



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

SA HERITAGE RESOURCES
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From: Directorate: Mineral Regulation: Northern Cape **Date:** 30 November 2010
Enquiries: Mrs R.F Sekepane **E-mail:** raisibe.sekepane@dmr.gov.za
Ref No.: NC 30/5/1/3/3/2/1/1742 EM

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

Attention: Mary Leslie

CONSULTATION OF AN AMMENDED ENVIRONMENTAL MANAGEMENT PLAN SUBMITTED IN TERMS OF SECTION 40 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT 2002, (ACT 28 OF 2002) IN RESPECT OF HOPETOWN NO.1 SITUATED IN THE MAGISTERIAL DISTRICT OF HERBERT. APPLICANT: RAYMOND VINCENT SILVANO.

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 24 **December 2010** 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 **Mrs Raisibe Sekepane** 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

Application for a: **Prospecting Right Mining Permit**
Applicant: **RAYMOND VINCENT SILVANO**
Farm: **HOPE TOWN 01**
District: **HERBERT**
Mineral: **ALLUVIAL DIAMONDS**
Date: **NOVEMBER 2010**

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A.1 INTRODUCTION

This document aims to provide a simplified national standard for applicants for prospecting rights and mining permits to comply with the relevant legislation and environmental regulations as apply to their respective applications in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)(MPRDA).

Applicants in this sector of the mining industry typically disturb smaller surface areas of land, whether drilling boreholes, small trenches, or mining on a small area, less than 1,5 hectares of land, under a mining permit as contemplated in Section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)

A.2 SCOPE

This document is intended for use by applicants for mining permits and prospecting rights. Typically, operations in this sector of the mining industry:

- Use little or no chemicals to extract mineral from ore,
- Work on portions of land of 1,5 hectares in size or smaller,
- Disturb the topography of an area somewhat but have no significant impact on the geology

A.3 PURPOSE

This document aims to :

- Provide a national standard for the submission of Environmental Management Plans for the types of applications mentioned above.
- Ensure compliance with Regulation 52 of the MPRDA.
- Assist applicants by providing the information that the Department of Mineral Resources (DME) requires in a simple language and in a structured, prescribed format, as contemplated in Regulation 52 (2) of the (MPRDA).
- Assist regional offices of the DME to obtain enough information about a proposed prospecting/ reconnaissance or mining permit operation to assess the possible environmental impacts from that operation and to determine corrective action even before such right is granted and the operation commences.

This document aims both to provide the DME regional offices with enough information about applicants for mining permits and applicants with guidance on environmental management matters pertaining to the mitigation of environmental impacts arising from their operations. Given this dual focus and the generic nature of the document, it might not be sufficient for all types of operations under various circumstances.

The document may therefore be altered or added to as the particular circumstances of the application in question may require.

A.4 USE OF THE DOCUMENT:

This document is designed for use by non-professionals and newcomers to the environmental management industry and it incorporates a *very simple* Environmental Impact Assessment (EIA). The EIA is contained in Section C of this document and was designed specifically with the target sectors of the mining industry (described in A.2 above) in mind.

The aim is ultimately to (a) gather information from applicants themselves; (b) to assess the impact of the operation based on that information and then (c) to guide the applicant to mitigate environmental impacts to limit damage to the environment.

Section B of the document gathers demographic information about the applicant. Section C gathers the information that will be used in the Environmental Impact Assessment. The applicant must complete the relevant sections of this document, but the regional office of the DME will do the scoring of these for the impact assessment rating in Section D.

Section F (the Environmental Management Plan) of the document is prescriptive and gives guidance to the miner or prospector on how to limit the damage of the operation on the environment. This part may be added to by the regional manager, who has the prerogative to decide whether this Environmental Management Plan will adequately address the environmental impacts expected from the operation or whether additional requirements for proper environmental management need to be set. Where these additional requirements are set, they will appear in Section G of this document. The Environmental Management Plan (Section F) of the document is legally binding once approved and, in the undertaking contained in Section H, the applicant effectively agrees to implement all the measures outlined in this Environmental Management Plan.

A.5 LEGISLATION/ REGULATIONS

The relevant sections of Mineral and Petroleum Resources Development Act and its supporting Regulations are *summarised below* for the information of applicants. The onus is on the applicant to familiarise him/herself with the provisions of the full version of the Mineral and Petroleum Resources Development Act and its Regulations.

Section of Act	Legislated Activity/ Instruction/ Responsibility or failure to comply	Penalty in terms of Section 99
5(4)	No person may prospect, mine, or undertake reconnaissance operations or any other activity without an approved EMP, right, permit or permission or without notifying land owner	R 100 000 or two years imprisonment or both
19	Holder of a Prospecting right must: lodge right with Mining Titles Office within 30 days; commence with prospecting within 120 days, comply with terms and conditions of prospecting right, continuously and actively conduct prospecting operations; comply with requirements of approved EMP, pay prospecting fees and royalties	R 100 000 or two years imprisonment or both
20(2)	Holder of prospecting right must obtain Minister's permission to remove any mineral or bulk samples	R 100 000 or two years imprisonment or both

Section of Act	Legislated Activity/ Instruction/ Responsibility or failure to comply	Penalty in terms of Section 99
26(3)	A person who intends to beneficiate any mineral mined in SA outside the borders of SA may only do so after notifying the Minister in writing and after consultation with the Minister.	R 500 000 for each day of contravention
28	Holder of a mining right or permit must keep records of operations and financial records AND must submit to the DG: monthly returns, annual financial report and a report detailing compliance with social & labour plan and charter	R 100 000 or two years imprisonment or both
29	Minister may direct owner of land or holder/applicant of permit/right to submit data or information	R 10 000
38(1)(c)	Holder of permission/permit/right MUST manage environmental impacts according to EMP and as ongoing part of the operations	R 500 000 or ten years imprisonment or both.
42(1)	Residue stockpiles must be managed in prescribed manner on a site demarcated in the EMP	A fine or imprisonment of up to six months or both
42(2)	No person may temporarily or permanently deposit residue on any other site than that demarcated and indicated in the EMP	A fine or imprisonment of up to six months or both
44	When any permit/right/permission lapses, the holder may not remove or demolish buildings, which may not be demolished in terms of any other law, which has been identified by the Minister or which is to be retained by agreement with the landowner.	Penalty that may be imposed by Magistrate's Court for similar offence
92	Authorised persons may enter mining sites and require holder of permit to produce documents/ reports/ or any material deemed necessary for inspection	Penalty as may be imposed for perjury
94	No person may obstruct or hinder an authorised person in the performance of their duties or powers under the Act.	Penalty as may be imposed for perjury
95	Holder of a permit/right may not subject employees to occupational detriment on account of employee disclosing evidence or information to authorised person (official)	Penalty as may be imposed for perjury
All sections	Inaccurate, incorrect or misleading information	A fine or imprisonment of up to six months or both
All sections	Failure to comply with any directive, notice, suspension, order, instruction, or condition issued	A fine or imprisonment of up to six months or both

A.6 OTHER RELEVANT LEGISLATION

Compliance with the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and its Regulations does not necessarily guarantee that the applicant is in compliance with other Regulations and legislation. Other legislation that may be immediately applicable includes, but are not limited 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).

A.7 WORD DEFINITIONS

In this document, unless otherwise indicated, the following words will have the meanings as indicated here:

Act (The Act)	Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
Borehole	A hole drilled for the purposes of prospecting i.e. extracting a sample of soil or rock chips by pneumatic, reverse air circulation percussion drilling, or any other type of probe entering the surface of the soil.
CARA	The Conservation of Agricultural Resources Act
EIA	An Environmental Impact Assessment as contemplated in Section 38(1) (b) of the Act
EMP	an Environmental Management Plan as contemplated in Section 39 of the Act
Fauna	All living biological creatures, usually capable of motion, including insects and predominantly of protein-based consistency.
Flora	All living plants, grasses, shrubs, trees, etc., usually incapable of easy natural motion and capable of photosynthesis.
Fence	A physical barrier in the form of posts and barbed wire and/or "Silex" or any other concrete construction, ("palisade"- type fencing included), constructed with the purpose of keeping humans and animals within or out of defined boundaries.
House	any residential dwelling of any type, style or description that is used as a residence by any human being
NDA	National Department of Agriculture
NWA	National Water Act, Act 36 of 1998
Pit	Any open excavation
"Porrel"	The term used for the sludge created at alluvial diamond diggings where the alluvial gravels are washed and the diamonds separated in a water-and-sand medium.
Topsoil	The layer of soil covering the earth which- <ol style="list-style-type: none"> provides a suitable environment for the germination of seed; allows the penetration of water; is a source of micro-organisms, plant nutrients and in some cases seed; and is not of a depth of more than 0,5 metres or such depth as the Minister may prescribe for a specific prospecting or exploration area or mining area.
Trench	A type of excavation usually made by digging in a line towards a mechanical excavator and not pivoting the boom – a large, U-shaped hole in the ground, with vertical sides and about 6 – 8 metres in length. Also a prospecting trench.
Vegetation	Any and all forms of plants, see also Fauna
DWAF	The Department of Water Affairs and Forestry – both national office and their various regional offices, which are divided across the country on the basis of water catchment areas.
MPRDA	the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
EMPlan	An Environmental Management Plan as contemplated in Regulation 52 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) – this document.

B. BIOGRAPHIC DETAILS OF THE APPLICANT:

B 1.1 Full name (and surname) of person or company applying for permit or right	RAYMOND VINCENT SILVANO
B 1.2 ID number of person or company/ CC registration number	601205 5115 082
B 1.3 Postal address	154 TRANSVAAL ROAD
	KIMBERLEY
	8301
B 1.4 Physical/ residential address	154 TRANSVAAL ROAD
	KIMBERLEY
	8301
B 1.5 Applicant's telephone number	
B 1.6 Applicant's cellular phone number	076 766 0034
B 1.7 Alternative contact's name	
B 1.8 Alternative contact's telephone/cell phone numbers	
B 2.1 Full name of the property on which mining/ prospecting operations will be conducted	HOPE TOWN 01
B 2.2 Name of the subdivision	NONE
B 2.3 Approximate center of mining/prospecting area: Latitude	E24.10243
	Longitude
B 2.4 Magisterial district	HERBERT
B 2.5 Name of the registered owner of the property	THEMBELIHLE MUNICIPALITY
B 2.6 His/her Telephone number	053 203 0005/8
B 2.7 His/ her Postal address	PRIVATE BAG X3
	CHURCH STREET
	HOPE TOWN

B 2.8 Current uses of surrounding areas

BRICKING MAKING OPERATION, WHICH IS ABOUT 3 KM FROM THE SITE.

B 2.9 Are there any other, existing land uses that impact on the environment in the proposed mining/ prospecting area?

NO

B 2.10 What is the name of the nearest town?

HOPE TOWN

B.3 Describe in detail how the proposed activities will be conducted.

WITHIN THE MINING AREA A 20 X 20 X 5 M EXCAVATION WILL BE MADE TO ACCESS THE GRAVELS AND THE PROCESS WILL BE AS FOLLOWS:-

- 1. THE TOPSOIL REMOVED WILL BE STORED NEXT TO THE TRENCH FOR SAFE GAURDING AND USED DURING FINAL REHABILITATION PROCESSES.**
- 2. GRAVEL EXCAVATED WILL SCREENED AND THE FINES STOCKPILED FOR DIAMOND RECOVERY WHILE THE ROUGHS IS DISCARDED BACK INTO THE EXCAVATION**
- 3. THE FINES IS WASHED IN A ROTATING PAN TO FORM A CONCENTRATE, WHICH WILL BE TRANSPORTED TO THE RECOVERY PLANT. PUDDLE FROM THE PANS WILL BE WASHED BACK INTO THE EXCAVATION TO FORM A CEMENTING MATERIAL WITH THE ROUGHS**
- 4. AT THE SORTING PLANT THE DIAMONDS IS RECOVERED FROM THE CONCENTRATED GRAVEL AND THE SURPLUS DISCARDED BACK INTO THE EXCAVATION.**
- 5. ONCE THE EXCAVATION IS BACKFILLED THE TOPSOIL WILL BE EVENLY SPREAD OVER THE AREA TO FINALISE THE REHABILITATION.**

ONLY TWO EXCAVATIONS WILL BE OPEN AT ANY STAGE OF THE MINING OPERATIONS, ONE IS FOR EXCAVATING PURPOSES AND THE OTHER FOR REHABILITATION.

C. ENVIRONMENTAL IMPACT ASSESSMENT:

The information provided in this section will enable officials to determine how serious the impact of the prospecting/mining operation will be.

DESCRIBE THE ENVIRONMENT THAT WILL BE AFFECTED BY THE PROPOSED PROSPECTING/MINING OPERATIONS UNDER THE FOLLOWING HEADINGS:

C.1 DESCRIPTION OF THE ENVIRONMENT LIKELY TO BE AFFECTED BY PROPOSED PROSPECTING/MINING OPERATIONS: (REGULATION 52(2)(a))

ENVIRONMENTAL ELEMENT/ IMPACTOR	VALUE	TICK	OFFICE USE
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C 1.1 What does the landscape surrounding the proposed operation look like? (Open veldt/ valley/ flowing landscape/ steep slopes)

THE LANDSCAPE HAS A FAIRLY GENTLE SLOPE FROM SOUTH TO NORTH TOWARDS THE ORANGE RIVER FALLING IN ELEVATION FROM 1080M TO 1060M IN ± 900M TO 1200M DISTANCE.

C 1.2 Describe the type of soil found on the surface of the site

RED SOIL CAN BE OBSERVED THROUGHOUT THE AREA.

	VALUE	TICK	OFFICE USE
C 1.3 How deep is the topsoil?	0 – 300mm		8
	300 – 600mm	X	4
	600mm +		2

C 1.4 What *plants, trees and grasses* grow naturally in the area around the site?

IN PLACES, THE REGION IS VERY ROCKY AND POSSESSES A "BROKEN" TOPOGRAPHY WITH QUIVER TREE (*Aloe dichotoma*), BUSHMAN POISON TREE (*Euphorbia avasmontana*) AND AGGENYS MILKBUSH (*E. gregaria*) NORMALLY ASSOCIATED WITH THE STEEP SLOPES OF THE MOUNTAINS AND HILLS OF THE AREA. ON THE PEDIMENTS SPIKE-FLOWERED BLACK THORN (*Acacia mellifera*), THREEHORN (*Rhigozum trichotomum*), SHEPHERD'S TREE (*Boscia albitrunca*) AND STINK SHEPHERD'S TREE (*B. foetida*) ARE COMMON TREES AND SHRUBS, WHILE SILKY BUSHMAN GRASS (*Stipagrostis uniplumis*) OFTEN DOMINATES THE PLAINS, ESPECIALLY AFTER GOOD SUMMER RAINS. THERE ARE ABUNDANT THICKETS ALONG THE BANKS OF THE ORANGE RIVER ITSELF, WITH WILD TAMARISK (*Tamarix usneoides*), BUFFALO THORN (*Ziziphus mucronata*) AND CAMEL THORN (*Acacia Erioloba*) COMMON ALONG THE DRY RIVER BEDS OF THE TRIBUTARIES AS WELL.

C 1.5 What <i>animals</i> naturally occur in the area?
KORI BUSTARD – <i>Ardiotis kori</i>
CAPE COBRA – <i>Naja nivea</i>
KUDU – <i>Tragelaphus strepsiceros</i>
SUN GRAZER – <i>Cordylus giganteus</i>
STEEN BUCK – <i>Raphicerus campestris</i>
CAPE KANGAROO – <i>Pedetes capensis</i>
RED MEERCAT – <i>Disambiguaton</i>
GROUND SQUIRREL – <i>Xeris Inauris</i>
BAT-EARED FOX – <i>Otocyon Megalotis</i>
GENET – <i>Genetta tigrina</i>
BLACK-BACK JACKAL – <i>Canis Mesomelas</i>

	VALUE	TICK	OFFICE USE
C 1.6 Are there any <i>protected areas</i> (game parks/nature reserves, monuments, etc) close to the proposed operation?	Yes		4
	No	X	0
THERE AREN'T ANY PROTECTED AREAS CLOSE TO THE PROPOSED OPERATIONS.			

C 1.7 What mineral are you going to prospect or mine for?	ALLUVIAL DIAMONDS

C 1.8 Describe the type of equipment that will be used:
4 FT PAN WITH CONVEYOR
SCREEN
TLB
WATERPUMP (5 HORSEPOWER)
WATERTANK

**C.2 HOW WILL THE PROPOSED OPERATION IMPACT ON THE NATURAL ENVIRONMENT?
(REGULATION 52(2)(b))**

ENVIRONMENTAL ELEMENT/ IMPACTOR	VALUE	TICK	OFFICE USE
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C 2.1 What will the ultimate depth of the proposed prospecting/mining operations be?	0 – 5m	X	2
	6 – 10m		4
	10 – 25m		8
	25m +		10

C 2.2 How large will the <i>total</i> area of all excavations be?	1.5		ha
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C 2.3 How large will each excavation be before it is filled up?	<10 X 10m		2
	<20 X 20m	X	4
	>20 X 20m		8
THE EXCAVATION WILL BE 20 X 20M.			

C 2.4 How many <i>prospecting</i> boreholes or trenches will there be?	NONE		
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	VALUE	TICK	OFFICE USE
C 2.5 Will employees prepare food on the site and collect firewood?	Yes		4
	No	X	0

C 2.6 Will water be extracted from a river, stream, dam or pan for use by the proposed operation?	Yes	X	4
	No		2

C 2.7 If so, what is the name of this water body?	ORANGE RIVER		
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C 2.8 If water will not be extracted from an open surface source, where will it be obtained?	N/A		
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