



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

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Ref: NCS 30/5/1/3/3/2/1(10106)MP

4 February 2013

REGISTERED MAIL

The Director
SAHRA
P O Box 4637
CAPE TOWN
8000

CONSULTATION IN TERMS OF SECTION 40 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) FOR THE APPROVAL OF ENVIRONMENTAL MANAGEMENT PLAN IN RESPECT OF A PORTION OF LOT 1076 A PORTION OF LOT 455 OF OLYVENHOUTSDRIFT SETTLEMENT ADMINISTRATIVE DISTRICT: KENHARDT

APPLICANT: KOBUS DUVENHAGE BOUERS BK

Attached herewith, please find a copy of the Environmental Management Plan received from the above-mentioned applicant, for your comments.

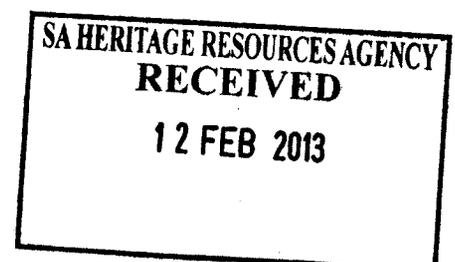
It would be appreciated if you could forward any written comments or requirements your department may have in the case in hand to this office on or before **31 March 2013**.

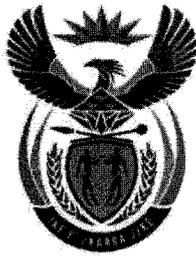
Consultation in this regard has also been initiated with other relevant State departments.

Your co-operation will be appreciated.

Yours faithfully


**REGIONAL MANAGER: MINERAL REGULATION
NORTHERN CAPE REGION**





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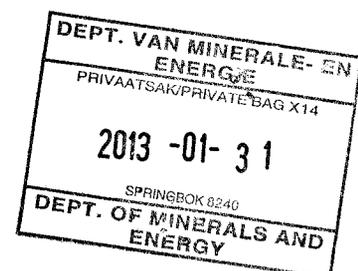
NAME OF APPLICANT: Kobus Duvenhage Bouers BK

REFERENCE NUMBER: NC30/5/1/3/2/10106 MP

ENVIRONMENTAL MANAGEMENT PLAN FOR SMALL-SCALE MINING

**APPLICABLE TO MINING PERMITS WHERE LESS
THAN 2000 m³ PER QUARTER WILL BE
EXCAVATED USING MANUAL LABOUR
TECHNIQUES AND
NOT TO BE USED FOR GOLD OR COAL MINING**

**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)**



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

1.1 Identification of interested and affected parties

IDENTIFICATION CRITERIA	Mark with an X where applicable	
	YES	NO
Has the landowner been identified?	X	
Is there a lawful occupier on the property other than the Landowner?		X
Is there a tribal authority or host community that may be affected?		X
Can it be confirmed that there are no land claims in respect of the area?	X	
Have the landowners or lawful occupiers of neighbouring properties been identified?	X	
Has the local municipality been identified?	X	
Are there power lines within 100 metres of the area applied for?		X
Are there public roads or railway lines within 100 metres of the area applied for?		X
Is there any other infrastructure within 100 metres of the area applied for? (Specify)		X
Has the Provincial Department responsible for the environment been identified?	X	
Have all of the parties identified above been provided with a description of the proposed mining operation as referred to in paragraph 2 below?	X	
Have all the parties identified above been requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?	X	

1.2 List of parties identified in 1.1 above that were in fact consulted.

LIST THE NAMES OF INTERESTED AND AFFECTED PARTIES CONSULTED	LIST THE INTEREST OF THE INTERESTED AND AFFECTED PARTIES CONSULTED e.g. Landowner, Neighbours, Community representative, Land claims commissioner, Local municipality, Government departments responsible for the environment, Departments or agencies responsible for infrastructure in the area.
Kobus Duvenhage Bouers BK	Landowner and applicant
W.I.B. Engelbrecht Khara Hais Municipality	Local Authority Khara Hais Municipality
H.C. Lambrecht	Neighbouring Landowner
Advertisement in press	General public
DESCRIBE BELOW HOW THE CONSULTATION WAS CONDUCTED Mark with an X where applicable	
Written communication (Written responses must be attached as an annexure)	X
Meetings (Minutes of meetings must be attached as an annexure)	
Other (specify)	X

Diagram 3: Landscape showing the main mining activities such as excavations, stockpiles, buildings, and processing plant



Soil

The soils in a regional context are reddish, moderately shallow, sandy, and often overlay layers of calcrete of varying depths and thickness. The soils are typically weakly structured with low organic content. These soils drain freely which results in a soil surface susceptible to erosion, especially wind erosion when the vegetation cover is sparse and gully erosion in areas where storm-water is allowed to concentrate. The soils in the area are generally not suitable for dry land crop production therefore the pre-mining land capacity is categorized as Class III grazing land. The productivity of the area is very low at 8-10Ha/SSU.

Natural vegetation / plant life

Only pioneer species due to previous disturbance dominated by *Galenia africana* and *Blackalea inflata* an exotic species. The natural vegetation surrounding the proposed mining area is dominated by Bushmanland grassland. This vegetation type is characterized by *Rhigozum tricototum*, *Sipagrostis obtusa* and *S. ciliata*. On the rocky areas *Lyceum* spp., *Laperosia* spp., *Senesio* spp., *Salsola* spp and *Aloe claviflora* are dominant. Other species include *Zygophyllum retrofractum* and *Asparagus* spp. Trees area represented by *Aloe dichotoma* and *Acacia karoo* in the drainage channels together with *Prosopis* spp. an exotic species.

Animal Life

Larger herbivore species are absent due to the conflicting land use. The habitat is well represented in the surrounding area.

Surface Water

No drainage channels occur within the mining area and there is no dendritic system which could be disturbed. Surface water only accumulates in the excavations after exceptional good rains. Given the variability of semi-arid rainfall, the calculation of the mean annual runoff (MAR) would be of no use. The MAR is in any event very low given the low rainfall less than 250 mm per year occurring mainly in the summer months, high evaporation rates, and shallow grade of the slope toward the drainage channels and the permeability of the soils. The surface water quality (when available) is suitable for animal consumption but not for potable water. No natural wetlands exist in the area.

Groundwater

No groundwater will be used during the mining operation.

Air Quality

The air background quality is very good due to low industrial activity and very low population density. Given the surrounding extent of semi-desert, dust generation is high under windy conditions (dust storm) however under normal conditions no extreme dust conditions are noted on site.

- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the mining operation, be corrected and the area be seeded with a seed mix to the Regional Manager's specification.

4.1.2 Rehabilitation of the office/ campsite

- On completion of operations, all buildings, structures or objects on the camp/office site shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002):
- Where office/camp sites have been rendered devoid of vegetation/grass or where soils have been compacted owing to traffic, the surface shall be scarified or ripped.
- Areas containing French drains shall be compacted and covered with a final layer of topsoil to a height of 10cm above the surrounding ground surface.
- The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a vegetation seed mix to his or her specification.
- Photographs of the camp and office sites, before and during the mining/ prospecting operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of the Regional Manager.

4.1.3 Rehabilitation of vehicle maintenance yard and secured storage areas

- On completion of mining/prospecting operations, the above areas shall be cleared of any contaminated soil, which must be dumped as referred to in section F 2.4.3 above.
- All buildings, structures or objects on the vehicle maintenance yard and secured storage areas shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002.
- The surface shall then be ripped or ploughed to a depth of at least 300mm and the topsoil previously stored adjacent the site, shall be spread evenly to its original depth over the whole area. The area shall then be fertilized if necessary (based on a soil analysis).
- The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.

4.1.4 Rehabilitation of access to a river bed

- When rehabilitating the access point, the original profile of the river-bank will be re-established by backfilling the access point with the original material excavated or other suitable material.
- The topsoil shall then be returned over the whole area to its original depth and if necessary fertilized and the vegetation allowed to grow.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the mining/prospecting operation be corrected and the area be seeded with a seed mix to his or her specification.
- In the event of damage from an occurrence where high flood waters scour and erode access points in the process of rehabilitation over the river-bank or an access point currently in use, repair of such damage shall be the sole responsibility of the holder of the mining permit or prospecting right.
- Repair to the river-bank to reinstate its original profile to the satisfaction of the Regional Manager must take place immediately after such event has occurred and the river has subsided to a point where repairs can be undertaken.

4.1.8 Final rehabilitation

- All infrastructure, equipment, plant, temporary housing and other items used during the mining period will be removed from the site (section 44 of the MPRDA)
- Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the mining area and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on the site.
- Final rehabilitation shall be completed within a period specified by the Regional Manager.

5 REGULATION 52 (2) (b) and (c): Assessment and summary (Rating) of the potential impacts of the proposed operation on the environment,

5.1 Criteria used for the significance rating.

- 5.1.1 All surface disturbances are rated high
- 5.1.2 Dust is rated low if only minimal dust is expected to accumulate over the permit period, medium if it is expected to require dust suppression such as watering, and high if there is a risk that it will migrate beyond the permit area.
- 5.1.3 Noise is rated low if no machinery is to be used, medium if machinery is to be used, and high if there is a potential for complaints from public and neighbours.
- 5.1.4 All drainage is rated high
- 5.1.5 All blasting is rated high
- 5.1.6 All dust and noise from loading, hauling and transport is rated high
- 5.1.7 Drainage from ablution facilities are rated high.

This impact assessment only deals with significant impacts. The implementation of the mitigating and management measures prescribed will address all impacts and after implementation of the mitigating measures most impacts can be classified as insignificant especially when looking at the current state of the environment

Geology

Significance/Magnitude	Duration	Probability	Timing
High	Permanent	Certain	Activity

Due to the removal and crushing of all material for road building purposes an excavation of maximum 10 meters deep will remain. No backfilling will take place therefore mixing of the geological sequence of sediment will not occur.

Topography

Significance/Magnitude	Duration	Probability	Timing
High	Long term	Certain	Activity

The excavation of the quarry without the possibility of backfilling will have a significant negative impact on the visual aspect of the generally flat topography.

Soils

Significance/Magnitude	Duration	Probability	Timing
High	Permanent	Certain	Activity

Stockpiling areas not prepared by removing of topsoil and quarrying without a soil handling program can have a significant impact. The footprint of the impact will be increased if the shallow layer of topsoil less than 20 cm is mixed with the crushed product.

Processing Plant	X	Dust	X		
		Drainage	X		
		Surface disturbance			X
OTHER (Specify)					

5.3 REGULATION 52 (2) (c) Proposed mitigation measures to minimise adverse impacts. Technical or management options chosen.

ACTIVITY Mark with X which measures are applicable	MITIGATION MEASURE	DESCRIPTION OF THE MEASURE TO BE PUT IN PLACE (e.g., Stockpiles will be thoroughly soaked once per day. e.g. Excessive dust on roads will be collected monthly and mixed into fill of excavations. e.g. Storm water trenches will be constructed with the necessary settling dams to separate clean and dirty water)
Excavations	X	Rehabilitation All rough material must be directly backfilled into the excavations and all mine waste must be directly used as backfill material. All mine waste on the mining area must be backfilled. No waste in the form of dumps or structures will remain on surface after mine closure. The high wall of the excavation will be made safe by creating benches of not more than 3 meter.
		Dust control measures
		Noise control measures
	X	Storm water system Construct concrete bund around parking area of mobile fuel tanks with bund capacity capable of collecting and holding full tank content in event of a leak Construct concrete floor with oil trap for vehicle repair bay Construct waste collection points and remove all solid waste from site and dispose of at municipal waste site on a weekly basis (do not bury or burn on site) Collect all workshop waste and oil in used oil storage area, and have oils and oil wastes collected by refining agency such as Oilkol or despatch to depot in Uppington. Construct domestic and industrial temporary storage facility with pollution control measures Maximize recycling of process water by collecting runoff in a section of the excavation
Blasting	X	Access control measures The mining area will be fenced off to prevent injuries to humans and animals. An control point will be established at the entrance
	X	Rehabilitation New stockpile sites will be GPS located and pegged with steel droppers. The site will be

OTHER (Specify)	Waste Management	X	Domestic Waste	<p>The owner will instruct the employees in the need for procedure/tasks as well as the actual handling of domestic waste, relating to domestic waste management.</p> <p>Domestic waste (lunch wrappers, containers, food tins, bottles) of daily workers as well as the domestic waste from the mining logistics will be provided for and handled as follows:</p> <ul style="list-style-type: none"> • Provide waste collection drums at strategic points (workshops/personnel amenity area, residential and recreational facilities). • Demarcate an area for and constructed as "temporary waste storage area" for temporary collection and storage of the drums, prior to delivery to Garies disposal site for disposal. (On-site dumping/burial is not allowed without registration/licensing of such a site with the Department of Environment and Water Affairs in terms of the Environment Conservation Act). • Instruct staff on the distinction between domestic refuse and industrial waste.
		X	Industrial Waste	<p>Identify and demarcate (by fences) the following sites:</p> <ul style="list-style-type: none"> • A salvage yard for temporary storage of scrap steel and equipment prior to sale or removal as scrap. Arrange regular sale and collection of scrap from the site. • A used oil collection and temporary storage area • Temporary storage area for all used lubrication products and other hazardous chemicals • No engines or other equipment parts are to be stored in the scrap yard without either having had the oil drained or suitable measures have been taken to prevent leaking of oil.
		X	Diesel and Lubricant Handling	<p>Refuelling: Refuelling of equipment from the trailer bowser will be conducted at a bunded facility, to be constructed on site. The concreted apron upon which the trailer is parked will be constructed with a drain along its extremities to collect any oil contaminated run-off and channel it to the oil trap where separated oil will be collected and disposed of in the oil recycling container. Any oil spills on the concreted apron or floor below the mobile tanker is to be treated with Spillsorb or equivalent as per the product instructions. Staff will require instruction in the identification of oil leaks on the concrete apron of the fuel tank area, the operation of the oil trap (including the disposal of trapped oil) and use of Spillsorb (or</p>

5.4 Regulation 52 (2) (c): Measures to address impacts identified by Interested and affected parties.

LIST THE POTENTIAL IMPACTS IDENTIFIED BY INTERESTED AND AFFECTED PARTIES AS RECORDED IN PARAGRAPH 1.3 ABOVE.	DESCRIBE THE MANNER IN WHICH THE IMPACTS IDENTIFIED BY INTERESTED AND AFFECTED PARTIES WILL BE ADDRESSED
None	No additional impacts except for the ones in the consultation template

In cases where a need for monitoring has been identified provide detail below. (Explain what will be monitored, how it will be monitored, by whom it will be monitored, and how frequently it will be monitored).

I will, on a bi-monthly basis, check every aspect of my operation against the prescriptions given in this document and, if I find that certain aspects are not addressed or impacts on the environment are not mitigated properly, I will rectify the identified inadequacies immediately. Regular monitoring of all the environmental management measures and components shall be carried out to ensure that the provisions of this program are adhered to.

Inspections and monitoring shall be carried out on both the implementations of the program and the impact on the environment. Visual inspections on erosion and physical pollution shall be carried out on a regular basis.

Layout plans will be updated on a regular basis and updated copies will be submitted on an annual basis to the Regional Manager together with a performance assessment and update of the financial provision for rehabilitation.

Reports confirming compliance with various points identified in the environmental management program will be submitted to the Regional Manager on a regular basis and as decided by the said manager.

Any emergency or unforeseen impact will be reported as soon as possible. An assessment of environmental impacts that were not properly addressed or were unknown when this program was compiled shall be carried out and added as a corrective action.

An open line of communication will also be kept with all interested and affected parties including the landowner during the life of the operation and any new input will be communicated to DME and recorded and addressed in the EMP.

5.5 Minimum operational standards that will be adhered to for environmental management

5.5.1 The relevant legislative provisions of the following will be adhered to

- National Monuments Act 1969 (Act 28 of 1969).
- National Parks Act, 1976 (Act 57 of 1976)
- Environmental Conservation Act, 1989 (Act 73 of 1989)
- National Environmental Management Act, 1998 (Act No. 107 of 1998)
- Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965)
- The National Water Act, 1998 (Act 36 of 1998)
- Mine Safety and Health Act, 1996 (Act 29 of 1996)
- The Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).

- The area chosen for these purposes shall be the minimum reasonably required and which will involve the least disturbance to vegetation
- No camp or office site shall be located closer than 100 metres from a stream, river, spring, dam or pan.
- No trees or shrubs will be felled or damaged for the purpose of obtaining firewood, unless agreed to by the landowner/tenant.
- Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a fire-break shall be cleared around the perimeter of the camp and office sites.
- Lighting and noise disturbance or any other form of disturbance that may have an effect on the landowner/tenant/persons lawfully living in the vicinity shall be kept to a minimum.

5.5.6 Toilet facilities, waste water and refuse disposal

- As a minimum requirement, the holder of a mining permit shall, at least, provide pit latrines for employees and proper hygiene measures shall be established.
- Chemical toilet facilities or other approved toilet facilities such as a septic drain shall preferably be used and sited on the camp site in such a way that they do not cause water or other pollution.
- The use of existing facilities must take place in consultation with the landowner/tenant.
- In cases where facilities are linked to existing sewerage structures, all necessary regulatory requirements concerning construction and maintenance should be adhered to.
- All effluent water from the camp washing facility shall be disposed of in a properly constructed French drain, situated as far as possible, but not less than 200 metres, from any stream, river, pan, dam or borehole.
- Only domestic type wash water shall be allowed to enter this drain and any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility.
- Spills will be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognized facility.
- Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., shall be stored in a container at a collecting point and collected on a regular basis and disposed of at a recognized disposal facility. Specific precautions shall be taken to prevent refuse from being dumped on or in the vicinity of the camp site.
- Biodegradable refuse generated from the office/camp site, processing areas vehicle yard, storage area or any other area shall either be handled as indicated above or be buried in a pit excavated for that purpose and covered with layers of soil, incorporating a final 0,5 metre thick layer of topsoil (where practicable). Provision should be made for future subsidence of the covering.

5.5.7 Vehicle maintenance yards, storage areas and equipment.

- Any vehicle maintenance yard and secured storage area will be established as far as is practicable, outside the flood plain, above the 1 in 50 flood level mark within the boundaries of the mining/prospecting area.
- The area chosen for these purposes will be the minimum reasonably required and involve the least disturbance to tree and plant life
- The storage area shall be securely fenced and all hazardous substances and stocks such as diesel, oils, detergents, etc., shall be stored therein. Drip pans, a thin concrete slab or a facility with PVC lining, shall be installed in such storage areas with a view to prevent soil and water pollution.
- The location of both the vehicle maintenance yard and the storage areas are to be indicated on the layout plan.
- No vehicle may be extensively repaired in any place other than in the maintenance yard.

least excavation and damage to vegetation will occur and shall not be wider than is reasonably required. The position of the river access together with all planned future access points, must be indicated on the layout plan.

- Mining will be conducted only in accordance with the Best Practice Guideline for small scale mining that relates to stormwater management, erosion and sediment control and waste management, developed by the Department of Water Affairs and Forestry (DWAF), and any other conditions which that Department may impose.

5.5.11 Establishing the excavation areas

- Whenever any excavation is undertaken for the purpose of locating and/or extracting ore bodies of all types of minerals, including precious stone-bearing gravels, the following operating procedures shall be adhered to:
 - ❖ Excavations shall take place only within the area indicated on the plan provided in terms of paragraph 2 herein..
 - ❖ Overburden rocks and coarse material shall be placed concurrently in the excavations or stored adjacent to the excavation, if practicable, to be used as backfill material once the ore or gravel has been excavated.
 - ❖ Trenches shall be backfilled immediately if no ore or precious stone-bearing gravel can be located.

5.5.12 Establishing processing areas, waste piles, tailings dams or slimes dams.

- Processing areas, waste piles, tailings dams or slimes dams, will not be established within 100 metres of the edge of any river channel or other water bodies.
- Processing areas will be established, as far as practicable, near the edge of excavations to allow the waste, gravel and coarse material to be processed therein.
- The areas chosen for this purpose will be the minimum reasonably required and involve the least disturbance to vegetation.
- Prior to development of these areas, the topsoil will be removed and stored as described in paragraph F 2.1 above.
- Processing area, waste piles, tailings dams or slimes dams will not be established unless the location and dimensions of the areas are clearly indicated on the plan referred to in paragraph 2 herein, and once established, the processing of minerals or ore containing precious stones shall be confined to these areas and no stockpiling or processing will be permitted on areas not correctly prepared.
- Tailings from the extraction process must be so treated and/or deposited that it will in no way prevent or delay the rehabilitation process.

6 REGULATION 52 (2) (e): Planned monitoring of the environmental management plan.

IDENTIFICATION	Mark with an X where applicable	
	YES	NO
Have the interested and affected parties identified that noise must be monitored?		X
Have the interested and affected parties identified that dust must be monitored?		X
Have the interested and affected parties identified that water quality must be monitored?		X

8.2 Undertaking to provide financial provision

The area will be rehabilitated with the original land use namely small stock farming in mind. The productivity of the area after closure will be the same as before the start of the mining operation. The proposed end-state of the area was consulted with interested and affected parties in terms of Regulation 52(2)(g).

Rehabilitation cost was estimated with the proposed end-state in mind and was calculated according to the categories listed in section F of the EMP

Rehabilitation of access roads

No access roads will be constructed by the holder of the permit. Existing access roads will be used and maintained by the applicant. The road will not be decommissioned as it will still be needed by the landowner

Cost of rehabilitation: R0.00

Rehabilitation of the office/camp site, vehicle maintenance yard and secured storages areas

No camp sites will be constructed as services will be obtained within Upington. The mining area will however be fenced off but the fence will remain at final closure as part of making the mining area safe.

A site office and secured storage areas will be constructed in the form of mobile containers that will be removed at final closure.

All structures and footings and foundations need to be removed at final closure and building rubble will be dumped in the excavation after it has been processed through the crusher.

Extent: 0.2 Ha

Equipment required:

Excavator for breaking up of footings and foundations

8 h X R500.00/h

R 4 000.00

Lowbed from Upington 25Km X R25.00/Km

R 625.00

Manual labour for clean-up

R 1 375.00

Removal of waste in storage area to Upington

R 1 000.00

Cost of rehabilitation:

R7 000.00

Rehabilitation of excavation area

The area is already disturbed by historic as well as recent mining activities and the applicant will be responsible for the rehabilitation of the historic disturbances within the application area. The goal of rehabilitation with respect to the area is to leave the area level and even, and in a natural state containing no foreign debris or other materials. All stockpiles will be removed including the subsoil where mixing of the product has occurred. All remaining product and stockpiles needs to be backfilled into the excavation. Any overburden dumps needs to be backfilled on top of any leftover product. The sides of the excavation will also be profiled or stepped with contours to prevent erosion. During this mining operation the excavations outside the mining area will be linked with the existing excavation to form a single excavation that will be profiled or stepped with 3meter benches if too deep to slope in a single bench.

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

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application. I herewith confirm that the above report comprises the EMP compiled in accordance with directive, in terms of sections 29 of the Act contained herein, and that the Environmental management plan will be executed as proposed should the permit be issued. I acknowledge that since this Environmental Management Plan is specific to the scale of the mining operation in the hands of the applicant/holder, the operation of the mine specifically by the holder in the manner and scale proposed in the applicable financial and technical ability report and in this Environmental management plan constitute material terms and conditions of the permit, and any change in the scope of the work or the party operating the mine, albeit on a subcontracting or subletting basis, will constitute a contravention contemplated in section 47(1) of the Act.

Full Names and Surname	JACOBUS JOHANNES DUVENHAGE
Identity Number	640629 5067 089

-END-