

# mineral resources

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

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First Floor, Liberty Corner, 29-31 Curry Street, Kimberley 8301

Directorate: Mineral Regulation, Northern Cape      Date: 04 June 2012  
Enquiries: **Mr. Peter Mohasoa**  
Ref: NC 30/5/1/1/3/2/1/10117 EM

The Director  
South African Heritage Resources Agency  
PO Box 4637  
CAPE TOWN  
8000

**Attention: Mrs Nonofho Ndobochani**

**CONSULTATION IN TERMS OF SECTION 40 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT 2002, (ACT 28 OF 2002) FOR THE APPROVAL OF AN ENVIRONMENTAL MANAGEMENT PLAN FOR PROSPECTING RIGHTS ON THE REMAINING EXTENT AND PORTION 1 OF THE FARM ZAAI-KLIPHEUVELS NO.414 AND PORTION 1, 2 AND THE REMAINING EXTENT OF THE FARM KLIPHEUVELS NO.393 SITUATED IN THE MAGISTERIAL DISTRICT OF FRASERBURG, NORTHERN CAPE REGION.**

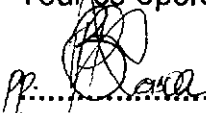
**APPLICANT: MONAFA TRADING CC**

Attached herewith, please find a copy of an EMP received from the above-mentioned applicant for your comments.

It would be appreciated if you could forward any comments or requirements your Department may have to this office and to the applicant before the **3<sup>rd</sup> August 2012** as required by the Act.

Consultation in this regard has also been initiated with other relevant State Departments. In an attempt to expedite the consultation process please contact **Peter Mohasoa** of this office to make arrangements for a site inspection or for any other enquiries with regard to this application.

Your co-operation will be appreciated.

  
.....  
**REGIONAL MANAGER: MINERAL REGULATION**  
**NORTHERN CAPE REGION**  
DATE: 04 June 2012



# mineral resources

Department:  
Mineral Resources  
REPUBLIC OF SOUTH AFRICA

NAME OF APPLICANT: **MONAFA TRADING CC**

REFERENCE NUMBER: **NC30/5/1/1/2/10117 PR**

## **ENVIRONMENTAL MANAGEMENT PLAN**

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

Documents received in terms of the Mineral and Petroleum  
Resources Development Act, 2002 (Act 28 of 2002)  
NORTHERN CAPE REGION  
24 MAY 2012  
HEWITTY  
Signature:.....  
DEPARTMENT OF MINERAL RESOURCES

## **STANDARD DIRECTIVE**

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

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

Name	Monafa Trading cc
Tel no	011 402 2812
Fax no:	011 312 9768
Cellular no	071 892 0558
E-mail address	<a href="mailto:kgomotso@inclusivediamond.com">kgomotso@inclusivediamond.com</a>
Postal address	10th Floor Hallmark Towers, 54 Siemert Road, Doornfontein, Gauteng

UGWA CONSULTING SERVICES
011 312 9765
011 312 9768
078 816 7281
<a href="mailto:murendeni@ugwa.co.za">murendeni@ugwa.co.za</a>
P.O. BOX 4077, HALFWAY HOUSE, 1685

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

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

The area concerned is a farm area with several portions of the farm being used for crop farming which consist of green fields, that has vegetation and small animals; and a stream that cuts across the farm.

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

- Water  
Water sources such as wetlands, rivers, watertable, etc. will be protected from oil leakages.
- Soil  
Need protection from contamination of oil leakages resulting from drilling machines and vehicles.

- **Vegetation**

This includes vegetation that will be removed during access road construction and drilling. After rehabilitation all vegetation will be re-grown. This will be done by collecting seeds of all vegetation that will be removed.

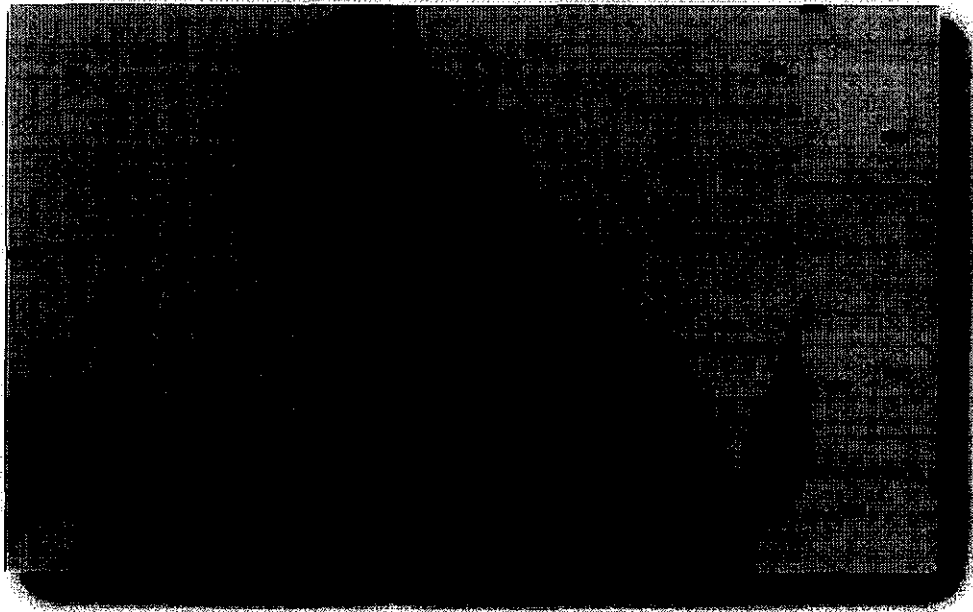
- **Air**

Dust accumulates from drilling machinery and vehicles, the spraying of water will be used to minimise dust accumulation.

- **Fauna and Flora**

Vegetation and small animals that will be affected by removal/ clearing of vegetation. The vegetation will be re-grown or moved that way the fauna will be saved.

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



A schematic diagram showing the relevant farm portions in details

**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.**

Consultation with landowner is on its peak, letters, E-mails as well as telephone conversation will serve as the basis of the EMP (see proof of consultations submitted). This was done by asking about the land use before going on site, taking into consideration domestic animals and also the fact that there will be children and adults in the vicinity of the area during drilling. Care must be taken to prevent damage to property, livestock, domestic animals as well as injury to humans.

## **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 )**

Field mapping will take place, after that construction of temporal access roads will be carried out and top soil will be stored in stock piles in a close by location, after which geophysical methods will be applied to allocate the ore body, after which allocation of drill holes. Drilling will take place and then core logging will be done. Access roads will be made for easy access to the application area, if existing roads exists, the roads will be improved to expectations of the vehicles that will be used.

#### **2.1.2 Plan of the main activities with dimensions**

Drilling and geophysics are the main activity. This will involve walking with a geophysical equipment in order to obtain data on a 2km x 2km grid area, while the total area in 7km x4km. Drilling will involve working on the results of the geophysics in order to draw up your grid lines, which is usually a 500mx500m grid.

### **2.1.3 Description of construction, operational, and decommissioning phases.**

#### **The construction phase**

During the construction phase there will be site clearance for road construction where construction equipment will be placed; there will be some vegetation cover that will be removed. This is a preparation stage of the site before actual drilling takes place. This will cause a lot of dust accumulation that will be prevented by spraying water on the soil to minimise the dust accumulation.

#### **The operational phase**

The operational phase of the project will involve the setting up of drill rigs, survey and the use of Geophysical equipment to know which area can be drilled to understand the ore body much better as well as the actual drilling. Noise will also be experienced due to the drilling machinery, ear plugs will be used to minimise the noise from machinery.

#### **The decommission phase**

Decommissioning phase involve ceasing of operations. During decommissioning phase, all areas that have been disturbed will have to be rehabilitated. All equipment will be removed from the site.

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

Activity 19: Any activity which requires a prospecting right or renewal thereof in terms of section 16 and 18 respectively of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

## **2.2 Identification of potential impacts**

(Refer to the guideline)

### **2.2.1 Potential impacts per activity and listed activities.**

- **Vegetation clearance**  
The vegetation clearance will affect fauna and flora; this disrupts the natural habitants of animal species.
- **Water pollution due to operational activities**  
Oil leakages from drilling machinery and vehicles.
- **Socio-economic impacts**  
During construction temporary staff will be obtained from locals during prospecting phase which will contribute to socio-economic upliftment of the area.

### **2.2.2 Potential cumulative impacts.**

- **Gain of potential and possible income**  
Because of employment which will contribute to positive economic and social impacts.
- **Water pollution**  
From oil leakages from drilling machinery and vehicles
- **Dust**  
During drilling and construction of road access a lot of dust will be accumulated which will have an impact on the employees conducting such operations, that's if they don't have the correct PPE's. This will lead to diseases such as asthma and relating lung infections which might lead to death and loss of income.
- **Soil pollution**  
When oil leakages occur, the oil spills on the soil and kill some vegetation and when it rains due to runoff water will flow into a water body either a watertable or river causing water pollution and the animals will die and if the river is used as drinking water then humans will have health problems thus cumulative impacts.



### **2.2.3 Potential impact on heritage resource**

None, all work will avoid graves, churches, old buildings and the residential area at large. If there are any presence of graves, archaeological specialists from the South African Heritage Resources Agency. Drilling or any mining activities will be on halt until the investigation is finalised.

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

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

- **Noise pollution**  
Noise from drilling machinery and vehicles
- **Employment creation**  
When mining activities or road construction begins there will be a lot of job opportunities for the local community.
- **Social impacts like HIV and AIDS as a results of construction workers on site**

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

Security, safety, privacy and compensation issues by the land owner were discussed and a mutual agreement will be reached soon. These talks took into consideration the amount of revenue which is most likely to be lost due the prospecting activity on the land and a common ground must be reached. Issues such as food, accommodation, and security were also addressed (see submitted proof of consultation).

### **2.2.6 Confirmation of specialist report appended.**

(Refer to guideline)

Specialist studies will be done during mining right applications when conducting detailed Environmental Impact study.

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

**3.1 Assessment of the significance of the potential impacts**

**3.1.1 Criteria of assigning significance to potential impacts**

The desktop studies and also the impact that the prospecting operations will cause on the environment, health and socio economic factors including the cumulative and also the effects of such an impact.

**Assessment of impacts will be guided by the following criteria:**

- **Assessment Criteria for Impacts:**

As a means of determining the significance of the various impacts that can or may be associated with the proposed prospecting right application, a series of assessment criteria must be used for each impact. These criteria include an examination of the nature, extent, duration, intensity and probability of the impact occurring, and assessing whether the impact will be positive or negative for the biophysical and social environments at and surrounding the site.

- **Nature:**

This is an appraisal of the type of effect the activity would have on the affected environment. This description includes what is being affected and how.

- **Extent:**

This indicates the spatial area that may be affected by the impact and further describes the possibility that adjoining areas may be impacted upon. This includes four classes that are listed as follows:

Local (extending only as far as the site)

Limited (limited to the site and its immediate surroundings)

Regional (extending beyond immediate surroundings to affect a larger area)

National (extending to other areas in other provinces)

- **Duration:**

This refers to the period of time that the impact may be operative for (i.e. the lifetime of the impact). This includes the following four classes that are listed as follows:

Short (i.e. 0 – 5 years)

Medium (i.e. 5 – 15 years)

Long (i.e. >15 years and/or where natural processes will return following the cessation of the activity or following human intervention).

Permanent (i.e. where mitigation either by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient).

- **Intensity:**

This indicates whether the impact is likely to be destructive or have a lesser effect. Three such classes of intensity are defined and these are listed as:

➤ Low (i.e. where natural, cultural and social functions and processes are not affected by the development)

➤ Medium (i.e. where the natural, cultural and/or social functions and processes are affected by the development but can continue in a modified way)

➤ High (i.e. where natural, cultural and/or social functions are altered to the extent that it will temporarily or permanently cease)

- **Probability:**

This refers to the likelihood of the impact actually occurring. The following four classes are used to describe the probability of the impact:

Improbable (i.e. low possibility of the impact)

Probable (i.e. a distinct possibility exists that the impact will occur)

Highly probable (i.e. more than likely that the impact will occur)

Definite (i.e. the impact will occur regardless of any preventative mitigation/measures)

- **Significance:**

The significance of the impact (i.e. whether it will lead to a marked change in the environment or not) is determined through a synthesis of the aspects produced in terms of their nature, duration, intensity, extent and probability. Four classes of significance exist including:

None (the impact will not have an influence on the decision and requires no mitigation)

➤ Low (the impact will have a limited influence on the decision and requires mitigation to manage the environment)

➤ Medium (it is likely that to have an influence on the decision and requires mitigation)

➤ High (mitigation is required and this may not be sufficient to ensure that the environment is not detrimentally affected by the proposed development).

- **Cumulative Effects:**

It is important to assess the natural environment using a systems approach that will consider the cumulative impact of the various actions. A cumulative impact refers to the impact on the environment, which results from the incremental impact of the actions when added to other past, present and reasonably foreseeable future actions regardless of what agencies or persons undertake such actions. Cumulative impacts can result from individually minor but collectively significant actions or activities taking place over a period of time.

Cumulative impacts can take place so frequently in time that the effects cannot be assimilated by the environment.

- **Identification of Mitigation Measures:**

The mitigatory measures should describe possible actions for the mitigation of the significant negative environmental impacts identified in the assessment. The philosophy of identifying mitigation measures for negative impacts will be based on the reduction of the impact at source, the management of the impact through monitoring and control, and the involvement of the I&APs in consideration of mitigating measures, where appropriate.

- **Maximisation of Positive Impacts:**

The philosophy to be followed will focus on maximizing the benefits to the local environment

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

- Air pollution and vehicles

Air pollution will be caused by drilling machinery that will be used onsite, this includes the dust that accumulates when access road are being constructed and during operational phase. This will occur in the site and the probability of the impacts to occur is high.

- Soil pollution

When drilling machinery and vehicles have oil leakage they spill into the soil and contaminate the soil, this might be occurring.

- Soil pollution

During rainy seasons runoff occurs and the contaminated soil is washed into water bodies such as watertable and river thus contaminating the water.

### **3.1.3 Assessment of potential cumulative impacts.**

Cumulative impacts

When mining activities are underway including access roads constructions this creates job creations thus will lead to employees relocating to the mine site. Men will leave their wives at home and get new wives at the mining site this will create trust problems and would also lead to HIV/AIDS and thus the virus will spread not only locally but nationally thus leads to accumulative impacts.

### **3.2 Proposed mitigation measures to minimise adverse impacts.**

Environmental awareness will be done prior to prospecting operation with all the project personnel to let them aware the do's and undo's during prospecting operation.

Monitoring, as well as strict adherence to the EMP submitted to the relevant authority i.e.

- **Dust**

Cumulated dust from drilling machinery and vehicles, water will be used to minimise dust accumulation. This will be done by spraying water on the dust before any activities can occur.

- **Flora**

For every vegetation removed onsite seeds will be planted in a different location so that when rehabilitation occurs the plants can be replanted thus fauna will also relocated back to its natural habitat. No hunting will be allowed during prospecting operation by employees or any contractor and no wood collection must be done.

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

- Drilling
- Stock piling of top soil
- Vegetation clearance
- Socio-economic impacts

### **3.2.2 Concomitant list of appropriate technical or management options**

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

- Operate during the day to minimise noise
- Avoid vegetated area as well as crops to minimise loss
- Spray water during drilling
- Contain water being used and control water spillage
- Any accidental spillages will be cleaned immediately to avoid any contamination with ground or surface water during rainy periods.

### **3.2.3 Review the significance of the identified impacts**

(After bringing the proposed mitigation measures into consideration).

After consideration of the mitigation measures, impacts will be less/minimal.

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

#### **4.1 Plans for quantum calculation purposes.**

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

See attached quantum

#### **4.2 Alignment of rehabilitation with the closure objectives**

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

- Drill holes will be capped
- All access road will be rehabilitated to an extent that will allow re-vegetation
- Fences will be reconstructed

Were necessary even boreholes for water will be closed up

#### **4.3 Quantum calculations.**

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

See attached copy.

#### **4.4 Undertaking to provide financial provision**

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

The amount will be available should the right be granted, though a final amount cannot be committed for such a project, there is a provisional budget set aside.

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

#### **5.1 List of identified impacts requiring monitoring programmes.**

- Dust
- Soil pollution
- Water Pollution
- Fauna and Flora
- Soil erosion
- Waste management
- Socio-economic impacts monitoring

#### **5.2 Functional requirements for monitoring programmes.**

Monitoring will be done once in a week and compliance report will be compiled and sent to the Authority for the duration of the project.

#### **5.3 Roles and responsibilities for the execution of monitoring programmes.**



- Spraying of water during dust accumulation. This will carry on for the duration of the project as dust accumulation will constantly be there due to moving machinery.
- Monitoring and controlling water use as well as water contamination.
- Monitor trucks and machines, to avoid and minimise oil spillage and other kinds of fuel.

#### **5.4 Committed time frames for monitoring and reporting.**

The monitoring and reporting will carry on for the duration of the operations.

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

#### **6.1 Rehabilitation plan**

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

The area to be prospected is not easy to show before desktop studies, but all means and efforts will make sure to demarcate the possible area to be drilled and prospected, thus to be as far away from people as possible including water, rivers and animals as well as vegetation.

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

During closure of the mining activities all cleared vegetation will be re-grown after rehabilitation to leave the land as it was found or even better than it was before prospecting.

#### **6.3 Confirmation of consultation**

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

Consultations will be finalized on the final meeting with the landowner as negotiations and talks are still in progress at the present moment although letters of consultations are attached.

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

**7.1 Identification of interested and affected parties.**

(Provide the information referred to in the guideline)

See the attachments on consultations proof appendices

**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.**

Consultation was done by an Environmental Assessment Practitioner through sending registered letters that pertain all information regarding prospecting as well as the company that's making an application and what is being expected from all interested and affected parties.

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

Landowner, community, trust and the municipality.

FARM NAME	PORTION NUMBER	CONTACT PERSON	TEL: CELL:
Grootfontein 392	00	Grootfontein Boerdery Trust	
Steenkamps Vlakte 416	04	Jan & Soria Van Wyk Familie Trust	

Droogfoots Fontein 356	01	Eric & Marita Pienaar Familie Trust	
Klipheuvelds 393	00	Grootfontein Boerdery Trust	
Klipheuvelds 393	01	Stadig Eiendomme Pty Ltd	
Klipheuvelds 393	02	Bosman Hermanus Abram	Home (028 435 6174) Work (021 859 4785)
Bamburger's 355	00	Mun Gebied Van Fraseburg	
Zaai-Klipheuvelds 414	00	Maritz Hilda Aletta	023 741 1406
Zaai-Klipheuvelds 414	01	Maritz Frans Stephanus Jacobus	
Zaai-Klipheuvelds 414	02	Boereplaas Abattoir CC	

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

- Safety
- Privacy
- Employment generation
- Social upliftment
- Environmental rehabilitation
- Compensation for prospecting
- Time frames for drilling
- Partnership
- Health issues.

**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.**

- Safety
- Privacy
- Employment generation
- Social upliftment
- Environmental rehabilitation
- Compensation for prospecting
- Time frames for drilling
- Partnership
- Health issues.

**7.2.5 Other concerns raised by the aforesaid parties.**

None

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

An official public participation meeting has not been scheduled but consultation letters have been sent to the interested and affected parties see the attachments on consultations proof appendices

**7.2.7 Information regarding objections received.**

None so far, but we still waiting for further comments from interested and affected parties.

**7.3 The manner in which the issues raised were addressed.**

As of the present moment, there are no unresolved issue, but should any arise after the submission of the EMP, they will be forwarded to the relevant authority and the client; the consultant will try by all means to resolve them.

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

### **8.1 Employee communication process**

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

An environmental awareness campaign will be done before any prospecting takes place with the objective of making all prospecting teams aware of what is required and what is not required. It will also outline all aspects outlined in the EMP that the contractor must be aware of.

### **8.2 Description of solutions to risks**

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

All risks with this kind of prospecting are minimal, though no risk is anticipated; there are funds as well as man power that will be deployed to address any possible and potential risks.

Spillages as risks and mitigation measures will be cleaned immediately if it occurs. All equipment's will have to be inspected for any fault before being used to avoid any leakages or oil spills. Incidences in the form of not having protective clothing by employees on site, the solution will be to provide all employees on site with protective clothing before doing actual work. All visitors must also be supplied with correct PPE's.

### **8.3 Environmental awareness training.**

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

Environmental awareness or induction will be done prior to commencement of prospecting activities or mining activities so that all personnel will be aware of all risks, impacts associated with their operations and how those risks and impacts might be minimised.

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

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

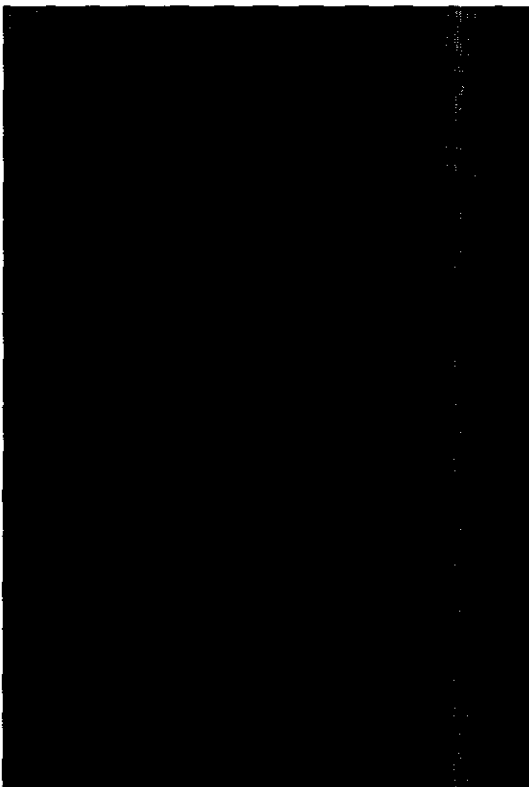
(Provide a detailed explanation as to how the amount was derived)

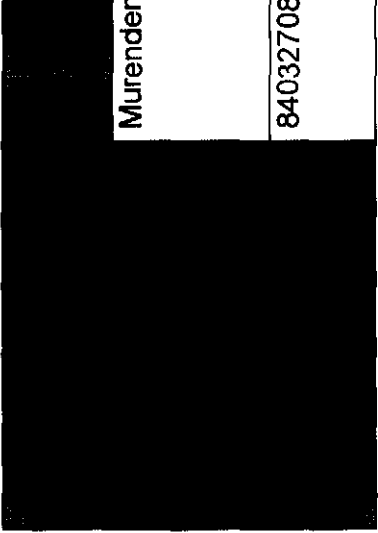
This solely depends on the area and environmental aspect to be rehabilitated shown on cost breakdown. It should be further noted that each site has got a different rehabilitation amount set aside, should anything not go the way anticipated. The PWP states that the

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

The amount stated in the PWP is R2000000

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





Murendeni Neluvhalani

8403270842089

-END-

**TABLE 4: CALCULATION OF THE QUANTUM**

Mine:		Monafa Trading CC NC5/1/15/10117PR			Location:		Midrand		
Evaluators:		Ugwa Consulting Services			Date:		17/02/2012		
No	Description	Unit	A Quantity Step 4.5	B Master rate/specific applied rate Step 4.3	C Step 4.3	D Weighting factor 1 Step 4.4	E=A*B*C*D Amount (rands)		
1	Dismantling of processing plant and related structures (Including overland conveyors and power lines)	m <sup>2</sup>				1.00	1.00	R	-
2(A)	Demolition of steel buildings and structures	m <sup>2</sup>				1.00	1.00	R	-
2(B)	Demolition of reinforced concrete buildings and structures	m <sup>2</sup>				1.00	1.00	R	-
3	Rehabilitation of access roads	m <sup>2</sup>	475	R 24.11	1.00	1.00	R	11,452	
4(A)	Demolition and rehabilitation of electrified railway lines	m	-					R	-
4(B)	Demolition and rehabilitation of non-electrified railway lines	m	-					R	-
5	Demolition of housing and/or administration facilities	m <sup>2</sup>	-		1.00	1.00	R	-	
6	Opencast rehabilitation including final voids and ramps	ha			0.50	1.00	R	-	
7	Sealing of shafts, adits and inclines	m <sup>3</sup>						R	-
8(A)	Rehabilitation of overburden and spoils	ha			1.00	1.00	R	-	
8(B)	Rehabilitation of processing waste deposits and evaporation ponds (basic, salt-producing waste)	ha			1.00	1.00	R	-	
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (acidic, metal-rich waste)	ha						R	-
9	Rehabilitation of subsided areas	ha						R	-
10	General surface rehabilitation	ha	0.5	R 74,614.11	0.52	1.00	R	19,400	
11	River diversions	ha						R	-
12	Fencing	ha			1.00	1.00	R	-	
13	Water management	ha							-
14	2 to 3 years of maintenance and aftercare	ha	2.0	R 9,929.63	0.52	1.00	R	10,327	
15a	Specialist study	sum			1.00	1.00	R	-	
(Sum of items 1 to 15 above)								R	41,179
Multiply by Weighting factor 2 (Step 4.4)			1.10		= R			R	45,297
1	Preliminary and General		Add 6% of Subtotal 1 if Subtotal 1 ≥ R 100,000,000.00						
2	Contingencies		Add 12% of Subtotal 1 if Subtotal 1 ≤ R 100,000,000.00					R	4,941
Sub Total 2								R	4,118
(Subtotal 1 plus sum of management and contingency)								R	45,297
Sub Total 3								R	54,356
VAT @ 14 % of Subtotal 3								R	7,610
GRAND TOTAL (Subtotal 3 plus VAT)								R	61,966