eskom:
No response has been received to date.
- SANRAL:
No response has been received to date.

- **Transnet:**
Mr. Andre Bodenstein of Transnet sent an e-mail to M&S Consulting on 12 September 2013 stating that Transnet has no objection or comments to raise towards the proposed prospecting application of Blue Lounge Trading 107 (Pty) Ltd. Find attached as Annexure 'D1' Transnet's response.
- **Department of Rural Development and Land Reform:**
A fax was received from Mr. Ryan Oliver of the Department stating that there are no restitution claims lodged against the property under application. Find attached as Annexure 'D2' the Department's response.
- **Department of Environmental Affairs:**
No response has been received to date.
- **Department of Agriculture and Land Reform:**
A letter, dated 8 October 2013, was received from Mr. W. De Bruyn of the Department of Agriculture. Find attached as Annexure 'D3' the Department's letter. The letter listed the following conditions and comments:
 - No natural storm water pattern or flow may be altered, restricted or blocked with the new development on the proposed site.
 - The removal of protected Thorn trees must be done with the relevant approval and permits.
 - Adherence to Act 43 of 1983, the conservation of agricultural resources.
 - Adherence to Act 70 of 1970, the change of ownership on agricultural used land.
 - Applicable erosion control.
 - No contamination of soil, groundwater and surface water.
 - Fire control.
 - Conservation of topsoil and rehabilitation thereof.
 - General rehabilitation after mining.
 - Only applicable, as proposed, areas on farm for mining.
- **Department of Water Affairs:**
No response has been received to date.

No responses were received from the newspaper advertisements that were placed in the DFA and Volksblad.

Any other comments / concerns received will be submitted to DMR as and when it is received.

7.2.4 List of views raised by consulted parties on how their existing cultural, socio-economic or biophysical environment potentially will be impacted on by the proposed prospecting or mining operation.

Responses / Concerns received to date:

- Ms. W.E. Ruiters (surface owner):
The planned prospecting operation was discussed in detail with Ms. Ruiters during the meeting held on 17 September 2013. Ms. Ruiters understands what the prospecting operation will entail on her property and have no concerns or objections towards the proposed prospecting activities. Find attached as under Annexures 'B' and 'C' the minutes of the meeting as well as Ms. Ruiters' response letter to the EMP.
- Zelpy 2648 (Pty) Ltd:
No response has been received to date.
- Referendum Landgoed (Pty) Ltd:
No response has been received to date.
- Dikgatlong Local Municipality:
No response has been received to date.
- Frances Baard District Municipality:
No response has been received to date.
- Eskom:
No response has been received to date.
- SANRAL:
No response has been received to date.
- Transnet:
Mr. Andre Bodenstein of Transnet sent an e-mail to M&S Consulting on 12 September 2013 stating that Transnet has no objection or comments to raise towards the proposed prospecting application of Blue Lounge Trading 107 (Pty) Ltd. Find attached as Annexure 'D1' Transnet's response.
- Department of Rural Development and Land Reform:
A fax was received from Mr. Ryan Oliver of the Department stating that there are no restitution claims lodged against the property under application. Find attached as Annexure 'D2' the Department's response.
- Department of Environmental Affairs:
No response has been received to date.

- Department of Agriculture and Land Reform:
A letter, dated 8 October 2013, was received from Mr. W. De Bruyn of the Department of Agriculture. Find attached as Annexure 'D3' the Department's letter. The letter listed the following conditions and comments:
 - No natural storm water pattern or flow may be altered, restricted or blocked with the new development on the proposed site.
 - The removal of protected Thorn trees must be done with the relevant approval and permits.
 - Adherence to Act 43 of 1983, the conservation of agricultural resources.
 - Adherence to Act 70 of 1970, the change of ownership on agricultural used land.
 - Applicable erosion control.
 - No contamination of soil, groundwater and surface water.
 - Fire control.
 - Conservation of topsoil and rehabilitation thereof.
 - General rehabilitation after mining.
 - Only applicable, as proposed, areas on farm for mining.

- Department of Water Affairs:
No response has been received to date.

No responses were received from the newspaper advertisements that were placed in the DFA and Volksblad.

Any other comments / concerns received will be submitted to DMR as and when it is received.

7.2.5 Other concerns raised by the aforesaid parties.

None

7.2.6 Confirmation that minutes and records of the consultations are appended.

Find attached hereto as Annexures 'A', 'B', 'C' and 'D' the consultation process conducted regarding the prospecting right application of Blue Lounge Trading 107 (Pty) Ltd.

7.2.7 Information regarding objections received.

No objections were received.

7.3 The manner in which the issues raised were addressed.

No issues / comments / concerns and/or objections regarding this prospecting right application have been received to date. Should any be received, Blue Lounge will address them within 14 days of receipt thereof.

Blue Lounge hereby undertakes to adhere to all sections of this document throughout the life of its prospecting operation.

8 SECTION 39 (3) (c) of the Act: Environmental awareness plan.

8.1 Employee communication process

(Describe how 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 monthly “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.

8.2 Description of solutions to risks

(Describe the manner in which the risk must be dealt with in order to avoid pollution or degradation of the environment).

- Establish the context
 - Strategic
 - Organisational
 - Risk management
- Identify risks
- Analyse risks
 - Consequences
 - Likelihood
- Assess and prioritise risks
 - Acceptability
 - Priorities for treatment
- Treat risks
 - Eliminate
 - Reduce
 - Transfer
 - Manage
- Monitor and review

8.3 Environmental awareness training.

(Describe the general environmental awareness training and training on dealing with emergency situations and remediation measures for such emergencies).

ENVIRONMENTAL AWARENES TRAINING PROGRAMME PROCEDURE

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

Environmental awareness training must be given to new employees on site and any contractors who may come onto 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**
 - a. The importance of saving water
 - i. South Africa is a water scarce country and rivers are polluted
 - ii. Do not throw litter into river or water drains
 - iii. Do not dispose of oils in sewers
 - b. Air pollution - Climate change
 - i. The use of fossil fuels is increasing the amount of greenhouse gases that are discharged to the atmosphere. Share transport or use public transport
 - ii. Don't burn any rubbish, the smoke pollutes the air
 - iii. Plant trees, they clean the air, provide us with oxygen and remove the greenhouse gas carbon dioxide from the air.
 - c. Soil conservation
 - i. Prevent overgrazing of farmlands, keep vegetation on the surface of the land to prevent soil erosion
 - ii. Plant trees
- **HAZARDOUS SUBSTANCE USE AND STORAGE**
 - a. Solvents, petrol, diesel, insecticides, chlorine, detergents, chemical fertilisers are harmful to the environment and to your health. Use them sparingly and do not let them get into the water systems. 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 point Material Substances Safety Data Sheets (MSDS) are available at point of store
 - d. Compressed gas storage requirements
 - e. Flammable substances store requirements
- **INCIDENT & 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 multi and the whole ecology of life. Some 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, attract wild birds
- d. Do not chop down indigenous trees without good reason
- e. Implement a tree planting programme
- f. Remove alien invasive trees in your area such as Prosopis, Syringa and Pepper trees, cactus plants.

- **WASTE MANAGEMENT**

- a. Employees must be instructed on how to tell the difference between hazardous waste and general waste
- b. They must know how to separate hazardous and general waste and where to dispose of these wastes in the correct way
- c. Examples of hazardous waste which must be recycled or sent to Waste Tech for disposal:
 - iii. Oil, diesel, batteries, acids, paint, thinners, electronic waste
 - iv. Pesticides, Jik, handy Andy
 - v. Old oil, old oil filters, old paint is hazardous and must not be disposed of to a general land fill. Oilkol will collect old oil.
 - vi. Mercury in fluorescent light bulbs is hazardous, fluorescent lights must be handled with great care so as not to break the glass and release the mercury vapour into the air which you breathe.
- d. Examples of general wastes which can go to the municipal landfill:
 - vii. Wood, paper, plastic, glass, old PPE
- e. Recycle, Reuse, Reduce, Recover where ever possible

- **CONCLUSION**

The management of Blue Lounge will utilize the Environmental Awareness Plan to assure that all employees and contractors are aware of the environment and know how to manage it correctly.

9 SECTION 39 (4) (a) (iii) of the Act: Capacity to rehabilitate and manage negative impacts on the environment.

9.1 The annual amount required to manage and rehabilitate the environment.

(Provide a detailed explanation as to how the amount was derived)

The total cost to manage and rehabilitate the environment was calculated to R84 973-00 in the financial quantum.

9.2 Confirmation that the stated amount correctly reflected in the Prospecting Work Programme as required.

The rehabilitation cost was included in the costing schedule contained in Table 9.1 Prospecting Work Programme as was submitted with Blue Lounge's Prospecting Right application.

10 REGULATION 52 (2) (h): Undertaking to execute the environmental management plan.

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

Full Names and Surname	BRADLEY NATHAN RUITERS
Identity Number	870311 5048 085

-END-