



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

NAME OF APPLICANT: **NKANYEZI RESOURCES (Pty) Ltd**

REFERENCE NUMBER: **NC30/5/1/1/2/11151PR**

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)**

For

Iron Ore & Manganese Prospecting Right Application

Prepared By



NKANYEZI



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.

Introduction and Background

Background

Nkanyezi Resources (Pty) Ltd is a legally registered South African company, registered under the company's act of 2008. The prospecting right over the proposed Nirvana Iron Ore & Manganese Project will be owned by the company *Nkanyezi Resources (Pty) Ltd* once granted. The applicant through Nkanyezi Resources consulted widely with interested and affected parties, including the surface right owners (*Francois Johannes Jacobus Theart*), *Jeff Leader a representative of Tshipi e Ntle Manganese Mining* a company that operates an Iron Ore Project adjacent to the target area. Other entities that have been informed about the application are: The Municipality of [Joe Morolong], Department of Land and Rural Development.

Brief Project Description

Shareholders of Nkanyezi Resources (Pty) Ltd, intends to explore for Iron Ore & Manganese on the target area (farms Annex Louwensrust No: 278 and Louwensrust No: 291 Kuruman RD). The target area has been included in the application for coal PR Ref no: **NC30/5/1/1/2/11151PR** issued by the Department of Mineral Resources. The proposed Nirvana Iron Ore & Manganese Project is located some 5km from the Town of Hotazel and 30km from Kuruman, the properties lies on the left hands side of the road (R31) linking Van Zylsrus, Hotazel and Kuruman. The exploration will be conducted in a phase approach and with limited land disturbance; the first phase of the project involves non-invasive methods such as: Detailed desk top study.

Contact details

The applicant is *Nkanyezi Resources (Pty) Ltd*, is a local BEE company registered under the laws of the republic of South Africa. The relevant contact details of the applicant are provided in the tables below.

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

ITEM	COMPANY CONTACT DETAILS
Name	NKANYEZI RESOURCES (Pty) Ltd
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ITEM	CONSULTANT CONTACT DETAILS (If applicable)
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Details about the Land

Nirvana Prospecting Right Area is located within **John Taolo Gaetsewe District Municipality, Kuruman Magisterial District** in the Province of Northern Cape, Republic of South Africa. The Municipality of *Joe Morolong* is part of the greater *John Taolo Gaetsewe District Municipality*. The target area is within the famous Kalahari Manganese Field. The locality of the proposed Nirvana Ferrous Project is shown in Figure1.

As indicated earlier on the document the proposed project covers Tow Farms: Annex Louwensrust 278 and Louwensrust 291. Details about the properties were sourced from windeed, Nkanyezi Resources service providers

Table: 1 Alleen Coal Project Property Details

No	Farm Details	Owner	Title Deed Number
01	Annex Louwensrust No 278	Franscois Johannes Jacobus Theart	T23/1975
02	Louwensrust No 291	Franscois Johannes Jacobus Theart	T749/1979

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

The information contained in this section is a result of a detailed environmental baseline study, as required by the act. The baseline was first conducted during an identification of the target area and a subsequent preparation of an application for a prospecting right; a follow-up of the study was conducted during consultation with interested and affected parties. A desk top study was also conducted drawing information from sources such as *Council for Geoscience, Mintek, Department of Land & Rural Development, Department of Water Affairs, Department of Fisheries*, and other sources.

Hard copies of the following documents were reviewed:

- 2722 Kuruman [1:250 000 Geological Series]
- 2722 Kuruman [1:250 000 Topographic Series]
- 2722 BA Floradora [1:50 000 Topographic Series]

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

Topography

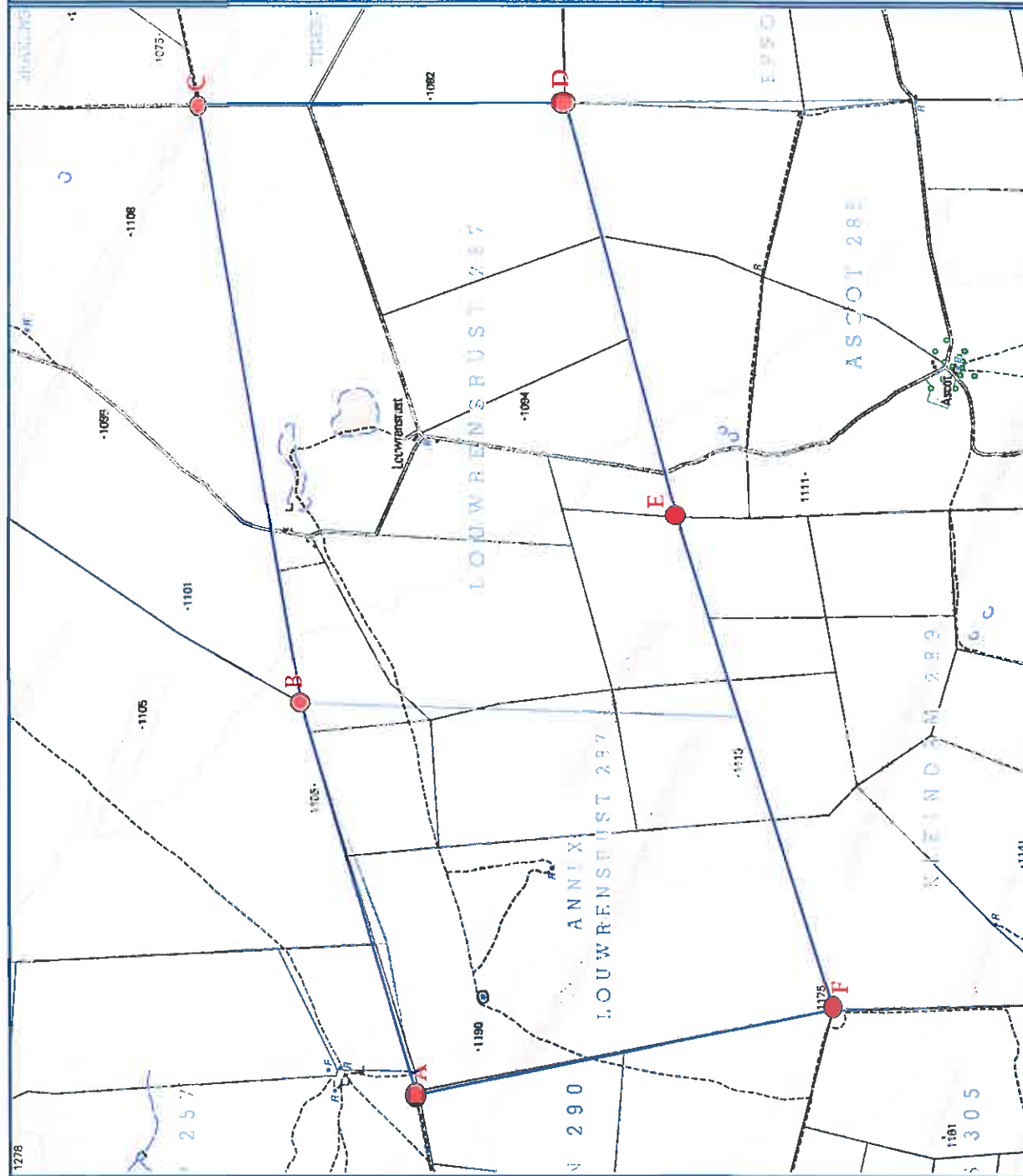
The target area under the proposed [Nirvana Ferrous Project] comprises Two (2) farms; the total surface area of the target is 3046.9984 Hectares in extent. Historically there has been little agricultural activity taking place on the farms, the farms were utilised mainly for sheep grazing

The target area topography is relatively gently sloping and undulating interspersed with small isolated hilltops and table-like mountains characterised by level plains with some relief, 70% of the target area comprises (level plains with some relief), 30% is more (rolling or irregular plains with low hills or ridges). The proposed Nirvana Iron Ore & Manganese Project is located 12kms from the town of Hotazel Joe Morolong Local Municipality, and 32kms east of Kuruman.

Water Resources

The proposed Nirvana Ferrous Project is located within the sub-catchments of the Kuruman River, and these are: D41M/D41K/D42C and D441L. There are no Primary catchment areas, the secondary catchment systems within or near the target area is D4. Kuruman River is lying approximately 7km east of the target area. No wet lands or dams have been sighted on the target area.

Nirvana Ferrous Project : Topographic Lay out



Nkanyezi Resources (Pty) Ltd
Plan of the land under application for
prospecting right in terms of the
MPRD Act, 28 of 2002

FIGURE:

A, B, C, D, E and F

Represents the farms: Louwrensrust
287 & Annex Louwrensrust 287
RESPECTIVELY BEING A TOTAL
AREA OF 3049.9984 HACTERS

□ Boundary of the target area

Coordinates of the Target
area

LONG	LAT
A 22° 64'46	27° 18'02
B 22° 67'83	27° 17'74
C 22° 73'32	27° 16'89
D 22° 73'33	27° 19'82
E 22° 69'59	27° 6'59
F 22° 65'19	27° 21'94

Executive Director

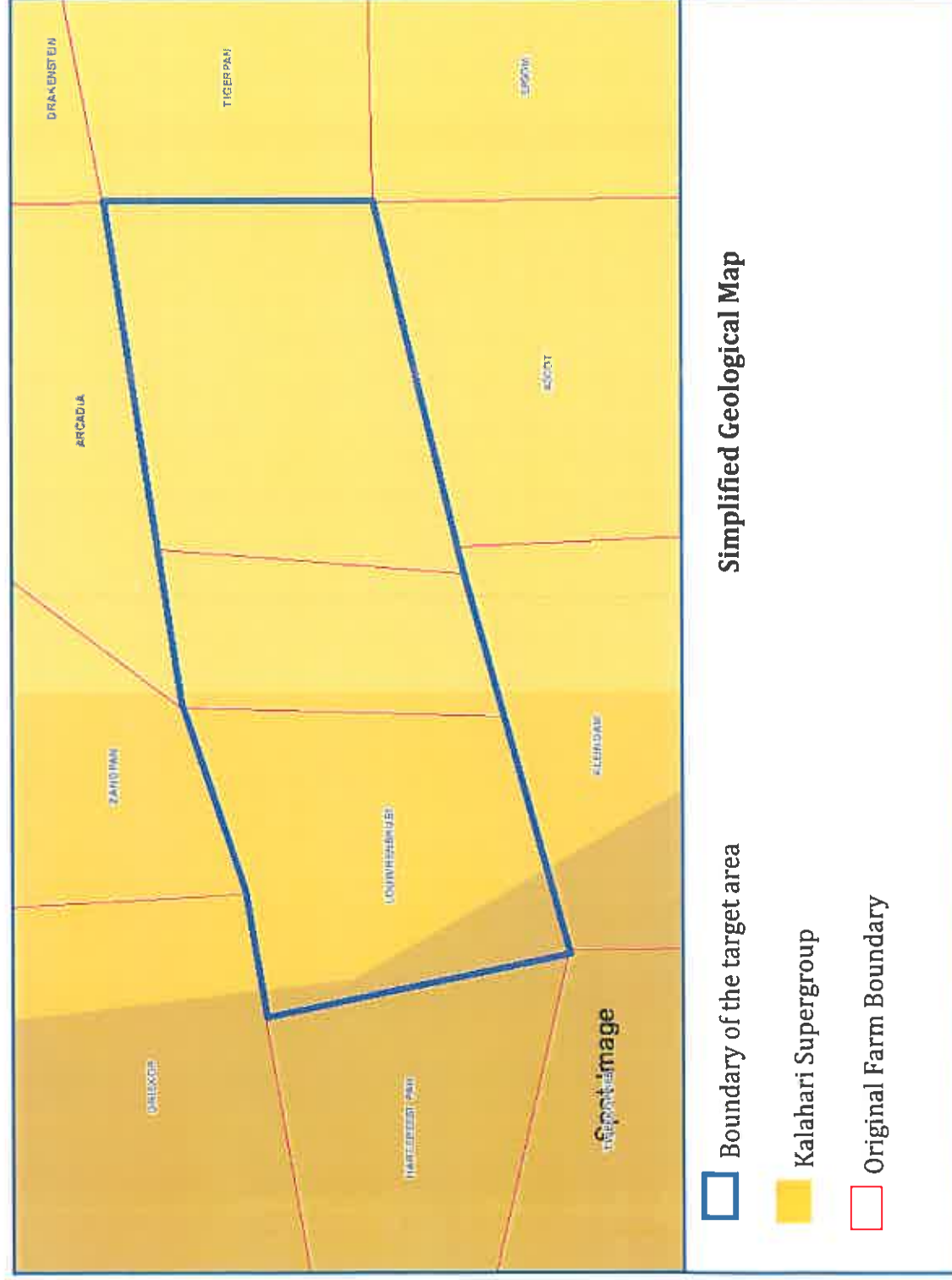
Date: 27/01/2013

Geology

The application covers an area comprising the Farms or Properties **Louwensrust 287 Kuruman RD** and **Annex Louwensrust 291 Kuruman**, situated within **John Taologaeetsewe District Municipality**, Kudumane Magisterial District in the Northern Cape Province. The farms are located on the ("KMB"), on the centre of the manganese field. The Ghaap Group is subdivided into the Schmidtsdrift-, campbellrand-, Asbestos Hills and Koegas-subgroups, whereas the Postmasburg Group is divided into the Makganyene and Ongeluk Formations and overlaying the Voelwater subgroup.

Manganese deposits in the Kalahari field are confined to the Hotazel Iron Formation of the Postmasburg Group, and represent the upper part of the early Proterozoic Transvaal Supergroup in the Griqualand West area. Three manganese units are interbedded with the Hotazel Iron Formation, the lower most manganese bed,

Nirvana Ferrous Project : Simplified Geological Map



Climate

South Africa is a dry country with unreliable rainfall; much of the country receives less than 500mm of rainfall a year. Droughts are a common feature of the country. The Northern Cape Province, which hosts the target area, is even worse in terms of less rainfall. The province is very dry and semi-arid, the average rainfall in the area is between 200-400millimeters during summer, day time temperatures during summer time could reach up to 31°C, to as low as below zero during winter. The conditions are a desert conditions, winters are dry and clear. Night time temperatures often drop to freezing point. Natural vegetation: Karoo Scrubs and some sporadic deciduous bush land. The land is not conducive for property crop farming, as it is characterized by undulating sand covered grassland; farming in the area is mainly focused on live stock. Surface elevation varies between 1500-2000meters above sea level.

The mean annual temperatures in the Joe Morolong Local Municipality range from 0.1°C to 2°C

Table: 1.2 Table provides a break-down of the past (12) months temperatures

Month	Description	Temperatures
December	long-term annual	24°C to 27°C
November	long-term annual	24°C to 27°C
October	long-term annual	21°C to 24°C
September	long-term annual	21°C to 24°C
August	long-term annual	12°C to 15°C
July	long-term annual	9°C to 12°C
June	long-term annual	9°C to 12°C
May	long-term annual	15°C to 18°C
April	long-term annual	18°C to 21°C
March	long-term annual	24°C to 27°C
February	long-term annual	24°C to 27°C
January	long-term annual	30°C to 33°C

- Temperatures –Average long-term annual [18°C to 21°C]
- Temperatures- Mean minimum annual [0.1°C to 2°C]
- Temperatures-minimum winter [5.6°C to 7.4°C]
- Temperatures-minimum summer [15.3°C to 17.4°C]
- Temperatures Maximum winter [21.9°C to 24°C]
- Temperatures Maximum summer [above 31°C]

The target area receives more rain during the summer months, as a result of its location within the summer rainfall region of South Africa. Close to 75% of the annual rainfall happens from the month of October to March the following year, with the month of January receiving most of the rain. See the table below for a breakdown of rainfall experienced during the past Twelve (12) Months.

Table: 1.3 The table provides a break-down of rainfall experienced

Month	Description	Amount of Rainfall
December	long-term annual	25-50mm
November	long-term annual	25-50mm
October	long-term annual	25-50mm
September	long-term annual	Less than 10mm
August	long-term annual	Less than 10mm
July	long-term annual	Less than 10mm
June	long-term annual	Less than 10mm
May	long-term annual	25-50mm
April	long-term annual	25-50mm
March	long-term annual	50-75mm
February	long-term annual	50-75mm
January	long-term annual	50-75mm
	mean annual	201-400mm
	67 th percentile	201-400mm
	33 rd percentile	201-400mm

Flora and Fauna

Natural vegetation: *Tropical Bush*, and *Savannah Type (Bushveld)*, including some few trees.

Table: 1.4. Table gives a detailed description of the vegetation found in the target area and Joe Morolong Local Municipality

Vegetation Groups	Vegetation Types
Acoccks Veld-type groups	Tropical Bush and Savannah type (bushveld)
Vegetation Biome 2008	<ul style="list-style-type: none"> • Eastern Upper Karoo (30%) • Eastern Valley Bushveld (70%) • Kathu Bushveld • Kuruman Thornveld (30%)
Vegetation Biome	Savannah

The tree density within the locality is less than 5%. The target area is of moderate conservation status. The Department of Agriculture listed some few dominant grass species, the grass species are as follows: Tassel three-awn, Sweet thorn, Weeping love grass, Couch grass and Common thatch grass

Soil Condition

Data drawn from the *Agricultural Research Council of South Africa* indicates that the soils from the region and the target area comprise sands. The sandy soils are relatively shallow and highly erodible due to the characteristics listed in table below

Table: 1.5 Table provide list of classification of soils found on the farms

Category	Detailed characteristics
1. General	70% of the target area is covered by (CM, Red Soils with high base status), 30% is (AR1, Red excessively drained sandy soils with high base status mainly dunes).
2. Land Type	AF covers 30% while Ag covers 70%, patches of Db can be found. SOTER Soil Association Map (A4 70% and AR 30%) (Water holding capacity is between 61mm to 80mm at 70% of the target area, and 41mm to 60mm at 30% of the target area).
3. Erosion	Rainfall erosivity is between 101 to 200mm Predicted soil loss VERY LOW. Sediment delivery potential is VERY LOW. Land has LOW to MODERATE susceptibility to water erosion. Generally gently to moderately sloping, soils have LOW to MODERATE erodibility index. Soil susceptible to wind erosion due to the presence of sand. The potential for soil regeneration is badly eroded is quite moderate.
4. Soils with Special management Requirements	<ul style="list-style-type: none"> • Potential Shifting Sands: Shifting Sands are scarce 70%. • Soils with textural contrast: abruptly transition scarce to almost absent • Soils with poor or impeded drainage: somewhat impeded. • Swelling clays: Non Existent • Saline and sodic soils : non-saline
5. Soils with beneficial physical attributes	<ul style="list-style-type: none"> • Structural favourable soils: soils with structure favouring arable land use scarce or absent • Water retaining: soils with beneficial water retaining layers below the rooting zone are very scarce or absent.
6. Natural Fertility	<ul style="list-style-type: none"> • Natural soils organic content is less than 0.5mm (%carbon) • Natural soil ph between 6.5 to 7.4 • Soils susceptible to acidification: moderately susceptible soils are very dominant • Leaching status: eutrophic. • Cation exchange capacity is less than 3.0 • Phosphorus status no data available • Soil Zinc status is between 0.5 • Soil copper status is between 0.5 • Soil cobalt status is between 0.6 • Soil selenium status is low (0.04mkg)

Air Quality

The quality of air within the farm and the surrounding locality is relatively good, throughout the year except during winter when the local families burn stoves for warming and cooking. Another contributing factor to the quality of air is dust due to dirt roads which are used for transporting coal from the nearby Black Rock Mining on the adjacent farms.

Noise

The area is one of the quiet areas in the country given its location, level of development and population density. The only noise generated seems to be coming from the nearby Black Rock Mining. According to the mine operator regular noise monitoring is being performed.

Waste Management

Past experience and history has shown that prospecting can leave the landscape scarred with waste, rock excavated and continuing environmental damage from polluted water courses, dust as a result of wind blowing, papers scattered. During the establishment and drilling activity, three bins of 50 liters each will be placed within the exploration site. The bins will be used for three different types of waste generated during exploration; waste will be cleared on a seven day cycle to an authorised landfill site operated by the municipality of Joe Morolong. For human waste there will be Four [4] portable toilets, supplied by the local contractor, the toilets will be cleared every four days.

Sites of Historical and Cultural Importance

There are no churches, schools or historical buildings within the farms, or farms adjacent to the target area.

Socio-Economic Profile

Joe Morolong Local Municipality is situated within John Taolo Gaetsewe District Municipality, Northern Cape province, the municipality was named after the anti-apartheid activist and Trade Unionist. The municipality is the most populous municipality within the district of John Taolo Gaetsewe, the municipality covers an area consisting of approximately 185 villages, and the total extent of the municipality is 20.173km². The local municipality had a total population of approximately 97 948 persons in 2001, and 75 609 in 2007. The total population of Joe Morolong Local Municipality decreased with about 22, 339 persons over the past 6 years from the year 2001 – 2007.

The total number of households decreased with 4,343 households over 6 years between 2001 and 2007. In many instances the size of the settlements is increasing with the formation of new households. The average household size is 4.3 persons per household. According to the Stats SA, data released indicates an annual decrease of -4.22% between 2001 and 2007, based on this negative growth rate; it is projected that the population will decrease to 43,166 in 2020.

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

A summary of the potential issues and impacts identified by the participants during one –on –one engagements, is provided in table below

Table 1.6 list of specific issues identified

Environmental Feature	Exploration Activity
1. Water Resource	The process of exploration drilling requires water, as a result of that contamination might occur, however the plan is for water to be drawn elsewhere not on the actual farm. Secondly ground water will be monitored for quality.
2. Soil	During site mobilisation and movement of exploration crew into the site, the ground might be compacted, eroded.
3. Flora	Clearing and loss of secondary vegetation.
4. Noise Level	Drilling activity generates a certain noise, but it is planned that more modern drilling equipment be deployed to site, with lower noise emission.
5. Air Quality	Same as above

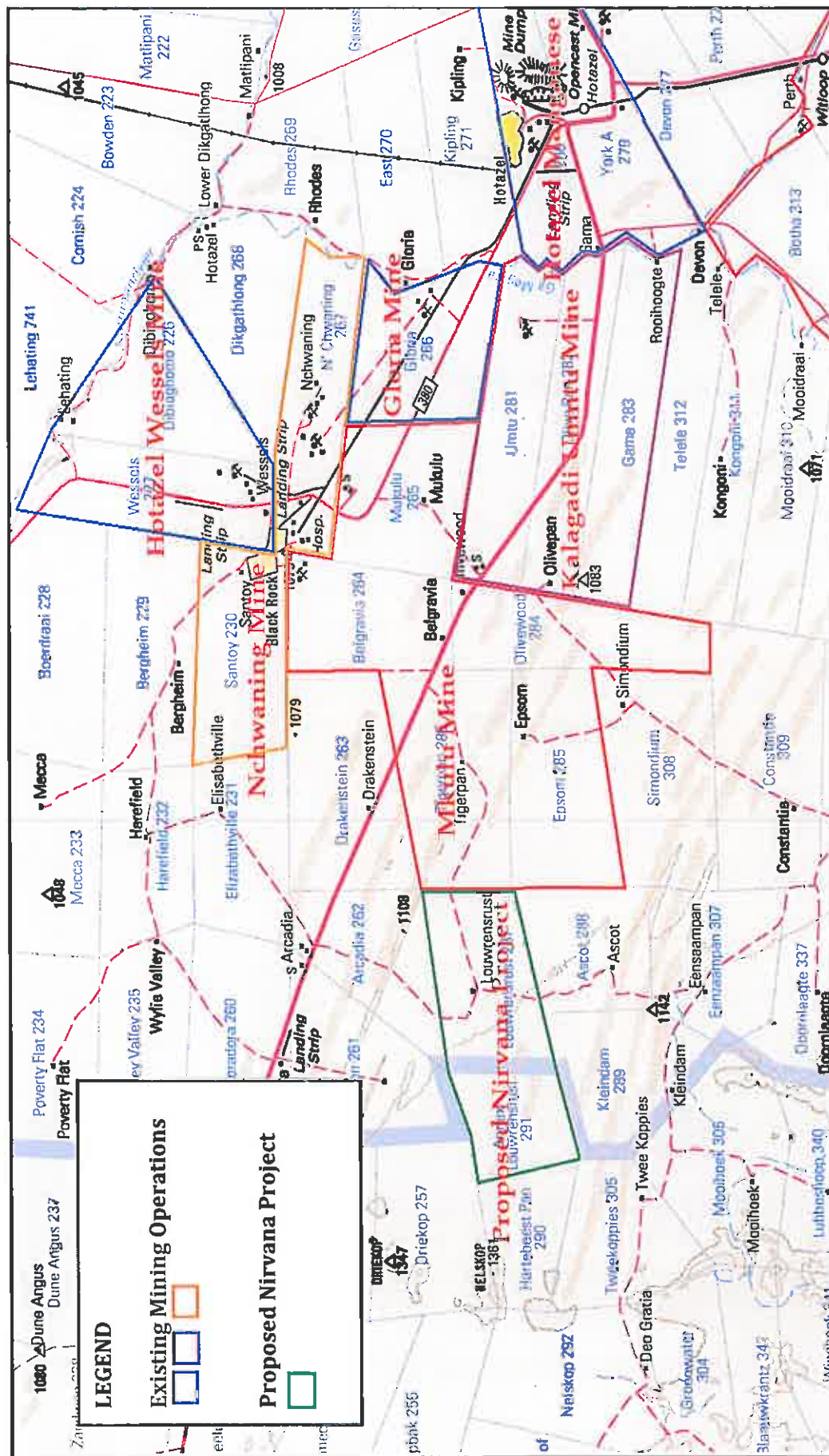
Table 1.7 Showing Potential Impacts

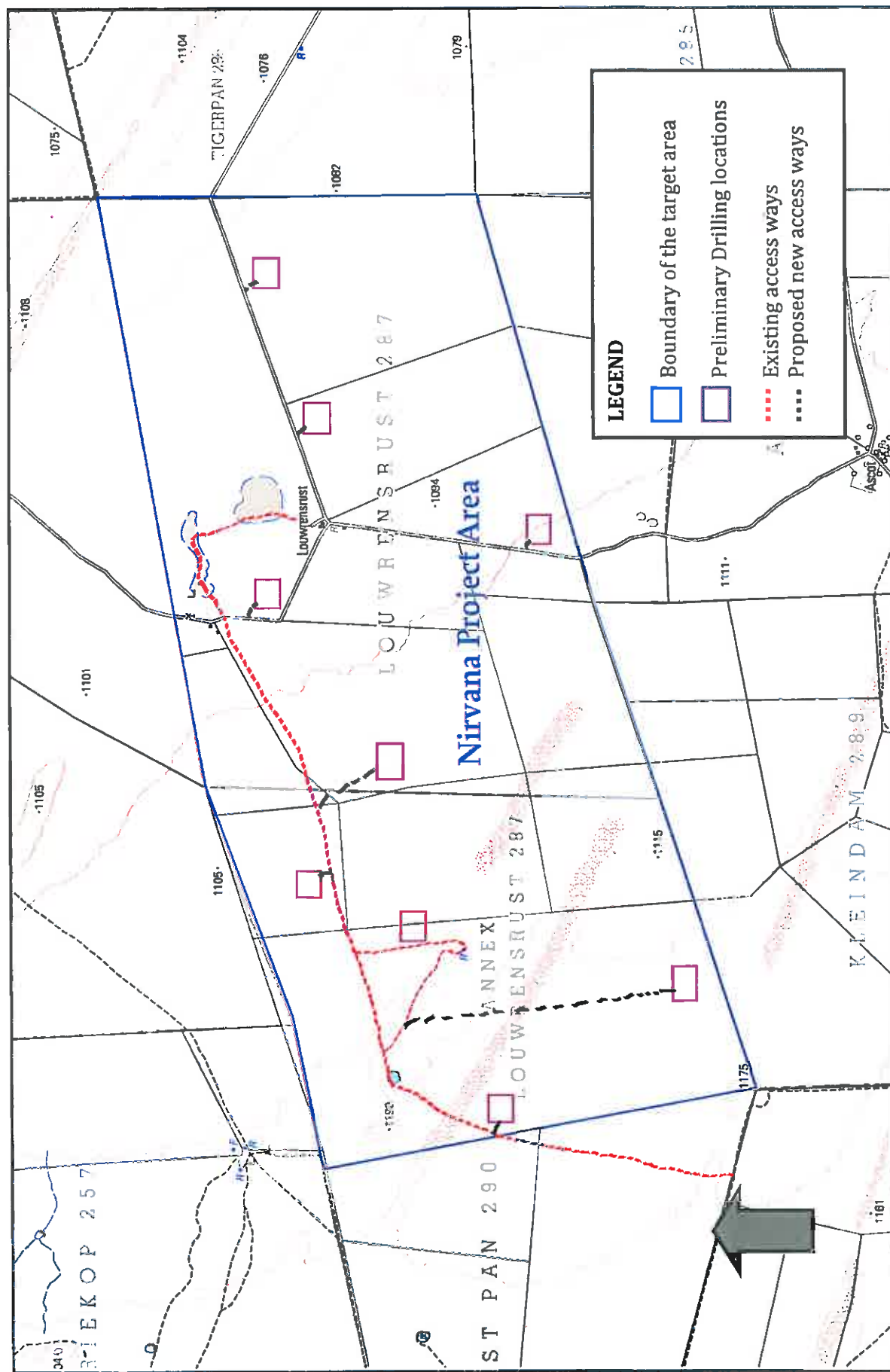
Environment category	Issue or impact raised	Description	Raised by
1. Social Conditions	Noise Pollution	Same as below	Aquila Steel [Deon Rossouw]
	Dust Pollution	Same as below	Aquila Steel [Deon Rossouw]
	Unsanitary Activities	The presence of exploration camp and the increased movement of traffic might disrupt the normal farm life.	Aquila Steel [Deon Rossouw]
	Impact on homes	Would there be any drilling, that might cause cracks to homes.	Maropeng Tribal Authority [Maphela Phomolo]
	Residents continuing use of the access ways	Will the activities somehow disturb the normal daily life?	Maropeng Tribal Authority [Maphela Phomolo]
2. Air Quality	Employment opportunities	How many people will be employed in the exploration	Maropeng Tribal Authority [Maphela Phomolo]
	Air pollution due to dust and carbon dioxide	The drilling activity and the movement of trucks, tractors water trucks and so forth will increase the chances of air pollution. Other factors that might cause air pollution are diesel engines used for powering drilling equipment.	Aquila Steel [Deon Rossouw] Maropeng Tribal Authority [Maphela Phomolo] Unitone Mining [Itumeleng Prince]
3. Water Resources	Borehole Water Contamination	The seepage from the drilling equipment might cause contamination of the borehole water, resulting in poor water quality for humans.	Dep of Agriculture Forestry & Fisheries [Jacoline]
	Surface water and watercourse contamination	Same as above, except that the cattle's will also be affected by the contamination	Dep of Agriculture Forestry & Fisheries [Jacoline]
4. Flora & Fauna	Vegetation clearing/habitat	The vegetation occurring within the exploration site will be cleared and destroyed.	Dep of Agriculture Forestry & Fisheries [Jacoline]

	Loss of protected flora and fauna specie		The issue of protected flora came up during discussion, but data shows that there is no evidence of protected flora.	Dep of Agriculture Forestry & Fisheries [Jacoline]
	Introduction of alien vegetation into the area		The movement of people and exploration crew, in and out of the area, plus the fact that the land will be disturbed during site mobilisation, might introduce alien vegetation into the area.	Dep of Agriculture Forestry & Fisheries [Jacoline]
5. Potential of the land to sustain agricultural activity	Loss of grazing land		The presence of exploration team or crew, together with the resultant exploration activity might reduce land available for cattle grazing.	No Comment
6. Historical and Cultural Heritage	Heritage impacts; graves old buildings and schools		Ms Fikile Majozi indicated that graves are present in the area, but not on the targeted area for exploration.	No Comment
7. Health & Safety	Safety for minors,		The actual drilling site must be fenced to prevent minors from coming close, and playing with dangerous stuff.	No Comment
	Air Quality		The movement of trucks, drill rigs and other heavy equipment might generate dust; there must be measures in place to control that.	Unitone Mining [Itumeleng Prince]
	Fires that might break-out due to hydraulic oils		Oils spillages must be cleaned as soon as it occurs.	No Comment
8. Alternatives	Target area and camp site		The question was that can the applicant ensure that the area earmarked for exploration drilling be kept as small as possible, and that equipment used be of modern make so that any noise or air pollution can be minimised.	No Comment
No Comments were received from the following consulted parties:				

[BHP Billiton, John Taolo Gaetsewe District Municipality, Joe Morolong Local Municipality, SALTRIM Ranches and United Manganese of Kalahari]

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





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.

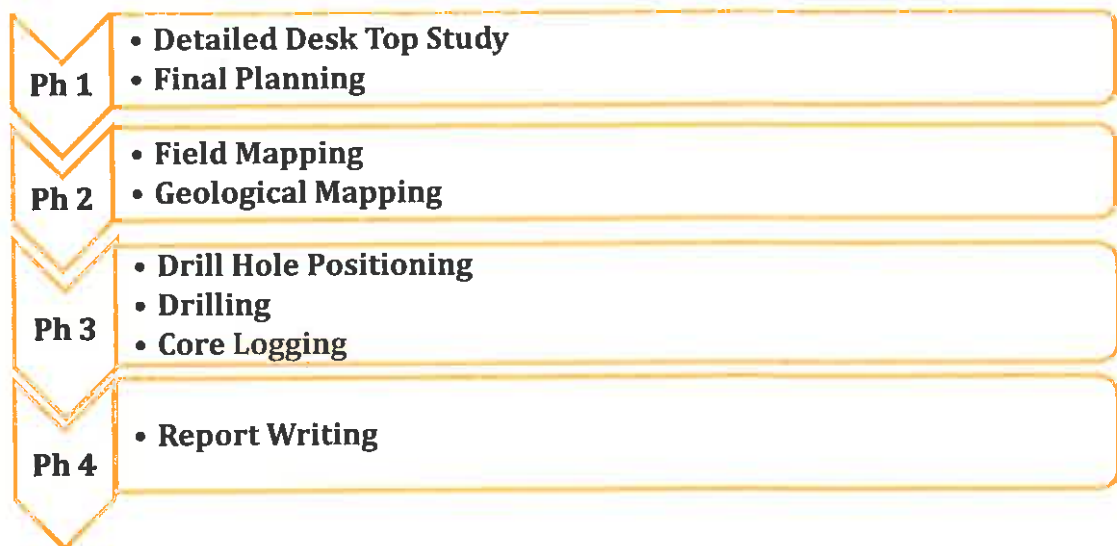
Please see attached proof of interested and affected parties engagement documents

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)

The proposed prospecting programme for the project entails both non-invasive as well as invasive methods. During the first phase of the programme field mapping will take place after an initial detailed desk top study, after field mapping and geological mapping a construction of access ways will be carried out, subsequent to the construction of access ways geophysical methods will be applied to confirm the existence, continuation and extent of the Seams (Orebody). It is at this stage that drilling will take place though not quite extensive.



2.1.2 Plan of the main activities with dimensions.

Table 2.1

Main Activities	Potential Impacts	Process
<ul style="list-style-type: none"> Geophysical & Geochemical Analysis. 	<ul style="list-style-type: none"> Noise. Soil. Air. Water. 	<p>An exploration crew under the leadership of a Geologist will be walking with Geophysical Equipment and other Earth Science Instruments to obtain data.</p> <p>The walking will be on a 2km by 2km grid pattern</p>

Table 2.2

Main Activities	Potential Impacts	Process
<ul style="list-style-type: none"> Drilling 	<ul style="list-style-type: none"> Noise. Soil. Air. Water. 	<p>An exploration crew and the drilling contractor under the leadership of a Senior Geologist will be based on site, around the Drill Hole Collars. They will be carrying with them all the drilling equipment and ancillary equipment.</p> <p>Ideally drilling will take place within 500m by 500m grid line, even the safety & health measures will factor that.</p>

2.1.3 Description of construction, operational, and decommissioning phases.

The Construction Phase:

In this instance construction means, site clearance for access ways and not necessarily the construction of a tarred road, but merely vegetation clearance and not the removal of top soil. It should further be mentioned that the access way will not be more than 2,5meters wide, and 1km long in total based on the site visit we conducted. There is enough access ways and clear ground already in existence.

Earth moving equipment such as Bull Dozers and Graders will be used together with water tanks for Dust Control. This is a preparation stage for the ultimate drilling exercise; this stage ordinarily comes after Detailed Desk Top study, Field Mapping and Geological Mapping.

The Operational Phase:

This phase will start off with site camp set-up, equipment storage safety awareness and environmental management plan awareness. Further *Geological mapping, detailed planning and Drill hole collar positioning* will take place.

Decommissioning Phase:

This is a closing stage where all areas that have been disturbed during exploration phase will be rehabilitated; we expect that Top soil, vegetation and other plant will be replanted. All the equipment temporary camp will be removed from the target area and report will be written.

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

Section 24 of the NEMA makes provision for the identification of activities may not commence without authorisation granted in writing by the competent authority. These activities were promulgated under the Government Notice Regulations (GNR) 544, and 545 in the Government Gazette No. 33306 on 18th of June 2010

No NEMA activities have been triggered by the proposed Nirvana Ferrous Project, as the project involves exploration with activities that have a minimal environmental disturbance.

2.2 Identification of potential impacts (Refer to the guideline)

2.2.1 Potential impacts per activity and listed activities. Table 9: Potential Impact per Activity

Phase	Function	Activities	Potential Impacts
Phase: 2 Mapping	Airborne and Ground Survey	Airborne Geophysical Survey, and Ground Magnetic Survey	1. Limited noise impacts resulting from site airborne survey, affecting the community around the area
Phase: 3 Mapping	Construction	No Construction or site establishment activity will be done	2. No impacts
	Operation	Target access	3. Limited disturbance of on-site flora 4. Vehicle traffic noise and the sudden movement of people might cause noise
		Less than 10kg of soil per sample will be extracted	5. Extraction of soil for geochemical sampling will result in some disturbance
	Decommissioning	No Decommissioning activity will be required as there will be no sampling plant constructed	6. No anticipated impacts
Phase: 4&5 Preliminary Drilling	Construction	No Construction of access way will be necessary, as the target area already has a number of access ways, from previous operations If need be only a minor access way can be constructed, of not more than 1000m ² , in total. It is envisaged that construction of	7. Disturbance of on-site flora 8. Ground compaction due to constant movement of heavy vehicles, machinery and people. 9. Noise generated by heavy vehicles, equipment & machinery and drilling crew.

	such access way [less than 1000m ²], will involve the following activities:	<p>I. Vegetation Clearing</p> <p>ii. Topsoil Removal</p> <p>iii. Ground Compaction due to the weight of the drill rig</p> <p>iv. Erection of temporary shelters or site offices, storage facilities, ablution facilities, erection of perimeter fence and other necessary support infrastructure</p>	<p>10. Disturbance of on-site flora</p> <p>11. Soil Disturbance and topsoil stockpiling might result in soil erosion.</p> <p>12. Generation of dust from site clearing, soil stripping and construction activities</p>
Operation	<p>Actual Drilling and extraction of the core sample:</p> <p>The following below listed activities will form part of the daily activities during drilling phase:</p> <p>I. Diamond Core Drilling, RC Drilling were necessary</p> <p>ii. Re-fuelling</p> <p>iii. Breakdown maintenance and normal rig maintenance.</p> <p>iv. Core Sample handling and logging</p> <p>v. management of drill fluids</p>	<p>13. Vegetation Clearance: a very small amount of vegetation will be cleared during site mobilisation, and drilling activity.</p> <p>14. Water Resource pollution: water will be required for drilling that will put a demand on portable water. Another factor is that ground water resource must be monitored for quality and level. (Due to exploration activities).</p> <p>15. Dust Emissions from drilling activity and general prospecting, and site activities</p> <p>16. Visual impact affecting the area.</p>	
Decommissioning	Removal of temporary structures such as, perimeter [Safety Barricades] fences and the following:	<p>17. Potential water pollution resulting from fuel spills.</p> <p>18. Soil pollution resulting from fuel spills</p>	

		<p>I. Removal of Temporary shelters, core log storage facility, site offices, portable ablution facilities, fuel storage tanks, water storage tanks</p> <p>ii. Capping of borehole.</p> <p>iii. ground ripping</p> <p>iv. Seeding, relaying of the stockpiled soil and re-vegetation.</p>	
Phase:6	Geological Modelling and Report writing	No disturbance emanating from this activity	

2.2.2 Potential cumulative impacts.

The identified cumulative impacts are included in Table 10

Table 10 : Cumulative Impacts

No	Concern	Impacts	Impact Description
01	Soils	Topsoil removal	1. The loss of topsoil due to construction of access ways, and drilling platform, and a potential contamination of soil due to fuel spillage
02	Water Resource	Surface and Ground water pollution	2. The surface water and ground water quality can affect not only within the target area if not properly managed
03	Climate	Release of carbon emissions	3. Air quality: The only activity that has a chance to contribute to air pollution is drilling, to mitigate against that only water drilling will be conducted rather than dry air drilling.
04	Biodiversity	Loss of biodiversity and disruption of existing flora found within the target area	4. The cumulative impacts relate to the land transformation, [vegetation will be cleared, topsoil will be removed etc], resulting Loss of possible grazing land for livestock
05	Visual	Landscape marred	5. The cumulative impacts relate to visual disturbance, affects the natural look and feel of the place.
06	Traffic Flow	Increased traffic flow	6. The increased in traffic flow as a result of exploration activity, may have an impact on local roads.

- Loss of possible grazing land for livestock: it is the views of the writer that grazing land will not be affected that much as drilling will only be restricted to very small areas within the farm.
- Water Resources degradation: no water resource will be degraded as a result of measures that will be put in place.
- Air quality: The only activity that has a chance to contribute to air pollution is drilling, to mitigate against that only water drilling will be conducted rather than dry air drilling.
- Soil Pollution: Equipment such as: Drilling Rigs, Trucks and Vehicles have a potential for oil leaks (Hydraulic, Oil and Diesel spillage). Constant inspection of all equipment will be conducted.
- Competing interest at community level, which will impact on the progress of the proposed Nirvana Ferrous Project.

2.2.3 Potential impact on heritage resources.

None whatsoever, activities covered by the proposed Prospecting Works Programme (PWP), seek to avoid as much as possible all the graves, places of worship, buildings of more than Sixty (60) years and other residential buildings.

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

We have identified Air Quality, Noise Pollution as potential areas that will impact negatively to the community, while at the same time we have appreciated fully the potential employment opportunity the project will bring to the community.

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

The following issues were identified during consultation with interested and affected parties:

- Employment opportunities.
- Skills transfer opportunities
- Noise Pollution.
- Air Quality.
- Health & Safety.
- Shareholding Structure.

See attached appendix B

2.2.6 Confirmation of specialist report appended.

Specialist study will be done during an application for a Mining Right; the specialist will be independent from the company.

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.

A detailed methodology used to rate all of the potential environmental impacts is attached as an **appendix E** of this report. The significance of each impact is calculated based on the criteria stipulated below:

- Foot print of the impact
- Duration of the impact
- Probability of the impact

Prediction of each impact was made during the study phase, and during the consultation meeting. The impacts are described and assessed for the situation prior to mitigation as well as after mitigation measures were implemented.

3.1 Assessment of the significance of the potential impacts

3.1.1 Criteria of assigning significance to potential impacts

Detailed desk top studies and also the impact that the prospecting operations will cause on environment, health & safety and socio-economic factors including the cumulative and also the effects of such an impact

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

- Soil degradation.
- Air Pollution.
- Noise Pollution.
- Water Resource Pollution.

3.1.3 Assessment of potential cumulative impacts.

Continuous monitoring and evaluation of impacts, that process will be incorporated into daily operational plan, and standard operational plan.

3.2 Proposed mitigation measures to minimise adverse impacts.

Table 3.1

No	Impact	Mitigation Measure	Responsibility
01	Water resource.	As proposed on the Prospecting Works Programme, the operation for Alleen Coal Project will be equipped with 3by 2000liters water tanks. <u>The operation will further acquire a water use licence before commencement with exploration programme. In accordance with the National Water Act 36 of 1998.</u> The applicant is mindful of such a requirement. The reason for water tanks is to ensure that water used during exploration is not drawn directly from fresh water sources or any river streams. The envisaged quantity of water to be used daily for drilling, dust suppression and other auxiliary activities is estimated to be 5000 litres to 6000litres per day, the source is a local famer, and we are currently in discussion with a local famer.	Drilling Contractor. Project Manager. Crew Members.

02	Soil Degradation	<p>The following will be practiced:</p> <ul style="list-style-type: none"> • Separate storage facility for Diesel, Hydraulic Oils, Oils and other harmful fluids. • Under the storage for the fluids will be plastic bags, in case of leakage. • Trucks, bull dozers, graders, drill rigs and other heavy equipment machinery will be inspected before the start of every shift to check for any leakages. • We don't envisage a huge quantity of topsoil being removed during access way construction. During our site inspection we discovered that the land has many access ways and plain & flat surfaces. 	Geologist. Crew Members.
03	Air	<ul style="list-style-type: none"> • Part of the reason why the operation will be equipped with water tanks, is to ensure that temporary access ways are sprayed with water to suppress dust. 	Drilling Contractor.
04	Flora, Fauna & Indigenous Vegetation	During site clearance for temporary access ways, the removed flora will be planted on areas that have experienced soil erosion. Though the soil erosion predates our proposed project. In this process we are able to deal with the issue of air pollution as well.	Geologist. Project Manager.
05	Noise	Site clearance will be done during the day, as well as drilling. The crew will however ensure that the noise is kept within the acceptable level.	Project Manager. Community Rep
06	Waste Material	The drilling contractors, earth scientist, and other contract personnel will be briefed on the standard operating procedures, particularly as it relates to waste management. The operation will have refuse bins on site, refuse bins will be allocated for different type of waste i.e. <i>used oils, general waste, mechanical replacements</i> etc.	Everybody on site.

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

Table 3.2 List of activities

Activity	Activity Description	Triggered by
Drilling	Drilling will be conducted on the identified target, the purpose of such activity is to draw the core from depth, to determine the lithology of the land	Ground water might become contaminated due spillages of hydraulic oils, diesel and other mechanical fluids

3.2.2 Concomitant list of appropriate technical or management options

- The drill rigs shall be of modern technology.
- Avoid endangered vegetated area to minimise loss of vegetation.
- Temporary access ways will be sprayed with water during the day.
- Operations will run during working hours.
- Water will be stored in 3by water tanks of 2000liters each.
- Creation of grazing camps for the identified cattle's (less than 100).
- Harmful fluids will be stored in a clearly demarcated storage place; under the storage place will be Sand Bags, and plastic bags.

3.2.3 Review the significance of the identified impacts

After factoring the mitigation measures as well as management options, it is the applicants view that impacts will be less, or at best very minimal.

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

4.1 Plans for quantum calculation purposes.

The cost calculation for the environmental rehabilitation takes into consideration costs associated with each impact, the costs such as:

Site Mobilisation:

- Seeding
- Ripping of compacted surface
- Replacement of lost soils
- No bulk sampling infrastructure will be constructed on site.

Area demarcated for drilling:

- Sealing of exposed bore hole collars
- Waste disposal
- Seeding
- Loosening of compacted ground/or surface.
- General surface rehabilitation
- In situ remediation of oil spillages on the surface

Management Costs:

- Rehabilitation Management

Access ways:

- Compacted surface loosening
- Fertiliser application, seeding and planting of indigenous vegetation

Land Maintenance and Monitoring:

- Removal of alien vegetation, weed or any other unwanted vegetation
- Inspection and follow-up monitoring and reporting
- Fertiliser and seeding application
- 2-3 years of maintenance and aftercare.

4.2 Alignment of rehabilitation with the closure objectives

- Drill Holes will be closed.
- Temporary access ways will be rehabilitated by re-laying of the stored top soil, and finally re-vegetation.
- Fences will be reconstructed.
- Site camps, storage facilities and temporary fences will be removed.

14	2 to 3 years of maintenance and aftercare	ha	0.2	R11 826.35	1	1.1	R2 601.80
15(A)	Specialist study	sum					
15(B)	Specialist study	sum					
						SUBTOTAL 1	R72 515.12
1	Weighting factor 2			(0%, 5% or 10%)			
2	Preliminary and General			12,5% of subtotal 1			R9 064.39
3	Administration and supervision costs			6,0% of subtotal 1			R4 350.91
4	Engineering drawings and specifications			2,0% of subtotal 1			R1 450.30
5	Engineering and procurement of specialist work			2,5% of subtotal 1			R1 812.88
6	Development of closure plan			2,5% of subtotal 1			R1 812.88
7	Final groundwater modelling**			2,5% of subtotal 1			R1 812.88
8	Contingency			10,0% of subtotal 1			R7 251.51
						SUBTOTAL 2	R18 491.36
						VAT (14%)	R12 740.91
						GRAND TOTAL (SUBTOTAL 1 + SUBTOTAL 2 + VAT)	R103 747.38

4.4 Undertaking to provide financial provision

The applicant Nkanyezi Resources (Pty) Ltd has entered into a formal agreement with a number of strategic equity partners, who have given an undertaking to support the project up to the feasibility study phase, through this agreement the strategic equity partners, will henceforth provide all the financial requirements for the project. See attached letter of financial support. Appendix D

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.
- Soil Pollution.
- Water Quality.
- Flora and Fauna.
- Noise Pollution.

5.2 Functional requirements for monitoring programmes.

Table 5.1

No	Impact	Equipment/Tools	Responsibility
01	Air Quality.	Standard Operating Procedure. EMP. Check List	Drilling Contractor. Community Rep. Project Manager
02	Soil Pollution.	Standard Operating Procedure. EMP. Check List	Drilling Contractor. Community Rep. Project Manager
03	Water Quality.	Standard Operating Procedure. EMP. Check List. Testing Equipment.	Drilling Contractor. Community Rep. Project Manager. Independent Inspector.
04	Flora and Fauna.	Standard Operating Procedure. EMP. Check List	Drilling Contractor. Community Rep. Project Manager. Independent Inspector.
05	Noise Pollution.	Standard Operating Procedure. EMP. Check List. Testing Equipment.	Drilling Contractor. Community Rep. Project Manager. Independent Inspector.

5.3 Roles and responsibilities for the execution of monitoring programmes.

Table 5.2

No	Impact	Internally	Externally
01	Air Quality.	Project Manager. To follow up on complains, or measures detailed on the EMP	Stakeholder Representative. To report on any complain received from community members.
02	Soil Pollution.	Project Manager. To follow up on complains, or measures detailed on the EMP	Stakeholder Representative. To report on any complain received from community members.
03	Water Quality.	Project Manager. To follow up on complains, or measures detailed on the EMP	Stakeholder Representative. To report on any complain received from community members. Independent Inspector. To check for compliance in terms of standard operating procedure as well as the measures contained in the EMP
04	Flora and Fauna.	Project Manager. To follow up on complains, or measures detailed on the EMP	Stakeholder Representative. To report on any complain received from community members.
05	Noise Pollution.	Project Manager. To follow up on complains, or measures detailed on the EMP	Stakeholder Representative. To report on any complain received from community members.

5.4 Committed time frames for monitoring and reporting.

- **Air Quality:** Air Quality will be monitored every Friday, and report completed.
- **Soil Pollution:** will be done every Friday, and report completed.
- **Water Quality:** will be done once a Month and a report will be completed.
- **Flora and Fauna:** will be done every second week and a report completed.
- **Noise Pollution:** will be done every day during drilling activity, and report completed.

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

6.1 Rehabilitation plan

An EMP is a detailed document for the implementation of the mitigation measures with a view to minimising the negative environmental impacts highlighted during the public consultation meeting. Issues or measures covered in the plan will be incorporated into the daily operational plan, as well as any other contract entered into with sub-contractors or service providers.

The objective is to conduct an exploration on the proposed Nirvana Ferrous Project, on a phased approach. The first phase will be non-invasive while the last phase will be invasive, the activity with real environmental impact within the last phase is drilling, therefore this activity will be conducted in such a manner that the machine used minimises noise, air and water pollution. Part of the overall land rehabilitation plan includes the removal of any waste from the site, be it domestic waste, human waste, or hazard waste. Temporary structures such as safety fence will be removed; a disturbed land will be re-vegetated by the indigenous grass specie, any spillage on the ground emanating from drilling equipment or any other equipment will be cleaned.

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

We shall endeavour to leave the target area as close as possible to its original state, as or even better than it was as we have noticed during site visits and engagement with interested & affected parties that there's an indication of soil erosion. The benefit of the phased approach to prospecting is that rehabilitation of the disturbed land will take place at the same time as the prospecting itself. Key objectives are to ensure that:

- Post prospecting period the land can be used to the maximum benefit of its inhabitants.
- The site is restored to its pre-prospecting era.
- Health & Safety of the inhabitants is not compromised.

6.3 Confirmation of consultation

Consultation was held with interested and affected parties for a detailed report please see attached appendix B

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

7.1 Identification of interested and affected parties.

Interested and affected parties were identified by conducting a deed search, through Nkanyezi Resources service provider Windeed.

For a detailed report please find attached appendix B

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.

The interested and affected parties, including the surface rights owners, community and the municipality were presented with the following documents: An acceptance letter from the regional manager, Prospecting Works Programme, Draft EIA Framework, Locality Sketch Plans and other information. More information can be gleaned on the attached appendix B

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

The attendance register forms part of a comprehensive public participation report attached here to as an appendix B

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

Table 1.7 on page sixteen (14) of this document describe in detail the views, concerns and comments raised by those consulted. The views and concerns raised cover various broad categories of the environment such as: Biodiversity, Water quality, Air quality, Noise, Land use and other. Please further refer to the table and the public participation report.

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.

See the attached public participation report, attached as Appendix B

7.2.5 Other concerns raised by the aforesaid parties.

See the attached public participation report, attached as Appendix B

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

See the attached public participation report, attached as Appendix B

7.2.7 Information regarding objections received.

None so far, but we are still open for further engagement as stated in our Public Participation Report.

7.3 The manner in which the issues raised were addressed.

Concerns and issues were addressed within this environmental management plan; further issues will be addressed on the operational plan such as: Skills Transfer, Employment Opportunities, and Procurement Health & Safety.

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

8.1 Employee communication process

Before the start of exploration programme, employee's contractors and other key stakeholders will attend a three day workshop. The topic will be compliance with this EMP, Health & Safety measures as well as operational procedures.

8.2 Description of solutions to risks

The starting point is the workshop to allow the crew, contractors and other key stakeholders to be familiar with the contents of this EMP. Secondly the applicant will have enough competent personnel to ensure monitoring and mitigation.

8.3 Environmental awareness training.

The environmental awareness workshop will be conducted prior to the commencement of prospecting programme being rolled-out, this is to ensure that all personnel working on-site is fully aware of the measures planned in the EMP for dealing with environmental impacts.

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.

This amount is calculated as a percentage of the overall exploration budget, disbursed annually for the entire duration of the planned prospecting activity.

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

Year One	Year Two	Year Three	Year Four	Year Five
R580,000.00	R200,000.00	R875,000.00	R950 000.00	R950,000.00
% of Land Rehabilitation Budget (2.9%)				

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

<p>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.</p>	
Full Names and Surname	Joey Johannes Shole
Identity Number	7401125404080

-END-

Appendix A

Regulation 2.2 Sketch Plan Prospecting Activities Illustration Map Aerial View of the Target

Nkanyezi Resources (Pty) Ltd

Plan of the land under application
for prospecting right in terms of the
MPRD Act, 28 of 2002

FIGURE:

A, B, C, D, E and F

Represents the farms:

Louwrensruist 287 & Annex

Louwrensruist 287

RESPECTIVELY BEING A TOTAL
AREA OF 3049.9984 HACTERS

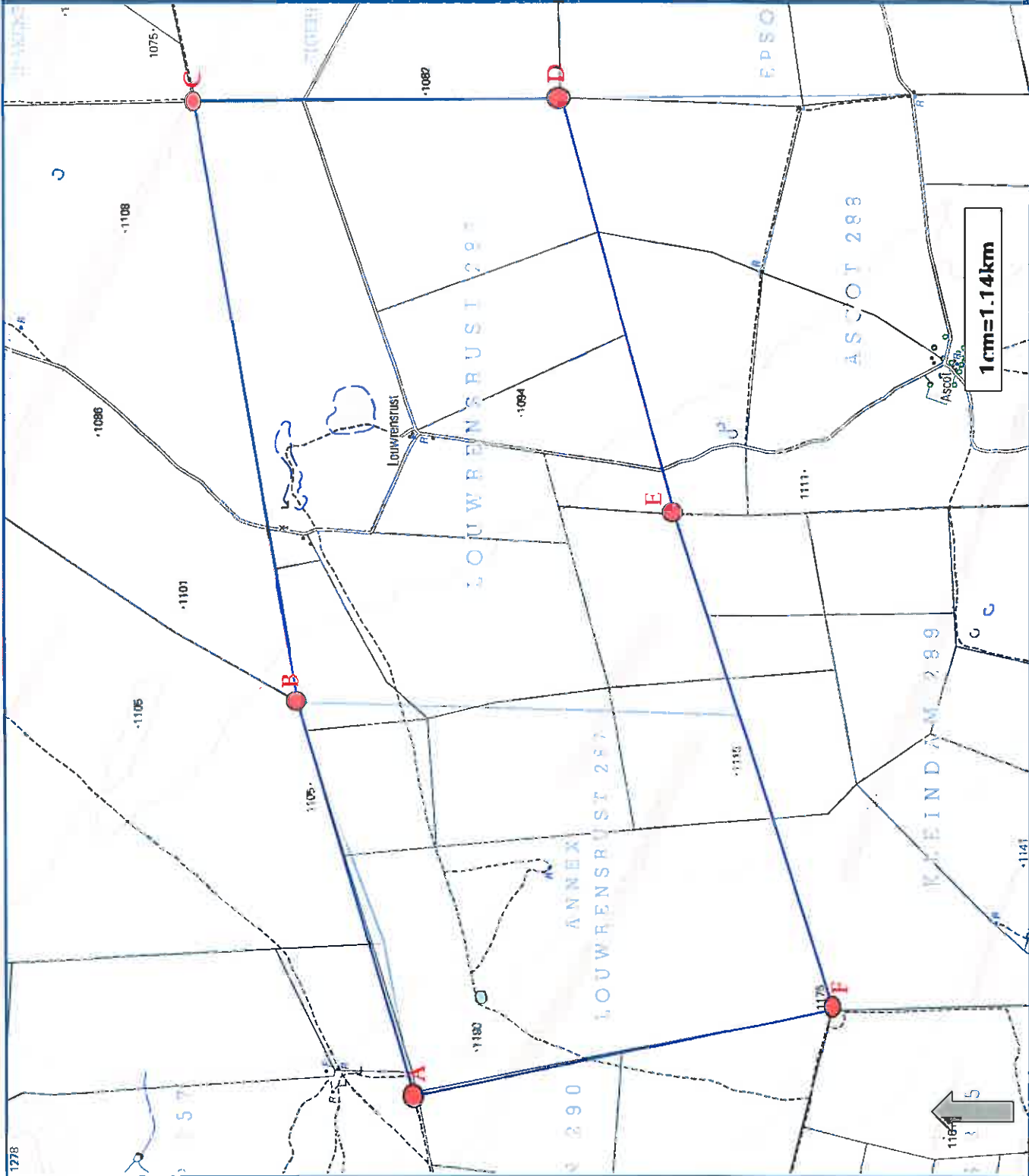
□ Boundary of the target area

● Coordinates of the Target area

LONG	LAT
A 22°.6446	-27°.1852
B 22°.6783	-27°.1774
C 22°.7332	-27°.1689
D 22°.733	-27°.1982
E 22°.6959	-27°.6959
F 22°.6519	-27°.2194

Executive Director

Date: 27/01/2013



9)

.

Appendix B

Public Participation Report

Public Participation Report

Nirvana Iron Ore & Manganese [Prospecting Rights] Application

Nkanyezi Resources (Pty) Ltd

3/7/2014

A Final Public Participation Report in support of an application for Iron Ore & Manganese Prospecting Rights over the Farms: Annex Louwensrust No 278 and Louwensrust 291 Kuruman District. The application Ref No: NC 30/1/1/2/11151PR

Public Participation Report

Nirvana Iron Ore & Manganese [Prospecting Rights] Application
Nkanyezi Resources (Pty) Ltd

CONFIDENTIALITY, DISCLAIMER STATEMENT

Cancelled! Cancelled!

Public Participation Report

Nirvana Iron Ore & Manganese [Prospecting Rights] Application
Nkanyezi Resources (Pty) Ltd

TITLE AND AUTHORISATION

Title: **Nirvana Iron Ore & Manganese Prospecting Right Public Participation Report**, for the granting of a Prospecting Right for Iron Ore & Manganese over the Farms: Louwensrust 291 Remaining Extent, and Portion (01) Annex Louwensrust No 278 Kuruman District.

Applicant: **Nkanyezi Resources (Pty) Ltd**
4th Floor, West Tower
Nelson Mandela Square, Sandton City
Sandton, 2196
Tel: (011) 100 – 5143
Fax: (086) 686 6029

Prepared By: **Nkanyezi Resources (Pty) Ltd**
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Nelson Mandela Square, Sandton
2196
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Joey Johannes Shole



Public Participation Report

Nirvana Iron Ore & Manganese
Nkanyezi Resources (Pty) Ltd

[Prospecting Rights] Application

TABLE OF CONTENTS

DETAILS	PAGE
1. Background & Introduction	5
2. Public Engagement	7
2.1. Objectives	7-8
2.2. Notifications	8
2.1.1. I & AP Identification Procedure	8
2.1.3. Public Space Notices	8
2.1.4. Other Notices	8
2.3. Meetings	8
2.4. Telephones, Faxes and E-Mail Communications	9
2.5. Engagement with the Government	9
2.6. Presentation of PWP	9
3. Key Issues & Impacts Raised.....	9
4. Way Forward	9-10

LIST OF TABLES

Table 1 : I & AP Database

LIST OF FIGURES

Figure 1 : Locality Sketch Plan.

LIST OF APPENDICES

Appendix A : Formal Acceptance Letter from KZN DMR.

Appendix B : Proof of Correspondences.

Appendix C : Copies of Responses.

Appendix D : Copy of the Notice.

Appendix E : Copy of Registration Form.

Public Participation Report

Nirvana Iron Ore & Manganese [Prospecting Rights] Application
Nkanyezi Resources (Pty) Ltd

1. Background & Introduction.

The applicant **Nkanyezi Resources (Pty) Ltd** has applied for Iron Ore & Manganese prospecting rights over the Farms: Louwensrust No: 291 & Remaining Extent, and Annex Louwensrust No: 278 in Kuruman District, once granted the prospecting right will constitute the proposed [Nirvana Ferrous Metals Project], which shall cover an area of approximately 3,500ha, in the John Taolo Gaetsewe District Municipality, Joe Morolong Local Municipality, Kuruman Magisterial in Northern Cape province, Republic of South Africa. The applicant Nkanyezi Resources (Proprietary) Limited is a South African registered company fully BEE Complied in terms of the BEE Act; the company is based in Johannesburg, with various interests within the resources sector. The area of an application is within what is normally called the Kalahari Manganese Field of South Africa.

It is the intention of the applicant **Nkanyezi Resources (Pty) Ltd**, to prospect for Iron Ore & Manganese on the properties targeted in partnership with the surface rights owners, and other interested and affected parties to the benefit of all, in accordance with the spirit of the Law. Prospecting will be conducted over a period of not more than five (5) years, and will be done so in phases, it is envisaged that the first and second phases will involve minimal land disturbance.

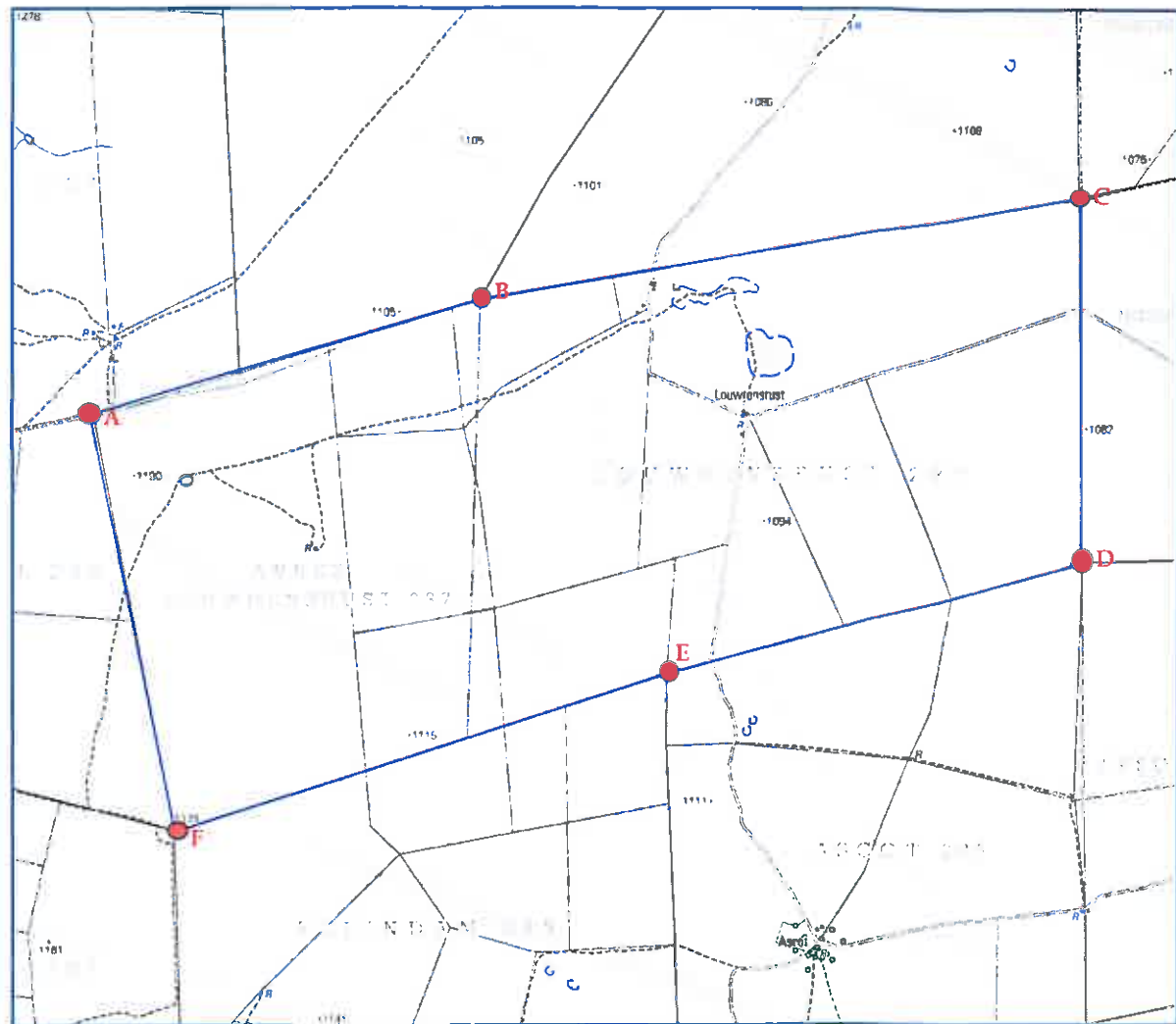
In accordance with the requirements of the law, and that of the formal acceptance letter from [Northern Cape DMR Regional Manager], the applicant **Nkanyezi Resources (Pty) Ltd**, need to conduct a public participation process, and produce the results thereof, it is for this reason that such a process was undertaken.

Public Participation Report

Nirvana Iron Ore & Manganese
Nkanyezi Resources (Pty) Ltd

[Prospecting Rights] Application

The project area is shown in Figure 1



2. **Public Engagement.**

After going through the guide lines from the DMR, pertaining to the public participation process, as well as the directive contained in the formal acceptance letter from the Department of Minerals Resources [Northern Cape Province], Nkanyezi Resources together with other strategic partners, made a determination as to the level and extent of public engagement. Parties then decided to engage the *Interested and Affected parties [I&AP]* through the following means:

- Telephones
- Faxes
- E-mails
- Public Notices (Public Space Notices)
- Posted Correspondences

2.1. **Objectives.**

2.1.1. **Regulatory.**

The application needed to comply with the terms of the formal acceptance letter, which stipulated clearly a need for public participation & engagement.

Further to the directive contained in the formal acceptance letter, the public participation process for the Nirvana Iron Ore & Manganese Application is very important to the overall Environmental Impact Assessment Study, and ultimately the compilation of an Environmental Management Plan. The Final EMP in support of an application for a Prospecting Right must comply with the requirements of Section 16 of the MPRD Act, 2000.

See attached Appendix A

2.1.2. **Environmental Management Planning.**

The public participation process for Nirvana Iron Ore & Manganese Prospecting Right application is critical to the overall process of compiling Environmental Management Plan for the proposed project. The proposed project will result in positive and negative impacts; the impacts will arise throughout the project lifecycle, from *Exploration* to *Development, Construction*, and *Operation* and ultimately *Decommission*. Therefore the consultation process provides a platform through which all stakeholders come together to jointly identify issues of common concern and interest, both positive as well as negative environmental negatives were identified during the process, and the applicant has planned accordingly.

2.1.3. **Public Engagement Process.**

These are intended outcomes to be achieved as envisaged by the guidelines of many institutions, both local and international. They are also required by the formal acceptance letter:

Public Participation Report

Nirvana Iron Ore & Manganese
Nkanyezi Resources (Pty) Ltd

[Prospecting Rights] Application

- The project promoters need to improve the quality of decision-making process, in as far as Environmental Management Planning is concern, the process allows for that by capturing the experience, concerns and recommendations of local people
- Strengthen the voice of the interested & affected parties by consulting adequately with them through open and transparent manner.
- Set the foundation for future broad-based participation in the advancement of **Nirvana Iron Ore & Manganese Project**. Determining and documenting aspects of the project that might require further investigation during the proceeding phases.

2.3. Notifications.

2.3.1. I & AP Identification Procedure.

The applicant **Nkanyezi Resources** utilised extensively documentation from Joe Morolong Local Municipality and John Taolo Gaetsewe District Municipality, documentation such as: Property Evaluation Roll of 2012/2013, the applicant further utilised the services of Windeed its service provider of more than Three (3) Years. This assisted a great deal in identifying **land Owners** and **Interested & Affected parties**; these are parties who were subsequently consulted via the means already explained above, more so the **email, posted letters** and telephones. The engagement took place between the 1st of March to the 25th of March 2014 with a follow up meetings proposed between **Unitone Mining cc** and **Nkanyezi Resources**.

2.3.2. Public Space Notices.

Notices were placed on the 10th of August 2013, and again on the 28th of October 2013 on various public spaces in and around the towns of **Dundee** and **Dunnhauser**. Due to insufficient response from the interested & affected parties the applicant had to place notices again on the 28th of October 2013 and convene another meeting on the 2nd of November 2013. **See Appendix D**

2.4. Meetings.

It has been proposed that a public meeting be held just before the granting of the prospecting rights, with the community of **Maropeng Tribal Council** assisting in that meeting to address issues such as: Social & Labour Plans, Public Infrastructure, Skills Development and other matters. The objective going forward is for the project promoters and the community to create a platform, whereby project promoters, consultants and I&AP could come together and engage on issues of mutual interest and concern about the proposed [Nirvana Iron Ore & Manganese Project].

2.5. Telephones, Faxes and E-Mail Communication.

These three means of engagement has been the most used methods of engagement for this particular application, as most of the parties consulted didn't express any interest in attending a meeting, but rather preferred a one-on-one engagement. It was expected that before the final public participation report was completed the applicant would have received more inputs from parties engaged, but unfortunately it wasn't to be. However that aspect will still continue as the building of I&AP Database is a continuous exercise, the applicant took a decision to continue engaging anybody who so wish.

2.6. Engagement with the Government.

The following government departments have been engaged:

- | | |
|--|-------------------|
| • Dept of Agriculture Forestry & Fisheries : | Ms Jacoline Mans |
| • John Taolo Gaetsewe DM : | K.K.Teise |
| • Joe Morolong Local Municipality : | Kgomotso Mabudi |
| • Joe Morolong Local Municipality : | Kemothibile Phiri |

See Appendix B

2.7. Presentation of Application Details.

Details about planned prospecting on the properties were sent to the consulted parties, details included: Regulation 2.2 Sketch Plan, Prospecting Works Programme and Formal Acceptance Letter from the DMR. Aspects of the prospecting such as: **Non-Invasive** as well as **Invasive methods**, its impact on the life of those around the properties and its benefits as well, were explained.

Other documentation sent to the interested and affected parties included a copy of the Notice, and the Registration Form.

3. Key Issues & Impacts Raised

See Appendix C

4. Way Forward.

I&AP

As requested by the interested and affected parties who responded to our initial engagement, a meeting just before a granting of the right must be convened.

A copy of an EMP will also be made available to all registered I&AP on the 6th of June 2014, the latest 30 June 2014. The latest 2nd of August 2014 a meeting to be held to present and discuss the Social & Labour Plans, Skills Development, Public Infrastructure and other matters with the community of **Maropeng Tribal Council**. As

Public Participation Report

Nirvana Iron Ore & Manganese
Nkanyezi Resources (Pty) Ltd

[Prospecting Rights] Application

requested a communication between the I&AP and project promoters will take place from time-to-time.

Public Participation Report

Nirvana Iron Ore & Manganese [Prospecting Rights] Application
Nkanyezi Resources (Pty) Ltd

Table 1: Database of interested and affected parties
For the proposed: Nirvana Ferrous Metals Project

Farm/Organisation	Name and Surname	Designation	Telephone & Fax	Mobile & Email	Address
Unitone Mining cc	Itumeleng Prince Segami	Director	079 317 4341	Unitonemining@gmail.com	4872 Botsang Street, P.O. Mankurwane, Kimberly 8345 P.O.Box 234 Hotazel, 8490
Louwensrust & Annex Louwensrust	Francois Johannes Jacobus Theart	Property Owner			1 st Floor, Gleneagles Building, Fairway Office Park 52 Grosvenor Park, Bryanston
Tshipi e Ntle Manganese Mining (Pty) Ltd	Jeff Leader	Director	(011) 706 - 9004 (086) 240 4925	JacolineMa@daff.gov.za	P.O.Box 2782, Upington 8800
Dep of Agriculture Forestry & Fisheries	Jacoline Mans	Chief Forester	(054) 338 - 5908 (054) 334 - 0030		4 Federale Mynbou Street Kuruman, 8460
John Taolo Gaetsewe DM	K.K. Teise	Director: Economic Development	(053) 712 - 8700 (053) 712 - 2502		D320 Cardington Road Churchill Village Kuruman, 8460
Joe Morolong LM	Kgomotso Mabudi	Director: Community Services	(053) 773 - 9300		D320 Cardington Road Churchill Village Kuruman, 8460
Joe Morolong LM	Kemothibile Phiri	Director: Planning and Development	(053) 773 - 9300		
BHP Billiton	Bronwyn Wilkinson	Head of Communications	(011) 376 - 2154	082 419 8236 Bronwyn.wilkinson@bhpbilliton.com	
SALTRIM Ranches					Hanmar Building 32 Steward Street Kuruman, 8460 P.O.Box 91, Kuruman 8460
Aquila Steel (Northern Cape)			(053) 741 - 2012		585 Plot Street Groblersshop

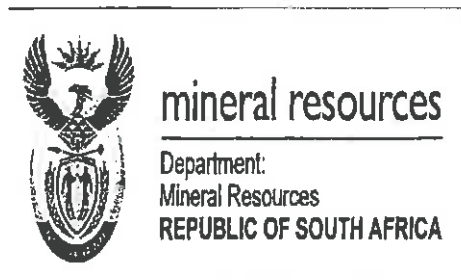
Public Participation Report

Nirvana Iron Ore & Manganese [Prospecting Rights] Application
Nkanyezi Resources (Pty) Ltd

					Northern Cape
United Manganese of Kalahari (UMK)	Isaac Letsholo	Mine Manager	(053) 742 - 3000 (053) 742 - 3119		Farm Perth, District Road D3340 Hotazel Posnet Suite 69, Private Bag X1532 Kuruman 8460

Appendix A

Formal Acceptance Letter from Kimberly DMR



65 P Mabija Street Private Bag X6093
Kimberley Kimberley
8301 8300

Tel: (053) 807 1700
Fax: (053) 832 5631
Email: Ephesia.semenya@dmr.gov.za
Enquiries: E M Semenya

File No: (NC) 30/05/1/1/2/11151 PR

PER REGISTERED MAIL

The Director
NKANYEZI RESOURCES (PTY) LTD
P. O Box 27527
Bertsham
2013

Attention: Clarence Ntshangase

Fax no: 086 686 6029

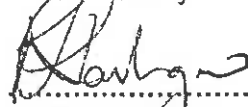
RE: APPLICATION FOR A PROSPECTING RIGHT

Name of Applicant	Nkanyezi Resources (Pty) Ltd
Description of Property	The farm Louwensrust 291 and Remaining Extent and Portion 01 Louwensrust 278
District	Kuruman

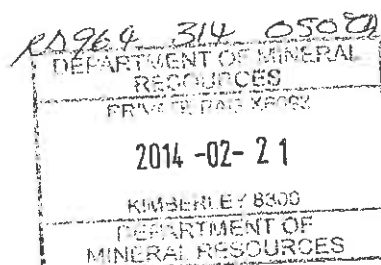
1. This is to inform you that your abovementioned application for the prospecting of **Manganese and Iron Ore** in terms of section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) has been accepted.
- 1.2 Please note that you are required to consult with **Unitone Mining Close Corporation** as part of your interested and affected parties and submit proof of consultation together with a detailed working agreement on or before the **30th March 2014**.
2. In terms of section 16(4) of the MPRDA you are therefore required:
 - 2.1 to submit online a copy of an Environmental Management Plan as per the online template on or before **16th May 2014** but not before the date mentioned in (2.3) below; and

- 2.2 to submit manually five copies of the uploaded Environment Management Plan to the office on or before the 16th May 2014; and
- 2.3 to notify in writing and consult with the landowner or lawful occupier and any other affected party and submit the result of such consultation to this office on or before the 30th March 2014,
3. You are further requested in terms of section 17 (4) of the Act to give effect to the object referred to in section 2(d) of the Act. In this regard you are required to submit by no later than 30th March 2014, the following documents:
- 3.1 duly signed shareholders' agreements;
 - 3.2 share certificates and shareholder's registers;
 - 3.3 articles and memorandum of association of the company;
 - 3.4 details relating to funding (all relevant agreements); and
4. Any other agreement or documents relating to the:
- 4.1. Joint Venture Agreements;
 - 4.2. Any other agreement relating to this transaction
- 5 Kindly note that all the requested information in paragraphs 2.1, 2.3, 3 and 4 should be submitted online.**
- 6 Failure and or delays in submitting all required or requested information within the prescribed timeframes could have negative impact on the decision-date.

Yours faithfully



.....
ACTING REGIONAL MANAGER: MINERAL REGULATION
NORTHERN CAPE REGION
DATE: 19/02/2014



Appendix B

Proof of Correspondences

The correspondences are both emails and postage

List of REGISTERED LETTERS Lys van GEREGISTREERDE BRIEWE (with an insurance option/met 'n versekeringsopsie)

Full tracking and tracing/Volledige volg en spoor

19,60 each



Post Office

Name and address of sender:

Naam en adres van afsender: NIKANYEZI RESOURCES
P.O. BOX 27507
BERTSHAM, 2013

Enquiries/Navrae
Toll-free number
Tolvry nommer
0800 111 502

No.	Name and address of addressee Naam en adres van geadresseerde	Insured amount Versekerde bedrag	Insurance fee Versekeringsgeld	Postage Posgeld	Service fee Diensgeld	Affix Track and Trace customer copy Plak Volg-en-Spoor-klëntafskrif
1	KEMOTHIBELE PHIRI 1370 CARMINGTON RD, 8400					REGISTERED LETTER (with a domestic insurance option) ShareCall 0800 111 502 www.saps.co.za RD 591 104 987 ZA CUSTOMER COPY 301028R
2	Balthazar Pankas 32 Stewart Street, 8400					REGISTERED LETTER (with a domestic insurance option) ShareCall 0800 111 502 www.saps.co.za RD 591 104 985 ZA CUSTOMER COPY 301028R
3	April Steel (Nether, Cape) 555 Pitt Street, 8400					REGISTERED LETTER (with a domestic insurance option) ShareCall 0800 111 502 www.saps.co.za RD 591 105 087 ZA CUSTOMER COPY 301028R
4	Isaac Lethebe (Lima) Tema Rd, District Reg, 8300					REGISTERED LETTER (with a domestic insurance option) ShareCall 0800 111 502 www.saps.co.za RD 591 105 024 ZA CUSTOMER COPY 301028R
5	Reginald Michael 1500 Cordington Rd, 8400					REGISTERED LETTER (with a domestic insurance option) ShareCall 0800 111 502 www.saps.co.za RD 591 105 015 ZA CUSTOMER COPY 301028R
6						
7						
8						
9						
10						
Total Totaal		R	R	R	R	

Number of letters posted
Getal briewe gepos

5 / five

Signature of client

Handtekening van klient

Signature of accepting officer

Handtekening van aanneembeampte

The value of the contents of these letters is as indicated and compensation is not payable for a letter received unconditionally. Compensation is limited to R100,00. No compensation is payable without documentary proof. Optional insurance of up to R200,00 is available and applies to domestic registered letters only.

Die waarde van die inhoud van hierdie briewe is soos aangedui en vergoeding sal nie betaal word vir 'n brief wat sonder voorbehoud ontvang word nie. Vergoeding is beperk tot R100,00. Geen vergoeding is sonder dokumentêre bewys betaalbaar nie. Opsionele versekering van tot R2 000,00 is beskikbaar en is slegs op binnelandse geregistreerde briewe van toepassing.



REGISTERED LETTER GEREGISTREERDE BRIEF (with an insurance option met 'n versekeringsopsie)				Postage paid R _____ c Service fee / Diensgeld R _____ c Insurance / Versekering R _____ c Total / Totaal R 29.00 c	
Full tracking and tracing/Volledige volg en spoor		Registered value of contents Verrekeerde waarde van inhoud R _____ c			
Addressed to/Geadresseer aan P.O BOX 37537 BEKTSHAM		Enquiries/Navrae Toll-free number Tolvry nommer 0800 111 502		Date Stamp X GABUJA 14:41 CSIC3114 Date stamp	
The value of the contents of the registered letter is limited to R10 000. No compensation is payable for such loss or damage. Optional insurance is available for an additional fee. RD 903 466 083 ZA		All's Track and Trace Alles volg en spoor		CUSTOMER COPY REGISTERED LETTER With domestic insurance option ShareCall 0800 111 502 www.espo.co.za RD 903 466 083 ZA	

REGISTERED LETTER GEREGISTREERDE BRIEF (with an insurance option met 'n versekeringsopsie)				Postage paid R _____ c Service fee / Diensgeld R _____ c Insurance / Versekering R _____ c Total / Totaal R 37.00 c	
Full tracking and tracing/Volledige volg en spoor		Registered value of contents Verrekeerde waarde van inhoud R _____ c			
Addressed to/Geadresseer aan P.O BOX 37537 BEKTSHAM		Enquiries/Navrae Toll-free number Tolvry nommer 0800 111 502		Date Stamp X GABUJA 14:41 CSIC3114 Date stamp	
The value of the contents of the registered letter is limited to R10 000. No compensation is payable for such loss or damage. Optional insurance is available for an additional fee. RD 903 466 083 ZA		All's Track and Trace Alles volg en spoor		CUSTOMER COPY REGISTERED LETTER With domestic insurance option ShareCall 0800 111 502 www.espo.co.za RD 903 466 083 ZA	

The Executive Director
Saltrim Ranches
Hanmar Building
32 Stewart Street,
Kuruman, 8460

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

Dear Sir.

A notice is hereby given that an application for Iron Ore & Manganese Prospecting Rights in terms of section 16 of the MPRD Act, 2002 (Act 28 of 2002), over the farms **Louwensrust 291** and **Annex Louwensrust 278**, has been accepted by the DMR (Kimberly) Regional Manager. Application ref No: **NC30/5/1/1/2/11151PR**.

In terms of the requirement as stipulated on the formal acceptance letter from the Regional Manager Kimberly, the applicant **Nkanyezi Resources (Pty) Ltd**, must inform you, or your office, as well as consult with other interested & affected parties, regarding the application. Therefore this correspondence seek to solicit your views, or comments on the above stated application, and to further list you in our database of Interested & Affected parties

For any further question or clarification regarding the application, or contents of this letter, please do not hesitate to contact me on Tel: (011) 100-5143, Fax: 086 686 6029 or Cell: 076 526 0160.

Thanking you in advance.

Sincerely

Clarence Ntshangase.
Executive Director.

DIRECTORS

J. J. Shole | P. Mudau | T. Molefe | L. Mohlabi

Kemothibile Phiri
Director: Planning & Development
Joe Morolong Local Municipality
D320 Cardington Road
Kuruman, 8460

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

Dear Sir.

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Thanking you in advance.

Sincerely

Clarence Ntshangase.
Executive Director.

DIRECTORS

I. I. Shole, D. Mude, T. Molefe, I. Molehi



NKANYEZI RESOURCES

Reg No. 2012/025313/07

Physical Address:
4th Floor, West Tower
Nelson Mandela Square
Sandton City
Johannesburg
Postal Address:
P.O Box 27527
Robertsham, 2013
Tel: (0) 11 100-5143
Fax: 086 686 6029
www.nkanyeziresources.co.za

Kgomotso Mabudi
Joe Morolong Local Municipality
D320 Cardington Road
Churchill Village
Kuruman, 8460

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

Dear Sir,

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DIRECTORS

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www.nkanyeziresources.co.za

Isaac Letsholo
Mine Manager
United Manganese of Kalahari (UMK)
Farm Perth, District Road D3340
Hotazel, Northern Cape

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

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Executive Director.

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J. J. Shole | P. Mudau | T. Molefe | L. Mohlabi



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Sandton City
Johannesburg
Postal Address:
P.O Box 27527
Robertsham, 2013
Tel: (0) 11 100-5143
Fax: 086 686 6029
www.nkanyeziresources.co.za

Mine Manager
Aquila Steel (Northern Cape)
585 Plot Street, Opwag
Groblershoop, Northern Cape

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

Dear Sir.

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Sincerely

Clarence Ntshangase.
Executive Director.

DIRECTORS

I. I. Shole, D. Mudau, T. Molefe, I. Mphahleli



NKANYEZI

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4th Floor, West Tower
Nelson Mandela Square
Sandton City
Johannesburg
Postal Address:
P.O Box 27527
Robertsham, 2013
Tel: (0) 11 100-5143
Fax: 086 686 6029
www.nkanyeziresources.co.za

Jeff Leader
Tshliple Ntle Manganese Mining (Pty) Ltd
1st Floor, Gleneagles Building
Fairway Office Park
52 Grosvenor Park, Bryanston
Johannesburg

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

Dear Sir.

A notice is hereby given that an application for Iron Ore & Manganese Prospecting Rights in terms of section 16 of the MPRD Act, 2002 (Act 28 of 2002), over the farms **Louwensrust 291** and **Annex Louwensrust 278**, has been accepted by the DMR (Kimberly) Regional Manager. Application ref No: NC30/5/1/1/2/11151PR.

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Clarence Ntshangase.
Executive Director.

DIRECTORS

J. J. Shole | P. Mudau | T. Molefe | L. Mohlabi



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Robertsham, 2013
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Fax: 086 686 6029
www.nkanyeziresources.co.za

Bronwyn Wilkinson
Head of Communications
BHP Billiton
Johannesburg

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

Dear Sir.

A notice is hereby given that an application for Iron Ore & Manganese Prospecting Rights in terms of section 16 of the MPRD Act, 2002 (Act 28 of 2002), over the farms **Louwensrust 291** and **Annex Louwensrust 278**, has been accepted by the DMR (Kimberly) Regional Manager. Application ref No: **NC30/5/1/1/2/11151PR**.

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Thanking you in advance.

Sincerely

Clarence Ntshangase.
Executive Director.

DIRECTORS

J. J. Shole | P. Mudau | T. Molefe | L. Mohlabi



NKANYEZI

Reg No. 2012/D25313/07

Physical Address:
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Nelson Mandela Square
Sandton City
Johannesburg
Postal Address:
P.O Box 27527
Robertsham, 2013
Tel: (0) 11 100-5143
Fax: 086 686 6029
www.nkanyeziresources.co.za

K.K. Telse
Director: Economic Development
John Taolo Gaetsewe District Municipality
4 Federale Mynbou Street
Kuruman, 8460

03 March 2014

Re: An application for Iron Ore & Manganese PR, over Louwensrust 291 & Annex Louwensrust 278

Dear Sir.

A notice is hereby given that an application for Iron Ore & Manganese Prospecting Rights in terms of section 16 of the MPRD Act, 2002 (Act 28 of 2002), over the farms **Louwensrust 291** and **Annex Louwensrust 278**, has been accepted by the DMR (Kimberly) Regional Manager. Application ref No: **NC30/5/1/1/2/11151PR**.

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Thanking you in advance.

Sincerely

Clarence Ntshangase.
Executive Director.

DIRECTORS

J. J. Shole | P. Mudau | T. Molefe | L. Mohlabi

Appendix C
Copies of Responses



agriculture, forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Directorate: Forestry Management (Other Regions)
P.O. Box 2782, Upington, 8800, Tel 054 338 5909, Fax 054 334 0030

Enquiries: J Mans
E-mail: JacolineMa@daff.gov.za
Date: 10 March 2014
Ref: F13/11/2/242

Nkanyezi Resources
P.O. Box 27527
Robertsham
2013

ATTENTION: Clarence Ntshangase (cntshangase@nkanyeziresources.co.za)
cc Joey Johannes Shole (jshole@nkanyeziresources.co.za)

RE: COMMENTS ON NOTICE OF A PROSPECTING RIGHT APPLICATION FOR THE PROPOSED IRON ORE & MANAGENESE PROJECT ON FARMS LOUWENSRUST NO 291 AND ANNEX LOUWENSRUS NO 278, KURUMAN DISTRICT (REF NC30/1/1/2/11151PR)

1. DEPARTMENTAL MANDATE

- 1.1 The Directorate: Forestry Management (Other Regions) in the Department of Agriculture, Forestry and Fisheries (DAFF) is mainly concerned about the potential impact on protected tree species. See the National Forests Act, Act 84 of 1998 (NFA) as amended, section 12(1)(d) read with s15(1) and s62(2)(c). The list of protected tree species was published in GN 877 of 22 November 2013. **No protected tree may be cut, removed, damaged, disturbed or destroyed without a valid Forest Act License, irrespective of authorizations and approvals in terms of other applicable legislation. Environmental approvals in terms of other legislation do not exempt the developer from complying with the NFA. Non-compliance is a criminal offence and may result in a fine or imprisonment or both.**
- 1.2 The DAFF is also responsible for the administration of the National Veld and Forest Fires Act, Act 101 of 1998 (NVFFA) as amended. Please take note of roles and responsibilities in terms of the NVFFA.

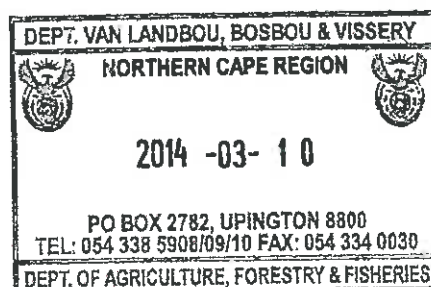
2. GENERAL COMMENT

- 2.1 All possible efforts should be made to minimize impacts on slow growing protected trees by careful consideration during final placement of mining infrastructure. Where trees cannot be avoided, a license must be applied for an obtained prior to any vegetation disturbance.
- 2.2 The developer should also take note of the Flora Permit requirement in terms of the Northern Cape Nature Conservation Act, Act 9 of 2009 administered by the provincial Department of Environment and Nature Conservation (DENC).

Yours truly,


Jacoline Mans

Chief Forester: NFA Regulation



REGISTRATION FORM**PUBLIC PARTICIPATION PROCESS WITH INTERESTED AND/OR AFFECTED PARTIES****Please complete the form and return****To :** Nkanyezi Resources (Pty) Ltd

P.O.Box 27527

Bertsham, 2013

Fax: (086) 686 6029

Email: cntshangase@nkanyeziresources.co.za

Project Title:	Nirvana Iron Ore & Manganese
DMR Ref No:	NC30/5/1/1/2/11151PR
Key Contact Person:	Clarence Ntshangase
Alternative Contact Person	Joey Johannes Shole

You are hereby invited to register as interested and/or affected parties in line with the requirements of a formal acceptance letter received by Nkanyezi Resources (Pty) Ltd, from The Department of Mineral Resources (Kimberly). And to further participate in the process of compilation of an EIA, and ultimately an EMP. Respondents are responsible to provide input and comments within the specific time frames as specified in the formal acceptance letter.

Full Name	Dean Rossouw
Surname	Rossouw
Capacity	Exploration Manager NC
Organization	Aquila Steel (SAfrica) Pty Ltd
Physical Address	Stand 584, Groblerskop
Postal Address	P.O. Box 118, Groblerskop, 8850
Tel	054 833 0027
Fax	0866 838 065
Cell	079 8816459
Email	drossouw@aquilaresources.com.au

1	Are you an interested and/or affected party?
	No Yes <input checked="" type="checkbox"/> Other
	If the answer is yes, how so?
	Aquila have m projects North-east of your project.
2	How will the proposed project affect you? Logistics and Marketing
	State the reasons:
	Extra capacity on rail and road and demand in the market.

3	Will the project have any detrimental effect on the Heritage, Culture, and history of the area?		
	NO	YES	NOT SURE <input checked="" type="checkbox"/>
	If yes, explain?		
4	Will the project have any negative impact on the environment?		
	NO	YES <input checked="" type="checkbox"/>	NOT SURE
	If yes can you provide explanation noise, water, dust and light pollution		
4	Will the project have a negative effect on the appearance of the area? e.g. Negative visual impact.		
	NO	YES <input checked="" type="checkbox"/>	I DON'T KNOW
	If Yes! Provide explanation Dumps		
5.	General Comments		

Appendix D

Copy of the Notice

NOTICE OF A PROSPECTING RIGHT APPLICATION

Nkanyezi Resources and other project partners, wish to give notice in terms of Regulation 16 of the MPRD Act, 2002 (Act 28 of 2002) for the proposed Iron Ore & Manganese Project on the farms **Louwensrust No: 291 and Annex Louwensrust No: 278**, situated in the **District of Kuruman**, within **John Taolo Gaetsewe District Municipality, Northern Cape Province**. Nkanyezi Resources will be conducting a public participation process, as well as conducting an Environmental Impact Assessment Study (EIA), for the purpose of compilation of an Environmental Management Plan [EMP], in accordance with the National Environmental Management Act (No 107 of 1998). An application for Iron Ore & Manganese Prospecting Rights in terms of Section 16 of the MPRD Act was submitted and such application has been accepted by the DMR (KZN) Regional Manager on the 19th of February 2014, Reference No: **NC30/1/1/2/11151PR**.

Should you have any comments, queries, concerns or you would like to be treated as an Interested & Affected Party, please send your details to address provided below on or before the **15th of March 2014**

Contact Details:

Contact Person: Clarence Ntshangase.
Cell: 076 526 0160 or Fax: 086 686 6029.
Email: cntshangase@nkanyeziresources.co.za
P.O.Box 27527, Bertsham, 2013

Or Alternatively

Joey Johannes Shole
Cell: 084 601 8387
Email: jshole@nkanyeziresources.co.za

Appendix E
Copy of the Registration Form

REGISTRATION FORM

PUBLIC PARTICIPATION PROCESS WITH INTERESTED AND/OR AFFECTED PARTIES

Please complete the form and return

To : Nkanyezi Resources (Pty) Ltd

P.O.Box 27527

Bertsham, 2013

Fax: (086) 686 6029

Email: cntshangase@nkanyeziresources.co.za

Project Title:	Nirvana Iron Ore & Manganese
DMR Ref No:	NC30/5/1/1/2/11151PR
Key Contact Person:	Clarence Ntshangase
Alternative Contact Person	Joey Johannes Shole

You are hereby invited to register as interested and/or affected parties in line with the requirements of a formal acceptance letter received by Nkanyezi Resources (Pty) Ltd, from The Department of Mineral Resources (Kimberly). And to further participate in the process of compilation of an EIA, and ultimately an EMP. Respondents are responsible to provide input and comments within the specific time frames as specified in the formal acceptance letter.

Full Name	
Surname	
Capacity	
Organization	
Physical Address	
Postal Address	
Tel	
Fax	
Mobile	
Email	

1	Are you an interested and/or affected party?		
	No	Yes	Other
	If the answer is yes, how so?		
2	How will the proposed project affect you?		
	State the reasons:		

3	Will the project have any detrimental effect on the Heritage, Culture, and history of the area?		
	NO	YES	NOT SURE
	If yes, explain?		
4	Will the project have any negative impact on the environment?		
	NO	YES	NOT SURE
	If yes can you provide reasons?		
4	The project will have a negative effect on the appearance of the area and erode sense of place - i.e. negative visual impact.		
	NO	YES	I DON'T KNOW
	Explain if necessary		
5.	General Comments		

Public Participation Report

Nirvana Iron Ore & Manganese [Prospecting Rights] Application
Nkanyezi Resources (Pty) Ltd

Appendix C

Quantum Calculations

Appendix D

Letter of Financial Guarantee



NKANYEZI

Reg No. 2012/025313/07

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The Regional Manager
Kimberly DMR Office
65 Phakamile Mabija Street
Perm Building,
Kimberly, 8300

10 January 2014

Dear Sir/Madam

FINANCIAL GUARANTEE FOR PROSPECTING RIGHTS APPLICATIONS

I, the undersigned **Mr Clarence Mando Ntshangase** of **Nkanyezi Resources (Pty) Ltd** do hereby irrevocably declare that, the company (applicant) have agreed to be a Primary Guarantor on the proposed **Nirvana Ferrous Metals Project**. The proposed project covers the farms listed below:

1. Louwensrust 287 Kuruman Portions (0 & 01)
2. Louwensrust 291 Kuruman Portion (0)

The estimated costs of the Exploration Programme is approximately R3, 0000.000.00 Three Million Rands, and I confirm that **Nkanyezi Resources (Pty) Ltd** as a Primary Guarantor has the Financial Credibility and Creditability to meet this obligation once the Prospecting Rights has been granted

For any further clarification, please do not hesitate to contact me on [Mr Clarence Mando Ntshangase Cell 076 526 0160]

Yours Faithfully

Clarence Mando Ntshangase

Shareholder

DIRECTORS

J. J. Shole | P. Mudau | T. Molefe | L. Mohlabi

Appendix E

Summary of the assessment of the significance of the potential impacts and the proposed mitigation measures to minimise adverse impacts.

The table with Activities and impacts for the proposed Nirvana Ferrous Project [Ref No: NC/30/5/1/1/2/11151PR]

Potential Environmental Impact	Activity	Environmental Significance before Mitigation							Recommended Mitigation Measures/Remarks	Environmental Significance after Mitigation						
		E	D	M	P	TT	SR	CI		E	D	M	P	TT	SR	CI
Issues that relates to water resources																
Contamination of water resources from spillages	Exploration site mobilisation, drilling equipment movement, and the actual drilling	3	4	6	2	26	L	M	Where fluids that have a potential to be contaminants are transported through the access ways, and other temporary road ways, measures shall be put in place to ensure that such fluids are stored in spillage proof container. Further to that spillage kits must be in stock for emergency purpose.	1	3	4	2	20	L	L
Contamination of surface water due to seepage and human waste discharge	Break-down maintenance of equipment, vehicles. Reseeding or replanting of the lost vegetation. During fencing of the target area, testing of ground water quality	3	4	6	2	26	L	M	All contractors and exploration crew shall ensure that an areas are well demarcated, especially areas for break-down maintenance of the equipment and vehicles as well as storage of spare fluids. The storage for hazardous fluids will be underlain by sand bags, beneath the sand bags will be plastic sheeting's. The storage facilities for such materials or maintenance facilities shall not be within 800meters from any water course.	1	3	4	2	20	L	L
Issues that relates to Soil and Geology																
Soil Erosion	Constant existence of on-site exploration camp, transportation of material and labour, transportation of core samples, the storage of core	1	3	2	2	12	N	N	An exploration footprint will be kept as minimum as possible, where possible the crew and contractors will use an existing access ways, open fields and other sites that are not covered by any vegetation. The storm water management will be implemented in areas where it is unavoidable to clear vegetation. Ground will be stabilised through re-vegetation. Soil fertility will be boosted by an application of fertilisers before any vegetation can be replanted, this will allow for	1	1	2	2	8	N	N

[illegible]

Noise Pollution	Constant existence of on-site exploration camp, transportation of material and labour, transportation of core samples, the storage of core samples in the core shed	1	1	2	5	20	L	L	L
<p>All the equipment such as drill rigs, water tankers, trucks etc must be fairly modern and compliant with South African Bureau of Standard (SABS). Planning does not include any drilling thus far; hence there will never be any need for sirens etc. Personnel working on-site especially those working on the drill rigs must be supplied with ear plugs. The impact of noise shall be minimised by restricting the hours during which the noisy activities are carried out and where possible, by insulating machinery and/or enclosing areas of activity. Operational activities that generates noise shall be restricted to between 06h00 and 16:30 Mondays to Fridays, and Saturdays only per special arrangement with interested and affected parties.</p> <p>Noise coming from operational activities shall not exceed the ambient noise level with more than 7db or more when measured at the nearest dwelling (Mzi)</p>									
Issues related to Flora and Fauna									
Biodiversity	Constant existence of on-site exploration camp, transportation of material and labour, transportation of core samples, the storage of core samples in the core shed	1	3	6	4	40	M	M	L
<p>Inevitably the surface will become compacted due to an unusual amount of traffic moving in the target area, or farm. This will require a measure of ripping the affected ground. The exercise allows for the growing of vegetation, all rehabilitation will start immediately after the exploration on that area is completed. Vegetation clearing will be limited to areas only earmarked for exploration, and site camp establishment, where necessary site camp will be established on an already existing open ground. Relevant authorities will be notified if any endangered species is sighted within the target area. Only indigenous plant species will be planted in areas where rehabilitation is required. Prevention of a proliferation of alien vegetation species in the area.</p>									
Biodiversity Loss	Constant existence of on-site exploration camp, transportation of material and labour,	1	3	6	4	40	M	M	L
<p>Due to compacting of the soil by heavy vehicles and other machinery, it will become necessary that contractors working on-site scarify compacted ground, including some access way that might have been constructed, which might no longer be in use.</p> <p>Vegetation clearing will be limited to areas that have been</p>									

[illegible]

	samples in the core shed																	
Disturbance of animals	During rehabilitation of Borehole Collars, Constant existence of on-site exploration camp, transportation of material and labour, transportation of core samples, the storage of core samples in the core shed	2	3	2	4	28	L	M	Most of the animals currently on the farm are cattle's, kept by some property owners. There aren't any endangered animal species on the farm or target area.	1	3	2	2	12	L	L		
Issues related to Social Conditions, Health & Safety and other																		
Safety	Drilling, Transportation of hazardous materials, storage thereof. The fencing of target area and rehabilitation work. Construction of temporary access ways, reseeded/planting of disturbed areas and testing of water quality	2	3	2	2	14	N	N	Occupational health & safety remains the key aspect of the proposed Groenvallei Coal Project exploration. The contractors shall ensure that before any exploration commence proper training is provided that covers First Aid, Safety inspection and Health awareness. The site shall at all times have First Aid Kit. Warning signs will be erected on the Farm perimeter fence, as well as the fence enclosing the actual drilling site. People will be made aware of the danger on-site, and that they must stay clear from the drilling site. All the necessary warning signs, tapes and other will be clearly placed.	1	1	2	2	8	N	N		
Waste	All the activities involved in exploration projects are associated with waste generation, be it human waste,	1	1	2	2	8	N	N	Three bins of 50liters will be placed around the site, with the bin allocated for hazard waste placed inside the campsite enclosure. Portable Four (4) Portable toilets will be sourced from an independent supplier, the supplier shall be responsible for clearing the toilets on a four day cycle.	1	1	2	1	4	N	N		

