

TEST REPORT No. 5415/1612720/UM09
TOETSVERSLAGNO

Page / Bladsy 2

TEST RESULTS

- 1 Opening moment of the lid. The opening moment of the lid before and after the cycling test was as follows:

Test No.	Opening moment, kg			
	Before cycling		After Cycling	
	without load	with load	without load	with load
1	3,85	4,85	3,65	4,90
2	3,82	5,10	3,75	4,80
3	3,60	4,85	4,10	4,60
Average	3,76	4,93	3,83	4,77

- 2 Cycling test. The drum rotating mechanism and drum conveyor showed negligible wear on the moving parts and drum support positions. The system was still able to perform the duty for which it was attended.

The test sample will be disposed of if not collected within a period of 6 weeks of the date of this report.


J Voigt
TEST OFFICER
MECHANICAL ENGINEERING


C van Hoeve
MANAGER
MECHANICAL AND FLUID TECHNOLOGY



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20 September 2001

TO WHOM IT MAY CONCERN:
THE "ECOSAN" URINE DIVERSION DRY TOILET

The undersigned was involved in an advisory capacity during development of the "EcoSan" urine diversion dry toilet. This toilet has been found to be of superior quality, robust and odourless. It provides an excellent level of service, and is furthermore simple to install, operate and maintain.

A handwritten signature in black ink, appearing to read 'L M Austin', with a horizontal line underneath.

L M Austin Pr Eng
PROGRAMME FOR SUSTAINABLE HUMAN SETTLEMENTS

A large, stylized handwritten signature in black ink, consisting of several overlapping loops and lines.

ANNEXURE K:

ITEMIZATION

OF

REHABILITATION

COSTS

Applicant: **A.J. Davids**
 Calculators: **A.J. Davids**

Calculation of the Quantum of **A.J. Davids Mining**.
A.J. Davids Mining, Ref. 30/5/1/2/2/0215 MR
 Date: 1st July 2009

Location: **Northern Cape**
 Date: 1st July 2009

No.	Description	Unit	A Quantity	B Master Rate	C Multiplication Factor	D Weighting Factor 1	E = B*C*D Amount (Rands)
1	Dismantling of processing plant and related structures (including overhead conveyors and power lines)	m ²	0	685	1	1	0
2(A)	Demolition of steel buildings and structures	m ²	0	95	1	1	0
2(B)	Demolition of reinforced concrete buildings and structures	m ²	0	140	1	1	0
3	Rehabilitation of access roads	m ²	0	17	1	1	0
4(A)	Demolition and rehabilitation of electrified railway lines	m	0	165	1	1	0
4(B)	Demolition and rehabilitation of non-electrified railway lines	m	0	90	1	1	0
5	Demolition of housing and/or administration facilities	m ²	0	190	1	1	0
6	Opencast rehabilitation including final voids and ramps	ha	2.0	96700	0.52	1	100 568.
7	Sealing of shafts, adits and inclines	m ³	0	51	1	1	0
8(A)	Rehabilitation of overburden and spoils	ha	2.0	64400	1	1	128 800.
8(B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	82700	1	1	0
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (pollution potential)	ha	0	240200	1	1	0
9	Rehabilitation of subsided areas	ha	0	35600	1	1	0
10	General surface rehabilitation	ha	2.0	52600	1	1	105 200.
11	River diversions	ha	2.0	52600	1	1	105 200.
12	Fencing	m	0	60	1	1	0
13	Water management	ta	2.0	20 000	1	1	40 000.
14	2 to 3 years of maintenance and aftercare	ta	2.0	7 000	3	1	42 000.
15(A)	Specialist study (SAHRA & Lidwale Engineering Consultants)	Sum	2.0	8200	1	1	16 400
15(B)	Specialist study (Surveyor)	Sum	2.0	7000	1	1	14 000
					Sub total		552 168.00

1	Preliminary and General at 12% costs	66 260.16	Weighting factor 2	66 260.16
2	Contingencies at 10% costs	55 236.80	Sub total 2	55 236.80
				673 644.96
				94 310.29
				8767 955.25

Completed by: **Elizabeth Court Investments** & **PTY LTD** on behalf of **A.J. Davids Mining**.
A.J. Davids

ANNEXURE L:

**SPECIALIST
ARCHAEOLOGICAL
REPORT**

**McGregor Museum
Department of Archaeology**



**Archaeological Impact Assessment on a
certain surveyed portion of Erf 1,
Windsorton, Northern Cape.**

DME File references: NC 30/5/1/2/3/2/1/215 EM
SAHRA File reference: 9/2/008/0001

**David Morris
July 2009**

Archaeological Impact Assessment on a certain surveyed portion of Erf 1, Windsorton, Northern Cape.

David Morris
McGregor Museum, Kimberley
July 2009

DME File references: NC 30/5/1/2/3/2/1/215 EM
SAHRA File reference: 9/2/008/0001

Introduction

The author was contacted by Mrs Amos Davids to carry out a phase 1 archaeological impact assessment with respect to proposed mining on a certain surveyed portion of Erf 1, Windsorton, on and alongside the island and within the Vaal River channel, downstream from the town of Windsorton.

Contact details: Mr A.J. Davids, P.O. Box 82, Windsorton 8510 Tel 053-5510089/5510355

The site was visited on 16 July 2009 in the company of Mr Davids who guided me to the vicinity to be mined.

Fieldnotes and photographs generated during the visit are lodged with the McGregor Museum, Kimberley.

Legislation

The National Heritage Resources Act (No 25 of 1999) (NHRA) provides protection for archaeological resources.

It is an offence to destroy, damage, excavate, alter, or remove from its original position, or collect, any archaeological material or object (defined in the Act), without a permit issued by the South African Heritage Resources Agency (SAHRA).

Section 35 of the Act protects all archaeological and palaeontological sites and requires that anyone wishing to disturb a site must have a permit from the relevant heritage resources authority. Section 36 protects human remains older than 60 years. In order for the authority to assess whether approval may be given for any form of disturbance, a specialist report is required. No mining, prospecting or development may take place without heritage assessment and approval.

SAHRA at national level acts on an agency basis for the Provincial Heritage Resources Agency (PHRA) in the Northern Cape, where archaeological sites are concerned. Permit applications should be made to the SAHRA office in Cape Town. In the event of any archaeological material being encountered during prospecting, SAHRA should be contacted immediately (021-4624502).

Methods and limitations

A background literature/museum database search provides indications of what might be expected in the region.

During the site investigation, the area of proposed mining was inspected. It consists of the island downstream from Windsorton already almost completely disturbed by previous mining, and the adjacent river channel including a section immediately downstream from the island, which has been pumped dry (the river diverted) and excavated to bedrock in places. Remnants of gravel profiles remain in places.

Old diggings gave an opportunity to assess the presence of subsurface archaeological materials, although in most instances the sediments have already been completely disturbed (as is plainly to be seen in the Google Earth image).

Background: archaeological resources in the region

The Northern Cape has a wealth of archaeological sites (Beaumont & Morris 1990; Morris & Beaumont 2004), with locales along and adjacent to the major river systems being of particular significance. This was particularly true of the Windsorton area, but much more so of the low-lying Younger Gravel sequences that have now largely been mined away on the east side of the river (Helgren 1979). River-side sites have been well-documented further down-stream along the Vaal in the Nooitgedacht-Pniel-Barkly West region (e.g. Beaumont & Morris 1990; Beaumont & McNabb 2000). Stone Age material found in this area spans the Earlier, Middle and Later Stone Ages through Pleistocene and Holocene times. Late Holocene material with pottery is known to occur on the river banks, while rock engravings are richly distributed in the region (Wilman 1933; Fock & Fock 1989; Morris 1988). Terraces along the rivers have also long been known for their association with archaeological and Plio-Pleistocene fossil material (e.g. Helgren 1979).

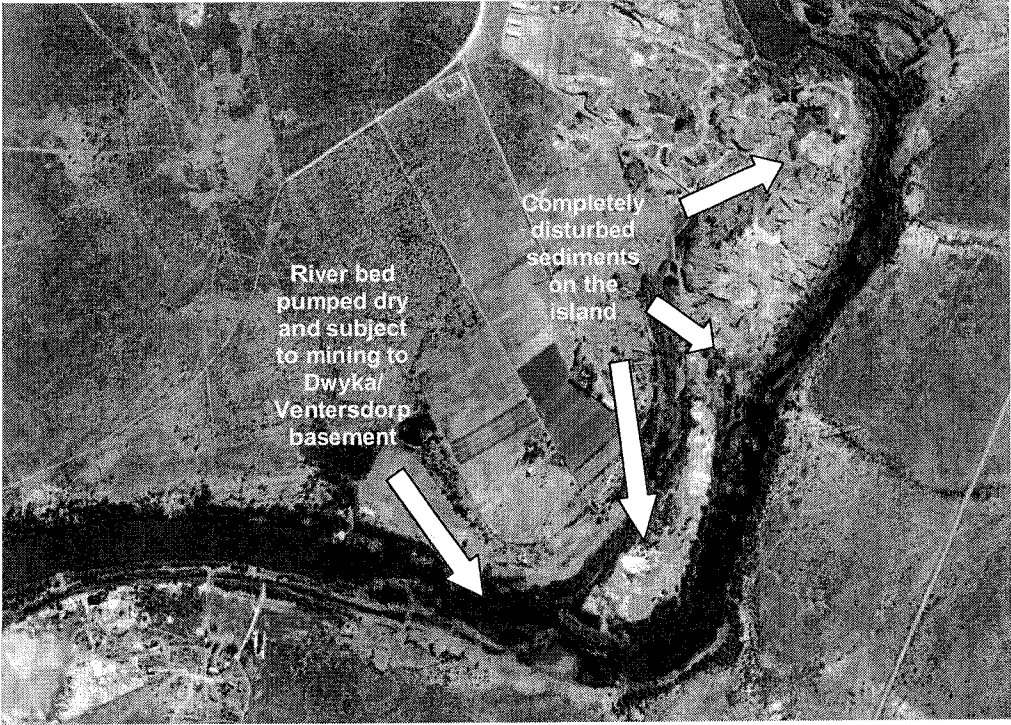
Observations

The prospecting site comprises a polygon defined by the corner peg points A to MM in the attached table, and taking in all of the island, the adjacent river channels and a portion of the river channel as it begins to flow westwards just downstream from the island.

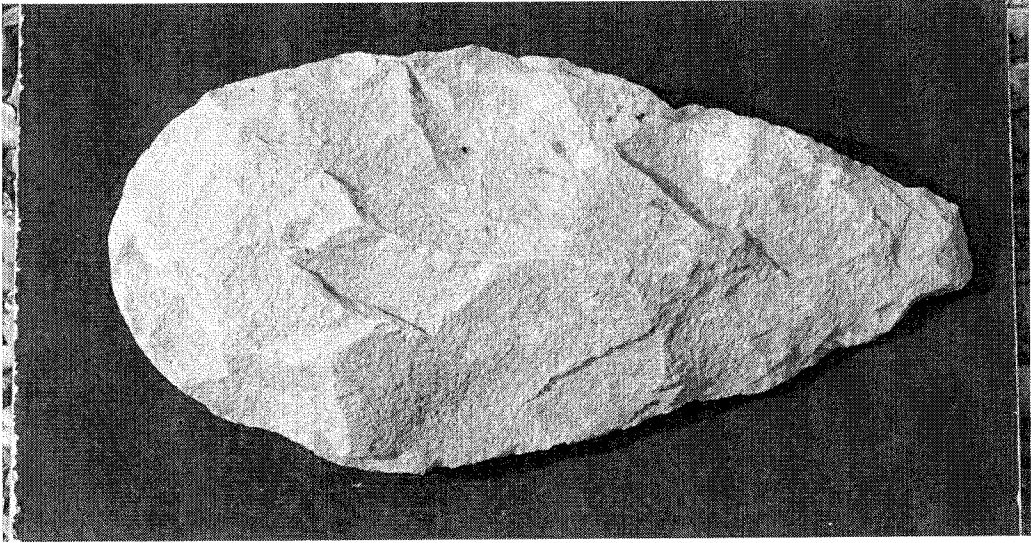
The entire present surface of the island together with the approaches to it is artificial, probably subjected to generations of searches for diamonds. There was almost nothing likely to approximate any kind of in situ archaeological deposit, although flakes and handaxes were occasionally to be seen on the heaps and surfaces in question. It was impossible to estimate any meaningful context for these.

Downstream from the island we walked down into the dried bed of the river where gravels are being mined down to a glacially striated Dwyka conglomerate and outcrops of Ventersdorp. Only locally are there remnants of in situ gravel. No artefacts were noted in these particular sections. They are potentially of interest in terms of a current cosmogenic dating project (Ryan Gibbon and colleagues) and

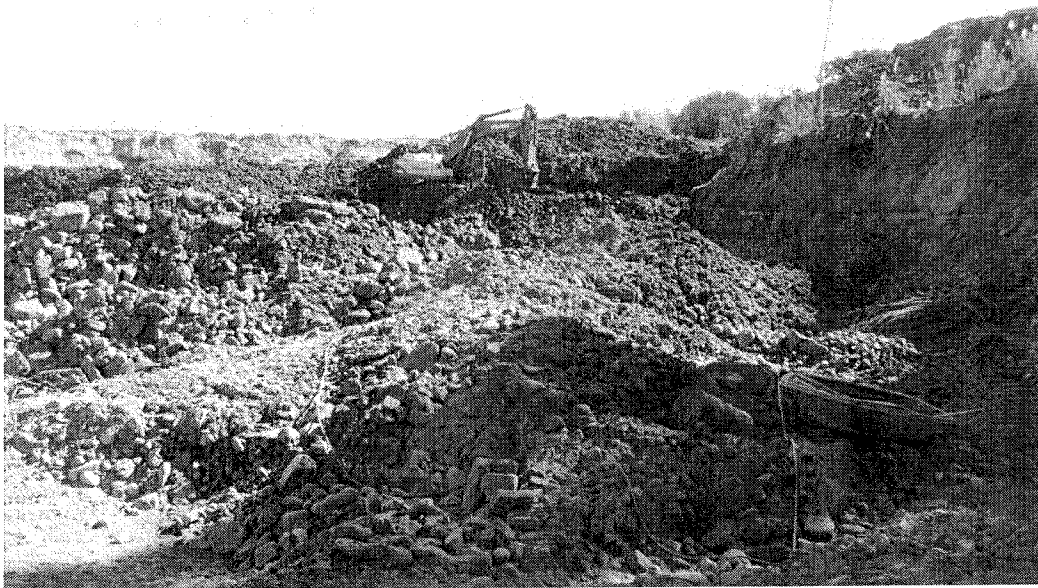
hence details were passed along to Gibbon who was conducting fieldwork in the area in July.



Google Earth image of the Vaal River just south (downstream) from Windsorton



Handaxe without context from the Island
Horizontal measurement of book: 205 mm.



Mining the bed of the river downstream from the island.

Reference made in the EMP to a report by Peter Beaumont is irrelevant. It refers to a locale further upstream, between the island and the town of Windsorton, where Fauresmith artefacts have been noted in gravel and calcified silts higher up in the sequence than those exposed in the banks of the Vaal adjacent to the island.

Recommendations

No significant archaeological or heritage features were found on the areas examined, though it is clear that archaeological contexts of note probably did once exist here. Virtually no part of the area investigated had not been disturbed by previous mining.

Sections in the banks of the river downstream from the island were referred to Gibbon and colleagues for possible cosmogenic dating and stratigraphic characterization.

It is recommended that prospecting be allowed to proceed as proposed. Archaeologists should be allowed to inspect any sections at the site at any time.

In the event that any archaeological site or feature is found in the course of work on the site – such as an area of substantially greater artefact density, a burial – SAHRA should be contacted immediately (021-4624502: Mrs Mary Leslie or Dr A. Jerardino) so that the find can be investigated and mitigation measures recommended.

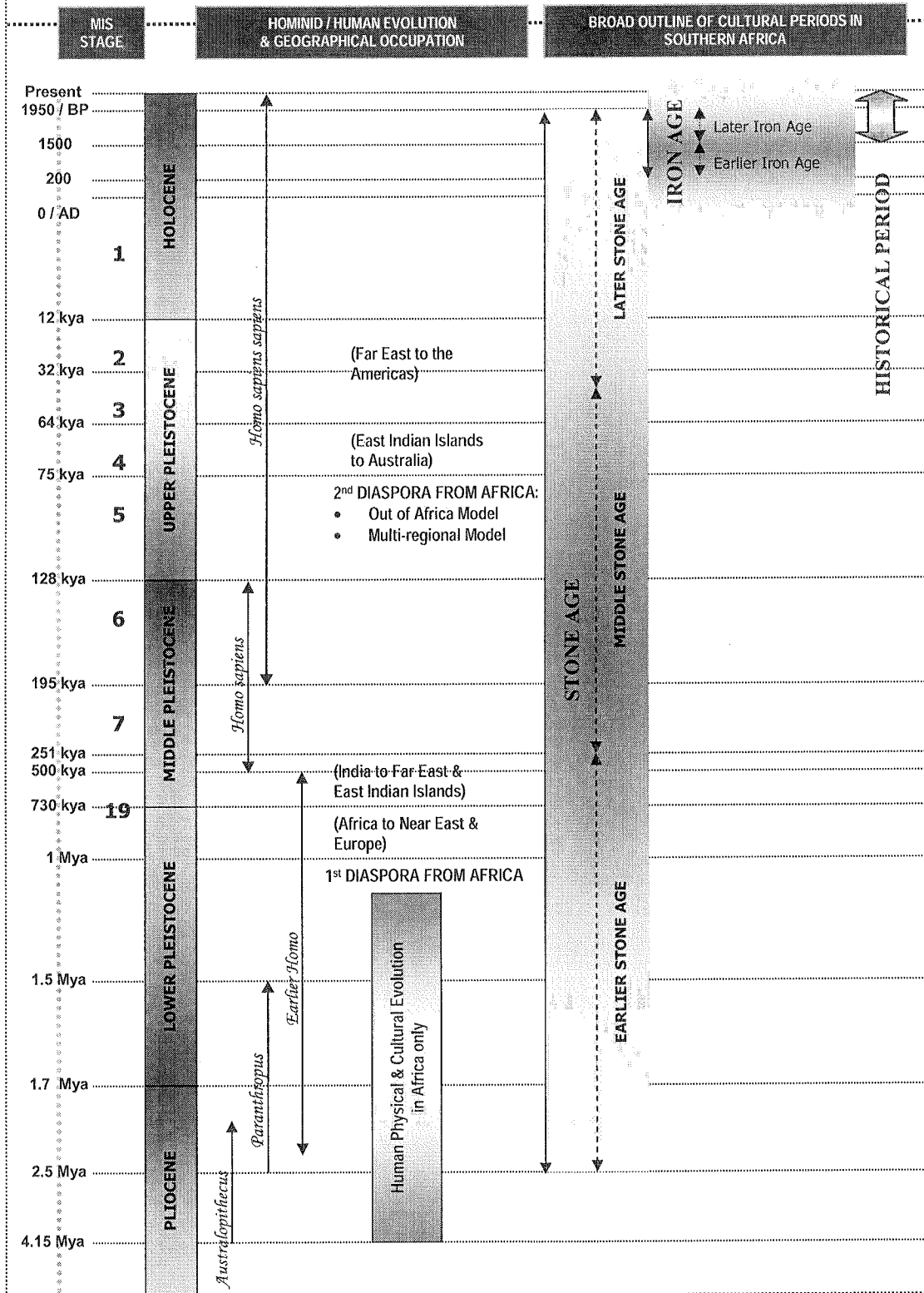
Acknowledgements

I thank Mr Davids who guided me to the site of proposed mining.

References

- Beaumont, P.B. & McNabb, J. 2000. Canteen Kopje: the recent excavations. *The Digging Stick* 17(3):3-7.
- Beaumont, P.B. & Morris, D. 1990. *Guide to archaeological sites in the Northern Cape*. Kimberley: McGregor Museum.
- Fock, G.J. & Fock, D.M.L. 1989. *Felsbilder in Südafrika. Teil 3 (Vaal-Oranje-Becken)*. . Köln: Böhlau Verlag.
- Helgren, D.M. 1979. *Rivers of diamonds: an alluvial history of the lower Vaal Basin, South Africa*. Chicago: University of Chicago Department of Geography. Research Paper 185.
- Morris, D. 1988. Engraved in place and time: a review of variability in the rock art of the Northern Cape and Karoo. *South African Archaeological Bulletin* 43:109-121.
- Morris, D. 2008. Archaeological Impact Assessment on Windsorton Erf 1 (Kruger, B-A.), Northern Cape.
- Morris, D. & Beaumont, P. 2004. *Archaeology in the Northern Cape: some key sites*. Kimberley: McGregor Museum.
- Rodionov, A.S. 2008. Alluvial Diamond Mining Project: Resource Estimate (Windsorton Erf 1, Northern Cape). Unpublished report, May 2008.
- Wilman, M. 1933. *Rock engravings of Griqualand West and British Bechuanaland, South Africa*. Cambridge: Deighton Bell.

Schematic Human Physical and Cultural Evolution in Africa



Extracts from the
National Heritage Resources Act (No 25 of 1999)

DEFINITIONS

Section 2

In this Act, unless the context requires otherwise:

- ii. "*Archaeological*" means –
 - a) material remains resulting from human activity which are in a state of disuse and are in or on land and which are older than 100 years, including artefacts, human and hominid remains and artificial features and structures;
 - b) rock art, being any form of painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10 m of such representation;
 - c) wrecks, being any vessel or aircraft, or any part thereof, which was wrecked in South Africa, whether on land, in the internal waters, the territorial waters or in the maritime culture zone of the Republic, ... and any cargo, debris, or artefacts found or associated therewith, which is older than 60 years or which SAHRA considers to be worthy of conservation.
- viii. "*Development*" means any physical intervention, excavation or action, other than those caused by natural forces, which may in the opinion of a heritage authority in any way result in a change to the nature, appearance or physical nature of a place, or influence its stability and future well-being, including –
 - a) construction, alteration, demolition, removal or change of use of a place or structure at a place;
 - b) carrying out any works on or over or under a place;
 - c) subdivision or consolidation of land comprising, a place, including the structures or airspace of a place;
 - d) constructing or putting up for display signs or hoardings;
 - e) any change to the natural or existing condition or topography of land; and
 - f) any removal or destruction of trees, or removal of vegetation or topsoil;
- xiii. "*Grave*" means a place of interment and includes the contents, headstone or other marker of such a place, and any other structure on or associated with such place;
- xxi. "*Living heritage*" means the intangible aspects of inherited culture, and may include –
 - a) cultural tradition;
 - b) oral history;
 - c) performance;
 - d) ritual;
 - e) popular memory;
 - f) skills and techniques;
 - g) indigenous knowledge systems; and
 - h) the holistic approach to nature, society and social relationships.
- xxxi. "*Palaeontological*" means any fossilised remains or fossil trace of animals or plants which lived in the geological past, other than fossil fuels or fossiliferous rock intended for industrial use, and any site which contains such fossilised remains or traces;
- xli. "*Site*" means any area of land, including land covered by water, and including any structures or objects thereon;
- xliv. "*Structure*" means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith;

NATIONAL ESTATE

Section 3

- 1) For the purposes of this Act, those heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations must be considered part of the national estate and fall within the sphere of operations of heritage resources authorities.
- 2) Without limiting the generality of subsection 1), the national estate may include –
 - a) places, buildings, structures and equipment of cultural significance;
 - b) places to which oral traditions are attached or which are associated with living heritage;
 - c) historical settlements and townscapes;
 - d) landscapes and natural features of cultural significance;
 - e) geological sites of scientific or cultural importance;
 - f) archaeological and palaeontological sites;
 - g) graves and burial grounds, including –
 - i. ancestral graves;
 - ii. royal graves and graves of traditional leaders;
 - iii. graves of victims of conflict

- iv. graves of individuals designated by the Minister by notice in the Gazette;
 - v. historical graves and cemeteries; and
 - vi. other human remains which are not covered in terms of the Human Tissue Act, 1983 (Act No 65 of 1983)
- h) sites of significance relating to the history of slavery in South Africa;
- i) movable objects, including –
- i. objects recovered from the soil or waters of South Africa, including archaeological and palaeontological objects and material, meteorites and rare geological specimens;
 - ii. objects to which oral traditions are attached or which are associated with living heritage;
 - iii. ethnographic art and objects;
 - iv. military objects;
 - v. objects of decorative or fine art;
 - vi. objects of scientific or technological interest; and
 - vii. books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 xiv) of the National Archives of South Africa Act, 1996 (Act No 43 of 1996).

STRUCTURES

Section 34

- 1) No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

ARCHAEOLOGY, PALAEOLOGY AND METEORITES

Section 35

- 3) Any person who discovers archaeological or palaeontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources authority.
- 4) No person may, without a permit issued by the responsible heritage resources authority –
- a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite;
 - b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or palaeontological material or object or any meteorite;
 - c) trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or palaeontological material or object, or any meteorite; or
 - d) bring onto or use at an archaeological or palaeontological site any excavation equipment or any equipment which assists in the detection or recovery of metals or archaeological and palaeontological material or objects, or use such equipment for the recovery of meteorites.
- 5) When the responsible heritage resources authority has reasonable cause to believe that any activity or development which will destroy, damage or alter any archaeological or palaeontological site is underway, and where no application for a permit has been submitted and no heritage resources management procedure in terms of section 38 has been followed, it may –
- a) serve on the owner or occupier of the site or on the person undertaking such development an order for the development to cease immediately for such period as is specified in the order;
 - b) carry out an investigation for the purpose of obtaining information on whether or not an archaeological or palaeontological site exists and whether mitigation is necessary;
 - c) if mitigation is deemed by the heritage resources authority to be necessary, assist the person on whom the order has been served under paragraph a) to apply for a permit as required in subsection 4); and
 - d) recover the costs of such investigation from the owner or occupier of the land on which it is believed an archaeological or palaeontological site is located or from the person proposing to undertake the development if no application for a permit is received within two weeks of the order being served.
- 6) The responsible heritage resources authority may, after consultation with the owner of the land on which an archaeological or palaeontological site or meteorite is situated, serve a notice on the owner or any other controlling authority, to prevent activities within a specified distance from such site or meteorite.

BURIAL GROUNDS AND GRAVES

Section 36

- 3) No person may, without a permit issued by SAHRA or a provincial heritage resources authority –
- a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

- b) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
 - c) bring onto or use at a burial ground or grave referred to in paragraph a) or b) any excavation equipment, or any equipment which assists in the detection or recovery of metals.
- 4) SAHRA or a provincial heritage resources authority may not issue a permit for the destruction of any burial ground or grave referred to in subsection 3a) unless it is satisfied that the applicant has made satisfactory arrangements for the exhumation and re-interment of the contents of such graves, at the cost of the applicant and in accordance with any regulations made by the responsible heritage resources authority.
- 5) SAHRA or a provincial heritage resources authority may not issue a permit for any activity under subsection 3b) unless it is satisfied that the applicant has, in accordance with regulations made by the responsible heritage resources authority –
- a) made a concerted effort to contact and consult communities and individuals who by tradition have an interest in such grave or burial ground; and
 - b) reached agreements with such communities and individuals regarding the future of such grave or burial ground.
- 6) Subject to the provision of any other law, any person who in the course of development or any other activity discovers the location of a grave, the existence of which was previously unknown, must immediately cease such activity and report the discovery to the responsible heritage resources authority which must, in co-operation with the South African Police Service and in accordance with regulations of the responsible heritage resources authority –
- a) carry out an investigation for the purpose of obtaining information on whether or not such grave is protected in terms of this Act or is of significance to any community; and
 - b) if such grave is protected or is of significance, assist any person who or community which is a direct descendant to make arrangements for the exhumation and re-interment of the contents of such grave or, in the absence of such person or community, make any such arrangements as it deems fit.

HERITAGE RESOURCES MANAGEMENT

Section 38

- 1) Subject to the provisions of subsections 7), 8) and 9), any person who intends to undertake a development categorised as –
- a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300 m in length;
 - b) the construction of a bridge or similar structure exceeding 50 m in length;
 - c) any development or other activity which will change the character of a site –
 - i. exceeding 5 000 m² in extent; or
 - ii. involving three or more existing erven or subdivisions thereof; or
 - iii. involving three or more erven or subdivisions thereof which have been consolidated within the past five years; or
 - iv. the costs which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
 - d) the rezoning of a site exceeding 10 000 m² in extent; or
 - e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority,
- must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.
- 2) The responsible heritage resources authority must, within 14 days of receipt of a notification in terms of subsection 1) –
- a) if there is reason to believe that heritage resources will be affected by such development, notify the person who intends to undertake the development to submit an impact assessment report. Such report must be compiled at the cost of the person proposing the development, by a person or persons approved by the responsible heritage resources authority with relevant qualifications and experience and professional standing in heritage resources management; or
 - b) notify the person concerned that this section does not apply.
- 3) The responsible heritage resources authority must specify the information to be provided in a report required in terms of subsection 2a) ...
- 4) The report must be considered timeously by the responsible heritage resources authority which must, after consultation with the person proposing the development decide –
- a) whether or not the development may proceed;
 - b) any limitations or conditions to be applied to the development;
 - c) what general protections in terms of this Act apply, and what formal protections may be applied, to such heritage resources;

- d) whether compensatory action is required in respect of any heritage resources damaged or destroyed as a result of the development; and
- e) whether the appointment of specialists is required as a condition of approval of the proposal.

APPOINTMENT AND POWERS OF HERITAGE INSPECTORS

Section 50

- 7) Subject to the provision of any other law, a heritage inspector or any other person authorised by a heritage resources authority in writing, may at all reasonable times enter upon any land or premises for the purpose of inspecting any heritage resource protected in terms of the provisions of this Act, or any other property in respect of which the heritage resources authority is exercising its functions and powers in terms of this Act, and may take photographs, make measurements and sketches and use any other means of recording information necessary for the purposes of this Act.
- 8) A heritage inspector may at any time inspect work being done under a permit issued in terms of this Act and may for that purpose at all reasonable times enter any place protected in terms of this Act.
- 9) Where a heritage inspector has reasonable grounds to suspect that an offence in terms of this Act has been, is being, or is about to be committed, the heritage inspector may with such assistance as he or she thinks necessary –
 - a) enter and search any place, premises, vehicle, vessel or craft, and for that purpose stop and detain any vehicle, vessel or craft, in or on which the heritage inspector believes, on reasonable grounds, there is evidence related to that offence;
 - b) confiscate and detain any heritage resource or evidence concerned with the commission of the offence pending any further order from the responsible heritage resources authority; and
 - c) take such action as is reasonably necessary to prevent the commission of an offence in terms of this Act.

A heritage inspector may, if there is reason to believe that any work is being done or any action is being taken in contravention of this Act or the conditions of a permit issued in terms of this Act, order the immediate cessation of such work or action pending any further order from the responsible heritage resources authority.

TITLE

DEED

LEADS/PAGE 11

ENDORSEMENT OP
ENDORSEMENT ON BW 71 / 82

ENDOM/PROPERTY Erft / Winderton

"Erft" "Dead" 2002

**ENDORSEMENT IN TERME VAN ARTIKEL 16 VAN DIE
REGISTRASIE VAN AKTESWET 47/1937**

Kragtens Offisiële Kennisgewing no. 31/2000 in Buitengewone
Provinsiale Koerant no. 564 van 6 Oktober 2000 is die
binnegemelde Plaaslike Oorgangsraad afgeskaf. 'n Munisipaliteit
bekend as **DIKGATLONG MUNISIPALITEIT** is ingestel.

Hierdie eiendom/~~verband~~/~~servituut~~ vestig nou in gemelde
Munisipaliteit.

Aansoek belê by T. 004357 / 2001

REGISTRATEUR VAN AKTES
KIMBERLEY

DATUM:
16 NOV 2001

Erft 2002 GED. VAN ERFT L WINDERTON = 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

GETRANSPORTEER AAN	TRANSFERRED TO
M. H. VAN DER WEEHLWIJZEN	
(G. B. G. G.)	
RESTANT/REMAINDER	4355,5136HA
T 002162/2004	REGISTRATEUR/REGISTRAR
01 JUN 2004	

IN THE NAME AND ON BEHALF OF HIS MAJESTY GEORGE THE FIFTH, BY THE GRACE OF GOD OF THE UNITED KINGDOM OF GREAT BRITAIN AND IRELAND, AND OF THE BRITISH DOMINIONS BEYOND THE SEAS, KING, DEFENDER OF THE FAITH, EMPEROR OF INDIA.

WHEREAS under and by virtue of the provisions contained in the Tenth Section of the Act No. 15 of 1897 of the Cape of Good Hope, entitled an "Act for regulating the manner in which the Crown Lands of the Colony shall be disposed of," the Council of the Municipality of Windsonton is entitled to the grant of a certain piece of land situated in the Division of Barkly West.

THEREFORE THESE PRESENTS WITNESSE that there is hereby granted by the Governor-General of the Union of South Africa unto the Council of the Municipality of Windsonton the said piece of land named the "WINDSONTON TOWN SQUARE", containing five thousand six hundred and twenty-three morgen one hundred and seventy square rods (5323 Mor:1708a Rds.) and represented and described in the diagram hereunto annexed, framed by His Majesty's Letters Patent Borel dated June, 1928, with full power and authority hereunto in that behalf to possess the same in perpetuity, subject to the following conditions:

1. That the Government shall have the right at all times of resuming the said public purposes such portion of the land hereby granted as may not have been alienated by the Town Council. In the event of resumption as aforesaid no compensation shall be payable by the Government except in respect of substantial improvements of a permanent nature erected or made on the land resumed whether by the Town Council or by any other person acting under the express authority of the said Council.

2. That all roads and thoroughfares over the land, whether or not described in the plan or diagram thereof, shall remain free and uninterrupted unless closed, diverted, or altered by competent authority.

3. That all rights to minerals, mineral products, mineral oils, and precious stones, precious or base metals on or under the land hereby granted are expressly reserved to the Crown, together with the right of access to any mines or works undertaken for mining or prospecting purposes by any person duly authorized in that behalf. The land is subject to such further rights as the public or the Government now may or may hereafter

UITGEREKENING INLICHTING
GOELEDIENDES
ISSUED FOR INFORMATION
PURPOSES

van Reg. 68 (7) Wet 47/1927. Aansoek
deur VA 93 1993
1 APRIL 1993
ARTEKANTOOR
REGISTRARIE
VAN AKTES

VA 103/96
GESERTIFISEERTE 'n Juiste afskrif van die duplikaat.
CERTIFIED a true copy of the duplicate original in
terms of regulation 68 (7) of the Act of 1927.
ARTEKANTOOR
DEURS OFFICE,
SIR R. BERLEY
REGISTRAR OF DEEDS

VIR ENDOSSEMENTE KYK BLADSY
FOR ENDORSEMENTS SEE PAGE 10 ET

170
177
185
181
197

Government of the Union of South Africa
Municipality of Windsonton
Barkly West

SERTIFIKAAT VAN GEREISTREERDE TITEL UITGEREIK
 CERTIFICATE OF REGISTERED TITLE ISSUED

TEN OPSIGTE VAN
 IN RESPECT OF Erf 1597, gedeelte van
 erf 1 windsortan RESTANT
 REMAINDER 4 741,3549 ha

T 4814 196

1996-09-05

W. J. J. J. J.
 REGISTRATEUR/REGISTRAR

UITGEREIK VIR INLIGTING
 DOELEINDES
 ISSUED FOR INFORMATION
 PURPOSES

SERTIFIKAAT VAN GEREISTREERDE TITEL UITGEREIK
 CERTIFICATE OF REGISTERED TITLE ISSUED

TEN OPSIGTE VAN
 IN RESPECT OF Erf 1440, gedeelte van erf
 1, windsortan RESTANT
 REMAINDER 4 731,6411 ha

T 5436 196

1996-10-11

W. J. J. J. J.
 REGISTRATEUR/REGISTRAR

Erkennement in terme van Art. 16 van die Registrasie van
 Akteswet 1975.

Kragtens Proklamasie no. 51/94 in Provinsiale
 Koerant no. 28 gedateer 28 November
 1994, is die ^{binnegematde} Plaaslike Owerheidsliggaam
 afgeestaf. In Plaaslike Oorgangsraad
 bekend as Windsortan Oorgangsraad. is
 ingestel. Hierdie eendom vestig nou
 in gemelde Plaaslike Oorgangsraad. SIEN AANSOEK
 BELF BY T 5799 196.

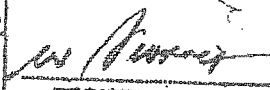
Oktober 1996
 Kimberley -11-06 *W. J. J. J. J.*
 Registrateur van Aktes

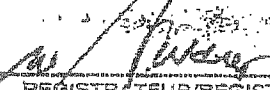
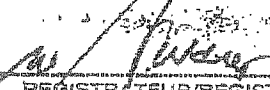
VIRVEERDE ERDOSSLEMENTE SIEN FOLIO II

BLADSY/PAGE 11

ENDOSSEMENT OP
ENDORSEMENT ON 0/WFH/1/60

EIENDOM/PROPERTY WINDSORTON
ERF 1

SERTIFIKAAT VAN GEREISTREERDE TITEL UITGEREIK CERTIFICATE OF REGISTERED TITLE ISSUED	
TEN OPSIGTE VAN IN RESPECT OF <u>ERF 788</u>	<u>ERF. VAN ERF WINDSORTON</u>
<u>20,0013 HA</u>	RESTANT REMAINDER <u>4 711,646 HA</u>
T <u>995</u> <u>98</u>	 REGISTRATEUR/REGISTRAR
<u>1998-03-20</u>	

SERTIFIKAAT VAN GEREISTREERDE TITEL UITGEREIK CERTIFICATE OF REGISTERED TITLE ISSUED	
TEN OPSIGTE VAN <u>① Erf 1601 nGed van Erf 1 Windsorton</u>	RESTANT REMAINDER <u>4 709,263 HA</u>
IN RESPECT OF <u>② Erf 1964 nGed van Erf 1 Windsorton</u>	
<u>1 = 13000 HA</u>	 REGISTRATEUR/REGISTRAR
<u>2 = 5928 VM²</u>	
T <u>2272</u> <u>99</u>	 REGISTRATEUR/REGISTRAR
<u>06 AUG 1999</u>	

UITGEREIK VIR INLIGTING
DOELEINDES
ISSUED FOR INFORMATION
PURPOSES
23

have or be entitled to obtain under or by virtue of an law relating to the prospecting, digging, mining, or exploitation of minerals, mineral products, mineral oils, precious stones or precious or base metals on or under the land hereby granted, such rights shall not be impaired or in any way affected by the title deed.

In terms of Section 30 of Act No 46/1927 a portion of the farm No 19, Division of Barkly West, in extent approximately 87 morgen 20 square rods, has been deposited on alluvial digging for precious stones by Proclamation No 115 published in Government Gazette No 2728 dated the 21st February, 1940. Vide Mining Commissioner's Minute No M.C.B.W. 12/140 dated the 6th February, 1940 and filed under No 293/22/37.

Deeds Registry
Kimberley
12/2/1940
(See S.G. Act No 5031 page 250)

Deeds Registry
Kimberley
12/2/1940
(See S.G. Act No 5031 page 250)

Deeds Registry
Kimberley
12/2/1940

(Act) S. Kimberley
Head Registrar of Deeds

Deeds Registry
Kimberley
24/7/1939
(See S.G. Act No 5031 page 197)

In terms of Section 30 of Act No 46/1927 a portion of the property held hereunder, approximately 87 morgen 20 square rods, has been deposited on alluvial digging for precious stones by Proclamation No 115 published in Government Gazette No 2728 dated the 21st February, 1940. Vide Mining Commissioner's Minute No M.C.B.W. 12/140 dated the 6th February, 1940 and filed under No 293/22/37.

(Act) S. Kimberley
Head Registrar of Deeds

Deeds Registry
Kimberley
24/7/1939
(See S.G. Act No 5031 page 197)

the land shall be subject to all rights and servitudes which now affect or at any time hereafter may be found to affect the title of the land hereby granted or which may be existing on the date hereof in respect of the said land and at the date hereof.

THIS DEED was signed by the Secretary for Lands at Kimberley on the 12th day of February, 1940, and duly authorized the undersigned, in the name of the Secretary for Lands, to sign this deed.

In terms of Section 30 of Act No 46/1927 a portion of the property held hereunder, approximately 87 morgen 20 square rods, has been deposited on alluvial digging for precious stones by Proclamation No 115 published in Government Gazette No 2728 dated the 21st February, 1940. Vide Mining Commissioner's Minute No M.C.B.W. 12/140 dated the 6th February, 1940 and filed under No 293/22/37.

Registered in the Deeds Registry.

Kimberley, this 12th day of March 1940.

In terms of Section 30 of Act No 46/1927 a portion of the property held hereunder, approximately 87 morgen 20 square rods, has been deposited on alluvial digging for precious stones by Proclamation No 115 published in Government Gazette No 2728 dated the 21st February, 1940. Vide Mining Commissioner's Minute No M.C.B.W. 12/140 dated the 6th February, 1940 and filed under No 293/22/37.

UITGEKERND W. VERKOPPING
DOELANDES
ISSUED FOR INFORMATION
PURPOSES

Chromosome No. relative to Grant No. 2

A. J. GROENEWALD
 Registrar
 24-11-1965

*Reference to 126 Ad 73/66
 by virtue of resolution 20.12.67
 and further by virtue of resolution 17.12.67
 a portion of the certificate of registration
 measuring 5 morgen has been defined
 on an attached digging plan
 which has been submitted to M.C.S.W.
 11/3/68 dated 2/11/1967 filed for
 10-11-1967*

ERNEST MURDOCH
 Registrar
 27-11-1965

Ref 213
 No. 1.23/62
 REGISTERED
 27-11-1965
 To: *H.C. Bred*
L. F. H. SIDLER
 Registrar

Ref 213
 No. 2.22/63
 REGISTERED
 22-1-1967
 To: *L.A. ...*
L. F. H. SIDLER
 Registrar

Ref 213
 No. 1.23/62
 REGISTERED
 29-11-1965
 To: *L.A.B. ...*
A. J. GROENEWALD
 Registrar

**UITGEREIK VIR INLIGTING
 DOERLEINDES
 ISSUED FOR INFORMATION
 PURPOSES**

*In terms of Sec 30 of the 1924 Portions
 Act No. 27 of 1924, together with the
 extent have been deposited and
 used as official diggings for sections
 1-5 by Proclamation No. 794/1949 dated
 1-11-49 published in Government Gazette
 No. 4231 dated 17/8/49.
 Vide Mining Commissioner's minute
 M.C.M. 12/161 dated 2-9-1949 on
 23/34 Vol. 5.
 Records deposited by *M. KOLLITZ*
Regist. of Deeds
Kimberley
 6 SEP 1949*

*Item 9 sub 30 of Act 14 of 1927 of the
 Portions Act has been approximately
 11 morgen has been approximately
 diggings for previous owners and the
 extent of 12/348 has been defined on the
 attached drawing dated 2/11/1967
 which has been submitted to M.C.S.W.
 11/3/68 dated 2/11/1967 filed for
 10-11-1967*

CHIEF RICHTER
*Government of the
 Cape Province*

WINDSOR
WINDSOR

UITGEREIK VIR INIGTING
DOELEINDES
ISSUED FOR INFORMATION
PURPOSES

file 8953

G. J. PIENAR
REGISTERED
1954

Bertini - it van Gereguleerde Certificate of Registered Title is No. 11164	1973/24 Eligible for enrolled in terms of Act No. 27/77 Act No. 27/77 in respect of the Sect.	1973/24 11/164	11164
The last Name of ANTREKOR DAMES OFFICE 11/164		REGISTERED REGISTERED	

R. B. MURDOCH
REGISTERED
1954

Plant of 26-1-1972 to 11/164/221 Keller

By proclamation 11/64 dated 13/1/64
the Village Management Board area of
Windsor has been deleted with
effect from 1/1/64 and that the area
by abolition be a portion of the
area of Bardsley District Division
will affect from 1/1/64 shall be a
local area with the name "local area
of Windsor" and within the same
boundary as those of the former
village management Board area.

R. J. PIENAR
Registrar of Deeds.

13-3-1972
Deeds Office
R. J. Pienaar

BLADSY/PAGE # 5

ENDOSSEMENT OP
ENDORSEMENT ON BWF 1/22

EIENDOM/PROPERTY Erf 1
WINDSORTON

EA 23 Windsor - 2427 uit meter.

DE TRANSPORTLEER
TRANSFERRED

AAN TO J.P. Brounberg

RESTANT
REMAINDER 1816, 2794 da

24-10-1978

E. L. PIENAAR
REGISTRATEUR
REGISTRAR

UITGEREIK VIR INLIGTING
DOELEINDS
ISSUED FOR INFORMATION
PURPOSES

Certificate of Registered Title
Sertifikaat van Geregistreeerde Titel No. 7/235/78

Sect. 43 Act No. 47/87 In respect of the
Art. 43 Wet No. 47/87 ten opsigte van

Erf 310 Ged van Erf 1 Windsorton
get. H. 0304 ha. Sect. 4755, 5380 da.

D. G. ORSMOND
Deeds Office, Registrar.
Reg. Distrikte, Registrateur.
Bischoffsbld. 24-10-1978

FOR FURTHER ENDOSSEMENTS SEE
VIR VERDERE ENDOSSEMENTS SIE

BWFH 1122

ENDOSSEMENT I.V. ART. 26 WETTVAN 1964:-

KRAGTENS 'N PROKLAMASIE No. 127/76 5005
VERSKYN HET IN STAATSKERANT No. 5216
VAN 16 JULIE 1976 IS 'N GEDEELTE VAN
DIE RESTANT VAN ERF 1 WINDSORTON,
ADMINISTRATIEWE DISTRIK VAN BARKLY-LES
AS 'N ALLUVIALE DELWERY VIR EDELGE-
STEENTES GEDEPROKLANEER.

SIEN MYN KOMMISSARIS SE VERWYSING No.
M.C.B.W. 12/133 GEDATEER 10 AUGUSTUS 1976
WEGGELE BY BC 941 / 76.

19-8-1976
KIMBERLEY...
ARTEKANTOOR.

REGISTRATEUR
VAN ...

UITGEPELIGTE INLIGTING
DOELINDOES
ISSUED FOR INFORMATION
PURPOSES

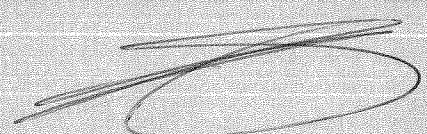
VIR INKOSSEMENTE VAN GROND
ENK BLOKKEERINGS OF PAAL

7 810

**RECOMMENDATIONS OF
RESPONSIBILITY TAKEN OVER
BY A.J. DAVIDS.**

**SEE THE FOLLOWING
ATTACHED DOCUMENTS**

1. Approved Environmental Management Plan of Golden Falls Trading 286 PTY LTD.
2. Approved sketch plan Golden Falls Trading 286 PTY LTD.
3. Take over of rehabilitation guarantee R115 000-00 see attachment of rehabilitation guarantee no. M453436.
4. Replacement guarantee submitted by A.J. Davids (Standard Bank Guarantee no. M501640 dated 4/03/2009 for the amount of R115 000-00.
5. Original Prospecting Right no. 51/2006 (Golden Falls Trading 286 PTY LTD)
6. Memorandum of Association of company having share capital.
7. Securities Transform Forms under companies Act 1974 (form CM42 x 4).
8. Certificate to commence business.
9. Certificate of incorporation.
10. Id copies of pending Directors x 2.
11. IDC Rehabilitation guarantee.
12. See agreement between Ben Gideon Sonnenberg and A.J. Davids
13. Amount of guarantee R100 000-00 see cheques payment of R200 000-00 paid to B.G. Sonnenberg.
14. Amount of guarantees in total
 1. R100 000-00 / 2002
 2. R100 000-00 / 2007
 2. R200 000-00 / 2008
 3. R115 000-00 / 2009Total guarantees = R515 000-00



File number: NC 30/5/1/1/2/157

DEPARTMENT OF MINERALS AND ENERGY

ENVIRONMENTAL MANAGEMENT PLAN

Submitted in support of application for a prospecting right or mining permit.
Section 39 and Regulation 52 of the Minerals and Petroleum Resources Development
Act, 2002 (Act 28 of 2002)



Application for a:

Prospecting Right	X
Mining Permit	

Applicant: GOLDEN FALLS TRADING 286 (PTY) LTD / SPRING GREEN

Farm: A PORTION OF UNSURVEYED LAND LOCATED AGAINST ERF 253 IN THE VAALRIVER

District: BARKLY WEST

Mineral: ALLUVIAL DIAMONDS

Date: 08/05/2005

Application received in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
NORTHERN CAPE REGION (S)

13 MAY 2005

Print Name

Signature:

DEPARTMENT OF MINERALS AND ENERGY

REGIONAL MANAGER
NORTHERN CAPE
PRETORIA

Contents

Section A:

A.1	Introduction	Page 3
A.2	Scope	Page 3
A.3	Purpose	Page 3
A.4	Use of the document	Page 4
A.5	Legislation/ Regulations	Page 4
A.6	Other relevant legislation	Page 5
A.7	Word definitions	Page 6

Section B:

B.1	Biographical information about the applicant	Page 7
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Section C:

C 1 - 5	Environmental Impact Assessment/ information about the environment	Page 8
C 6	Specific Regulatory requirements	Page 12

Section D:

D	Scoring of the EIA	Page 18
---	--------------------	---------

Section E:

E	Undertaking by applicant	Page 19
---	--------------------------	---------

Section F:

F	Environmental Management Plan	Page 20
---	-------------------------------	---------

Section G:

G	Specific additional requirements determined by the Regional Manager and agreed to by the Applicant	Page 41
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Section H:

H	Undertaking	Page 42
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Section J:

J	Approval	Page 43
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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 Minerals and Energy (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

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
NORTHERN DISTRICTS



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)

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
NORTHERN CAPE
KIMBERLEY



- 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.

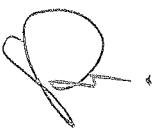
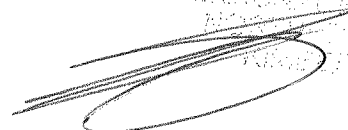
B. BIOGRAPHIC DETAILS OF THE APPLICANT:

B 1.1 Full name (and surname) of person or company applying for permit or right	GOLDEN FALLS TRADING 286 (PTY) LTD
B 1.2 ID number of person or company/ CC registration number	2004/026324/07
B 1.3 Postal address	62 KEKEWICH MONUMENT HEIGHTS KIMBERLEY 8301
B 1.4 Physical/ residential address	Erf 1 Windsorton 8510
B 1.5 Applicant's telephone number	053 8315461
B 1.6 Applicant's cellular phone number	082 8555 967
B 1.7 Alternative contact's name	Stevan du Plooy
B 1.8 Alternative contact's telephone/cell phone numbers	083 6797798
B 2.1 Full name of the property on which mining/ prospecting operations will be conducted	A PORTION OF UNSURVEYED LAND LOCATED AGAINST ERF 253 IN THE VAALRIVER
B 2.2 Name of the subdivision	None
B 2.3 Approximate center of mining/prospecting area: Latitude	28 ° 22 min 04 sec South
Longitude	24 ° 43 min 51 sec East
B 2.4 Magisterial district	Barkly West
B 2.5 Name of the registered owner of the property	Republic of South Africa
B 2.6 His/her Telephone number	-
B 2.7 His/ her Postal address	-

Release Version (1.3.1) 01 May 2004

 REGIONAL MANAGER
 NORTH CAPE
 BARKLY WEST
 


B 2.8 Current uses of surrounding areas	
Alluvial mining, livestock grazing, chicken farm.	
B 2.9 Are there any other, existing land uses that impact on the environment in the proposed mining/ prospecting area?	
* Historical mining activity that impacted on the area applied for.	
* Current mining activities on the surrounding land.	
B 2.10 What is the name of the nearest town?	
Windsorton	



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
C 1.1 What does the landscape surrounding the proposed operation look like? (Open veldt/ valley/ flowing landscape/ steep slopes)			
Highly disturbed island terrain in floodline of Vaal River.			
C 1.2 Describe the type of soil found on the surface of the site	Dundee Soil Forms – alluvial soil types		
	VALUE	TICK	OFFICE USE
C 1.3 How deep is the topsoil?	0 – 300mm		8
	300 – 600mm		4
	600mm +	X	2
C 1.4 What <i>plants, trees and grasses</i> grow naturally in the area around the site?			
Trees: <i>Rhus lancea</i> (Karee), <i>Acacia karroo</i> (Sweet Thorn), <i>Acacia tortilis</i> (Umbrella Thorn) and <i>Ziziphus mucronata</i> (Buffalo Thorn).			
Shrub: <i>Acacia tortilis</i> (Umbrella Thorn), <i>A. mellifera</i> (Black Thorn) and <i>Diospyros lycioides</i> (Star apple).			
Grasses: <i>Cynodon dactylon</i> (Couch Grass), <i>Cenchrus ciliaris</i> (Foxtail Buffalo Grass), <i>Aristida congesta</i> subsp. <i>barbicollis</i> (Spreading Three-awn), <i>Eragrostis lehmanniana</i> (Lehmann's Love Grass) and <i>Phragmites australis</i> (Common Reed).			
Forbs: <i>Asclepias fruticosa</i> (Milkweed) and <i>Cyperus</i> species.			



C 1.5 What animals naturally occur in the area?

<i>Pronolagus rupestris</i>	-	Smith's red rock rabbit
<i>Hystrix africaeaustralis</i>	-	Porcupine
<i>Suricata suricatta</i>	-	Meerkat
<i>Helogale parvula</i>	-	Dwarf mongoose
<i>Cynictis penicillata</i>	-	Yellow mongoose
<i>Atilax paludinosus</i>	-	Water mongoose
<i>Galerella sanguinea</i>	-	Slender mongoose
<i>Ictonyx striatus</i>	-	Striped polecat
<i>Genetta genetta</i>	-	Small spotted genet
<i>Xerus inauris</i>	-	Ground squirrel
<i>Sylvicapra grimmia</i>	-	Common duiker
<i>Raphicerus campestris</i>	-	Steenbok
<i>Tragelaphus strepsiceros</i>	-	Kudu
<i>Suncus infinitesimus</i>	-	Least dwarf shrew
<i>Crocidura cyanea</i>	-	Reddish-grey musk shrew
<i>Chlorotohpa sclater</i>	-	Golden Mole
<i>Tadarida aegyptiaca</i>	-	Egyptian free-tailed bat
<i>Eptesicus capensis</i>	-	Cape serotine bat
<i>Nycteris thebaica</i>	-	Common slit-faced bat
<i>Rhinolophus clivosus</i>	-	Geoffroy's horseshoe bat
<i>Papio ursinus</i>	-	Chacma baboon

	VALUE	TICK	OFFICE USE
C 1.6 Are there any protected areas (game parks/nature reserves, monuments, etc) close to the proposed operation?	Yes		4
	No	X	0

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:
 1 X 16ft PAN WITH A GREASE TABLE, 1 X FRONT END LOADER, 1 X BACK ACTOR, 1 X TIPPER TRUCK

REGIONAL MANAGER
 

C.2 HOW WILL THE PROPOSED OPERATION IMPACT ON THE NATURAL ENVIRONMENT? (REGULATION 52(2)(b))			
ENVIRONMENTAL ELEMENT/ IMPACTOR	VALUE	TICK	OFFICE USE
C 2.1 What will the ultimate depth of the proposed prospecting/mining operations be?	0 – 5m		2
	6 – 10m	X	4
	10 – 25m		8
	25m +		10
C 2.2 How large will the <i>total</i> area of all excavations be?			0.1 ha
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
C 2.4 How many <i>prospecting</i> boreholes or trenches will there be?	10 Boreholes 3 Trenches		
	VALUE	TICK	OFFICE USE
C 2.5 Will employees prepare food on the site and collect firewood?	Yes	X	4
	No		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?	Vaal River		
C 2.8 If water will not be extracted from an open surface source, where will it be obtained?	-		
	VALUE	TICK	OFFICE USE
C 2.9 How much water per day will the <i>mineral processing</i> operation require?	1000 – 10 000 Liters	*	2
	20 000 – 40 000 L		3
	40 000 – 60 000 L		5
	60 000 – 100 000L	X	8
	More		10

Release Version (1.3.1) 01 May 2004

REGIONAL WATER
NORTHERN CAPE
AUTHORITY

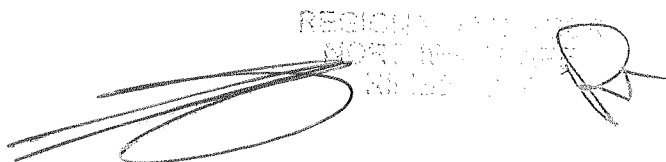
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C 2.10 How far is the proposed operation from open water (dam, river, pan, lake)?	0 – 15m		8
	16 – 30m	X	6
	31 – 60m		4
	More than 60 metres		2
C 2.11 What is the estimate depth of the water table/ borehole?		5	metres
C 2.12 How much water per day will the proposed operation utilize for employees?		250	Liters
C 2.13 What toilet facilities will be made available to workers?	None		8
	Pit latrine (longdrop)		4
	Chemical toilet	X	2
C 2.14 Would it be necessary to construct roads to access the proposed operations?	Yes		4
	No	X	0
	VALUE	TICK	OFFICE USE
C 2.15 How long will these access road(s) be (from a public road to the proposed operations)	0 – 0,5 km		4
	0,6 – 1,5 km	X	2
	1,6 – 3 km		4
C 2.16 Will trees be uprooted to construct these access road(s)?	Yes		4
	No	X	0
C 2.17 Will any foreign material, like crushed stone, limestone, or any material other than the naturally occurring topsoil be placed on the road surface?	Yes		4
	No	X	0
C.3 TIME FACTOR			
C 3.1 For what time period will prospecting/mining operations be conducted on this particular site?	0 – 6 months		2
	6 – 12 months		4
	12 – 18 months		6
	18 – 24 months	X	8
	>24 months		10

Release Version (1.3.1) 01 May 2004

 REGIONAL MANAGER
 (NORTHERN DISTRICT)
 KENYA
 


C.4 HOW WILL THE PROPOSED OPERATION IMPACT ON THE SOCIO-ECONOMIC ENVIRONMENT? (REGULATION 52(2)(b))			
ELEMENT/ IMPACTOR	VALUE	TICK	OFFICE USE
C 4.1 How many people will be employed?	• 24		
C 4.2 How many men?	• 20		
C 4.3 How many women?	• 4		
C 4.4 Where will employees be obtained? (Own or employed from local communities?)	Own 15		2
	Contractor 5		
	Local 4		4
C 4.5 How many hours per day will employees work?	Sunrise → Sunset	X	4
	Less 8hours		2
	More		8
ELEMENT/ IMPACTOR	VALUE	TICK	OFFICE USE
C 4.6 Will operations be conducted within 1 kilometer from a residential area	Yes		6
	No	X	1
C 4.7 How far will the proposed operation be from the nearest fence/windmill/house/dam/built structure?	0 – 50 metres		8
	51 – 100 metres		4
	150 or more metres	X	2
C.5 HOW WILL THE PROPOSED OPERATION IMPACT ON THE CULTURAL HERITAGE OF THE SURROUNDING ENVIRONMENT? REGULATION 52(2)(b)			
ELEMENT/ IMPACTOR	VALUE	TICK	OFFICE USE
C 5.1 Are there any graveyards or old houses or sites of historic significance within 1 kilometer of the area?	Yes		8
	No	X	0

REGIONAL...
 NORTH...
 RIVER...


C.6 SPECIFIC REGULATORY REQUIREMENTS

<p>C.6.1 Air quality Management and Control (Regulation 64) Describe how the operation will impact on the quality of the air, taking into account predominant wind direction and other affected parties in the downwind zone:</p>	
<p>The mining operation will generate dust in the immediate area of trenches but these will be located at least 1.5km away from any potential impact zones like a farmstead, stock holding pens or irrigation lands.</p>	
<p>At the processing plant the gravels will be sprayed/washed with water and no dust should be generated. The plant will also be at least 1.5km away from any potential impact zones. All roads used will also be regularly watered to prevent the creation of nuisance dust.</p>	
<p>C.6.2 Fire Prevention (Regulation 65) Applicants for permits, rights or permissions involving <u>coal or bituminous rock</u> must:</p> <ul style="list-style-type: none"> • <i>Indicate on a plan</i> where the coal or rock discard dump will be located <i>(If applied for a permit to mine or prospect for coal or bituminous rock, indicate the exact location of the discard dump on the plan and write "EMPlan C6.2" next to it)</i> 	
<p>C.6.3 Noise control (Regulation 66) Indicate how much noise the operation will generate, and how it will impact on the surrounding environment, who might be influenced by noise from your operation.</p>	
<p>Noise will be generated where the trenches are excavated and where the material is screened. It is expected that noise levels will be below 82 decibels outside the prospecting area.</p>	
<p>C.6.4 Blasting, vibration and shock (Regulation 67) Please indicate whether any blasting operations will be conducted.</p>	
Blasting:	No
	How often? -
<p>C.6.5 Disposal of waste material (Regulation 69) <i>Indicate on your plan</i> where waste will be dumped in relation to the beneficiation works/ washing pans Also indicate below how domestic waste material will be managed.</p>	
<p>No mine residue will be dumped permanently but will be stockpiled near the processing area until the trench has been completely excavated. Topsoil and subsoil will be stockpiled separately besides each open trench. Backfilling will take place within 7 days of a new trench being excavated. All boreholes drilled will be immediately backfilled after drilling.</p>	
<p>Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., will be stored in a container at a collecting point near the processing plant and be collected on a regular basis and disposed of at a recognised disposal facility in Barkly West. Specific precautions will be taken to prevent any refuse from being dumped outside the above collecting point. Biodegradable refuse generated from the office/camp site, processing areas vehicle yard,</p>	

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
BARKLY WEST
SOUTH AFRICA

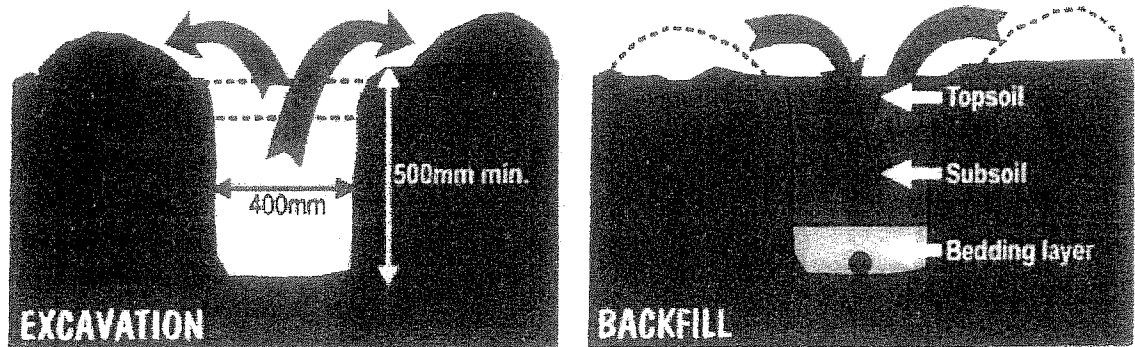
storage area or any other area will either be handled as indicated above or be buried in a pit excavated for that purpose and covered with layers of soil, incorporating a final 0,5 metre thick layer of topsoil.

C.6.6 Soil pollution and erosion control (Regulation 70)

6.6.1 Indicate how topsoil will be handled on the area.

In all places where the surface will be disturbed or impacted on the topsoil will be removed to an effective depth of at least 300mm and stockpiled near each open trench.

Where trenches are made the topsoil and subsoil will be stockpiled separately and after backfilling be replaced in the order as found – see diagram description.





6.6.2 Describe how spills of oil, grease, diesel, acid or hydraulic fluid will be dealt with.

The spillage will be removed together with the polluted soil and stored in 200 liter drums to be disposed at a recognised facility like the furnace at Lime Acres or be collected by Oilkol - Johannesburg.

6.6.3 Briefly describe the storage facilities available for the above fluids:

All hydrocarbon fluids will be stored in a sealed steel container (8m x 4m) with a small berm to contain any spills. Drip pans will also be installed and use where these fluids are used outside the steel container.

<p>C-6.7 If significant impacts on any element of the environment mentioned in Section C 1 to C 6.6 above have been identified, summarise all of them here: (Regulation 52(2)(c))</p>	<p>Example: Section C 6.4 Blasting. I have identified that the people living on the neighbouring property are sensitive to loud noises as they have children that must study during the afternoons</p>
<p>C-6.8 How will the negative impacts on the environment be mitigated or managed (as described in C 6.11 to the left? (Regulation 57(2)(c))</p>	<p>Example: I will mitigate the impact of my blasting operations on the interested Parties by limiting blasting operations to school hours, when no one in the affected area is at home.</p>
<p>1 None</p>	<p>1 At the processing site the mined material will be sprayed with water and no dust should be generated. The plant will also be at least 2000m away from any potential impact zones</p>
<p>2</p>	<p>2 Topsoil will be stockpiled for a period not exceeding 6months as not to impact on the seed bank capacity of the topsoil</p>
<p>3</p>	<p>3 The processing area will be so located as to be aesthetically pleasing and not highly visible.</p>
<p>4</p>	<p>4 Where trees or bushes are to be removed no trees will be removed that are higher than 3m in height or protected under legislation.</p>
<p>5</p>	<p>5 No workers will be allowed to remove wood for fires except where provided for by the current surface owner.</p>
<p>6</p>	
<p>7</p>	
<p>8</p>	

C.7 Financial provision: (Regulation 54)

The amount that is necessary for the rehabilitation of damage caused by the operation, both sudden closure during the normal operation of the project and at final, planned closure will be estimated by the regional office of the DME, based on the information supplied in this document. This amount will reflect how much will it cost the Department to rehabilitate the area disturbed in case of liquidation or abscondence.

Enter the amount of financial provision required here : The determined rehabilitation cost will be R70 000. R60 000 to backfill the three open pits/trenches and R10 000 guarantee for the drilling of 10 holes.

What method will be used to furnish DME with this financial provision?

Cash deposit	
Bank guarantee	X
Trust Fund	
Other: (specify) (Note: other methods must be approved by the Minister)	

The standard formats for each of these types of guarantees are available from your regional office of the DME.

C.8.1 Monitoring and performance assessment.

Regulation 55 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) clearly describes the process and procedure as well as requirements for monitoring and auditing of the performance of this plan to adequately address environmental impacts from the operation. The following information must be provided:

C.8.2 Please describe how the adequacy of this programme will be assessed and how any inadequacies will be addressed. (Regulations 55(1) and 52(2)(e))
<i>Example: I will, on a bi-monthly basis, check every aspect of my operation against the prescriptions given in Section F of 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.</i>
Golden Falls Trading 286 will on a monthly basis check all the potential impacts identified against his operation and take immediate mitigation action if they do not comply with the management guidelines or statutory regulations. They will also appoint an independent environmental specialist on annual basis to a performance assessment report and give this through to the DME – Kimberley.
C.9 Closure and Environmental objectives: (Regulation 52(2)(f))
Clearly state the intended end use for the area prospected/mined after closing of operations
Livestock grazing or wilderness area.

C.9.1 Describe, in brief terms, what the environment will look like after a closure certificate has been obtained.
The impacted areas will have the same topography and contour shape as before the prospecting/ mining operation with no trenches pits or residue deposits left on surface. All industrial / domestic waste or material will be completely removed and the area will be aesthetically pleasing. Where sampling has taken place the area will be devoid of bushes and small trees but all trees higher than 3m will be left in place.

Note: The proposed end-state of your area must be consulted with interested and affected parties in terms of Regulation 52(2)(g). Details of the acceptability of the end-state must appear in the section below.

C 10 CLOSURE

Regulations 56 to 62 outline the entire process of mine closure, and these are copied in Section F of this document, both as a guide to applicants on the process to be followed for mine closure, and also to address the legal responsibility of the applicant with regard to the proper closure of his operation. In terms of Section 37 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), the holder of a permit is liable for any and all environmental damage or degradation emanating from his/her operation, until a closure certificate is issued in terms of Section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002).

C.11 Public Participation: (Regulation 52(2)(g))

In terms of the above regulation consultation with interested and affected person or persons must take place prior to the approval of the environmental management plan. This regulation is quoted below for ease of reference.

"a record of the public participation undertaken and the results thereof"

C 11.1 Any comments lodged by an interested and affected person or persons in terms of section 10(1)(b) of the Act, must be in writing and addressed to the relevant Regional Manager.

C 11.2 Any objections lodged by an interested and affected person or persons against the application for a right or permit in terms of the Act, must set out clearly and concisely the facts upon which it is based and must be addressed to the relevant Regional Manager in writing.

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
NORTHERN CAPE
WUPRCEL 1

C 11.3 The Regional Manager must make known by way of publication in a local newspaper or at the office of the Regional Manager, that an application for a right or permit in terms of the Act has been received.

In the table below, please list the names of people or organisations likely to be influenced by the proposed operations (these might include neighbours, other water users, etc.) Kindly indicate how these people were consulted (eg. By letter or by phone) and provide proof of that consultation. What were the main concerns/ objections raised by the interested and affected parties to the proposed operation?

Name of Interested/ affected party	Contact details: Address & telephone number	How did consultation take place?	What were his/her main concern about the operation?
Mr MJ Van Der Westhuizen Hermanus – Erf 253 Windsorton municipality	Cell:083 2939995 Tel/Fax:053 5510025 PO Box 43 Windsorton 8530	By personal meetings and fax.	The owner was not prepared to put anything in writing but did mention during a meeting with him that he was worried about his water abstraction out of the Vaal River being impacted on and the use of the access road through his property onto the island.
Mev Minna Olivier Farm Slypklip North A #32	Farm Slypklip North A #32 Barkly West Fax:051 5222130	By phone and fax.	No issues raised.

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
NORTH WEST DISTRICT
KIMBERLEY



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Instructions for officials:

In this table, complete the totals of each section indicated below and do the calculation. **Remember to first add all the values of sections C 1,2,4 and 5 and then to multiply it by the time factor in Section C 3**

Note that the value for the time factor element of the impact rating appears in Section C3. This is the total amount of time that the operation is expected to impact on the environment and all other factors are MULTIPLIED by this value. Compare the score (Impact rating) with the table below to help you make a decision on the total impact of the operation and also on the sufficiency of this programme to address all expected impacts from the operation on the environment.

D 1.1 CALCULATION TABLE

Section C1 Total	+	Section C2 Total	+	Section C4 Total	+	Section C5 Total	=	<u>Subtotal</u>	X	Time Factor Section C 3	=	Score (Impact rating)
2	+	34	+	7	+	0	=	43	X	8	=	344

D 1.2 IMPACT RATING SCALE

SCORE ATTAINED	IMPACT RATING	REMARKS
46 - 300	Low	No additional objectives needed – this programme is sufficient
301 - 800	Medium	Some specific additional objectives to address focal areas of concern may be set.
801 - 1160	High	Major revision of Environmental Management Plan for adequacy and full revision of objectives.

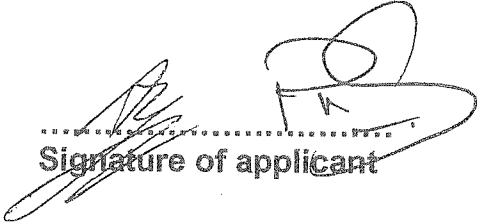
Additional Objectives:

Based on the information provided by the applicant and the regional office's assessment thereof, combined with the interpretation of the scoring and impact rating attained for the particular operation above, the Regional Manager of the regional office of the DME may now determine additional objectives /requirements for the mine owner/manager to comply with. *These measures will be specific and will address specific issues of concern that are not adequately covered in the standard version of this document.* These requirements are not listed here, but are specified under Section G of this document, so as to form part of the legally binding part of this Environmental Management Plan.

E UNDERTAKING:

I, Adriaan Isak du Toit, duly authorised by Golden Falls Trading 286 (PTY) Ltd as the applicant for a Prospecting Right hereby declare that the above information is true, complete and correct. I undertake to implement the measures as described in Sections F and G hereof. I understand that this undertaking is legally binding and that failure to give effect hereto will render me liable for prosecution in terms of Section 98 (b) and 99 (1)(g) of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). I am also aware that the Regional Manager may, at any time but after consultation with me, make such changes to this plan as he/she may deem necessary.

Signed on this 07 day of May 2005 at Kimberley (Place)


.....
Signature of applicant


REGIONAL MANAGER
NORTHERN CAPE
KIMBERLEY 

F. ENVIRONMENTAL MANAGEMENT PLAN:

INTRODUCTION

This Environmental Management Plan contains guidelines, operating procedures and rehabilitation/pollution control requirements which will be binding on the holder of the mining permit/ prospecting permission/ reconnaissance permission after approval of the Environmental Management Plan. It is essential that this portion be carefully studied, understood, implemented and adhered to at all times.

F 1 GENERAL REQUIREMENTS

F 1.1 MAPPING AND SETTING OUT

F 1.1.1 LAYOUT PLAN

- A copy of the layout plan as provided for in Regulation 2.2 must be available at the prospecting/mining site for scrutiny when required.
- The plan must be updated on a regular basis with regard to the actual progress of the establishment of surface infrastructure, mining operations and rehabilitation (a copy of the updated plan shall be forwarded to the Regional Manager on a regular basis).
- A final layout plan must be submitted at closure of the mine or when operations have ceased.

NOTE: Regulation 2.2 of the regulations promulgated in terms of the Act requires:

"An application contemplated in sub-regulation (1) must be accompanied by a plan that must contain –

- (a) *the co-ordinates of the land or area applied for;*
- (b) *the north point;*
- (c) *the scale to which the plan has been drawn;*
- (d) *the name, number and location of the land or area covered by the application;*
and
- (e) *in relation to farm boundaries and surveyed points-*
 - (i) *the size and shape of the proposed area;*
 - (ii) *the boundaries of the land or area comprising the subject of the application concerned;*
 - (iii) *the layout of the proposed reconnaissance, prospecting, exploration, mining or production operations;*
 - (iv) *surface structures and servitudes;*
 - (v) *the topography of the land or area; "*

F 1.1.2 DEMARCATING THE MINING/ PROSPECTING AREA

- The mining/ prospecting area must be clearly demarcated by means of beacons at its corners, and along its boundaries if there is no visibility between the corner beacons.
- Permanent beacons as indicated on the layout plan or as prescribed by the Regional Manager must be firmly erected and maintained in their correct position throughout the life of the operation.

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
NORTHERN CAPE
KIMBERLEY



- Mining/ prospecting and resultant operations shall only take place within this demarcated area.

F 1.1.3 DEMARCATING THE RIVER CHANNEL AND RIVERINE ENVIRONMENT

The following is applicable if operations are conducted within the riverine environment (See F 3.2):

- Beacons as indicated on the layout plan or as prescribed by the Regional Manager must be erected and maintained in their correct position throughout the life of the operation.
- These beacons must be of a permanent nature during the operations and must not be easily removable, especially those in a river channel. The beacons must, however, be removed at the end of the operations.
- The mining of and prospecting for any mineral shall only take place within this demarcated mining area.
- If riverine vegetation is present in the form of reeds or wetland vegetation, the presence of these areas must be entered in Part C 1.45 of the EMP plan and indicated on the layout plan.
- The holder of the mining permit/ prospecting right will also be required to permanently demarcate the areas as specified in F 1.1.2.

F 1.2 RESTRICTIONS ON MINING/ PROSPECTING

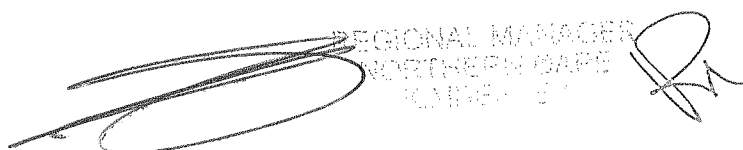
- On assessment of the application, the Regional Manager may prohibit the conducting of mining or prospecting operations in vegetated areas or over portions of these areas
- In the case of areas that are excluded from mining or prospecting, no operations shall be conducted within 5 m of these areas.

F 1.3 RESPONSIBILITY

- The environment affected by the mining/ prospecting operations shall be rehabilitated by the holder, as far as is practicable, to its natural state or to a predetermined and agreed to standard or land use which conforms with the concept of sustainable development. The affected environment shall be maintained in a stable condition that will not be detrimental to the safety and health of humans and animals and that will not pollute the environment or lead to the degradation thereof.
- It is the responsibility of the holder of the mining permit/ prospecting right to ensure that the manager on the site and the employees are capable of complying with all the statutory requirements which must be met in order to mine, which includes the implementation of this EMP.
- If operations are to be conducted in an area that has already been disturbed, the holder must reach specific agreement with the Regional Manager concerning the responsibilities imposed upon himself/herself pertaining to the rehabilitation of the area and the pollution control measures to be implemented.

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REGIONAL MANAGER
NORTHERN CAPE
KIMBERLEY



F 2 INFRASTRUCTURAL REQUIREMENTS

F 2.1 TOPSOIL

- Topsoil shall be removed from all areas where physical disturbance of the surface will occur.
- All available topsoil shall be removed after consultation with the Regional Manager prior to the commencement of any operations.
- The topsoil removed, shall be stored in a bund wall on the high ground side of the mining/prospecting area outside the 1:50 flood level within the boundaries of the mining area/prospecting.
- Topsoil shall be kept separate from overburden and shall not be used for building or maintenance of access roads.
- The topsoil stored in the bund wall shall be adequately protected from being blown away or being eroded.

F 2.2 ACCESS TO THE SITE

F 2.2.1 Establishing access roads on the site

- The access road to the mining/prospecting area and the camp-site/site office must be established in consultation with the landowner/tenant and existing roads shall be used as far as practicable.
- Should a portion of the access road be newly constructed the following must be adhered to:
 - The route shall be selected that a minimum number of bushes or trees are felled and existing fence lines shall be followed as far as possible.
 - Water courses and steep gradients shall be avoided as far as is practicable.
 - Adequate drainage and erosion protection in the form of cut-off berms or trenches shall be provided where necessary.
- If imported material is used in the construction or upgrading of the access road this must be listed in C 2.17
- The erection of gates in fence lines and the open or closed status of gates in new and existing positions shall be clarified in consultation with the landowner/tenant and maintained throughout the operational period.
- No other routes will be used by vehicles or personnel for the purpose of gaining access to the site.

NOTE: The design, construction and location of access to provincial roads must be in accordance with the requirements laid down by the Provincial or controlling authority.

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REGIONAL MANAGER
NORTHERN DISTRICT
KIMBERLEY

F 2.2.2 Maintenance of access roads

- In the case of dual or multiple use of access roads by other users, arrangements for multiple responsibility must be made with the other users. If not, the maintenance of access roads will be the responsibility of the holder of the mining permit/ prospecting right.
- Newly constructed access roads shall be adequately maintained so as to minimise dust, erosion or undue surface damage.

F 2.2.3 Dust control on the access and haul roads

- The liberation of dust into the surrounding environment shall be effectively controlled by the use of, inter alia, water spraying and/or other dust-allaying agents. The speed of haul trucks and other vehicles must be strictly controlled to avoid dangerous conditions, excessive dust or excessive deterioration of the road being used.

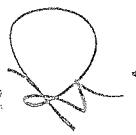
F 2.2.4 Rehabilitation of access roads

- Whenever a mining permit/ prospecting right is suspended, cancelled or abandoned or if it lapses and the holder does not wish to renew the permit or right, any access road or portions thereof, constructed by the holder and which will no longer be required by the landowner/tenant, shall be removed and/or rehabilitated to the satisfaction of the Regional Manager.
- Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre mining/ prospecting situation.
- Roads shall be ripped or ploughed, and if necessary, appropriately fertilised (based on a soil analysis) to ensure the regrowth of vegetation. Imported road construction materials which may hamper regrowth of vegetation must be removed and disposed of in an approved manner prior to rehabilitation.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed 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 the Regional Manager's specification.

F 2.3 OFFICE/CAMP SITES

F 2.3.1 Establishing office / camp sites

- Office and camp sites shall 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 shall be the minimum reasonably required and which will involve the least disturbance to vegetation. Topsoil shall be handled as described in F 2.1 above

- 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.

F 2.3.2 Toilet facilities, waste water and refuse disposal

- As a minimum requirement, the holder of a mining permit/ prospecting right 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 recognised facility.
- Spills should 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 recognised 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 recognised 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.

F 2.3.3 Rehabilitation of the office/camp site

- 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), which states:
 - (1) *When a prospecting right, mining right, retention permit or mining permit lapses, is cancelled or is abandoned or when any prospecting or mining operation comes to an end, the holder of any such right or permit may not demolish or remove any building, structure, object -*
 - (a) *which may not be demolished in terms of any other law;*
 - (b) *which has been identified in writing by the Minister for purposes of this section; or*
 - (c) *which is to be retained in terms of an agreement between the holder and the owner or occupier of the land, which agreement has been approved by the Minister in writing.*
 - (2) *The provision of subsection (1) does not apply to bona fide mining equipment which may be removed*
- 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 analysed 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.

F 2.4 VEHICLE MAINTENANCE YARD AND SECURED STORAGE AREAS

F 2.4.1 Establishing the vehicle maintenance yard and secured storage areas

- The 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 shall be the minimum reasonably required and involve the least disturbance to tree and plant life. Topsoil shall be handled as described in F 2.1 above.

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
NORTHERN CAPE
KIMBERLEY




- 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.

F 2.4.2 Maintenance of vehicles and equipment

- The maintenance of vehicles and equipment used for any purpose during the mining/prospecting operation will take place only in the maintenance yard area.
- Equipment used in the mining/prospecting process must be adequately maintained so that during operations it does not spill oil, diesel, fuel, or hydraulic fluid.
- Machinery or equipment used on the mining/prospecting area must not constitute a pollution hazard in respect of the above substances. The Regional Manager shall order such equipment to be repaired or withdrawn from use if he or she considers the equipment or machinery to be polluting and irreparable.

F 2.4.3 Waste disposal

- Suitable covered receptacles shall be available at all times and conveniently placed for the disposal of waste.
- All used oils, grease or hydraulic fluids shall be placed therein and these receptacles will be removed from the site on a regular basis for disposal at a registered or licensed disposal facility.
- All spills should 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 recognised facility.

F 2.4.4 Rehabilitation of vehicle maintenance yard and secured storages 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 fertilised if necessary (based on a soil analysis).
- The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora.



KIMBERLEY

- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed 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.

F 3 OPERATING PROCEDURES IN THE MINING AREA

F 3.1 Limitations on mining/prospecting

- The mining of or prospecting for precious stones shall take place only within the approved demarcated mining or prospecting area.
- Mining/ prospecting may be limited to the areas indicated by the Regional Manager on assessment of the application.
- The holder of the mining permit/ prospecting right shall ensure that operations take place only in the demarcated areas as described in section F 1.1.2 above.
- Operations will not be conducted closer than one and a half times the height of the bank from the edge of the river channel and in such manner that the stability of the bank of the river is effected.
- Precautions shall also be taken to ensure that the bank of the river is adequately protected from scouring or erosion. Damage to the bank of the river caused by the operations, shall be rehabilitated to a condition acceptable to the Regional Manager at the expense of the holder.
- Restrictions on the disturbance of riverine vegetation in the form of reeds or wetland vegetation must be adhered to. The presence of these areas must be entered in Part of the programme and indicated on the layout plan.

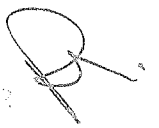
F 3.2 Mining/ prospecting operations within the riverine environment

NOTE: The Department of Water Affairs and Forestry may impose additional conditions which must be attached to this EMP. In this regard, please see the Best Practice Guideline for small scale mining developed by DWAF (BPG 2.1)
(available from <http://www.dwaf.gov.za>)

- The mining of or prospecting for precious stones in the river or the banks of the river will be undertaken only after the Regional Manager has consulted with the Department of Water Affairs and Forestry.
- The canalisation of a river will not be undertaken unless the necessary permission has been obtained from the Department of Water Affairs and Forestry. Over and above the conditions imposed by the said Department, which conditions shall form part of this EMPlan, the following will also apply:
 - ❖ The canalisation of the flow of the river over different parts of the river bed shall be constructed in such a manner that the following are adhered to at all times:



REGIONAL MANAGER
NORTH CAPE
MAY 2004



- ◆ The flow of the river may not be impeded in any way and damming upstream may not occur.
 - ◆ The canalisation of the flow may not result in scouring or erosion of the river-bank.
 - ◆ Well points or extraction pumps in use by other riparian users may not be interfered with and canalisation may not impede the extraction of water at these points.
- Access to the riverbed for the purpose of conducting excavations in the river-bed, shall be through the use of only one access at a time. The location of the access to the river channel across the river-bank shall be at a point of the river-bank where the 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.

F 3.2.1 Rehabilitation of access to 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 fertilised 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 analysed 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.
- Final acceptance of rehabilitated river access points will be awarded only after the vegetation has re-established to a point where the Regional Manager is satisfied that the river-bank is stable and that the measures installed are of durable nature and able to withstand high river-flow conditions.

F 3.2.2 Rehabilitation of mining/prospecting area in the bed of the river

- The goal of rehabilitation with respect to the area where mining/prospecting has taken place in the river-bed is to leave the area level and even, and in a natural state containing no foreign debris or other materials and to ensure the hydrological integrity of the river by not attenuating or diverting any of the natural flow.
- All scrap and other foreign materials will be removed from the bed of the river and disposed of as in the case of other refuse (see section F 2.3.2 above), whether



these accrue directly from the mining/prospecting operation or are washed on to the site from upstream.

- Removal of these materials shall be done on a continuous basis and not only at the start of rehabilitation.
- Where reeds or other riverine vegetation have been removed from areas, these shall be re-established systematically in the approximate areas where they occurred before mining/prospecting.
- An effective control programme for the eradication of invader species and other exotic plants, shall be instituted on a regular basis over the entire mining/prospecting area under the control of the holder of the mining permit/prospecting right, both during mining/prospecting and at the stage of final rehabilitation.

2. THE WATER USE LICENCE

The National Water Act, (Act 36 of 1998), is based on the principles of sustainability, efficiency and equity, meaning that the protection of water resources must be balanced with their development and use.

In addition to being issued with a prospecting right or mining permit a small-scale miner may also need to get a **water use licence** for the proposed water uses that will take place, except in certain cases.

NOTE: The Department of Water Affairs and Forestry (DWAF) developed specific Best Practice Guideline for small scale mining that relates to stormwater management, erosion and sediment control and waste management. Copies of these guidelines can be obtained from the regional office of DME or DWAF.

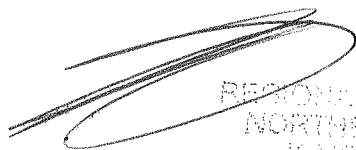
Applications for a water use licence must be made in good time, such that approval can be granted before a water use activity can begin. The appropriate licence forms for each kind of expected water use should be completed together with supporting documentation. The main supporting document required is a technical report. To make the technical report easier, you can refer to sections in this EMPlan, as most of what the technical report requires has already been done in the EMPlan. If you refer to the EMPlan it must be attached to the technical report.

F 3.3 EXCAVATIONS

F 3.3.1 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:
 - ❖ Topsoil shall, in all cases (except when excavations are made in the river-bed), be handled as described in F 2.1 above.
 - ❖ Excavations shall take place only within the approved demarcated mining/prospecting area.
 - ❖ Overburden rocks and coarse material shall be placed concurrently in the excavations or stored adjacent to the

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REGIONAL MANAGER
NORTHERN LOCAL
MATTERS



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.

F 3.3.2 Rehabilitation of excavation areas

The following operating procedures shall be adhered to:

- The excavated area must serve as a final depositing area for the placement of tailings during processing.
- Rocks and coarse material removed from the excavation must be dumped into the excavation simultaneously with the tailings.
- Waste, as described in paragraph F 2.3.2 above, will not be permitted to be deposited in the excavations.
- Once excavations have been refilled with overburden, rocks and coarse natural materials and profiled with acceptable contours and erosion control measures, the topsoil previously stored, shall be returned to its original depth over the area.
- The area shall be fertilised if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local or adapted indigenous seed mix in order to propagate the locally or regionally occurring flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed 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.

F 3.4 PROCESSING AREAS AND WASTE PILES (DUMPS)

F 3.4.1 Establishing processing areas and waste piles

- Processing areas and waste piles shall not be established within 100 metres of the edge of any river channel or other water bodies.
- Processing areas should 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 shall be the minimum reasonably required and involve the least disturbance to vegetation.
- Prior to development of these areas, the topsoil shall be removed and stored as described in paragraph F 2.1 above.
- The location and dimensions of the areas are to be indicated on the layout plan and once established, the processing of 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.



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 ACCESS TO INFORMATION ACT
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F 3.4.2 Rehabilitation of processing areas

- Coarse natural material used for the construction of ramps must be removed and dumped into the excavations.
- On completion of mining/prospecting operations, the surface of the processing areas especially if compacted due to hauling and dumping operations, shall be scarified to a depth of at least 300mm and graded to an even surface condition and the previously stored topsoil will be returned to its original depth over the area.
- Prior to replacing the topsoil the material that was removed from the processing area will be replaced in the same order as it originally occurred.
- The area shall then be fertilised if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local, adapted indigenous seed mix.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed 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.

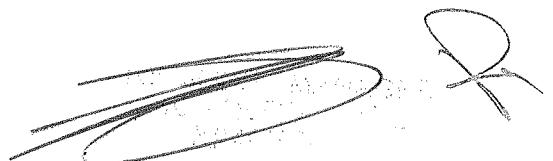
F 3.5 TAILINGS DAM(S) (SLIMES DAM)

The permission of the Regional Manager must be obtained should a tailings dam be constructed for the purpose of handling the tailings of the mining/prospecting operations. The construction, care and maintenance of tailings dams have been regulated and the relevant regulation is copied herewith, both for your information and as a guideline to the commissioning, management, operation, closing and aftercare of a tailings deposition facility.

Regulation 73 promulgated under the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) requires the following:

Management of residue stockpiles and deposits

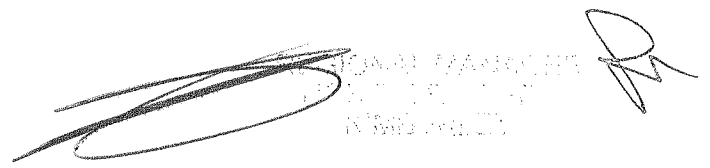
56. (1) *The assessment of impacts relating to the management of residue stockpiles and deposits, where appropriate, must form part of the environmental impact assessment report and environmental management programme or the environmental management plan.*
- (2) *Residue characterisation*
- (a) *Mine residue must be characterised to identify any potentially significant health and safety hazard and environmental impact that may be associated with the residue when stockpiled or deposited at the site(s) under consideration.*
- (b) *Residue stockpiles and deposits must be characterised in terms of its –*
- (i) *physical characteristics, which may include –*
- (aa) *the size distribution of the principal constituents;*
- (bb) *the permeability of the compacted material;*
- (cc) *void ratios of the compacted material;*
- (dd) *the consolidation or settling characteristics of the material under its own weight and that of any overburden;*
- (ee) *the strength of compacted material;*
- (ff) *the specific gravity of the solid constituents; and*



- (gg) *the water content of the material at the time of deposition, after compaction, and at other phases in the life of the deposit.*
 - (ii) *chemical characteristics, which may include -*
 - (aa) *the toxicity;*
 - (bb) *the propensity to oxidize and /or decompose;*
 - (cc) *the propensity to undergo spontaneous combustion;*
 - (dd) *the pH and chemical composition of the water separated from the solids;*
 - (ee) *stability and reactivity and the rate thereof; and*
 - (ff) *neutralising potential.*
 - (iii) *mineral content, which include the specific gravity of the residue particles and its impact on particle segregation and consolidation;*
- (3) *Classification of residue stockpiles and deposits*
- (a) *All residue stockpiles and deposits must be classified into one or a combination of the following categories -*
 - (i) *the safety classification to differentiate between residue stockpiles and deposits of high, medium and low hazard on the basis of their potential to cause harm to life or property; and*
 - (ii) *the environmental classification to differentiate between residue stockpiles and deposits with -*
 - (aa) *a potentially significant impact on the environment due to its spatial extent, duration and intensity of potential impacts; or*
 - (bb) *no potentially significant impact on the environment.*
 - (b) *All mine residue stockpiles and deposits must be classified by a suitably qualified person(s).*
 - (c) *The classification of residue stockpiles and deposits shall determine the -*
 - (i) *level of investigation and assessment required;*
 - (ii) *requirements for design, construction, operation, decommissioning, closure and post closure maintenance; and*
 - (iii) *qualifications and expertise required of persons undertaking the investigations, assessments, design, construction thereof.*
 - (d) *The safety classification of residue stockpiles and deposits shall be based on the following criteria -*

<i>Number of residents in zone of influence</i>	<i>Number of workers in zone of influence</i>	<i>Value of third party property in zone of influence</i>	<i>Depth to underground mine workings</i>	<i>Classification</i>
<i>0</i>	<i>< 10</i>	<i>0 - R2 m</i>	<i>> 200m</i>	<i>Low hazard</i>
<i>1 - 10</i>	<i>11 - 100</i>	<i>R 2 m - R20 m</i>	<i>50 m - 200 m</i>	<i>Medium hazard</i>
<i>> 10</i>	<i>> 100</i>	<i>> R20 m</i>	<i>< 50 m</i>	<i>High hazard</i>

- (e) *A risk analysis must be carried out and documented on all high hazard residue stockpiles and deposits.*
- (f) *The environmental classification of residue stockpiles and deposits must be undertaken on the basis of -*
 - (i) *the characteristics of the residue;*
 - (ii) *the location and dimensions of the deposit (height, surface area);*
 - (iii) *the importance and vulnerability of the environmental components that are at risk; and*
 - (iv) *the spatial extent, duration and intensity of potential impacts.*



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- (g) *An assessment of the environmental impacts shall be done on all environmental components which are significantly affected.*
 - (h) *The assessment of impacts and analyses of risks shall form part of the environmental assessment and management programme.*
- (4) *Site selection and investigation:*
- (a) *The process of investigation and selection of a site must entail -*
 - (i) *the identification of a sufficient number of possible candidate sites to ensure adequate consideration of alternative sites;*
 - (ii) *qualitative evaluation and ranking of all alternative sites;*
 - (iii) *qualitative investigation of the top ranking sites to review the ranking done in (ii);*
 - (iv) *a feasibility study to be carried out on the highest ranking site(s), involving -*
 - (aa) *a preliminary safety classification;*
 - (bb) *an environmental classification;*
 - (cc) *geotechnical investigations; and*
 - (dd) *groundwater investigations.*
 - (b) *The geotechnical investigations may include-*
 - (i) *the characterization of the soil profile over the entire area to be covered by the residue facility and associated infrastructure to define the spatial extent and depth of the different soil horizons;*
 - (ii) *the characterization of the relevant engineering properties of foundations soils and the assessment of strength and drainage characteristics.*
 - (c) *The groundwater investigations may include-*
 - (i) *the potential rate of seepage from the residue facility;*
 - (ii) *the quality of such seepage;*
 - (iii) *the geohydrological properties of the strata within the zone that could potentially be affected by the quality of seepage;*
 - (iv) *the vulnerability and existing potential use of the groundwater resource within the zone that could potentially be affected by the residue facility.*
 - (d) *From these investigations, a preferred site must be identified.*
 - (e) *Further investigation on the preferred site, shall include -*
 - (i) *land use;*
 - (ii) *topography and surface drainage;*
 - (iii) *infrastructure and man-made features;*
 - (iv) *climate;*
 - (v) *flora and fauna;*
 - (vi) *soils;*
 - (vii) *ground water morphology, flow, quality and usage; and*
 - (viii) *surface water.*
 - (f) *The investigations, laboratory test work, interpretation of data and recommendations for the identification and selection of the most appropriate and suitable site for the disposal of all residue that have the potential to generate leachate that could have a significant impact on the environment and groundwater must be carried out by a suitably qualified person.*



NATIONAL ENVIRONMENT AGENCY
 NATIONAL ENVIRONMENT AGENCY
 NATIONAL ENVIRONMENT AGENCY

- (5) *Design of residue stockpile and deposit*
- (a) *The design of the residue stockpile and deposit shall be undertaken by a suitably qualified person.*
- (b) *An assessment of the typical soil profile on the site is required for residue stockpiles and deposits which -*
- (i) have a low hazard potential; and*
 - (ii) have no significant impact on the environment.*
- (c) *The design of the residue stockpile and deposit must take into account all phases of the life cycle of the stockpile and deposit, from construction through to closure and must include -*
- (i) the characteristics of the mine residue;*
 - (ii) the characteristics of the site and the receiving environment;*
 - (iii) the general layout of the stockpile or deposit, whether it is a natural valley, ring dyke, impoundment or a combination thereof and its 3-dimensional geometry at appropriate intervals throughout the planned incremental growth of the stockpile or deposit;*
 - (iv) the type of deposition method used; and*
 - (v) the rate of rise of the stockpile or deposit.*
- (d) *Other design considerations, as appropriate to the particular type of stockpile and deposit must be incorporated -*
- (i) the control of storm water on and around the residue stockpile or deposit by making provision for the maximum precipitation to be expected over a period of 24 hours with a frequency of once in a 100 years, in accordance with the regulations made under section 8 of the National Water Act, 1998;*
 - (ii) the provision, throughout the system, of a freeboard of at least 0.5 m above the expected maximum water level, in accordance with regulations made under the National Water Act, 1998, to prevent overtopping;*
 - (iii) keeping the pool away from the walls; where there are valid technical reasons for deviating from this, adequate motivation must be provided and the design must be reviewed by a qualified person as required in terms of sections 9(6) or 9(7) of the Mine Health and Safety Act, 1996;*
 - (iv) the control of decanting of excess water under normal and storm conditions;*
 - (aa) the retention of polluted water in terms of polluted water in terms of GN R991(9), where measures may be required to prevent water from the residue deposit from leaving the residue management system unless it meets prescribed requirements;*
 - (bb) the design of the penstock, outfall pipe, under-drainage system and return water dams;*
 - (cc) the height of the phreatic surface, slope angles and method of construction of the outer walls and their effects on shear stability;*
 - (dd) the erosion of slopes by wind and water, and its control by (ee) vegetation, berms or catchment paddocks; and*
 - (ee) the potential for pollution.*
- (e) *A design report and operating manual shall be drawn up for all residue stockpiles and deposits which -*
- (i) have a medium to high hazard; and*
 - (ii) have a potentially significant impact on the environment.*
- (f) *Relevant information must be included in the draft environmental management programme or environmental management plan.*

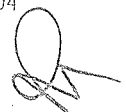


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- (6) *Construction and operation of residue deposits:*
- (a) *The holder of any right or permit in terms of the Act, must ensure that-*
- (i) *the residue deposits, including any surrounding catchment paddocks, is constructed and operated in accordance with the approved environmental management programme or environmental management plan;*
 - (ii) *the design of the residue deposit is followed implicitly throughout the construction thereof, and that any deviations from the design be approved by the Regional Manager and the environmental manage programme and environmental management plan be amended accordingly;*
 - (iii) *as part of the monitoring system, measurements of all residues transported to the site and of all surplus water removed from the site are recorded;*
 - (iv) *the provision for appropriate security measures be implemented to limit unauthorised access to the site and intrusion into the residue deposit;*
 - (v) *specific action be taken in respect of any sign of pollution;*
 - (vi) *adequate measures be implemented to control dust pollution and erosion of the slopes; and*
 - (vii) *details of rehabilitation of the residue deposit be provided in the draft environmental management programme or environmental management plan.*
- (b) *A system of routine maintenance and repair in respect of the residue deposit must be implemented to ensure the ongoing control of pollution, the integrity of rehabilitation and health and safety matters at the site.*
- (7) *Monitoring of residue stockpiles and deposits:*
- (a) *A monitoring system for residue stockpiles and deposits with respect to potentially significant impacts as identified in the environmental assessment must be included in the environmental management programme or environmental management plan.*
- (b) *In the design of a monitoring system for a residue stockpile or deposit, consideration must be given to –*
- (i) *baseline and background conditions with regard to air, surface and groundwater quality ;*
 - (ii) *the air, surface and groundwater quality objectives;*
 - (iii) *residue characteristics;*
 - (iv) *the degree and nature of residue containment;*
 - (v) *the receiving environment and specifically the climatic, local geological, hydrogeological and geochemical conditions;*
 - (vi) *potential migration pathways;*
 - (vii) *potential impacts of leachate;*
 - (viii) *the location of monitoring points and the prescribed monitoring protocols; and*
 - (ix) *the reporting frequency and procedures.*
- (8) *Decommissioning, closure and after care:*
- (a) *The decommissioning, closure and post closure management of residue deposits must be addressed in the closure plan, which must contain the following -*
- (i) *the environmental classification, including assumptions on which the classification were based;*
 - (ii) *the closure objectives, final land use or capability;*
 - (iii) *conceptual description and details for closure and post closure management;*
 - (iv) *cost estimates and financial provision for closure and post-closure management; and*
 - (v) *residual impacts, monitoring and requirements to obtain mine closure in terms of the Act.*

F 3.6 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 recognised 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.

F 4 MONITORING AND REPORTING

F 4.1 Inspections and monitoring


- Regular monitoring of all the environmental management measures and components shall be carried out by the holder of the prospecting right, mining permit or reconnaissance permission in order to ensure that the provisions of this programme are adhered to.
- Ongoing and regular reporting of the progress of implementation of this programme will be done.
- Various points of compliance will be identified with regard to the various impacts that the operations will have on the environment.
- Inspections and monitoring shall be carried out on both the implementation of the programme and the impact on plant and animal life.
- Visual inspections on erosion and physical pollution shall be carried out on a regular basis.

Regulation 55 promulgated in terms of the MPRDA requires the following:

Monitoring and performance assessments of environmental management programme or plan

- (1) *As part of the general terms and conditions for a prospecting right, mining right or mining permit and in order to ensure compliance with the approved environmental management programme or plan and to assess the continued appropriateness and adequacy of the environmental management programme or plan, the holder of such right must-*
 - (a) *conduct monitoring on a continuous basis;*
 - (b) *conduct performance assessments of the environmental management programme or plan as required; and*
 - (c) *compile and submit a performance assessment report to the Minister to demonstrate adherence to sub-regulation (b).*
- (2) *The frequency of performance assessment reporting shall be-*
 - (a) *in accordance with the period specified in the approved environmental management programme or plan, or, if not so specified;*
 - (b) *as agreed to in writing by the Minister; or*
 - (c) *biennially (every two years).*
- (3) *The performance assessment report, shall be in the format provided in guidelines that will from time to time be published by the Department and shall as a minimum contain-*
 - (a) *information regarding the period that applies to the performance assessment;*
 - (b) *the scope of the assessment;*

Release Version (1.3.1) 01 May 2004


 REGIONAL MANAGER
 NORTH-WEST PROVINCE
 WATERBOORD

- (c) *the procedure used for the assessment;*
 - (d) *the interpreted information gained from monitoring the approved environmental management programme or plan;*
 - (e) *the evaluation criteria used during the assessment;*
 - (f) *the results of the assessment; and*
 - (g) *recommendations on how and when deficiencies that are identified and/or aspects of non-compliance will be rectified.*
- (4) *The holder of a prospecting right, mining right or mining permit may appoint an independent qualified person(s) to conduct the performance assessment and compile the performance assessment report provided that no such appointment shall relieve the holder of the responsibilities in terms of these regulations.*
- (5) *Subject to section 30(2) of the Act, the performance assessment report submitted by the holder shall be made available by the Minister to any person on request.*
- (6) *If upon consideration by the Minister, the performance assessment executed by the holder is not satisfactory or the report submitted by the holder is found to be unacceptable, the holder must-*
- (a) *repeat the whole or relevant parts of the performance assessment and revise and resubmit the report; and/or*
 - (b) *submit relevant supporting information; and/or*
 - (c) *appoint an independent competent person(s) to conduct the whole or part of the performance assessment and to compile the report.*
- (7) *If a reasonable assessment indicates that the performance assessment cannot be executed satisfactorily by the holder or a competent person(s) appointed by the holder, the Minister may appoint an independent performance assessment person(s) to conduct such performance assessment. Such appointment and execution shall be for the cost of the holder.*
- (8) *When the holder of a prospecting right, mining right or mining permit intends closing such operation, a final performance assessment shall be conducted and a report submitted to the Minister to ensure that -*
- (a) *the requirements of the relevant legislation have been complied with;*
 - (b) *the closure objectives as described in the environmental management programme or plan have been met; and*
 - (c) *all residual environmental impacts resulting from the holder's operations have been identified and the risks of latent impacts which may occur have been identified, quantified and arrangements for the management thereof have been assessed.*
- (9) *The final performance assessment report shall either precede or accompany the application for a closure certificate in terms of the Act.*

F 4.2 Compliance reporting / submission of information

- *Layout plans will be updated on a regular basis and updated copies will be submitted on a biennial basis to the Regional Manager*
- *Reports confirming compliance with various points identified in the environmental management programme 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 the programme was compiled shall be carried out and added as a corrective action.*



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F 5 CLOSURE

When the holder of a prospecting right, mining permit or reconnaissance permission intends closing down his/her operations, an environmental risk report shall accompany the application for closure. The requirements of such a risk report is contained in Regulation 60 of the Regulations promulgated in terms of the Act and is quoted below :

F 5.1 ENVIRONMENTAL RISK REPORT

"An application for a closure certificate must be accompanied by an environmental risk report which must include-

- (a) *the undertaking of a screening level environmental risk assessment where-*
 - (i) *all possible environmental risks are identified, including those which appear to be insignificant;*
 - (ii) *the process is based on the input from existing data;*
 - (iii) *the issues that are considered are qualitatively ranked as –*
 - (aa) *a potential significant risk; and/or*
 - (bb) *a uncertain risk; and/or*
 - (cc) *an insignificant risk.*
- (b) *the undertaking of a second level risk assessment on issues classified as potential significant risks where-*
 - (i) *appropriate sampling, data collection and monitoring be carried out;*
 - (ii) *more realistic assumptions and actual measurements be made; and*
 - (iii) *a more quantitative risk assessment is undertaken, again classifying issues as posing a potential significant risk or insignificant risk.*
- (c) *assessing whether issues classified as posing potential significant risks are acceptable without further mitigation;*
- (d) *issues classified as uncertain risks be re-evaluated and re-classified as either posing potential significant risks or insignificant risks;*
- (e) *documenting the status of insignificant risks and agree with interested and affected persons;*
- (f) *identifying alternative risk prevention or management strategies for potential significant risks which have been identified, quantified and qualified in the second level risk assessment;*
- (g) *agreeing on management measures to be implemented for the potential significant risks which must include-*
 - (i) *a description of the management measures to be applied;*
 - (ii) *a predicted long-term result of the applied management measures;*
 - (iii) *the residual and latent impact after successful implementation of the management measures;*
 - (iv) *time frames and schedule for the implementation of the management measures;*
 - (v) *responsibilities for implementation and long-term maintenance of the management measures;*
 - (vi) *financial provision for long-term maintenance; and*
 - (vii) *monitoring programmes to be implemented."*

F 5.2 CLOSURE OBJECTIVES

Closure objectives form part of this EMPlan and must-

- (a) identify the key objectives for mine closure to guide the project design, development and management of environmental objectives;
- (b) provide broad future land use objective(s) for the site; and
- (c) provide proposed closure cost

Release Version (1.3.1) 01 May 2004

REGIONAL MANAGER
NORTHERN DISTRICT
WATER

F 5.3 CONTENTS OF CLOSURE PLAN



A closure plan forms part of the EMP and must include the following:

- (a) a description of the closure objectives and how these relate to the prospecting or mine operation and its environmental and social setting;
- (b) a plan contemplated in Regulation 2(2), coordinated according to generally accepted standards, showing the land or area under closure;
- (c) a summary of the regulatory requirements and conditions for closure negotiated and documented in the environmental management programme or plan;
- (d) a summary of the results of the environmental risk report and details of identified residual and latent impacts;
- (e) a summary of the results of progressive rehabilitation undertaken;
- (f) a description of the methods to decommission each prospecting or mining component and the mitigation or management strategy proposed to avoid, minimize and manage residual or latent impacts;
- (g) details of any long-term management and maintenance expected;
- (h) details of financial provision for monitoring, maintenance and post closure management, if required;
- (i) a plan or sketch at an appropriate scale describing the final land use proposal and arrangements for the site;
- (j) a record of interested and affected persons consulted; and
- (k) technical appendices, if any.

F 5.4 TRANSFER OF ENVIRONMENTAL LIABILITIES TO A COMPETENT PERSON

Should the holder of a prospecting right, mining permit or reconnaissance permission wish to transfer any environmental liabilities and responsibilities to another person or persons, the following will pertain:

- (1) An application to transfer environmental liabilities to a competent person in terms of section 48) of the Act, must be completed on Form O as set out in Annexure 1 to the Regulations and be lodged to the Minister for consideration.
- (2) The holder of a prospecting right, mining right or mining permit may transfer liabilities and responsibilities as identified in the environmental management plan and the required closure plan to a competent person as contemplated in Regulation 58.
- (3) When considering the transfer of environmental liabilities and responsibilities in terms of section 48) of the Act, the Minister must consult with any State department which administers any law relating to matters affecting the environment.
- (4) No transfer of environmental liabilities and responsibilities to a competent person may be made unless the Chief Inspector of Mines and the Department of Water Affairs and Forestry have confirmed in writing that the person to whom the liabilities and responsibilities is transferred to, have the necessary qualifications pertaining to health and safety and management of potential pollution of water resources.

 
 ENVIRONMENTAL MANAGEMENT
 REGULATIONS
 PART 5

F 5.5 NOTES ON LEGAL PROVISIONS

NOTE: The holder of a prospecting right, mining permit or reconnaissance permission must also take cognisance of the provisions of other legislation dealing with matters relating to conservation, and which include, *inter alia*, the following:

- * 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).

G. SPECIFIC ADDITIONAL REQUIREMENTS DETERMINED BY THE REGIONAL MANAGER.

Officials in regional offices may use the following matrix to determine the necessity for additional objectives to be included in this Section of the document:

POTENTIAL ENVIRONMENTAL IMPACTS OF MINING										
Activity	Disturbance					Pollution				Visual
	Landform	Soil	Flora	Fauna	Heritage	Land	Water	Air	Noise	
Mining										
Access										
Topsoil removal										
Overburden removal										
Mineral Extraction										
Tailings disposal										
Water Abstraction										
Pipeline route										
Transport										
Accomodation										
Waste Disposal										
Electricity										
Hydrocarbon storage										
Workforce										

Please indicate VL, L, M, H, and VH for Very Low, Low, Medium, high and Very High in each column to determine the main area and severity of impact.



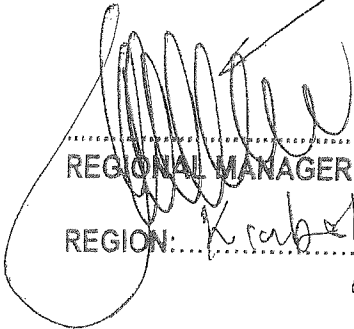
REGIONAL MANAGER
 NORTH WEST PROVINCE
 DEPARTMENT OF ENVIRONMENT AND AFFAIRS



J. APPROVAL

Approved in terms of Section 39(4) of the Mineral and Petroleum Resources Development Act, 2002 (Act 29 of 2002)

Signed at Kimberley this 06 day of February 2006


REGIONAL MANAGER
REGION: Kimberley Northern Cape

This document has been compiled by the Directorate: Mine Environmental Management of the Department of Minerals and Energy at their Head Office in Pretoria. Any comments, suggestions or inputs will be sincerely appreciated. If you have any comments or suggestions regarding this document or its application, please forward your contribution to:

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