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EC30/5/1/3/3/2/1(0346)EM
28 July 2009

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ATTENTION: MR. T. LUNGILE

caseID: 2311

Sir

CONSULTATION IN TERMS OF SECTION 40 OF THE MPRDA OF 2002: SAND MINING ON PORTION 20 OF THE FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE, EASTERN CAPE

1. Attached herewith, please find a copy of the EMP received from Margene Transport Cc
2. Please forward any written comments or requirements your department may have in this regard, to this office no later than **25 September 2009**. Failure to do so, will lead to the assumption that your department has no objection(s) or comments with regard to the said documents.
3. Consultation in this regard has also been initiated with other relevant State Departments.
4. Please use the reference numbers as indicated in all future correspondence.
5. Your co-operation is appreciated.

Yours faithfully

**REGIONAL MANAGER
EASTERN CAPE**

ENVIRONMENTAL MANAGEMENT PLAN (EMP):

**APPLICATION FOR A MINING PERMIT
W.R.T.
PORTION 20
OF THE
FARM STRANDFONTEIN 442,
DIVISION OF UITENHAGE,
EASTERN CAPE**

Report prepared for: Margene Transport CC (Mrs. M van Rooyen)

Report dated: 27 July 2009

Report number: MP 1/2009

DME Reference Numbers:
EC 30/5/1/3/2/0346 MP
EC 30/5/1/3/3/2/1/0346 EM

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1. INTRODUCTION

The Margene Transport CC Sand Quarry is situated in the Thornhill area on Portion 20 of the farm Strandfontein 442, Uitenhage. The said site is located approximately 10 km from Thornhill, 60 km west of Port Elizabeth and 20km east of Jeffrey's Bay (Figure 1).

The company, Margene Transport CC T/A M&U Enterprises, was issued with a mining right with regards to the sand deposit on site. This old order mining right was issued on 30 April 2004 (Mining Licence Number 23/2004 ML) and covered an area of 12.7120 hectares.

A letter from the Department of Minerals and Energy (dated: 10 June 2008; Ref: PE 5/3/2/840; Appendix 3) was received indicating that the old order mining right was to be converted to a new order mining right. If not converted, the old order mining right would expire on 30 April 2009.

A letter (dated: 30 April 2009; Appendix 3) was forwarded to the Department of Minerals and Energy indicating that Margene Transport CC would not be applying for the conversion of the old order mining right to a new order mining right. The reason for this was that the sand remaining to be mined was insufficient to justify applying for a new order mining right. *It was however, indicated that an application would be submitted for a permit to mine the remaining 1.44 hectares.*

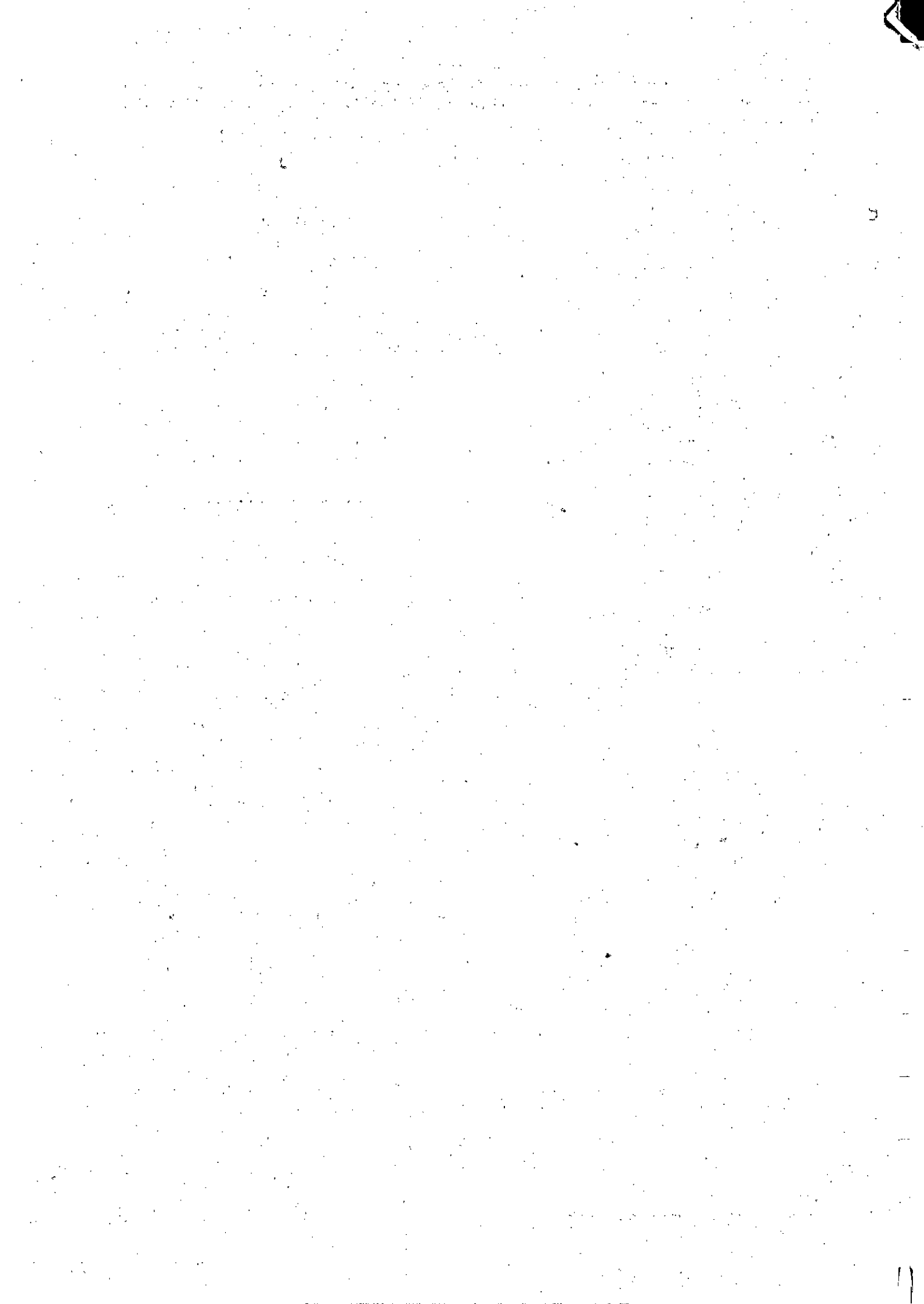
Subsequently, a letter from the Department of Minerals and Energy (dated: 22 May 2009; Ref: PE 5/3/2/840; Appendix 3) was received indicating that the old order mining right had expired, that all mining activities should cease and that a closure certificate in terms of section 43(3)(a) read with section 43(4) of the MPRDA should be applied for. *A closure certificate for the previously mined area will be applied for separately by Margene Transport CC.*

During May 2009, Clean Stream Environmental Services on behalf of the applicant, Margene Transport CC (Mrs. M. van Rooyen), applied for a mining permit w.r.t. Portion 20 of the farm Strandfontein 442, i.e. with regards to the remaining 1.44 hectares of the said site.

A registered letter (dated: 28 May 2009; Ref: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM; Appendix 3) was received from the Department of Minerals and Energy confirming that the application from Margene Transport CC for a mining permit in terms of Section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) had been accepted.

A requirement of the mining permit application is the compilation of an Environmental Management Plan (EMP) for the proposed mining operation. In addition, the proposed activity was to be brought to the attention of the surrounding property owners and the general public.

This EMP was compiled in accordance with Regulation 52 of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002) (referred to as the MPRDA). This report provides an overview of the public participation process followed as well as the environmental management measures to be implemented for the proposed activity.



2. DETAILS OF THE PROJECT APPLICANT AND ENVIRONMENTAL CONSULTANT

2.1 Details of project applicant

Name and address of project applicant: The Manager Margene Transport CC P.O. Box 7 Melon Loerie 6365	
Contact person:	Mrs. M. van Rooyen
Cell number:	073 215 0845
Telephone number:	042-2870643
Fax number:	042-2870643
Email:	-

2.2 Details of environmental consultant

Name and address of environmental consultant: Clean Stream Environmental Services P.O. Box 947 Humansdorp 6300	
Contact persons:	Mr. T. Daines M. Sc <i>Pr. Sci. Nat.</i> ; Mrs. A. Erasmus M. Sc <i>Pr. Sci. Nat.</i>
Cell number:	082 572 4310/083 271 8260
Telephone number:	042-2911081/013 - 6975021
Fax number:	042-2951284/013 - 6975021
Website:	www.cleanstreamsa.co.za

3. DESCRIPTION OF THE PROPOSED MINING ACTIVITY

3.1 Location of proposed mining area

The proposed sand mining operation will be located on a portion of Portion 20 of the farm Strandfontein 442. The said property belongs to Mr. P.E. van Niekerk (the landowner) and is 141 hectares in extent. Mr. van Niekerk leased 12 hectares to Margene Transport CC for sand mining purposes.

The said site is located approximately 10 km from Thornhill, 60 km west of Port Elizabeth and 20km east of Jeffrey's Bay. Figure 1 provides an indication of the location of the said site.

Access to the site is gained via the R102 provincial road (located 1km north of the site) and the secondary tarred road leading to Gamtoos River Mouth (Figure 1). The N2 National Road is located approximately 1.5km north of the property (Figure 1).

The proposed site lies within the Uitenhage Magisterial District and falls under the jurisdiction of the Cadadu District Municipality and the Kouga Municipality.

3.2 Mineral deposit

The project applicant plans to operate a sand works (Sand general; QY) on the said property.

3.3 Proposed mining area

Figure 2 provides an indication of the proposed mining area and the proposed mining blocks. Figure 3 provides an indication of the proposed mining area in relation to the previously mined area.

The proposed mining area is 1.44 hectares in extent as indicated in Figure 2. The co-ordinates of the 1.44 hectare area are as follows:

COORDINATES (Figure 2)		
POINT A	Y -7 951,2	X 3 753 959,3
POINT B	Y -8 056,1	X 3 764 010,7
POINT C	Y -8 028,3	X 3 754 089,5
POINT D	Y -7 893,5	X 3 754 066,9
POINT E	Y -7 893,6	X 3 754 006,1

A surveyor will demarcate the above-mentioned points with beacons.

3.4 Estimated reserves of the mineral deposit and extent of the target area

The said site is 1.44 ha in extent. The selected area for sand mining varies in depth, with an average depth of sand being 2.5 meters.

As a rough estimate the sand resource available on the 1.44 ha is approximately 36 000 cubic, which will be mined at the rate of 1500 cubic meters per month over the two year period that the mine will be in operation.

3.5 Planned life of mine

The planned life of mine is approximately 24 months or 2 years.

3.6 Motivation for the project

The company, Margene Transport CC T/A M&U Enterprises, was issued with a mining right with regards to the sand deposit on site. This old order mining right was issued on 30 April 2004 (Mining Licence Number 23/2004 ML) and covered an area of 12.7120 hectares.

A letter from the Department of Minerals and Energy (dated: 10 June 2008; Ref: PE 5/3/2/840; Appendix 3) was received indicating that the old order mining right was to be converted to a new order mining right. If not converted, the old order mining right would expire on 30 April 2009.

A letter (dated: 30 April 2009; Appendix 3) was forwarded to the Department of Minerals and Energy indicating that Margene Transport CC would not be applying for the conversion of the old order mining right to a new order mining right. The reason for this was that the sand remaining to be mined was insufficient to justify applying for a new order mining right. It was however, indicated that an application would be submitted for a permit to mine the remaining 1.44 hectares.

There is a good market for the sand in the nearby Jeffreys Bay area where there is a great demand for sand due to the extensive new developments taking place. Margene Transport CC has been supplying this market with sand since 2004. The new permit area will ensure that the requirements of the established clientele can be met. There will be a continued and expanded market for sand with the continued developments in the area.

3.7 Proposed mining method

The sand will be mined by means of an open cast mining method. Being a sand mining operation, no blasting will take place. There will thus be no impact (vibration and shock) as a result of blasting. Sand will be extracted using a front end loader.

The 1.44 ha area will be divided into four blocks (Figure 4) and will be mined in the following sequence: Block 3, Block 4, Block 1, Block 2 (Figure 4).

The outer boundaries of the blocks will be trenched between the beacons (inserted by the surveyor) to ensure that the operator remains within the allocated area.

It is proposed that sand extraction should start in Block 3 from the bank adjoining the previously mined area (Figure 4). Sand will be removed in 10m to 15 m wide strips across the length of the demarcated block (Figure 4).

Firstly, the topsoil (approximately 25cm in depth) within a block will be removed and placed on the outside perimeter (either on the north or the south side of the block which ever is closest to the block being mined) of the block. This topsoil will be returned to the block from which it has been removed during the rehabilitation phase. The operator will be in full control of removing the topsoil and moving it to the dedicated topsoil stockpiles.

Once the topsoil is removed, the sand will then be removed until the quality declines and contains too much clay, i.e. an approximate depth of 2 – 2.5m. The removed sand will be stockpiled into different classes to meet the client's requirements. These stockpiles will initially be outside the demarcated mining block until space has been developed within the block for such stockpiles. From these stockpiles, the sand will be loaded onto trucks for transportation to the various clients.

Trucks loading sand will use the established roads to enter and leave the mining area (Figure 4). No new roads will be made in the previously mined area that is being rehabilitated.

This sequence of development and rehabilitation will be applicable to the entire mining area.

3.8 Access to the proposed workings

Access to the site is gained via the R102 provincial road (located 1km north of the site) and the secondary tarred road leading to Gamtoos River Mouth (Figure 1).

The proposed mining area will be access utilising existing roads on the said property. No new roads will be constructed for the proposed mining operation.

Figure 4 provides an indication of the existing access road to the quarry from the Gamtoos Mouth Road as well as the location of the existing road extending through the said site.

It should be noted that the Department of Roads and Transport (letter dated: 17 September 2008; Ref: 5/15/1/3/9(EC 108)0614.08; Appendix 4) gave permission for the said access road from the Gamtoos Mouth Road (MR434).

Figure 5a provides a photographic view of the access road from the Gamtoos Mouth Road.

3.9 Mining layout options/alternatives

Mining of Blocks (lengthwise i.e. from Point B to Point A; Figure 4)

Figure 4 provides a schematic layout plan for the proposed mining operation. It is proposed that sand extraction should start in Block 3 from the bank adjoining the previously mined area (Figure 4). Sand will be removed in 10m

to 15 m wide strips across the length of the demarcated block (Figure 4). Mining will commence with Block 3 and then move to Block 4 followed by Block 1 and finally Block 2 (Figure 4).

Another option would be to start the mining operation next to the existing access road to the quarry from the Gamtoos Road i.e. starting with Block 1 and mining towards Block 3 (Figure 4). In order to initiate the mining of Block 1, a trench would have to be dug to extract the sand and to work within the area. The constructed trench/hole could be filled with water during heavy downpours hampering mining progress.

In addition, extra machine movements would be necessary to build stockpiles outside of the mining area as trucks would not be able to enter the area to load. In view of these facts, this option was not considered.

Mining of Blocks (across the width of the block i.e. from Point D to Point A; Figure 4)

Another option would be to start the mining operation at Point D and mine towards Point A, i.e. starting with Block 2 and mining towards Block 1 (Figure 4). In order to initiate the mining of Block 2, one would have to dig a trench to be able to extract the sand and to work within the area. The constructed trench/hole could be filled with water during heavy downpours hampering mining progress. In addition, it would increase the danger of erosion during heavy downpours.

With this option, loading of trucks would be difficult. The cost of sand mining would be increased as a result of greater machine movement and use of fuel. In view of these facts, this option was not considered.

3.10 Proposed processing method

No washing of sand will take place on site and therefore there will be no mine residue dumps or mine waste present on site.

3.11 Associated infrastructure required

No offices will be built on site. In addition, no vehicle maintenance yard or secured storage area will be provided at the proposed sand mining area. All vehicles will be repaired off site as the machinery is hired on a daily basis.

3.12 Waste generation and disposal

3.12.1 Mining waste generation and disposal

No washing of sand will take place on site and therefore no mine waste will be generated.

3.12.2 Processing/plant residue disposal

No washing of sand will take place on site and therefore there will be no mine residue dumps present on site.

3.12.3 Other solid waste

3.12.3.1 Industrial waste including hazardous waste

No vehicles will be repaired within the proposed mining area. All vehicles will be repaired off site as the machinery is hired on a daily basis.

Equipment and machinery used in the mining operation will be adequately maintained so that during operations, oil diesel, fuel, hydraulic fluid spills will be prevented.

3.12.3.2 Domestic waste

A rubbish bin will be placed at the sand mining site for non degradable refuse such as glass bottles, plastic bags, etc. This drum will be emptied on a regular basis and disposed of at a recognised disposal facility. Bio-degradable refuse will be handled in a similar manner.

3.12.3.3 Waste pollution and effluent management facilities

There is no need for waste pollution and effluent management facilities.

3.13 Services required

3.13.1 Water

The operator will bring his own water to site daily. No water abstraction out of the nearby drainage area will be allowed.

No washing of the sand will take place on site. Therefore, no water will be required for processing operations.

3.13.2 Sewage

A chemical toilet must be provided on site for the operator. This chemical toilet must be serviced on a regular basis. Under no circumstances will long drop toilets be utilised.

3.13.3 Electricity

No electricity is required for the proposed mining operation.

3.13.4 Storm water control measures

A storm water trench will be constructed from Point C to Point D (Figure 4) in order to direct runoff away from the proposed mining area and so prevent erosion and flooding of the mined area during heavy downpours.

The topsoil removed will be stored in a bund wall on the high ground side of the mining area within the boundaries of the mining area as indicated in Figure 4. The topsoil will be utilized in the rehabilitation of the sand pits.

3.14 Socio-economic aspects of the proposed mining activity

3.14.1 Number of people to be employed

Number of women	0
Number of men	1 HDSA male (using TLB) – operator
Total number	1

It should be noted that only one person (front-end loader operator) is on-site daily. The front end loader with the operator is hired to do the work.

People buying sand supply their own trucks. If transport is required to move sand, it is moved in leased trucks.

3.14.2 Work hours

The sand mining operation will be conducted during daylight hours (i.e. sunrise to sunset). Sand mining will normally take place 5 days per week depending on the weather conditions.

Site workers will work a normal 8 hour day shift.

4. DESCRIPTION OF THE PRE-MINING ENVIRONMENT

4.1 Location of the mining site

The proposed sand mining operation will be located on a portion of Portion 20 of the farm Strandfontein 442. The said property belongs to Mr. P.E. van Niekerk (the landowner) and is 141 hectares in extent. Mr. van Niekerk leased 12 hectares to Margene Transport CC for sand mining purposes. The proposed mining site is only 1.44 hectares in extent.

The said site is located approximately 10 km from Thornhill, 60 km west of Port Elizabeth and 20km east of Jeffrey's Bay. Figure 1 provides an indication of the location of the said site.

Access to the site is gained via the R102 provincial road (located 1km north of the site) and the secondary tarred road leading to Gamtoos River Mouth (Figure 1). The N2 National Road is located approximately 1.5km north of the property (Figure 1).

The proposed site lies within the Hankey Magisterial District and falls under the jurisdiction of the Cacadu District Municipality and the Kouga Municipality.

4.2 Climate

4.2.1 Regional Climate

According to the modified Köppen System, Port Elizabeth falls under the Subtropical climatic type (Cfb), which is characterised by average temperatures of between 10 to 22,2°C and at least 60mm of rain (all months).

This coastal zone experiences mild winters (with occasional frost) and warm summers. Windiness in this area reduces both heat and humidity in summer.

4.2.2 Temperatures

Table 1 provides an indication of the temperature and sunshine duration statistics for Port Elizabeth. For Port Elizabeth, the average daily minimum temperature is 12.17°C while the average daily maximum temperature is 22.26°C (Table 2).

For the Thornhill area, the daily temperatures range from 23°C in summer to 18°C in winter. During extreme climatic conditions, temperatures can go above 40°C in the summer months and drop to below 5°C in the winter months.

Table 1: Temperature and Sunshine Duration Statistics for Port Elizabeth (adapted from Stone (1988) and the SA Weather Service)

MONTH	TEMPERTURE (°C)				SUNSHINE DURATION	
	Average Daily Minimum	Average Daily Maximum	Highest recorded	Lowest recorded	Average Monthly (mean daily hours)	Average Annual (% of possible duration)
January	16,3	25,4	39	10	8,5	60
February	16,9	25,5	38	11	8,2	62
March	15,8	24,6	41	8	7,5	61
April	12,9	22,8	39	4	7,6	67
May	10,1	21,9	35	2	6,9	67
June	7,5	20,1	32	-1	6,9	69
July	7,3	19,5	33	-1	7,1	71
August	8,3	19,9	34	2	7,6	70
September	10,1	20,1	39	2	7,6	63
October	12,2	20,9	39	3	7,7	59
November	13,6	22,4	36	6	8,3	60
December	15,0	24,0	36	9	8,9	62
Year	12,17	22,26	41	-1	7,73	64,25

The highest recorded temperature was 41°C during the month of March and the lowest recorded temperature was -1°C during the months of June and July (Table 2).

4.2.3 Rainfall

The Eastern Cape is largely a transition zone of climate types and the seasonality of rainfall is much less pronounced than in other parts of the country.

Rainfall is usually associated with the passage of both low pressure (cold fronts) and high pressure weather systems.

Winter maximum rainfall is experienced in Port Elizabeth, with a summer dry period. Port Elizabeth's winter rainfall maximum can be explained by its westerly position where it catches the tail end of the fronts that bring winter rain to the Western Cape (Stone, 1988).

Table 2 provides an indication of the rainfall statistics for Port Elizabeth. The mean annual rainfall for the Port Elizabeth area is 624 mm, which is fairly evenly distributed throughout the year. The wettest month is normally August with a rainfall figure of 64mm. The driest month is December with a rainfall figure of 34mm. Spring is the wettest period of the year.

Table 2: Rainfall Statistics for Port Elizabeth (based on monthly averages for the 30-year period: 1961 – 1990)

PRECIPITATION			
Month	Average Monthly (mm)	Average Number of days with ≥ 1mm	Highest 24 Hour Rainfall (mm)
January	36	9	68
February	40	9	121
March	54	10	224
April	58	9	105
May	59	9	76
June	62	8	60
July	47	8	99
August	64	10	77
September	62	9	429
October	59	11	46
November	49	11	52
December	34	9	95
Year	624 (total)	112 (total)	429

The Thornhill area experiences an average annual rainfall of approximately 673mm with an average monthly rainfall of 68mm between April and September and 44 mm during the summer months.

4.2.4 Mean annual evaporation

The Mean Annual Evaporation value is considered to be between 1 550 and 1600 mm per annum.

4.2.5 Prevailing wind direction

The Eastern Cape is one of the windiest parts of southern Africa. Port Elizabeth carries the title of the windiest city in the Eastern Cape; although the statistics for East London shows it to have the lowest percentage of calms (7,5%). In Port Elizabeth, calm conditions are experienced for approximately 20% of the year.

This coastal town's wind is dominated by westerlies and south-westerlies during the winter months, associated with passing low pressure (cold front) systems. Wind speeds of 20 to 25 km/hr can then be encountered.

During the summer months, the easterly and south-easterly winds associated with high pressure systems dominate. North-easterly winds also occur during summer, and can reach speeds of up to 20 km/hr. Port Elizabeth's strong winds often cause natural dune thicket to be dwarfed by wind stress.

During the winter months, south-westerly and westerly winds associated with passing low pressure (cold fronts) systems are dominant. Average wind speeds range between 20 and 25 km per hour.

4.2.6 Extreme weather conditions

On rare occasions, really hot days with temperatures more than 40°C may occur but then only when 'Berg Wind' conditions are at their worst (i.e. usually in January and February; Kopke, 1988).

Port Elizabeth has a low frequency of hail days namely 0,4 days per year.

A peculiarity of the Eastern Cape is that of the Three-Day-Rain that usually occurs during the last week of August and the first week of March (Kopke, 1988). Three-Day-Rains are characterised by heavy rains over a period of a few days which can be caused either by an intense outbreak of polar air or by a high pressure system to the south of Port Elizabeth, feeding in cool moist air over the region. If this system coincides with a cut-off low over the interior, devastating floods can occur in the coastal areas.

4.3 Geology

The proposed mining site is located within a stepped coastal plain on which the marine Alexandria Formation was deposited (during the Neogene times) as a thin unconformable veneer on a wave-cut platform (van der Merwe, 2004). The Alexandria Formation consists of calcareous sandstone, sandy limestone and conglomerate at the base. It is regarded as a littoral deposit.

The Alexandria Formation is overlain by partly consolidated dunes and coastal dunes where horizontal sedimentary beds are found (van der Merwe, 2004). These remnants of extensive dune fields are aligned at right angles to the prevailing south-west wind direction. This represents the Nanaga Formation which is of quaternary age.

The Nanaga Formation consists of yellowish, fine to medium grained, partly consolidated sand dunes, which are calcareous due to the presence of shell fragments. In terms of lithology, the Nanaga Formation can be described as aeolianite that accumulated as the coastline receded.

This deposit constitutes the mineral to be mined and is several meters thick. The influence of mudstones to the northwest could result in the sandy clay lenses at the bottom of this sand deposit to be prominent. This might pose a threat to soil stability through sheet wash during periods of high precipitation.

The proposed mining site is located just east of the Gamtoos fault. The said site is however, tectonically stable.

4.4 Topography

The Thornhill area is characterised by a number of steps or platforms formed as a result of receding sea levels and the influence of the Gamtoos Fault (van der Merwe, 2004).

To the south of the proposed mining site, a rather flat coastal platform is present which is followed by a gentle inland rise resulting in a second platform where the proposed mining site is located (van der Merwe, 2004).

The Thornhill/Loerie escarpment is found further inland and is as a result of the Gamtoos Fault that caused a steep rise of the Alexandria Formation.

The proposed mining site is located at approximately 100 – 125 m above mean sea level (Figure 1) within an area of gentle undulating dunes. The proposed mining area is relatively flat sloping gently towards the nearby small stream/drainage area located to the north of the proposed mining area (Figure 1). All surface water runoff will thus also drain towards this stream.

This small stream/drainage area drains towards the southeast and eventually into Koedoesvlei (Figure 1).

The proposed mining area is located adjacent to a previously mined area (Figure 3) which has been partly rehabilitated. The topography of the immediate surrounding area has thus already been impacted upon by sand mining operations.

In addition, an Eskom power line extends along the northern boundary of the proposed mining area (Figure 1 and Figure 4) and also impacts on the topography of the area.

The existing gravel access road extending from the Gamtoos Mouth Road (Figure 4) as well as the road extending through the previously mined area, have also impacted on the topography of the area.

4.5 Soils

As indicated in Section 4.4, the proposed mining site is located within an area of gentle undulating, partly consolidated sand dunes.

The soil of the proposed mining area (Figure 4) falls into the Fernwood soil form. Here the top soil is approximately 25 cm in depth with the E-horizon having a depth of approximately 2 – 2.5m. Below this depth, the B-layer is classified as a soft plinthic with coarse sand with yellow mottling showing the presence of a fluctuating water table (this is due to water movement in the E-horizon).

The proposed mining and surrounding area were previously cultivated. In addition, the proposed mining area is located adjacent to a previously mined area (Figure 3) which has been partly rehabilitated. The soil of the immediate area has thus already been impacted upon by sand mining operations and agricultural activities.

In addition, an Eskom power line extends along the northern boundary of the proposed mining area (Figure 1 and Figure 4) and also impacts on the soil of the area.

The existing gravel access road extending from the Gamtoos Mouth Road (Figure 4) as well as the road extending through the previously mined area, have also impacted on the soil of the area.

4.6 Land use

4.6.1 Zoning of the site

Portion 20 of the farm Strandfontein 442 is currently zoned as agricultural and is used for both agricultural and sand mining activities.

The proposed site lies within the Uitenhage Magisterial District and falls under the jurisdiction of the Cadadu District Municipality and the Kouga Municipality.

4.6.2 Land ownership

The proposed sand mining operation is located on a portion of Portion 20 of the farm Strandfontein 442. The said property belongs to Mr. P.E. van Niekerk (the landowner) and is 141 hectares in extent. Mr. van Niekerk leased 12 hectares to Margene Transport cc for sand mining purposes.

The proposed mining site is only 1.44 hectares in extent and falls within an area previously approved for sand mining purposes (Figure 4).

4.6.3 Servitudes

An Eskom power line extends along the northern boundary of the proposed mining area (Figure 1 and Figure 4). An 18-meter servitude is associated with this power line (i.e. 9 metres on either side of the centre line).

It should be noted that permission has been obtained from Eskom Distribution (letter dated: 23 April 2009; Ref: M and E Transport, Jeffreys Bay; Appendix 4) to mine within this servitude area.

4.6.4 Major existing infrastructure

The proposed mining area is located adjacent to a previously mined area (Figure 3) which has been partly rehabilitated (Figure 3; Figure 5b). It should be noted that the sand mining area is fenced off from the surrounding agricultural area.

An Eskom power line extends along the northern boundary of the proposed mining area (Figure 1, 4 & 5b).

The existing gravel access road extending from the Gamtoos Mouth Road is located along the western boundary of the proposed mining area (Figure 4). In addition, a gravel road extends along the eastern boundary of the proposed mining area directly adjacent to the previously mined area (Figure 4).

4.6.5 Adjacent land use

In general, the said property and adjacent properties are utilised for agricultural purposes (mainly beef production). The property to the east of the sand mining area is utilized as a game park.

4.7 Natural vegetation

According to the 'The vegetation of South Africa, Lesotho and Swaziland', the study area falls within the Albany Thicket bioregion, specifically the Albany Coastal Belt (veld type AT9) (Mucina & Rutherford, 2006). The vegetation type was previously referred to by Low and Rebelo (1998) as Coastal Forest and by Acocks (1953) as Alexandria Forest (2). Remnants of this vegetation type are present on properties adjacent to the proposed mining area.

The proposed mining area is located adjacent to a previously mined area (Figure 3) which has been partly rehabilitated (Figure 3; Figure 5b). Within the previously mined area, two large Cape Ash Trees are present (Figure 5b).

The 1.44 hectare area to be mined (Figure 4) is an old cultivated land which is covered by pioneer grasses. *Cynodon dactylon* is the dominant grass cover. The other grasses found in the area are *Eragrostis* species. Figure 5a provides a photographic view of the vegetation of the said site.

The area has been rested since 2004 when mining started in the adjacent demarcated area (Figure 4). As a result of the resting, pioneer tree species, mainly *Acacia karroo* and *Acacia caffra* have started invading the area (Figure 5a).

No endangered species were found on the proposed mining area since the area was previously cultivated and therefore the natural vegetation was removed.

4.8 Animal life

As indicated in Section 4.7, the vegetation of the proposed mining area (Figure 4) represents old cultivated lands, which have been allowed to revert to natural veld. The proposed mining area is located adjacent to a previously mined area (Figure 3) which has been partly rehabilitated (Figure 3; Figure 5b).

Any natural animal habitats that could have been associated with the proposed mining area would have been impacted by the past cultivation activities.

It is likely that smaller animal species (e.g. rodents, scrub hare), birds, etc. could frequent the site. However, it is highly unlikely that large animal species would permanently inhabit the proposed mining area.

The sand mining area is fenced on three sides by farm fencing while game fencing is present along the eastern boundary with the game park.

Small game (bushbuck, duiker, spring hare, vervet monkeys, tortoises) and birds have been noted in the surrounding area especially the bushed areas.

The nearby small stream/drainage area could provide the necessary habitat for aquatic and bird species.

4.9 Surface water

The proposed mining area is located within the Primary Drainage Area L and more specifically the Gamtoos River drainage area.

Only a small stream/drainage area is located to the north of the proposed mining area (Figure 1; Figure 4). This small stream/drainage area drains towards the southeast and eventually into Koedoesvlei, located to the south of the proposed mining area (Figure 1).

The previous sand mining operation did not impact directly on the small stream/ drainage area (Figure 4) since the required buffer between the sand mining operation and the drainage area was implemented.

The proposed mining site slopes gently towards this small stream (Figure 4). All surface water runoff from the proposed mining area will thus also drain towards this stream.

This small stream/drainage area will not be impacted by the proposed mining operation.

4.10 Ground water

Only a small stream/drainage area is located to the north of the proposed mining area (Figure 1; Figure 4). Ground water would be associated with this drainage area.

Mining to a depth of 3 metres was undertaken within the previously mined area (Figure 4). No ponding of groundwater was noted within this mined area.

However, within the E-horizon of the soil yellow mottling was noted indicating the presence of a fluctuating water table.

4.11 Air quality

In general, the air quality of the area is anticipated to be of good quality. Potential sources that might impact on the general air quality of the area include:

- Dust generation as a result of the use of the various gravel roads in the area;
- Dust generation as a result of the existing unrehabilitated sand works or the associated rehabilitation activities;
- Dust generation as a result of surrounding agricultural activities.

4.12 Noise

The proposed mining area is located within a tranquil rural environment. Potential sources that might impact on the ambient noise level of the area include:

- Vehicles utilizing the nearby gravel and tarred roads in the area;
- Noise generated as a result of the rehabilitation activities taking place on the previously mined area;

- Noise generated as a result of the surrounding agricultural activities.

4.13 Sensitive landscapes

No sensitive landscapes (rivers, streams, wetlands, etc.) are present within the proposed mining area.

Only a small stream/drainage area is located to the north of the proposed mining area (Figure 1; Figure 4). The previous sand mining operation did not impact on the small stream/ drainage area (Figure 4) since the required buffer between the sand mining operation and the drainage area was implemented.

4.14 Sites of archaeological and/or cultural interest

Van der Merwe (2004) indicated that the proposed mining area is unimportant in archaeological terms. From the records, it is evident that early populations were mostly located close to the sea on open land and hence inland findings are less frequent.

As indicated in Section 4.7, the vegetation of the proposed mining area (Figure 4) represents old cultivated lands, which have been allowed to revert to natural veld. In addition, the proposed mining area is located adjacent to a previously mined area (Figure 3) which has been partly rehabilitated (Figure 3; Figure 5b).

No artefacts were found during the mining of the adjacent area (Figure 4). It is therefore not anticipated that any sites of archaeological and/or cultural interest would be present on the said site.

4.15 Visual aspects

The proposed mining area is relatively flat and located within an area of gentle undulating dunes. The proposed mining area slopes gently towards the nearby small stream/drainage area located to the north of the proposed mining area (Figure 1).

The proposed mining site is situated at least 1 kilometre from the secondary tarred road leading to Gamtoos River Mouth (Figure 1). In addition, trees along the boundary of the property provide screening of the mining area.

The proposed mining site is hardly be visible from the adjacent properties located to the west, north, east and south of the said site. Trees and dense vegetation provide screening.

4.16 Traffic

The N2 National Road is located approximately 1.5km north of the property (Figure 1).

Access to the site is gained via the R102 provincial road (located 1km north of the site) and the secondary tarred road leading to Gamtoos River Mouth (Figure 1).

The existing gravel access road extending from the Gamtoos Mouth Road is located along the western boundary of the proposed mining area (Figure 4). In addition, a gravel road extends along the eastern boundary of the proposed mining area directly adjacent to the previously mined area (Figure 4).

4.17 Sense of place

The proposed mining area is located within a tranquil rural environment, which is mostly used for agricultural purposes. It is not located within 1 kilometre of a residential area. The closest farmstead is located approximately 1 kilometre from the proposed mining area.

The proposed mining area is located adjacent to a previously mined area (Figure 3) which has been partly rehabilitated (Figure 3; Figure 5b).

4.18 Interested and affected parties

Section 5 should be consulted with regards to the various interested and affected parties who were consulted as part of this permit application process.

5. DESCRIPTION OF THE PUBLIC PARTICIPATION PROCESS

5.1 Advertising of the project

5.1.1 Press advertising

A block advert (150mm x 95mm), according to the Mineral and Petroleum Resources Development Act, 2004 (Act of 2004), was placed in the local newspaper, The Herald, on Wednesday, 24 June 2009, giving notice that an application for a mining permit had been submitted to the Department of Minerals and Energy. A copy of the advert is provided in Appendix 1. A print out of the advert from The Herald website (www.theherald.co.za) featuring the said notice is also provided in Appendix 1.

Interested and affected parties were provided with a 30-day registration period as stated in the above-mentioned advertisement. I&APs thus had until 24 July 2009 to register and lodge their issues of concern and/or objections regarding the proposed activity.

5.1.2 On-site advertising

Notices (Appendix 1) according to the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) were placed:

- On-site, at entrance to Strandfontein Farm – size of notice 594mm x 841mm; Figure 5a);
- On the notice board of the nearby shop (size of notice (150mm x 95mm));
- On the notice board of the Humansdorp Public Library – size of notice (150mm x 95mm; Figure 5a).

5.1.3 Informing I&APs via the internet

Interested and affected parties were also informed via the above-mentioned adverts and notices that a copy of the following documentation could be downloaded from the Clean Stream Environmental Services website (www.cleanstreams.co.za):

- Notice of a mining permit application (1 page; Appendix 1);
- Map indicating the location of the site (Figure 1; Appendix 1);
- Map indicating the proposed mining blocks (Figure 2; Appendix 1);
- Comment sheet (Appendix 1).

This information was made available on the website for the duration of the 30-day registration period and is still available on the website.

A copy of the website print out is provided in Appendix 1.

5.1.4 Feedback from the advertising process

To date, no feedback with regards to the placed advertisement has been received.

5.2 Consultation with the landowner

Mr. P.E. van Niekerk is the owner of Portion 20 of the farm Strandfontein 442.

15 June 2009:

Mr and Mrs Van Rooyen of Margene Transport CC (the project applicant) hand delivered (15 June 2009) the following documentation to Mr. P.E. van Niekerk in order to inform him of the proposed project:

- Notice of a mining permit application (1 page);
- Map indicating the location of the site (Figure 1);
- Map indicating the proposed mining blocks (Figure 2);
- Comment sheet.

A copy of this documentation is provided in Appendix 2.

Mr. van Niekerk signed the register indicating that he had received the said documentation (Appendix 2). *The landowner was thus informed in writing of the proposed project.*

Mr. and Mrs. Van Rooyen (15 June 2009) verbally informed Mr. van Niekerk of the proposed project and the changes that were going to take place at the mining site and that the new area to be mined would be located within the previously demarcated area.

In addition, Mr. van Niekerk was informed that Margene Transport CC was not going to convert the old mining right into a new mining right. The reason for this was insufficient sand to justify applying for a new mining right. The remaining sand on site covers an area of approximately 1.5 ha.

Mr. van Niekerk requested time to read the provided documentation before commenting.

29 June 2009:

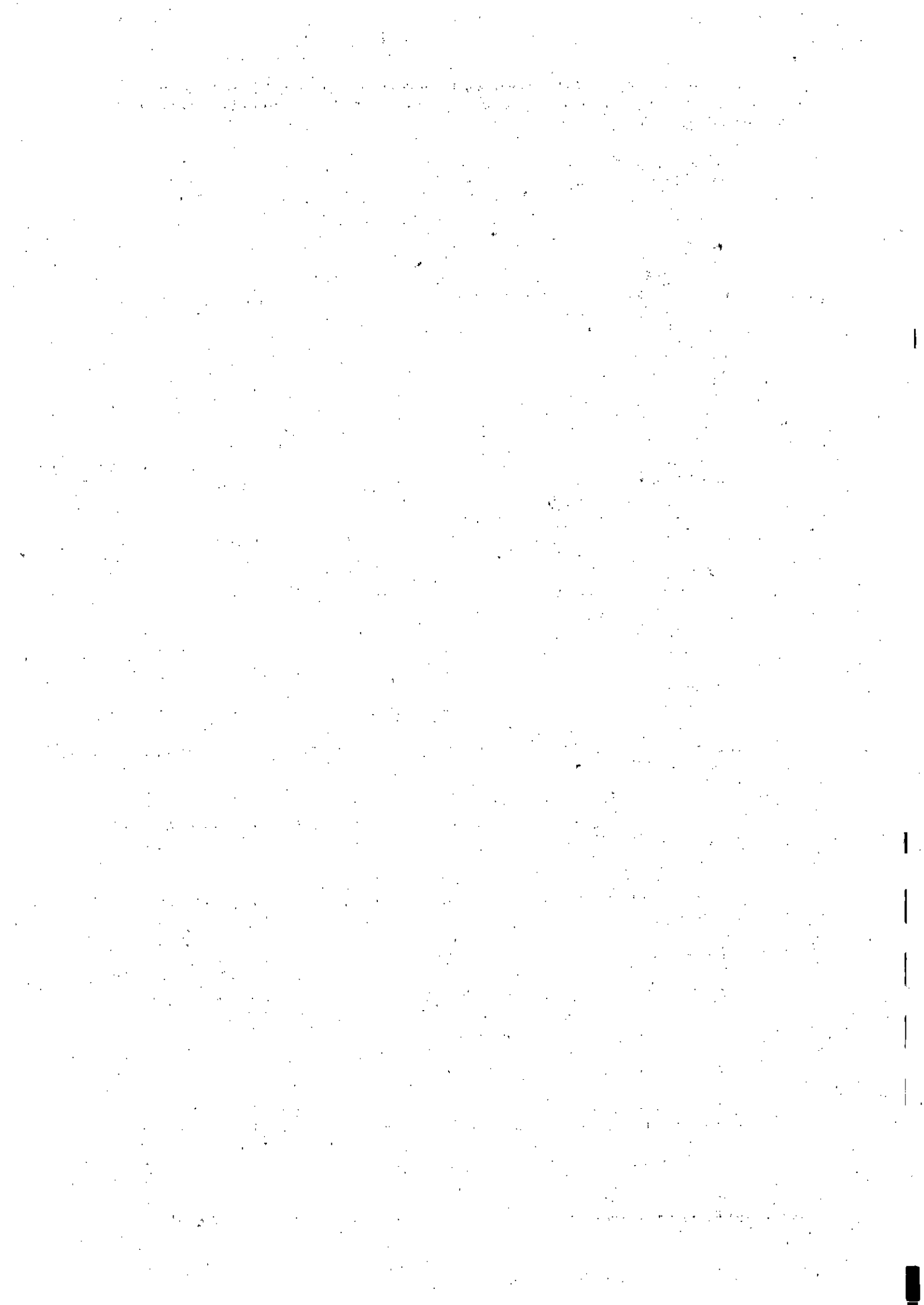
Mr T.Daines of Clean Stream Environmental Services visited Mr P.E. van Niekerk at Strandfontein farm on 29 June 2009. It was explained that Clean Stream Environmental Services was involved in the preparation of the permit application for the applicant, Margene Transport CC.

Mr Daines informed Mr. van Niekerk of the proposed project and the changes that were going to take place at the mining site. The new area to be mined would be located within the previously demarcated area.

In addition, Mr. van Niekerk was informed that Margene Transport CC was not going to convert the old mining right into a new mining right. The reason for this was insufficient sand to justify applying for a new mining right.

It was explained that rehabilitation would take place on the previously mined area whilst sand was being extracted from the new permit block and that rehabilitation of the site is required in order to obtain closure for the site. As part of the rehabilitation process, banks would be correctly sloped and the floor of the mined area would be levelled and covered with stored topsoil. The area would be fertilized and seeded (grass species as detailed in the approved EMP to be used).

Mr P.E. van Niekerk requested that he be informed of all activities that take place at the mining site. In addition, he requested to be informed when changes to the mining operation were decided upon. He also requested a copy of the annual EMP performance assessment.



It was agreed that Mr. T. Daines would convey these points to the applicant, Margene Transport CC.

Mr van Nierkerk verbally indicated that he would not have any objections to the continuation of the sand mining on the area leased to Margene Transport CC.

Appendix 2 provides a summary of the discussions held with the land owner, Mr. P.E. van Niekerk.

As requested, a copy of the Environmental Management Plan (EMP) and Performance Assessment Report will be made available to Mr. van Niekerk.

5.3 Consultation with adjacent landowners

The following documentation was hand delivered (by the project application) to the adjacent landowners in order to inform them of the proposed project:

- Notice of a mining permit application (1 page);
- Map indicating the location of the site (Figure 1);
- Map indicating the proposed mining blocks (Figure 2);
- Comment sheet.

A copy of this documentation is provided in Appendix 2.

The adjacent land owners are:

- Arno Moore (De Woud, Thornhill);
- Rian Moore (Die Woud, Thornhill);
- Brian Quinton Aubrey (corner of Old Cape Road and Gamtoos Mouth Road, Thornhill);
- Mr. P. Hickman (African Dawn Wildlife Sanctuary and Endangered Species Breeding Centre)

Appendix 2 provides a copy of the register signed by these landowners indicating that they had received the said documentation. *Adjacent land owners were thus informed in writing of the proposed project.*

To date, completed comment sheets (Appendix 2) were obtained from the following landowners:

- Arno Moore (De Woud, Thornhill);
- Rian Moore (Die Woud, Thornhill);
- Brian Quinton Aubrey (corner of Old Cape Road and Gamtoos Mouth Road, Thornhill);

No objections were received as indicated in the completed comment sheets. The said landowners however, requested to remain on the mailing list.

To date, no comment has been received from Mr. P. Hickman (African Dawn Wildlife Sanctuary and Endangered Species Breeding Centre).

5.4 Consultation with authorities

5.4.1 Kougha Municipality

The following documentation was hand delivered to the Kougha Municipality in order to inform them of the proposed project:

- Notice of a mining permit application (1 page);

- Map indicating the location of the site (Figure 1);
- Map indicating the proposed mining blocks (Figure 2);
- Comment sheet.

A copy of this documentation is provided in Appendix 2.

C. Daniso signed the register indicating that the Kougha Municipality had received the said documentation (Appendix 2).

5.4.2 Eskom

The following documentation was hand delivered to the Eskom Office (Humansdorp) in order to inform them of the proposed project:

- Notice of a mining permit application (1 page);
- Map indicating the location of the site (Figure 1);
- Map indicating the proposed mining blocks (Figure 2);
- Comment sheet.

A copy of this documentation is provided in Appendix 2.

Mr. J. van der Walt signed the register indicating that Eskom had received the said documentation (Appendix 2).

A letter from Eskom Distribution (dated: 20 July 2009; Appendix 2) was subsequently received indicating the following:

'Please be advised that permission for co-use of Eskom servitude is hereby granted subject to the conditions listed on the document attached hereto. Eskom has two lines traversing the farm and they are:

- ***Kudu-Melkhout 132 kV;***
- ***Grassridge/Melkhout 132 kV.***

Kindly indicate your acceptance of these conditions by initialling each page and signing in the appropriate area on the last page'.

The conditions stipulated in the said letter will form part of the Environmental Management Plan (see Section 7 of this report).

5.4.3 Department of Agriculture (DA)

The following documentation was hand delivered to Mr. F. Weitz of the Department of Agriculture in order to inform them of the proposed project:

- Notice of a mining permit application (1 page);
- Map indicating the location of the site (Figure 1);
- Map indicating the proposed mining blocks (Figure 2);
- Comment sheet.

A copy of this documentation is provided in Appendix 2.

Ms. S. Matthee signed the register indicating that the Department had received the said documentation (Appendix 2).

Mr. F. Weitz telephonically (23 July 2009) indicated that he had no objections in terms of the proposed project.

5.4.4 Department of Water Affairs and Forestry (DWAf)

An email (dated: 28 June 2009; Appendix 2) was forwarded to Mr. P. Retief of the Department of Water Affairs and Forestry in order to inform the Department of the proposed project:

- Notice of a mining permit application (1 page);

Environmental Management Plan (EMP): Application for a mining permit w.r.t. Portion 20 of the farm Strandfontein 442, Division of Uitenhage, Eastern Cape. (DME REF. NO.: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM)

- Map indicating the location of the site (Figure 1);
- Map indicating the proposed mining blocks (Figure 2);
- Comment sheet.

A copy of this documentation is provided in Appendix 2.

To date, no comment has been received.

5.4.5 Department of Economic Development and Environmental Affairs (DEDEA)

An email (dated: 28 June 2009; Appendix 2) was forwarded to Mr. D. Govender, Mr. A. Struwig and Ms. N. Gerber of the Department of Economic Development and Environmental Affairs in order to inform the Department of the proposed project:

- Notice of a mining permit application (1 page);
- Map indicating the location of the site (Figure 1);
- Map indicating the proposed mining blocks (Figure 2);
- Comment sheet.

A copy of this documentation is provided in Appendix 2.

To date, no comment has been received.

5.5 Further consultation with I&APs

Availability of the Environmental Management Plan (EMP)

A copy of the Environmental Management Plan (EMP) will be made available at the Humansdorp Public Library, Humansdorp, for evaluation purposes. A period of 30-days will be provided for evaluation purposes. In addition, a copy of the EMP will be made available on the company website (www.cleanstreams.co.za).

The identified interested and affected parties will be informed by means of facsimile, e-mail or telephonically of the availability of the Environmental Management Plan on the said website and at the library.

A register will be kept of all comments received in terms of the evaluation of the EMP. These comments will be forwarded to the Department of Minerals and Energy for inclusion in their final decision regarding the approval of the mining right and the EMP.

Approval of the mining right and the EMP

The identified interested and affected parties will be informed by means of facsimile, e-mail or telephonically that the mining right and EMP have been approved or rejected.

A copy of the said approval will also be made available on the company website (www.cleanstreams.co.za) and I&APs will be informed accordingly.

6. ENVIRONMENTAL IMPACT DESCRIPTION AND EVALUATION

6.1 Evaluation of impacts

This section of the report describes how the potential impact of the proposed development on the environment was evaluated.

The impact of the mining operation was assessed in terms of the following development phases:

- **Construction/operational phase**
- **Decommissioning/closure phase**

The evaluation of impacts was conducted in terms of the following criteria:

- **Nature of impact**

- **Extent of impact**

Site	Effect limited to the site and its immediate surroundings
Local	Effect limited to within 3-5 km of the site
Regional	Effect will have an impact on a regional scale

- **Duration of impact**

Short	Effect lasts for a period 0 to 5 years
Medium	Effect continues for a period between 5 and 10 years
Long	Effect will cease after the operational life of the activity either because of natural process or by human intervention
Permanent	Where mitigation either by natural process or by human intervention will not occur in such a way or in such a time span that the impact can be considered transient

- **Intensity of impact**

Low	The impact affects the environment in such a way that natural, cultural and social functions and processes are not affected
Medium	Where the affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way
High	Where natural, cultural or social functions or processes are altered to the extent that it will temporarily or permanently cease

- **Probability**

Improbable	Less than 33% chance of occurrence
Probable	Between 33 and 66% chance of occurrence
Highly probable	Greater than 66% chance of occurrence
Definite	Will occur regardless of any prevention measures

• **Significance of impact**

Low	Where the impact will have a relatively small effect on the environment and will not have an influence on the decision
Medium	Where the impact can have an influence on the environment and the decision and should be mitigated
High	Where the impact definitely has an impact on the environment an the decision regardless of any possible mitigation

• **Status**

Positive	Impact will be beneficial to the environment
Negative	Impact will not be beneficial to the environment
Neutral	Positive and negative impact

• **Confidence**

Low	It is uncertain whether the impact will occur
Medium	It is likely that the impact will occur
High	It is relatively certain that the impact will occur

It must be noted that many of the potential negative consequences can be mitigated successfully. It will however, be necessary to make a thorough assessment of all possible impacts in order to ensure that environmental considerations are taken into account, in a balanced way, as far as possible, supporting the aim of creating a healthy and pleasant environment.

6.2 Identification of potential impacts

6.2.1 Geology

Construction/operational phase:

The impact on the geology of the site would be site specific and would result in the removal of sand over an area of 1.44 ha (Blocks 1 to 4; Figure 4). The sand extends down to a depth of approximately 2.5 – 3 metres. The impact on geology would therefore be permanent.

PREDICTED IMPACT	
Extent	Site
Duration	Permanent
Intensity	Low
Probability	Definite
Significance	Low
Status	Negative
Confidence	High

The stockpiling of top soil and sand would not impact on the geology of the site.

PREDICTED IMPACT: NONE

No further impact on the geology of the site will take place during the concurrent rehabilitation of the mining area (Blocks 1 to 4; Figure 4).

PREDICTED IMPACT: NONE

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. No new roads will be constructed and therefore no impact on the geology of the site will take place.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

The final rehabilitation of the mining area (Blocks 1 to 4; Figure 4) and the rehabilitation of the road extending through the mining area would not impact on the geology of the site.

PREDICTED IMPACT: NONE

6.2.2 Topography

Construction/operational phase:

The impact on the topography of the site would be site specific and would result in the removal of sand over an area of 1.44 ha (Blocks 1 to 4; Figure 4). The sand extends down to a depth of approximately 2.5 – 3 metres. The removal thereof would result in a void to a depth of 2.5 - 3 metres, which would affect the site drainage.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Medium
Probability	Definite
Significance	Low
Status	Negative
Confidence	High

The concurrent rehabilitation of the rehabilitation of the mining area (Blocks 1 to 4; Figure 4) would have a positive impact on the topography and drainage of the site.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. No new roads will be constructed and therefore no new impact on the topography of the site will take place.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

The final rehabilitation of the mining area (Blocks 1 to 4; Figure 4) and the rehabilitation of the road extending through the mining area would have a positive impact on the topography and site drainage. However, a large shallow depression in the landscape will be present.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Neutral
Confidence	High

6.2.3 Soils

Construction/operational phase:

The mining operation would result in the removal of the topsoil and sand from an area of 1.44 ha which would impact on Fernwood soils. This would lead to changes in soil structure, soil nutrient status, soil compaction, etc. of the topsoil. This impact would continue through the operational phase of the mining operation.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Low
Status	Negative
Confidence	High

The concurrent rehabilitation of the mining area (Blocks 1 to 4; Figure 4) would have a positive impact on the soil of the site in terms of soil compaction and soil nutrient status.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. No new roads will be constructed and therefore no new impact on the soil of the site will take place.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

The final rehabilitation of the mining area (Blocks 1 to 4; Figure 4) and the rehabilitation of the road extending through the mining area would have a positive impact on the soil of the site in terms of soil compaction and soil nutrient status.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

6.2.4 Land use

Construction/operational phase:

The mining operation would result in an area of 1.44 ha no longer being available for agricultural purposes (particularly for grazing purposes).

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Medium
Probability	Definite
Significance	Low
Status	Negative
Confidence	High

The concurrent rehabilitation of the rehabilitation of the mining area (Blocks 1 to 4; Figure 4) would have a positive impact on the land use of the site since it would eventually be returned to natural veld.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. No new roads will be constructed and therefore no new impact on the land use of the site will take place.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

The final rehabilitation of the mining area (Blocks 1 to 4; Figure 4) and the rehabilitation of the road extending through the mining area would have a positive impact on the land use of the site. The rehabilitated area would be returned to natural veld for grazing purposes.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

6.2.5 Natural vegetation/animal life

Construction/operational phase:

The mining operation would result in the removal of an area of 1.44 ha of vegetation associated with old cultivated lands and associated animal habitat.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Permanent
Intensity	High
Probability	Definite
Significance	Low
Status	Negative
Confidence	High

The stockpiling of top soil and sand will take place within the mined area and will therefore not impact on the natural vegetation and associated animal life.

PREDICTED IMPACT: NONE

The concurrent rehabilitation of the rehabilitation of the mining area (Blocks 1 to 4; Figure 4) would have a positive impact since the area would be returned to natural veld and would provide a possible habitat for animal species in the area.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. No new roads will be constructed and therefore no new impact on the natural vegetation and associated animal life will take place.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

The final rehabilitation of the mining area (Blocks 1 to 4; Figure 4) and the rehabilitation of the road extending through the mining area would have a positive impact on the natural vegetation and associated animal life of the site.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

6.2.6 Surface water/sensitive landscapes

Construction/operational phase:

The mining of Blocks 1 to 4 (Figure 4) and the subsequent stockpiling of top soil and sand would not impact directly on any surface water environments/sensitive landscapes since the mining activity would be located away from the small stream/drainage area located to the north of the proposed mining area.

PREDICTED IMPACT: NONE

The mining operation would however, impact on the surface water runoff of an area of 1.44 due to the formation of a void. Currently, the surface water runoff is over the proposed mining area in the direction of the small stream/drainage area located to the north of the proposed mining area.

PREDICTED IMPACT	
Extent	Site
Duration	Short
Intensity	Low
Probability	Probable
Significance	Low
Status	Negative
Confidence	High

A storm water drain will be constructed at the top end of the mining area in order to divert the clean storm water around the mining area (prevent flooding of the mining area) and back into the drainage area. Erosion control measures would have to be installed in order to prevent erosion of the storm water drain and the drainage area.

PREDICTED IMPACT	
Extent	Site
Duration	Short
Intensity	Medium
Probability	Definite
Significance	Low
Status	Neutral
Confidence	High

Decommissioning/closure phase:

The final rehabilitation of the mining area (Blocks 1 to 4; Figure 4) and the rehabilitation of the road extending through the mining area would have a positive impact on the site drainage and therefore the small stream/drainage area located to the north of the proposed mining area.

PREDICTED IMPACT	
Extent	Site
Duration	Short
Intensity	Low
Probability	Definite
Significance	Medium
Status	Positive
Confidence	High

6.2.7 Ground water

Construction/operational phase:

The mining operation would result in the removal of sand from an area of 1.44 ha (Blocks 1 to 4; Figure 4) down to a depth of 2.5 - 3 meters. A fluctuating water table was noted (i.e. yellow mottling of the soil) at this depth. The mining operation could thus potentially impact on the perched groundwater flow. However, no ponding/seeping of groundwater was noted in the previously mined area. Groundwater recharge or quality would not be impaired by the proposed mining operation.

PREDICTED IMPACT	
Extent	Site
Duration	Short
Intensity	Low
Probability	Probable
Significance	Low
Status	Negative
Confidence	High

The stockpiling of top soil and sand would not impact on the groundwater of the site.

PREDICTED IMPACT: NONE

The utilization of the road extending through the mining area will not impact on the groundwater of the site.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

The final rehabilitation of the mining area (Blocks 1 to 4; Figure 4) and the rehabilitation of the road extending through the mining area would have a positive impact on the groundwater recharge and therefore the groundwater of the site.

PREDICTED IMPACT	
Extent	Site
Duration	Long
Intensity	Low
Probability	Probable
Significance	Low
Status	Positive
Confidence	High

6.2.8 Air quality

Construction/operational phase:

The mining of Blocks 1 to 4 (Figure 4) and the subsequent stockpiling of top soil and sand could lead to dust generation that would impact on site workers and the immediate surrounding area. This impact would depend on the season and the wind direction at that particular time.

PREDICTED IMPACT	
Extent	Site
Duration	Short
Intensity	Low
Probability	Highly Probable
Significance	Low
Status	Negative
Confidence	High

No farmstead/homestead or residential area is located within 1 kilometers of the proposed mining area. Dust generation as a result of the operation should therefore not impact on any farmstead/homestead or residential area.

PREDICTED IMPACT: NONE

The utilization of the roads on site could also result in dust generation that would impact on the site workers and immediate surrounding area. This impact would depend on the season and the wind direction at that particular time.

PREDICTED IMPACT	
Extent	Site
Duration	Short
Intensity	Low

Probability	Highly Probable
Significance	Medium
Status	Negative
Confidence	High

Decommissioning/closure phase:

The rehabilitation of Blocks 1 to 4 (Figure 4) and the road extending through the mining area could result in dust generation that would impact on site workers and the surrounding vegetation due to the use of heavy machinery. This impact would depend on the season and the wind direction at that particular time. The rehabilitation of the mined area will have a positive impact on the visual aspect of the site.

PREDICTED IMPACT	
Extent	Site
Duration	Short
Intensity	Low
Probability	Highly Probable
Significance	Low
Status	Negative
Confidence	High

6.2.9 Noise

Construction/operational phase:

The mining of Blocks 1 to 4 (Figure 4) and the subsequent stockpiling of top soil and sand will impact on the ambient noise of the site and the immediate surroundings due to the use of the front end loader.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Low
Probability	Highly Probable
Significance	Low
Status	Negative
Confidence	High

The concurrent rehabilitation of the mining area (Blocks 1 to 4; Figure 4) will impact on the ambient noise of the site and the immediate surroundings due to the use of heavy machinery.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Low
Status	Neutral
Confidence	High

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. This would impact on the ambient noise of the site and immediate surroundings.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Low
Probability	Probable
Significance	Low
Status	Negative
Confidence	High

Decommissioning/closure phase:

The rehabilitation of Blocks 1 to 4 (Figure 4) and the road extending through the mining area could result in noise generation as the result of the use of heavy machinery. This would impact on site workers and the immediate surrounding area. This impact would depend on the season and the wind direction at that particular time.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Low
Status	Neutral
Confidence	High

6.2.10 Sites of archaeological and/or cultural interest

Construction/operational phase:

During the mining of Blocks 1 to 4 (Figure 4) and the subsequent stockpiling of top soil and sand, no sites of archaeological and/or cultural interest will be impacted upon.

PREDICTED IMPACT: NONE

The utilization of the road extending through the mining area will also not impact on any sites of archaeological and/or cultural interest.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

During the rehabilitation of Blocks 1 to 4 (Figure 4) and the road extending through the mining area, no sites of archaeological and/or cultural interest will be impacted upon.

PREDICTED IMPACT: NONE

6.2.11 Visual aspects

Construction/operational phase:

The mining of Blocks 1 to 4 (Figure 4) and the subsequent stockpiling of top soil and sand will impact on the visual aspect of the site and the immediate surroundings. These activities would only be visible from the adjacent agricultural land owned by land owner and the adjacent rehabilitated area. It would not be visible from the provincial road or from any farmstead.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Low
Probability	Definite
Significance	Low
Status	Negative
Confidence	High

The concurrent rehabilitation of the mining area (Blocks 1 to 4; Figure 4) will impact on the visual aspect of the site and the immediate surroundings. This rehabilitation would only be visible from the adjacent agricultural land owned by land owner and the adjacent rehabilitated area. The rehabilitation of the mined area would have a positive impact on the visual aspect of the site.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Long
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Neutral
Confidence	High

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. The presence of vehicles on these roads would impact on the visual aspect of the site and immediate surroundings.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Low
Probability	Definite
Significance	Low
Status	Negative
Confidence	High

Decommissioning/closure phase:

The rehabilitation of Blocks 1 to 4 (Figure 4) and the road extending through the mining area will only be visible from the adjacent agricultural land owned by land owner and the adjacent rehabilitated area. The

rehabilitation of the mined area will have a positive impact on the visual aspect of the site.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Medium
Probability	Definite
Significance	Medium
Status	Neutral
Confidence	High

6.2.12 Traffic

Construction/operational phase:

The mining of Blocks 1 to 4 (Figure 4) and the subsequent stockpiling of top soil and sand will not impact on any traffic or general road user since all activities will take place within the demarcated area.

PREDICTED IMPACT: NONE

The concurrent rehabilitation of the mining area (Blocks 1 to 4; Figure 4) will also not impact on any traffic or general road users since all activities will take place within the demarcated area.

PREDICTED IMPACT: NONE

Existing roads on the property will be utilised by the vehicles on site as well as trucks transporting sand to clients. Access to the site will be gained via the R102 provincial road (located 1km north of the site) and the secondary tarred road leading to Gamtoos River Mouth (Figure 1). There could thus be a small increase in traffic on the access road and the provincial road in terms of sand deliveries.

CONSTRUCTION/OPERATIONAL PHASE	
Extent	Site
Duration	Short
Intensity	Low
Probability	Probable
Significance	Low
Status	Negative
Confidence	Medium

Decommissioning/closure phase:

The rehabilitation of Blocks 1 to 4 (Figure 4) and the road extending through the mining area will not impact on any traffic or general road user since all rehabilitation activities will take place within the demarcated area.

PREDICTED IMPACT: NONE

6.2.13 Interested and affected parties/sense of place

Construction/operational phase:

The proposed mining operation would impact directly on the land owner. However, the said area has been leased from the land owner for sand mining purposes. All mining activities (including rehabilitation) will take place within the leased demarcated area.

PREDICTED IMPACT: NONE

The closest farmstead is located approximately 1 kilometre from the proposed mining area. No direct impact on any interested and affected party is thus envisaged.

PREDICTED IMPACT: NONE

Decommissioning/closure phase:

The rehabilitation of Blocks 1 to 4 (Figure 4) and the road extending through the mining area will not impact on any interested and affected party since the closest farmstead is located approximately 1km from the proposed mining area. All rehabilitation activities will take place within the demarcated area.

PREDICTED IMPACT: NONE

6.3 Residual impacts after closure

The following residual impacts after closure could take place:

- Wind erosion;
- Water erosion;
- Collapse of embankments and contours;
- Poor soil cover.

On identification, mitigation measures (Section 7) would have to be implemented in order to rectify the situation.

6.4 Cumulative impacts

The proposed sand mining operation together with the previously mined area would contribute to the cumulative impact of sand mining on the said property. In essence, an area of approximately 12 hectares would have been mined. However, these mined areas will be rehabilitated and returned to grazing.

6.5 No project impacts

If the 'no project option' in terms of the proposed mining operation was exercised, it would mean that a new mining area would have to be investigated, the potential impacts on the environment determined and the interested and affected parties consulted. The necessary permits would also have to be obtained for the proposed activity.

Margene Transport CC would thus not be able to deliver sand to their existing client base and this would impact on their business.

6.6 Conclusion

Only a small area (1.44 ha) will be impacted by the proposed sand mining operation. The proposed sand mining operation is located adjacent to an existing sand mining area.

Mitigation measures indicated in Section 7 would assist with reducing the potential impact of the proposed sand mining operation.

7. ENVIRONMENTAL MANAGEMENT PLAN

7.1 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 after approval of the Environmental Management Plan. ***It is essential that this portion be carefully studied, understood, implemented and adhered to at all times.***

Responsibility

- The environment affected by the mining operation will 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 will 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 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.

7.2 Geology

As indicated in Section 6.3.1, the removal of sand from the 1.44 ha area would result in a permanent impact on the geology of the site.

No mitigation measures are possible in order to reduce this impact other than implementing the proposed mine plan and mining within the said mining area (Blocks 1 to 4; Figure 4).

7.3 Topography

Objectives:

- *To reduce the potential impact of the proposed mining operation on the topography of the site and surroundings as far as possible.*
- *To ensure that the proposed mining operation does not impact on the small stream/drainage area located to the north of the proposed mining area or the adjacent previously mined area that is currently being rehabilitated (Figure 4).*

- | |
|--|
| <ul style="list-style-type: none">a) Before any mining takes place, the boundaries of the proposed mining area (Blocks 1 to 4; Figure 4) will be surveyed and pegged.b) No activities will be allowed within the adjacent previously mined areas or within the small stream/drainage area located to the north of the proposed mining area (Figure 4). This includes dumping of any material during and after mining; trampling and urination by operator/contractors, etc. |
|--|

- c) The operator/contractors will be informed of these NO-GO AREAS and will be made aware of penalties (fines to be paid) to be imposed due to infringements.
- d) The outer boundaries of the blocks (Blocks 1 to 4; Figure 4) will be trenched between the beacons (inserted by the surveyor) to ensure that the operator remains within the allocated area.
- e) All mining activities associated with a particular block (Block 1 to 4; Figure 4) will be limited to the surveyed area.
- f) Sand extraction will start in Block 3 from the bank adjoining the previously mined area (Figure 4).
- g) Sand will be removed in 10m to 15 m wide strips across the length of the demarcated block (Figure 4).
- h) The maximum depth of the excavations will be 2.5 - 3m below ground level.
- i) The subsequent blocks (Blocks 3, 1 and 3; Figure 4) will only be mined once the earthworks on the previous phase have been completed.
- j) After the first section (Block 3, Figure 4) has been mined out, it will be sloped at 18 degrees (1:3) and seeded to suitable grass species (see Section 8.2.2) to limit erosion and restore protective ground cover.
- k) Rehabilitation of the mining blocks will thus take place in the following sequence: Block 3, Block 4, Block 1 and Block 2 (Figure 4) – and following the procedures indicated in Section 8.2.2.

7.4 Soil

Objectives:

- *To reduce the potential impact of the proposed mining operation on the soil of the site and surroundings (in terms of soil quality, structure and erosion potential) as far as possible.*
- *To ensure that the proposed mining operation does not impact on the soils associated with the small stream/drainage area located to the north of the proposed mining area or the adjacent previously mined area that is currently being rehabilitated (Figure 4).*

- a) Before any mining takes place, the boundaries of the proposed mining area (Blocks 1 to 4; Figure 4) will be surveyed and pegged. The outer boundaries of the blocks (Blocks 1 to 4; Figure 4) will be trenched between the beacons (inserted by the surveyor) to ensure that the operator remains within the allocated area.
- b) No activities will be allowed within the adjacent previously mined areas or within the small stream/drainage area located to the north of the proposed mining area (Figure 4). This includes dumping of any material during and after mining; trampling and urination by operator/contractors, etc.
- c) The operator/contractors will be informed of these NO-GO AREAS and will be made aware of penalties (fines to be paid) to be imposed due to infringements.
- d) All mining activities associated with a particular block (Block 1 to 4; Figure 4) will be limited to the surveyed area.
- e) Sand extraction will start in Block 3 from the bank adjoining the previously mined area (Figure 4).
- f) Sand will be removed in 10m to 15 m wide strips across the length of the demarcated block (Figure 4).

- g) The maximum depth of the excavations will be 2.5 - 3m below ground level.
- h) The topsoil layer of the areas to be developed will be removed and stockpiled in demarcated areas. The topsoil layer generally has a high organic content and carries the seed bank.
- i) Any stockpile, which is likely to remain for 3 months or more, must be vegetated (see grass mix provided in Section 8.2.2).
- j) Any sub-soil or rocks removed should also be stockpiled separately and be used during the rehabilitation phase (see Section 8.2.2).
- k) After the first section (Block 3, Figure 4) has been mined out, it will be sloped at 18 degrees (1:3) and seeded to suitable grass species (see Section 8.2.2) to limit erosion and restore protective ground cover.
- l) Rehabilitation of the mining blocks will thus take place in the following sequence: Block 3, Block 4, Block 1 and Block 2 (Figure 4).
- m) Rehabilitation will follow the procedures indicated in Section 8.2.2.
- n) The road extending through the mining area will be rehabilitated as indicated in Section 8.2.3.

Objective:

- *To reduce potential soil pollution as a result of the mining activity taking place.*

- a) No washing of sand will take place on site and therefore no mine waste/mine residue dumps will be present on site.
- b) A rubbish bin will be placed at the sand mining site for non degradable refuse such as glass bottles, plastic bags, etc. This drum will be emptied on a regular basis and disposed of at a recognised disposal facility. Bio-degradable refuse will be handled in a similar manner.
- c) No dumping or burying of any kind of waste (domestic, general, building rubble, etc.) to take place on site or on the adjacent previously mine areas or the nearby small stream/drainage area.
- d) Site workers must not be allowed to burn any waste on site.
- e) A chemical toilet will be provided on site for use by the operator/site workers. The chemical toilet will be serviced on a regular basis. No long drop toilets to be allowed on site.
- f) No vehicles will be repaired within the proposed mining area. All vehicles will be repaired off site as the machinery is hired on a daily basis.
- g) Equipment and machinery used in the mining operation will be adequately maintained so that during operations, oil diesel, fuel, hydraulic fluid spills will be prevented.
- h) No used oils or lubricants to be stored or buried on site.
- i) No diesel tank for refuelling of the front end loader may be installed on site without the necessary permission.
- j) All hydrocarbon spills (oil, grease, diesel, petrol, etc.) should be cleaned with the use of suitable absorbent materials such as drizit. Appropriate soil remediation measures should be implemented where soil has been contaminated with oil.
- k) The operator/site workers should be educated with regards to the said waste management system and the importance thereof.

7.5 Natural vegetation/animal life

Objective:

- *To reduce the potential impact of the proposed mining operation on the vegetation of the site and surroundings as far as possible.*
- *To ensure that the proposed mining operation does not impact on the natural vegetation associated with the small stream/drainage area located to the north of the proposed mining area or the adjacent previously mined area that is currently being rehabilitated (Figure 4).*

- a) Before any mining takes place, the boundaries of the proposed mining area (Blocks 1 to 4; Figure 4) will be surveyed and pegged.
- b) The outer boundaries of the blocks (Blocks 1 to 4; Figure 4) will be trenched between the beacons (inserted by the surveyor) to ensure that the operator remains within the allocated area.
- c) All mining activities associated with a particular block (Block 1 to 4; Figure 4) will be limited to the surveyed area.
- d) No activities will be allowed within the adjacent previously mined areas or within the small stream/drainage area located to the north of the proposed mining area (Figure 4). This includes dumping of any material during and after mining; trampling and urination by operator/contractors, etc.
- e) The operator/contractors will be informed of these NO-GO AREAS and will be made aware of penalties (fines to be paid) to be imposed due to infringements.
- f) The subsequent blocks (Blocks 3, 1 and 3; Figure 4) will only be mined once the earthworks on the previous phase have been completed.
- g) The operator/site workers will be informed that only official roads may be used. No off-road driving will be permitted.
- h) The operator/site workers will be informed that no poaching/trapping of animals will be allowed on site or on adjacent properties. The overall site should be inspected on a regular basis to ensure that no snaring of animals is taking place.
- i) The operator/site workers will be informed that no fires will be permitted on site or adjacent to the site in order to prepare food, etc.
- j) The operator/site workers will not be allowed to burn any waste on site.
- k) No unnecessary removal of trees or other vegetation will take place outside of the demarcated mining area.
- l) Collecting of wood and/or indigenous plants will be prohibited.
- m) Dust suppression will be practiced in order to prevent air-borne deposition on the surrounding natural vegetation and possibly the animals.
- n) The sand mining operation will be conducted during daylight hours (i.e. sunrise to sunset).
- o) The waste management system as indicated in Section 7.4 must be implemented in order to prevent any impact on the natural vegetation and animal life on site and the surrounding area.
- p) Regular site inspections should be conducted to identify any declared weeds or invader plants. If identified, the plants should be eradicated using the appropriate methods. The regulations in terms of the Conservation of Agricultural Resources Act, 1983, with regards to declared weeds and plants must be noted.

Objectives:

- To rehabilitate disturbed areas in order to establish a proper vegetation cover in order to stabilize the soil and drainage patterns;
- To improve the visual and aesthetic acceptability of the disturbed area;
- To prevent and control the growth of declared weeds and/or invader plants.

- a) After the first section (Block 3, Figure 4) has been mined out, it will be sloped at 18 degrees (1:3) and seeded to suitable grass species (see Section 8.2.2) to limit erosion and restore protective ground cover.
- b) Rehabilitation of the mining blocks will thus take place in the following sequence: Block 3, Block 4, Block 1 and Block 2 (Figure 4).
- c) Rehabilitation will follow the procedures indicated in Section 8.2.2.
- d) The road extending through the mining area will be rehabilitated as indicated in Section 8.2.3.
- e) The bank along the Eskom servitude should be shaped with a slope of at least 3:1 and rehabilitated as indicated in Section 8.2.2.
- f) The regulations in terms of the Conservation of Agricultural Resources Act, 1983 with regards to declared weeds and plants will be noted and complied with.
- g) Regular site inspections will be conducted to identify any declared weeds and/or invader plants. If identified, the plants will be eradicated using appropriate methods.
- h) Rehabilitation activities will be closely monitored and supervised by the independent Environmental Control Officer (ECO) in conjunction with a qualified specialist.

Please note: Mitigation measures proposed with regards to surface and groundwater would also result in the protection of natural vegetation and animal life.

7.6 Surface water/sensitive landscapes

Objective:

- To reduce the potential impact of the proposed mining operation on the surface water run-off on the surrounding area (including the adjacent previously mined area that is currently being rehabilitated) as far as possible.
- To ensure that the proposed mining operation does not impact on the small stream/drainage area located to the north of the proposed mining area (Figure 4).

- a) Before any mining takes place, the boundaries of the proposed mining area (Blocks 1 to 4; Figure 4) will be surveyed and pegged.
- b) The outer boundaries of the blocks (Blocks 1 to 4; Figure 4) will be trenched between the beacons (inserted by the surveyor) to ensure that the operator remains within the allocated area.
- c) All mining activities associated with a particular block (Block 1 to 4; Figure 4) will be limited to the surveyed area.
- d) No activities will be allowed within the adjacent previously mined areas or within the small stream/drainage area located to the north of the proposed mining area (Figure 4). This includes dumping of any material

- during and after mining; trampling and urination by operator/contractors, abstraction of water, etc.
- e) The operator/contractors will be informed of these NO-GO AREAS and will be made aware of penalties (fines to be paid) to be imposed due to infringements.
 - f) A storm water trench will be constructed from Point C to Point D (Figure 4) in order to direct runoff away from the proposed mining area and so prevent erosion and flooding of the mined area during heavy downpours.
 - g) The top soil removed will be stored in a bund wall on the high ground side of the mining area within the boundaries of the mining area as indicated in Figure 4. The topsoil will be utilized in the rehabilitation of the sand pits.
 - h) The subsequent blocks (Blocks 3, 1 and 3; Figure 4) will only be mined once the earthworks on the previous phase have been completed.
 - i) Appropriate soil conservation measures will be provided in order to prevent soil erosion and loss of topsoil.
 - j) The storm water management measures will be inspected on a regular basis in order to ensure that the structures are functional and not causing soil erosion.
 - k) If soil erosion is noted, appropriate remediation measures should be implemented.

7.7 Groundwater

Objective:

- *To reduce the potential impact on the groundwater associated with the site and the nearby small stream/drainage area located to the north of the proposed mining area (Figure 4).*

Mitigation measures indicated in Section 7.4 (Soil) and Section 7.5 (Surface Water) should be implemented in order to prevent any impact on the groundwater of the site.

7.8 Air Quality

Objective:

- *To ensure that the mining operation has the least possible impact on air quality of the site and immediate surroundings (and therefore the interested and affected parties).*

- a) In order to reduce the potential for dust generation due to mining activities, the area to be cleared of vegetation should be limited (especially during the windy months).
- b) All mining activities associated with a particular block (Block 1 to 4; Figure 4) will be limited to the surveyed area.
- c) The subsequent blocks (Blocks 3, 1 and 3; Figure 4) will only be mined once the earthworks on the previous block have been completed.
- d) Dust suppression measures (e.g. use of water tanker or water sprays) should be implemented during very dry and windy periods.

- e) Top soil stockpiles remaining in place for longer than 3 months should be seeded and fertilized. The piles should also be wetted regularly until vegetation starts to grow and the soil surface forms a crust.
- f) Top soil must not be handled during periods of high winds.
- g) Sand stockpiles must be kept as small as possible and well within the excavations to reduce wind erosion.
- h) Disturbed areas should be re-vegetated as soon as climatic conditions permit and when necessary, areas generating excessive dust must be watered down.
- i) Chicken manure must not be stockpiled on site in large quantities or for long periods. Chicken manure should be worked into soil as soon as possible.
- j) Application of chicken manure in a fine form must be avoided.
- k) Vehicular movement and speed within the mining area will be limited to a minimum to reduce dust generation on the roads. Hauling speed will be limited to below 20km/h.
- l) The gravel access roads and haul roads (Figure 4) should be provided with red gravel or crushed stone topping that does not encourage dust generation.
- m) The operator/site workers will be informed that only official roads may be used. No off-road driving will be permitted.
- n) Vehicles must be properly maintained to reduce smoke emissions.
- o) The operator/site workers must not be allowed to make open fires or burn any waste on site.
- p) The waste management system as indicated in Section 7.4 must be implemented.
- q) The chemical toilet must be serviced on a regular basis in order to prevent odours.

7.9 Noise

Objective:

- *To ensure that the mining operation has an impact of low significance on the operator and noise levels of the surrounding area (and therefore the interested and affected parties).*

- a) All machinery (including vehicles) used during the mining operation should be properly muffled and maintained so as to reduce noise generation to a minimum.
- b) Working procedures should be structured so as to avoid the unnecessary generation of noise.
- c) Hooting, shouting and the use of exhaust brakes should be avoided.
- d) The necessary protective gear must be worn by the operator/site workers at all times.
- e) The sand mining operation will be conducted during daylight hours (i.e. sunrise to sunset) or 07h00 to 17h00.
- f) No mining activities will take place over weekends (i.e. Saturdays and Sundays) or on public holidays.
- g) The operator/site workers will not reside on site.
- h) Blasting will not be required as part of the mining operation.

7.10 Sites Of Archaeological And/Or Cultural Interest

Objective:

- *To prevent any impact on archaeological remains that may be excavated during the mining operation.*

- a) If any archaeological remains (including burial remains) are exposed during excavation and earthworks, the construction must be terminated immediately and the South African Heritage Resources Agency (SAHRA; Mrs Mary Leslie, Tel: 021 – 462 4502), Heritage Eastern Cape (Ms Africa Maxongo, Tel: 043 – 722 1934) and the Department of Economic Development and Environmental Affairs (DEDEA) informed of the finding.
- b) The excavated remains should not be disturbed or removed.
- c) The said site must then be inspected by a professional archaeologist.
- d) In this regard, the applicant must take note of the requirements in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999).

7.11 Visual Aspects

Objective:

- *To limit the potential visual impact as a result of the mining operation on the surrounding interested and affected parties.*

- a) All activities are to be limited to the said site.
- b) The operator/site workers must ensure that the site is kept neat and tidy at all times.
- c) Proper waste management measures must be implemented for the site (see Section 7.4 of this report).
- d) Appropriate dust control measures must be implemented during the mining operation (see Section 7.8 of this report)
- e) The operator/site workers must comply with this Environmental Management Plan (EMP).

7.12 Traffic

Objective:

- *To reduce the potential impact on the land owner and the general road user as a result of the mining operation and the subsequent transportation of the sand.*

- a) In order to gain access to the mining site or exit the mining site, the operator/site workers/contractors will use the existing road extending from the Gamtoos Mouth Road.
- b) No sand/gravel may be deposited on the tarred Gamtoos Mouth Road that could impact on the safety of the general road user.
- c) The operator/site workers will be informed that only official roads may be used. No off-road driving will be permitted.
- d) Vehicular movement and speed within the mining area will be limited to a minimum to reduce dust generation on the roads. Hauling speed will be limited to below 20km/h.

- e) The operator/site workers/contractors will at all times obey the rules of the road. No speeding will be allowed.
- f) The operator/site workers/contractors will at all times use roadworthy vehicles.
- g) Trucks will not be overloaded.

7.13 Interested and affected parties

Objective:

- *To minimize the impact of the proposed mining operation on the land owner and the adjacent land owners and therefore the adjacent land use and sense of place.*

- a) All mining activities will take place within the demarcated mining area (Blocks 1 to 4; Figure 4) in order to reduce the footprint of the mining operation and avoid impact on the activities of the surrounding interested and affected parties.
- b) No activities will be allowed to spill over onto adjacent properties.
- c) The waste management system indicated in Section 7.4 will be implemented.
- d) Appropriate notification signs must be erected warning contractors/site workers that they are entering a mining area.
- e) The mitigation measures indicated in this Environmental Management Plan (EMP) will be implemented by the operator/site workers/contractors.
- f) The sand mining operation will be conducted during daylight hours (i.e. sunrise to sunset) or 07h00 to 17h00.
- g) No mining activities will take place over weekends (i.e. Saturdays and Sundays) or on public holidays.
- h) The operator/site workers will not reside on site.
- i) No squatting by informal settlers will be allowed on site.

Objective:

- *To ensure that the operator/site workers are not impacted upon in terms of the mining operation being performed.*

- a) The mining operation must comply with the Mine Health and Safety Act, 1996 (Act 29 of 1996) at all times.
- b) Appropriate notification signs must be erected warning contractors/site workers that they are entering a mining area.
- c) The operator/site workers/contractors must to be instructed to bring potable water to site on a daily basis.
- d) The required protective clothing and equipment must be supplied to the operator/site workers/contractors in order to reduce the potential impact on these workers.
- e) It must be ensured that the operator of the front-end loader or any other specialist equipment is properly trained by auditing the training certificates before any job commences.

Objective:

- *To ensure good relations with all interested and affected parties by creating open channels of communication to address matters of concern that may arise.*

- a) Communication between the permit holder, operator/contractors, the land owner and the various interested and affected parties will be established and maintained.
- b) Details with regards to the procedures to be followed by I&APs in terms of reporting complaints/concerns, emergency situations, etc. will be documented and made available to the I&APs. In this way, two-way communication between I&APs, the contractors and the permit holder can be formalized.
- c) In order to provide feedback with regards to complaints/concerns received, a complaints register will be kept.
- d) The complaints register will record the following: Date when complaint/concern was received; Name of person to whom the complaint/concern was reported; Nature of the complaint/concern reported; the way in which the complaint/concern was addressed (date to be included).
- e) Any complaint received from the public must be attended to as soon as possible. Feedback with regards to how the said complaint was addressed must be provided to the complainant and recorded in the complaints register.
- f) Any complaints regarding the said mining operation will be brought to the attention of the Department of Minerals and Energy (DME) within 24 hours after receiving the complaint.
- g) The complaints register will be kept up to date for inspection by members of the Department of Minerals and Energy (DME).

8. REHABILITATION

8.1 Introduction

Section 44 of the MPRDA requires that all infrastructure, equipment, plant, temporary housing and other items used during the mining period be removed from the site and these disturbed areas rehabilitated. In addition, areas mined must also be rehabilitated after mining has ceased.

Final rehabilitation will be completed within a period specified by the Regional Manager.

8.2 Areas to be rehabilitated

It should be noted that no office, construction camp or any other infrastructure will be constructed at the proposed mining area.

Rehabilitation of the following would have to take place:

- The mining area (Blocks 1 to 4; Figure 4);
- The road extending through the mining area (Figure 4).

The existing road extending from the Gamtoos Mouth Road onto site will be left for use by the land owner.

8.2.1 Proposed end land use

The proposed mining area (Blocks 1 to 4; Figure 4) and the road extending through the mining area (Figure 4) will be returned to natural veld to be used for grazing purposes. This is in line with the current use of the proposed mining area.

8.2.2 The mining area (Blocks 1 to 4; Figure 4)

The mining of Blocks 1 to 4 (Figure 4) would result in an area of 1.44 hectares requiring rehabilitation. It should be noted that the road extending through the mining area (Figure 4) would be rehabilitated as part of Block 3 and Block 4 (Figure 4).

After the first section (Block 3, Figure 4) has been mined out, it will be sloped at 18 degrees (1:3) and seeded to suitable grass species to limit erosion and restore protective ground cover.

Rehabilitation of the mining blocks will thus take place in the following sequence: Block 3, Block 4, Block 1 and Block 2 (Figure 4).

The following will be adhered to:

- Rocks and coarse material removed from the excavation (if any) will be replaced into the excavation.
- Once the excavation has been refilled with overburden, rocks and coarse natural materials and profiled (sloped at 18 degrees (1:3)) with acceptable contours and erosion control measures, the top soil previously stored will be returned to its original depth over the area.
- A soil sample will be taken and analysed in order to determine the status of the soil and the need for a fertiliser.

- Chicken manure could be added at a rate of 3 – 4 tons per ha or a top dressing of mixed fertiliser (such as 2-3-4) could be applied in order to improve the organic matter and improve the grass sward.
- Seeding would coincide with the first rains and is thus dependent on rainfall.
- The top soiled area can then be seeded using the following seed mixture (March – July): 3-5kg/ha *Cloris gayana*; 3-5kg/ha *Cynodon dactylon*; 3-5kg/ha *Eragrostis curvula*; 3-5 kg/ha Rye grass; 15kg/ha Barley. Spring/summer period (September – March): 3-5kg/ha *Cloris gayana* (Rhodes grass); 3 – 5kg/ha *Cynodon dactylon*; 15 kg/ha *Eragrostis tef* (Tef).
- Once rehabilitation has taken place, no grazing will be allowed. It must be ensured that the rehabilitated area is properly fenced in order to prevent grazing.
- Photographs of the Block 1, 2, 3 and 4 (Figure 4) mining areas, before and during the mining operation and after rehabilitation, will be taken at selected fixed points and kept on record for the information of the Regional Manager.
- Regular site inspections should be conducted to identify any declared weeds or invader plants. If identified, the plants should be eradicated using the appropriate methods. The regulations in terms of the Conservation of Agricultural Resources Act, 1983, with regards to declared weeds and plants must be noted.
- If dubbeltjie (*Emmex australis*) invades the floor of the excavated areas, it should be eradicated using 2-4-D amine after which top soil should be spread over the area.
- Measures must be put in place to prevent and control veld fires.

The bank along the Eskom servitude should be shaped with a slope of at least 3:1. After shaping, it should be covered with topsoil and be reinforced with chicken manure to improve the fertility. The floor area should also be levelled and be reinforced with chicken manure. Both the bank and the floor should be seeded with the above-mentioned grass mix.

It should be noted that waste will not be permitted to be deposited in the excavations. 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.

8.2.3 Rehabilitation of road

- Imported road construction materials which may hamper regrowth of vegetation will be removed and disposed of in an approved manner prior to rehabilitation.
- The road will be ripped or ploughed to increase the aeration and water penetrating.
- If necessary, the ripped road area will be appropriately fertilised (based on a soil analysis) to ensure the regrowth of vegetation.
- Chicken manure (3 – 4 tons per ha) could be used as a top dressing
- The following seed mixture will be used as from March - October: 3-5kg/ha *Cloris gayana*; 3-5kg/ha *Cynodon dactylon*; 3-5kg/ha *Eragrostis curvula*; 3-5 kg/ha Rye grass; 15kg/ha Barley.
- Regular site inspections should be conducted to identify any declared weeds or invader plants. If identified, the plants should be eradicated using the appropriate methods. The regulations in terms of the

Conservation of Agricultural Resources Act, 1983, with regards to declared weeds and plants must be noted.

- If dubbeltjie (*Emmex australis*) invades the area, it should be eradicated using 2-4-D amine after which top soil should be spread over the area.

8.3 Maintenance (aftercare) programme

A two year maintenance (aftercare) programme will be required in order to ensure that two years after final rehabilitation the rehabilitated area will represent a fully developed grazing unit.

The maintenance/aftercare programme would involve:

- | |
|--|
| <ul style="list-style-type: none">• Maintenance of the rehabilitated land and storm water trench until such time as it can be proven that a steady state has been achieved.• Ensuring that the rehabilitated area is fenced in order to prevent grazing and trampling of the newly rehabilitated surfaces. This will assist in reducing potential erosion.• Periodic visits (quarterly) to the rehabilitated area after decommissioning in order to determine the status thereof.• Implementation of correctional measures if required. |
|--|

9. MONITORING AND REPORTING

According to Regulation 55 promulgated in terms of the MPRDA, the holder of the mining permit will:

- Conduct monitoring on a continuous basis;
- Conduct performance assessment of the environmental management plan as required;
- Compile and submit a performance assessment to the Minister to demonstrate adherence to this environmental management plan.

9.1 Inspections and reporting

This would involve:

- Regular monitoring of all the environmental management measures and components to ensure that the provisions of this EMP are adhered to.
- Identification of non-compliance and the implementation of recommendations regarding the rectification thereof.
- Ongoing regular reporting of the progress regarding the implementation of this EMP.

9.1.1 Immediate reporting

The following must be reported immediately (i.e. within 24 hours):

- Any complaints received to be immediately reported to the permit holder and recorded in the complaints register;
- Any recorded complaint to be investigated and addressed (if possible);
- Any emergency or unforeseen impact to be reported as soon as possible.
- Any accidental release of pollutants or possible polluting substances to be reported immediately to the Regional Director of the Department of Minerals and Energy and the Department of Water Affairs and Forestry.

A record of incidents reported in this manner must be kept.

9.1.2 Monthly reporting

The quantity of sand mined on a monthly basis must be recorded and kept on file.

Any complaints received must be recorded in the complaints register. The way in which these complaints were addressed and feedback provided to the complainant must be indicated in the complaints register.

9.1.3 Quarterly inspections and reporting

A responsible person (independent Environmental Control Officer (ECO)) should be appointed, in writing, to monitor all environmental aspects relating to the mining operation on a quarterly basis and thus ensure compliance with the EMP.

In addition, the independent Environmental Control Officer (ECO) must ensure that the following information is recorded:

- Quantities sand mined on a monthly basis;
- The percentage of disturbed area rehabilitated (rehabilitation figures);
- Complaints in the complaints register as well as the way in which these complaints were addressed and feedback provided to the complainant.

Photographs of the Block 1, 2, 3 and 4 (Figure 4) mining areas should be taken at selected fixed points and kept on record for the information of the Regional Manager as well as included in the quarterly reports.

The independent ECO must compile a report confirming compliance with various points identified in the environmental management plan. In addition, the ECO must indicate any possible non-compliances and recommendations regarding the rectification thereof.

9.2 Compliance reporting/submission of information

9.2.1 Quarterly submissions

The following information to be submitted to the Department of Minerals and Energy on a quarterly (3-monthly) basis:

- Quantities sand mined;
- The percentage of disturbed area rehabilitated (rehabilitation figures);
- A report confirming compliance with various points identified in the environmental management plan as well as the identification of possible non-compliance and recommendations regarding the rectification thereof.
- Copy of complaints register.
- Record of any incidents reported.

9.2.2 Annual submissions

The following information should be submitted to the Department of Minerals and Energy on an annual basis and should form part of the annual performance assessment (see Section 9.3):

- An updated mine plan indicating the actual progress with the mining of the area and the rehabilitation thereof;
- Quantities sand mined;
- The percentage of disturbed area rehabilitated (rehabilitation figures);
- A report confirming compliance with various points identified in the environmental management plan as well as the identification of possible non-compliance and recommendations regarding the rectification thereof.
- Copy of the complaints register.
- Record of any incidents reported.

9.3 Monitoring and performance assessments of the environmental management plan

The performance assessment reporting for this proposed mining operation will be on an annual basis (i.e. from the date of approval of this EMP). *This is due to the fact that the proposed mining operation has a lifespan of approximately 24 months (i.e. 2 years).*

The performance assessment report will contain the following information (as a minimum):

- | |
|---|
| <ul style="list-style-type: none">• information regarding the period that applies to the performance assessment;• the scope of the assessment;• the procedure used for the assessment;• the interpreted information gained from monitoring the approved environmental management programme or plan;• the evaluation criteria used during the assessment;• the results of the assessment; and• recommendations on how and when deficiencies that are identified and/or aspects of non-compliance will be rectified |
|---|

The holder of the mining right will 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.

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 (e.g. the land owner, Mr. P.E. van Niekerk).

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-

- repeat the whole or relevant parts of the performance assessment and revise and resubmit the report; and/or
- submit relevant supporting information; and/or
- appoint an independent competent person(s) to conduct the whole or part of the performance assessment and to compile the report.

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.

10. CLOSURE

Regulations 56 to 62 outline the entire process of mine closure. 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 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).

10.1 Closure objectives

The proposed end land use will be to return the mined area to natural veld to be used for grazing purposes. This is in line with the current use of the site.

Two years after final rehabilitation, the rehabilitated area to represent a fully developed grazing unit that can once again be utilised by the land owner.

The main closure objectives will thus include:

- Blocks 1 to 4 (Figure 4) to be restored, as closely as possible, to its original state. This will also be applicable to the road extending through the mining area (Figure 4).
- The mined area to be top soiled, shaped and revegetated in order to create a stable, fertile soil layer that is erosion free and protected by a proper vegetation cover.
- The rehabilitated area to blend in with the surrounding site and the adjacent rehabilitated area.
- The rehabilitated area to be a natural extension of the adjacent rehabilitated area.
- The rehabilitated area to be protected by a proper vegetation cover to prevent any impact in terms of dust.
- The drainage of the rehabilitated area to be adequate with no ponding taking place.
- The rehabilitated area to be erosion free.
- The rehabilitated area to be free of alien plants and weeds.
- The mined/affected areas to be made safe for man and animal.
- The soil around the power line pylons to be stable, fully vegetated and erosion free.
- All stockpiles to be removed.
- All infrastructure (e.g. chemical toilet, rubbish bin, etc.) to be removed.
- All waste (including rubbish bin) to be removed.
- No impact on the nearby small stream/drainage area located to the north of the mining area.

After closure, any gate or fence erected by the holder which is not required by the landowner/tenant will be removed and the situation restored to the pre-mining situation.

10.2 Application for a closure certificate

When the holder of the mining right intends to apply for a closure certificate, the following documentation will be completed and submitted to the Department of Minerals and Energy:

- The official Application for Closure Certificate (Form P) of the Department of Minerals and Energy;
- A closure plan contemplated in Regulation 62;
- An environmental risk report contemplated in Regulation 60;
- A final performance assessment report contemplated in Regulation 55(9);
- A completed application form contemplated in Regulation 58(1) to transfer environmental liabilities and responsibilities, if the transfer of such liabilities has been applied for.

10.2.1 Closure plan

The holder of the mining permit will compile a closure plan in accordance with Regulation 62. The closure plan will thus contain the following information:

- (a) a description of the closure objectives and how these relate to the 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.

10.2.2 Environmental risk report

When the holder of the mining permit intends closing down his operation, an environmental risk report will 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:

"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."*

10.2.3 Final performance assessment report

When the holder of the mining right intends closing such operation, a final performance assessment shall be conducted and a report submitted to the Minister to ensure that -

- the requirements of the relevant legislation have been complied with;
- the closure objectives as described in the environmental management plan have been met; and
- 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.

The final performance assessment report contemplated in Regulation 55(9) will accompany the application for a closure certificate in terms of the Act.

The performance assessment report will contain the following information (as a minimum):

- information regarding the period that applies to the performance assessment;
- the scope of the assessment;
- the procedure used for the assessment;
- the interpreted information gained from monitoring the approved environmental management programme or plan;
- the evaluation criteria used during the assessment;
- the results of the assessment; and
- recommendations on how and when deficiencies that are identified and/or aspects of non-compliance will be rectified

The holder of the mining right will 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.

10.2.4 Transfer of environmental liabilities to a competent person

The mining permit holder must note that should the holder 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 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.

11. FINANCIAL PROVISION

11.1 Features/structures to be rehabilitated

It should be noted that no office, construction camp or any other infrastructure will be constructed at the proposed mining area.

Rehabilitation of the following would have to take place:

- The mining area (Blocks 1 to 4; Figure 4);
- The road extending through the mining area (Figure 4).

The existing road extending from the Gamtoos Mouth Road onto site will be left for use by the land owner.

11.2 Financial provision for features/structures to be rehabilitated

The mining of Blocks 1 to 4 (Figure 4) would result in an area of 1.44 hectares requiring rehabilitation. It should be noted that the road extending through the mining area (Figure 4) would be rehabilitated as part of Block 3 and Block 4 (Figure 4).

The following table provides an indication of the estimated cost with regards to the rehabilitation of a one (1) hectare area as well as a 1.44 hectare area.

ITEM	REHABILITATION COST (excl. VAT)	
	1 HECTARE	1.44 HECTARE
Sloping the bank adjoining the Eskom servitude and the previously mined area: 8 hrs @ R325/hr (includes diesel and operator)	R 2 600.00	R 3 744.00
Levelling the floor: 4 hrs @ R325/hr (includes diesel and operator)	R 1 300.00	R 1 872.00
Spreading top soil and incorporating chicken manure: 4 hrs @ R500/hr (includes diesel and operator)	R 2 000.00	R 2 880.00
Cost of chicken manure: 3 tons @ R400/ton	R 1 200.00	R 1 728.00
Cost of seed mixture	R 1 070.00	R 1 540.80
Spreading of seed and rolling	R 200.00	R 288.00
TOTAL COST	R 8 370.00	R 12 052.00
VAT	R 1 171.80	R 1 687.28
TOTAL COST (INCL. VAT)	R 9 541.80	R 13 739.28

Environmental Management Plan (EMP): Application for a mining permit w.r.t. Portion 20 of the farm Strandfontein 442, Division of Uitenhage, Eastern Cape. (DME REF. NO.: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM)

ITEM	ADMINISTRATIVE COST (excl. VAT)	
	1 HECTARE	1.44 HECTARE
Advertising tender	R 3 000.00	R 3 000.00
Performance assessment report	R10 000.00	R10 000.00
Closure report	R10 000.00	R10 000.00
TOTAL COST	R23 000.00	R23 000.00
VAT	R 3 220.00	R 3 220.00
TOTAL COST (INCL. VAT)	R26 220.00	R26 220.00

ITEM	OVERALL COST (excl. VAT)	
	1 HECTARE	1.44 HECTARE
Rehabilitation cost	R 8 370.00	R 12 052.00
Administrative cost	R 23 000.00	R 23 000.00
TOTAL COST	R31 370.00	R35 052.00
VAT	R 4 391.80	R 4 907.28
TOTAL COST (INCL. VAT)	R35 761.80	R39 959.28

11.3 Method of financial provision

A bank guarantee will be provided by the holder of the mining permit once the Department of Minerals and Energy has indicated what financial provision must be provided.

12. ADDITIONAL REQUIREMENTS BY THE DEPARTMENT OF MINERALS AND ENERGY

This section outlines the specific additional requirements that may be set for the operation by the Regional Manager. Additional requirements will only have been set if the Regional Manager is of the opinion that there are specific impacts on the environment which will not be adequately mitigated by the provisions set within the standard version of the Environmental Management Plan. These requirements form part of the Environmental Management Plan and all elements and instructions contained herein must be complied with by the applicant.

UNDERTAKING BY THE APPLICANT

I, MARGENE TRANSPORT CC
MRS M van Rooyen.

the undersigned and duly authorised thereto by Margene Transport

~~Company~~/Close Corporation/Municipality (Delete that which is not applicable)

hereby duly undertake to implement all aspects contained in the EMP and accept full responsibility therefore.

Signed at Humansdorp this 23 day of July 2009.

M. van Rooyen
Signature of applicant

WITNESSES:

1. Davis

2. _____

APPROVAL BY THE DEPARTMENT OF MINERALS AND ENERGY

Approved in terms of the provisions of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)

Signed at _____ this _____ day of _____ 20 _____

**REGIONAL MANAGER
EASTERN CAPE**

LIST OF FIGURES:

- ❖ Figure 1: Location of site
- ❖ Figure 2: Proposed mining blocks
- ❖ Figure 3: Location of new mining area in relation to previous mining area
- ❖ Figure 4: Proposed mine plan
- ❖ Figure 5a: Photographic view of the notices and the site
- ❖ Figure 5b: Photographic view of the adjacent previously mined area



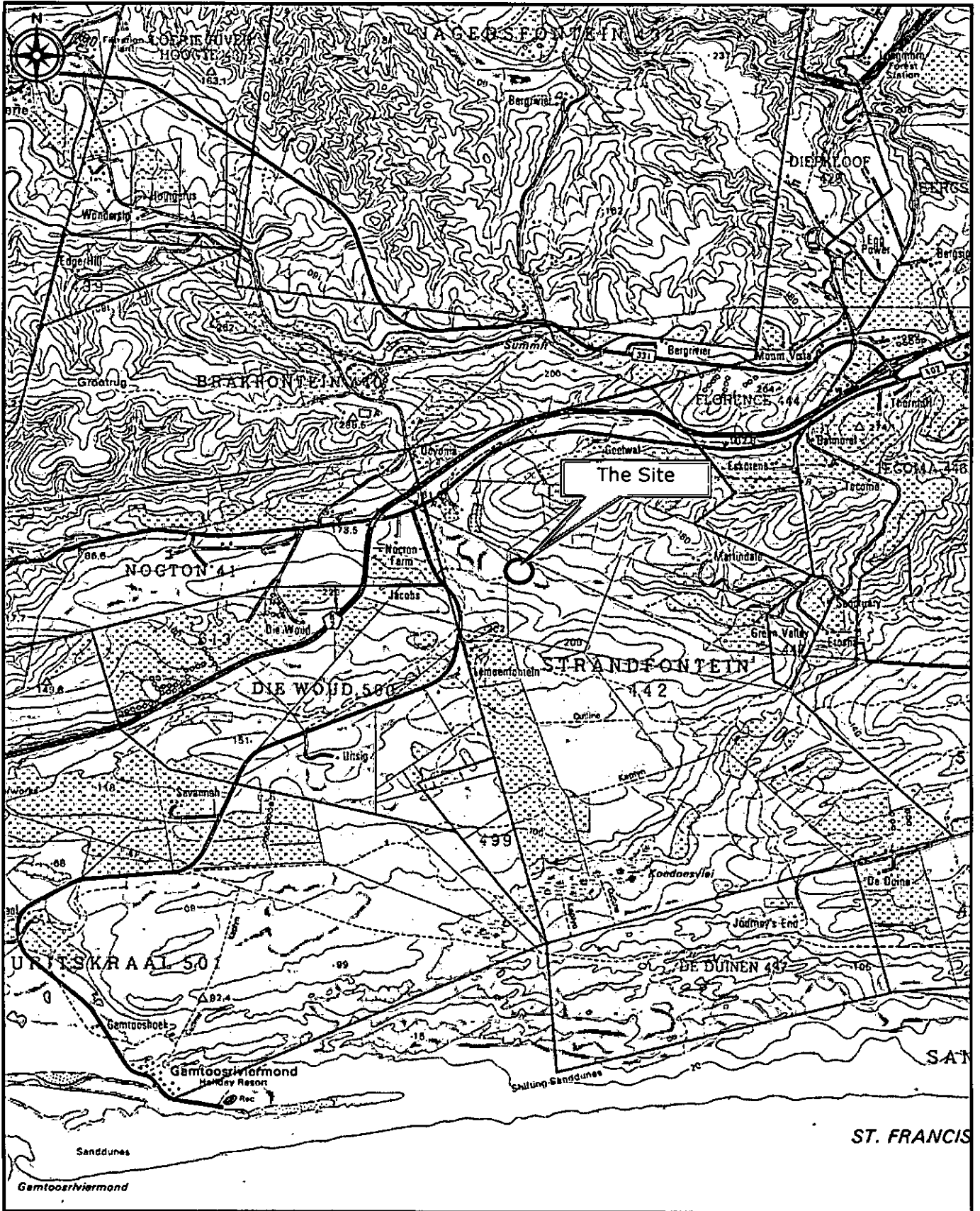


Figure 1

Location of site

(taken from 1: 50 000 3325CC - not to scale)



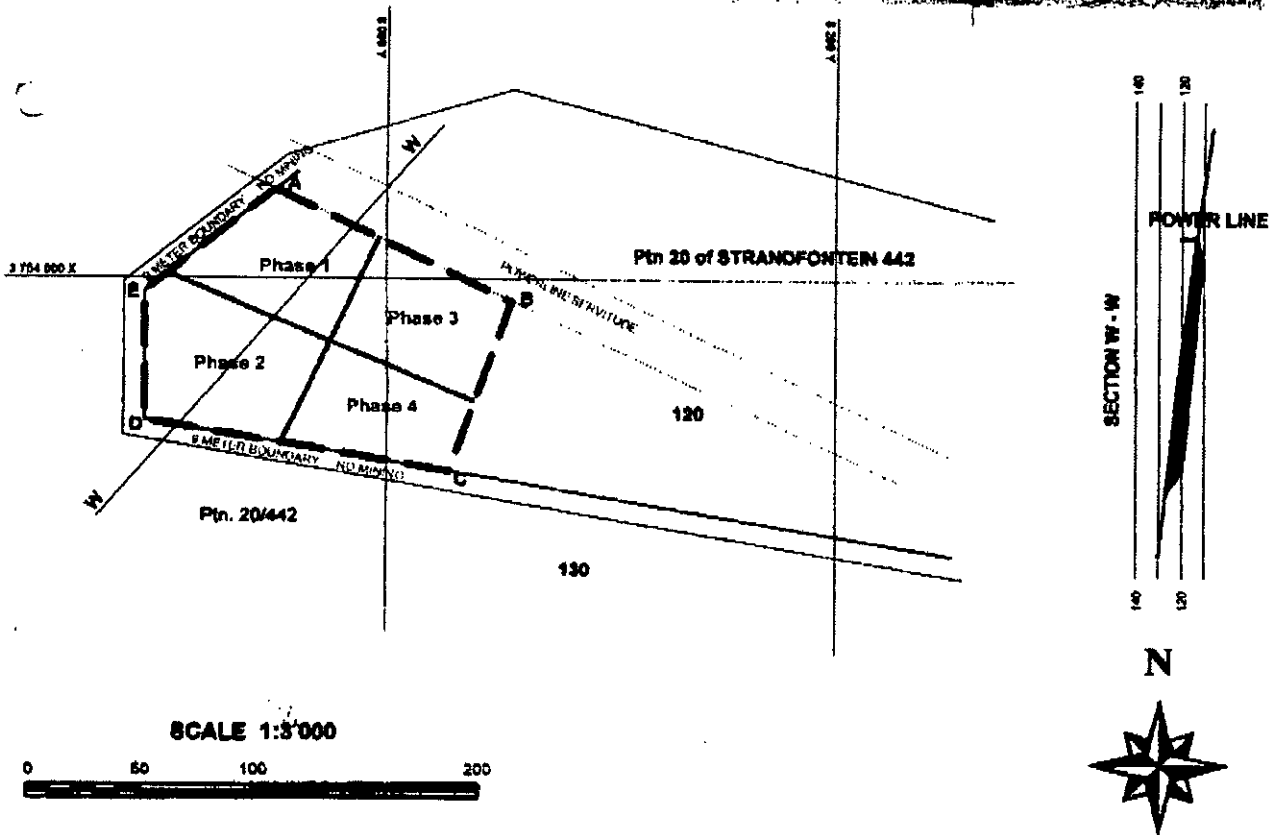
CO-ORDINATE SYSTEM LO 25°

A Y -7 851,2 X 3 783 889,3
 B Y -8 056,1 X 3 784 010,7
 C Y -8 028,3 X 3 784 069,6
 D Y -7 893,8 X 3 784 066,0
 E Y -7 893,6 X 3 784 006,1

AREA 1,44 HA

3228CC LOERIE 25° 05' E

33° 55' S



SURVEYOR *J. Victor*
 DATE *6-04-2009*

APPLICANT *M. M. Rooyen*
 DATE *6-04-2009*

JOHN VICTOR SURVEYS
 PORT ELIZABETH
 TEL/FAX (041) 581366

OFFICE USE

 REGIONAL MANAGER
 EASTERN CAPE

 DATE

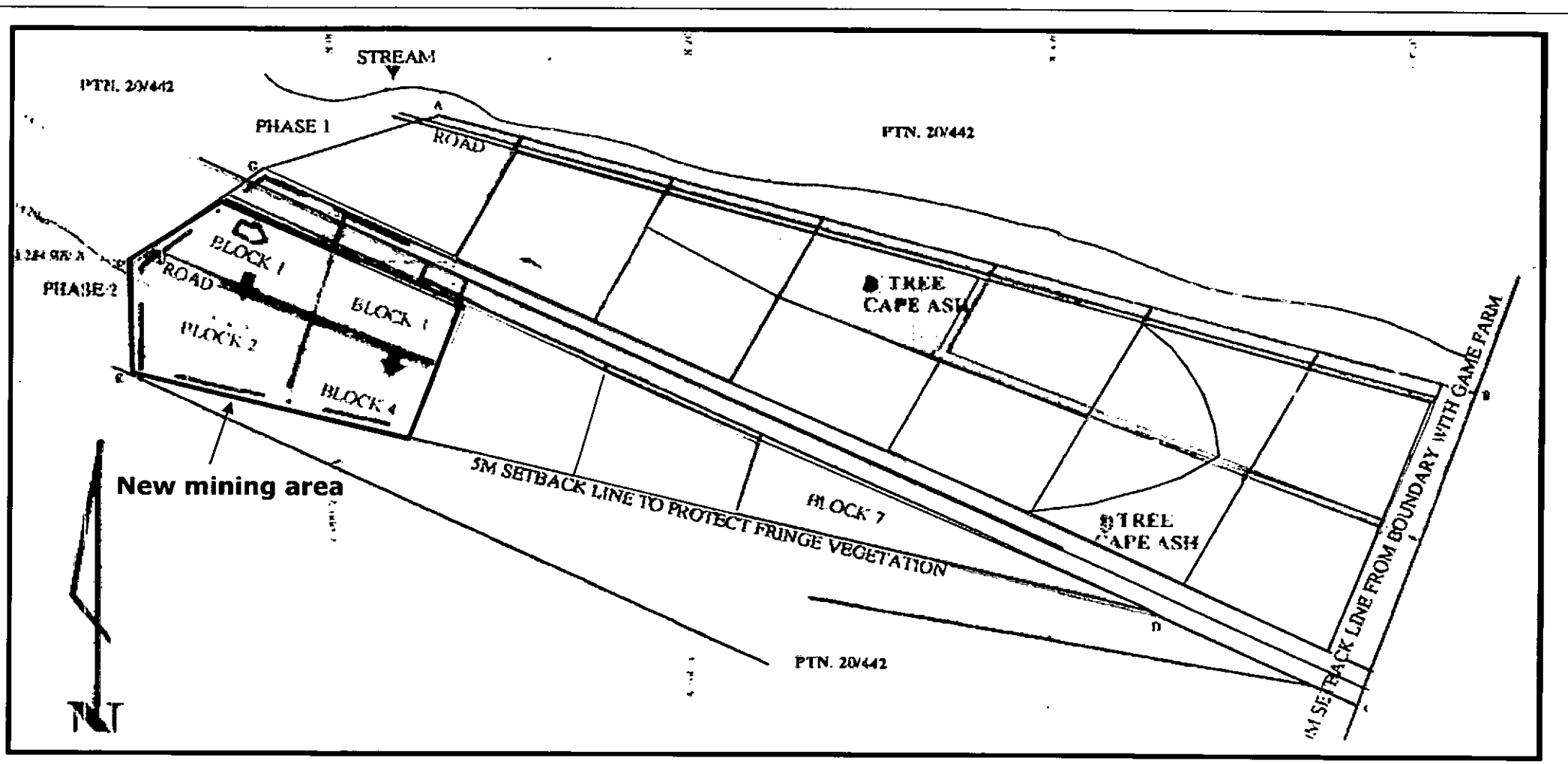
The above figure lettered A,B,C,D, E represents an area of land, in extent 1,44 Ha situated on the farm STRANDFONTEIN 442 district of Humansdorp, Eastern Cape Region, in respect of which a mining permit has been issued to

ID No _____

Figure 2

Proposed mining blocks





LEGEND	
[White box]	Un-mined
[Dark grey box]	Being Mined
[Medium grey box]	Rehabilitated
[Light grey box]	Mined

Figure 3:

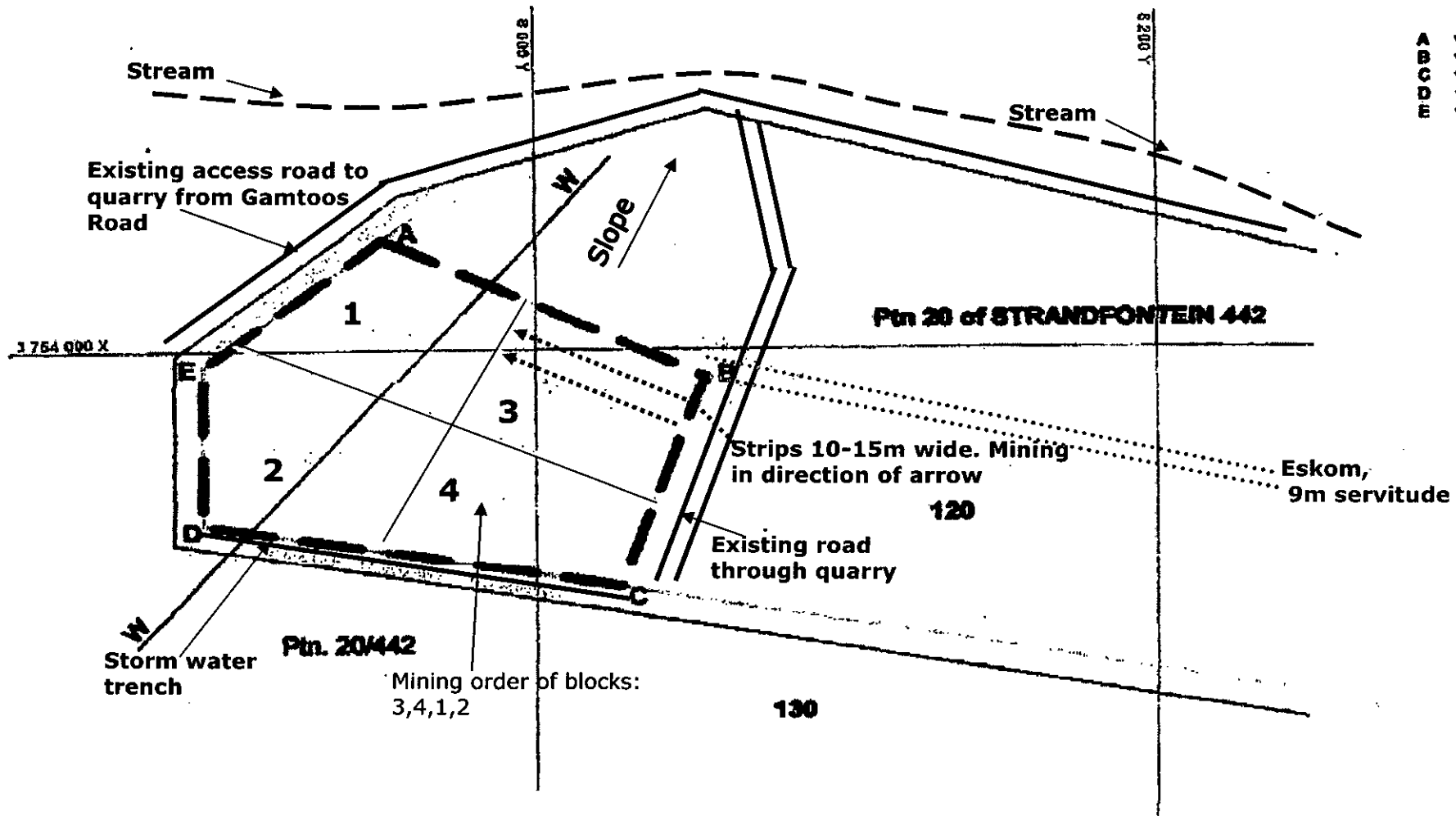
Location of new mining area in relation to previous mining area



CO-ORDINATE SYSTEM LO 25°

A	Y-7 061,2	X 3 783 006,3
B	Y-8 066,1	X 3 784 010,7
C	Y-8 028,3	X 3 784 089,6
D	Y-7 093,6	X 3 784 065,9
E	Y-7 883,6	X 3 784 006,1

AREA 1,44 HA



Ptn 20 of STRANDPONTEN 442

Strips 10-15m wide. Mining in direction of arrow

Eskom, 9m servitude

Existing road through quarry

Ptn. 20/442

Mining order of blocks: 3,4,1,2

130

SCALE 1:3 000



Figure 4
Proposed mine plan





Photo 1: Notice placed at entrance to Strandfontein Farm (i.e. the proposed mining area)

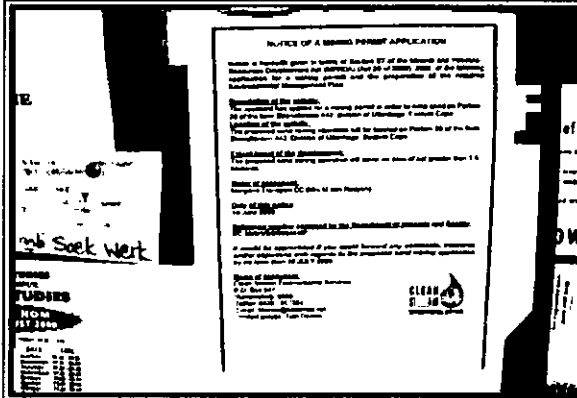


Photo 2: Notice at Humansdorp Public Library.

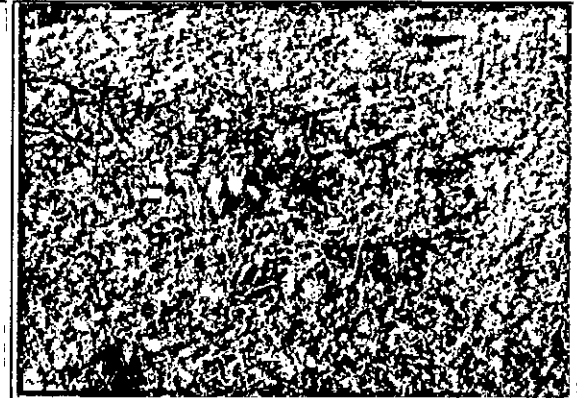


Photo 3: A view of the vegetation of the proposed mining area.



Photo 4: Notice the small pioneer trees present within the grassed area to be mined.

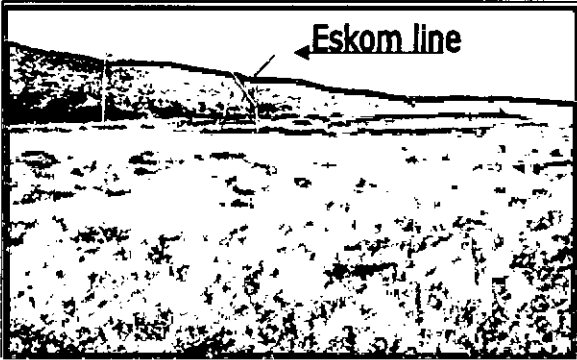


Photo 5: Eskom line on servitude running through sand mining area.



Photo 6: Approved access road from the Gamtoos Mouth Road. Note that the proposed mining area is not visible from this road.



Photo 7: Approved entrance from Gamtoos Mouth Road (MR 434).



Photo 8: One of the Cape Ash trees preserved within the previously mined area.

Figure 5a

Photographic view of the notices and the site





Photo 1: A view of the road and rehabilitated area of Phase 1, Blocks 1, 2 and 3 (May 2008).

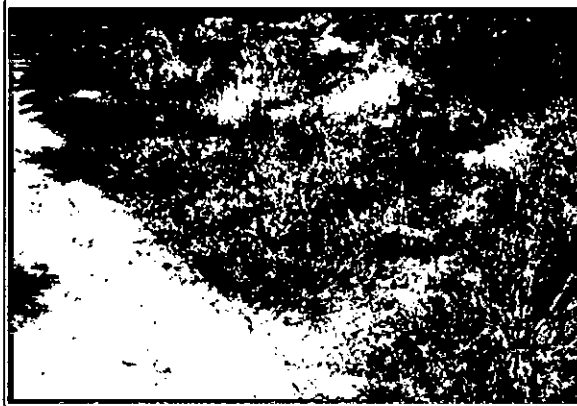


Photo 2: A view of the grass cover on the rehabilitated areas (May 2008).



Photo 3: A view of the stockpiled topsoil (May 2008).

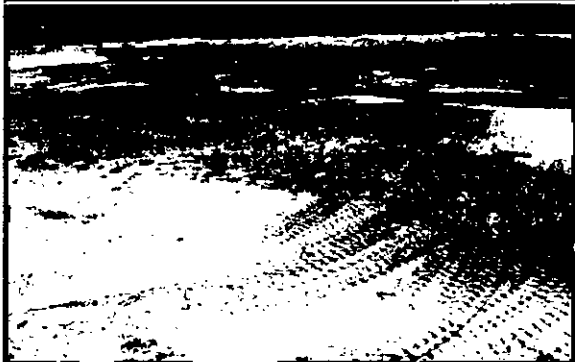


Photo 4: A view of the floor covered with dubbeltjies (May 2008).



Photo 5: A view of the rehabilitated area where topsoil had been spread (May 2008).



Photo 6: A view of the rehabilitated area and the Eskom Servitude area. Note the shaped and unshaped bank in the background (May 2008).



Photo 7: Looking toward the Eskom Servitude area. Note: no mining has taken place under the Eskom power lines (May 2008).



Photo 8: A view of the previous mining area. Note: the sand stockpiled within this area (May 2008).

Figure 5b

Photographic view of the adjacent previously mined area

(Photographs taken May 2008 by T. Daines)



APPENDIX 1:

ADVERTISING OF THE PROJECT

- ❖ Copy of the advertisement placed in The Herald, Wednesday, 24 June 2009.
- ❖ Copy of the advertisement as displayed on The Herald website;
- ❖ Copy of the on-site notice.
- ❖ Copy of documentation made available on the website:
 - Notice of a mining permit application (1 page);
 - Map indicating the location of the site (Figure 1);
 - Map indicating the proposed mining blocks (Figure 2);
 - Comment sheet.
- ❖ Copy of website (www.cleanstreams.co.za) printout.





THE HERALD

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Updated: Jun 24 2009 7:57AM

The Herald

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Legal Notices

In the High Court of South Africa (Eastern Cape High Court, Port Elizabeth). Port Elizabeth, Wednesday, the 17th day of June 2009 before the Honourable Mr Justice van der Byl (AJ) In the matter between:- HAZEL MARGARET SCOTT (Identity number: 430527-0127-08-6) Applicant For the compulsory sequestration of:- SUSAN WENDY SCOTT (Identity number: 680823-0073-08-2) (Date of Birth: 23 August 1958) (Unmarried) Respondent Case no. 1569/2009 — COURT ORDER — Having heard Advocate Beneko, Counsel for the Applicant, having read the Notice of Motion and other documents filed of record. IT IS ORDERED: 1. That the Estate of the Respondent be and is hereby placed under Provisional Sequestration in the hands of The Master of the above Honourable Court. 2. That a rule nisi do hereby issue calling upon all interested parties to appear and show cause, if any, to the above Honourable Court on Tuesday, 14 July 2009, at 9.30am or so soon thereafter as Counsel for the Applicant may be heard, why the estate of the Respondent should not be placed under final sequestration. 3. That this Order be served as follows:- 3.1 on the Respondent at his residential address being 22 28th Avenue, Mount Pleasant, Port Elizabeth; 3.2 by publication forthwith in each of "The Herald" and "Die Burger (Oos-Kaap)" newspapers; 3.3 on the South African Revenue Services; 3.4 on all known Creditors by registered post. 4. That the costs of this application be costs on the Sequestration, such costs to be taxed on the scale as between party and party by the Registrar of the High Court. By order of the Court A ERASMUS pp Registrar GREYVENSTEINS 104 Park Drive Central Port Elizabeth Ref: G Parker/jo/R02991

In the Magistrate's Court for the District of Port Elizabeth held at Port Elizabeth In the matter between:- METROPOLITAN LIFE PROPERTIES LTD Plaintiff and THANDAZWA BRENDA MPINGA v/a ADOHAN BROKERS Defendant Case no. 8584/09 — NOTICE OF SALE IN EXECUTION — IN pursuance of a Judgment in the Magistrate's Court for the district of Port Elizabeth and a warrant of execution dated 21 May 2009, the goods listed hereunder will be sold in execution on Thursday, 9 July 2009 at 10am at Danelynn Building, 12 Theale Street, North End, Port Elizabeth to the highest bidder:- 2 x Office chairs 1 x Swivel chair 1 x Metal Desk 1 x L-shaped desk 2 x Office chairs 1 x Swivel chair 1 x Lexmark printer 1 x L-shaped desk unit 1 x 4-drawer filing cabinet 1 x M-Web ADSL unit 1 x Electric kettle 1 x Bauer CD player 1 x Mecer computer complete (screen, cpu, keyboard, mouse) 9 x Black plastic chairs 1 x Black highback swivel chair 1 x Panafax UF-550 1 x Bell telephone Dated at Port Elizabeth on this 18th day of June 2009. GREYVENSTEINS Attorneys for Plaintiff St George's House 104 Park Drive Port Elizabeth Ref: R02954/G Parker/jo

NOTICE OF A MINING PERMIT APPLICATION — Notice is herewith given in terms of Section 27 of the Mineral and Petroleum Resources Development Act (MPRDA) (Act 28 of 2002), 2002, of the following application for a mining permit and the preparation of the required Environmental Management Plan: Description of the activity: The applicant has applied for a mining permit in order to mine additional sand on Portion 20 of the farm Strandfontein 442, Division of Uitenhage. An existing sand mine is present on the said site. Location of the activity: The proposed sand mining operation will be located on Portion 20 of the farm Strandfontein 442. The said site is located approximately 10 km from Thornhill. Access to the site is gained from the secondary tarred road leading to Gamtoos River Mouth. Extent (area) of the development: The proposed sand mining operation will cover an area of not greater than 1.5 hectares and will consist of four blocks - Phase 1, 2, 3 & 4. Name of proponent: Margene Transport cc (Mrs. M. van Rooyen) Date of this notice: 24 June 2009 Reference numbers assigned by the Department of Minerals and Energy: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM Documentation regarding this application can be downloaded from the website: www.cleanstreams.co.za (see New projects). It would be appreciated if you could forward any comments, concerns and/or objections with regards to the proposed sand mining application by no later than 24 July 2009. Name of consultant: Clean Stream Environmental Services PO Box 947 Humansdorp 6300 Phone/fax: (042) 295-1284 E-mail: tdaines@telkomsa.net Contact person: Tom Daines

Back

2010 Countdown: 2010-6-11 00:00:00 GMT+00:00

TODAY'S PAPER



News
Garden Route

WEEKEND PAPER



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Lifestyle

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SOCCER COMPETITION

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Ex-Royal Air Force aircraft technician talks about the good old days

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Emerging Boks can strike psychological blow against Lions

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Telkom price changes kind to consumers
Significant success of plastic bag rules

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'Between the Sheets' or nougat delights for dad
Half the fun - the taxi quest to get there

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'Survivor': Crusier gets the boot
'99% Xhosa Comedy' show back
Two workshops for aspiring dancers

Opinion & Letters

Dugout proves funny
Billions could be spent on clean energy provision
Demands damaging SA economy

Sendin
Accommodation
Luxury 4 star
accommodation in

NOTICE OF A MINING PERMIT APPLICATION

Notice is herewith given in terms of Section 27 of the Mineral and Petroleum Resources Development Act (MPRDA) (Act 28 of 2002), 2002, of the following application for a mining permit and the preparation of the required Environmental Management Plan:

Description of the activity:

The applicant has applied for a mining permit in order to mine additional sand on Portion 20 of the farm Strandfontein 442, Division of Uitenhage. An existing sand mine is present on the said site.

Location of the activity:

The proposed sand mining operation will be located on Portion 20 of the farm Strandfontein 442. The said site is located approximately 10 km from Thornhill. Access to the site is gained from the secondary tarred road leading to Gamtoos River Mouth.

Extent (area) of the development:

The proposed sand mining operation will cover an area of not greater than 1.5 hectares and will consist of four blocks – Phase 1, 2, 3 & 4.

Name of proponent:

Margene Transport cc (Mrs. M. van Rooyen)

Date of this notice:

24 June 2009

Reference numbers assigned by the Department of Minerals and Energy: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM

Documentation regarding this application can be downloaded from the website: www.cleanstreams.co.za (see New projects).

It would be appreciated if you could forward any comments, concerns and/or objections with regards to the proposed sand mining application by no later than 24 July 2009.

Name of consultant:

Clean Stream Environmental Services
P.O. Box 947
Humansdorp, 6300
Tel/fax: 0422 - 951284
E-mail: tdaines@telkomsa.net
Contact person: Tom Daines



NOTICE OF A MINING PERMIT APPLICATION

Notice is herewith given in terms of Section 27 of the Mineral and Petroleum Resources Development Act (MPRDA) (Act 28 of 2002), 2002, of the following **application for a mining permit and the preparation of the required Environmental Management Plan:**

Description of the activity:

The applicant has applied for a mining permit in order to mine additional sand on Portion 20 of the farm Strandfontein 442, Division of Uitenhage. An existing sand mine is present on the said site.

Location of the activity:

The proposed sand mining operation will be located on Portion 20 of the farm Strandfontein 442. The said site is located approximately 10 km from Thornhill. Access to the site is gained from the secondary gravel road leading to Gamtoos River Mouth. Figure 1 provides an indication of the location of the proposed sand mining operation.

Extent (area) of the development:

The proposed sand mining operation will cover an area of not greater than 1.5 hectares and will consist of four blocks – Phase 1, 2, 3 & 4 – as indicated in Figure 2.

Name of proponent:

Margene Transport cc (Mrs. M. van Rooyen)

Date of this notice:

24 June 2009

Reference number assigned by the Department of Minerals and Energy: EC 30/5/1/3/2/0226 MP; EC 30/5/1/3/3/2/1/0346 EM

Documentation regarding this application can be downloaded from the website: www.cleanstreams.co.za (see New projects).

It would be appreciated if you could forward any comments, concerns and/or objections with regards to the proposed sand mining application by no later than 24 July 2009.

Name of consultant:

Clean Stream Environmental Services
P.O. Box 947
Humansdorp, 6300
Tel/fax: 0422 - 951284
E-mail: tdaines@telkomsa.net
Contact person: Tom Daines



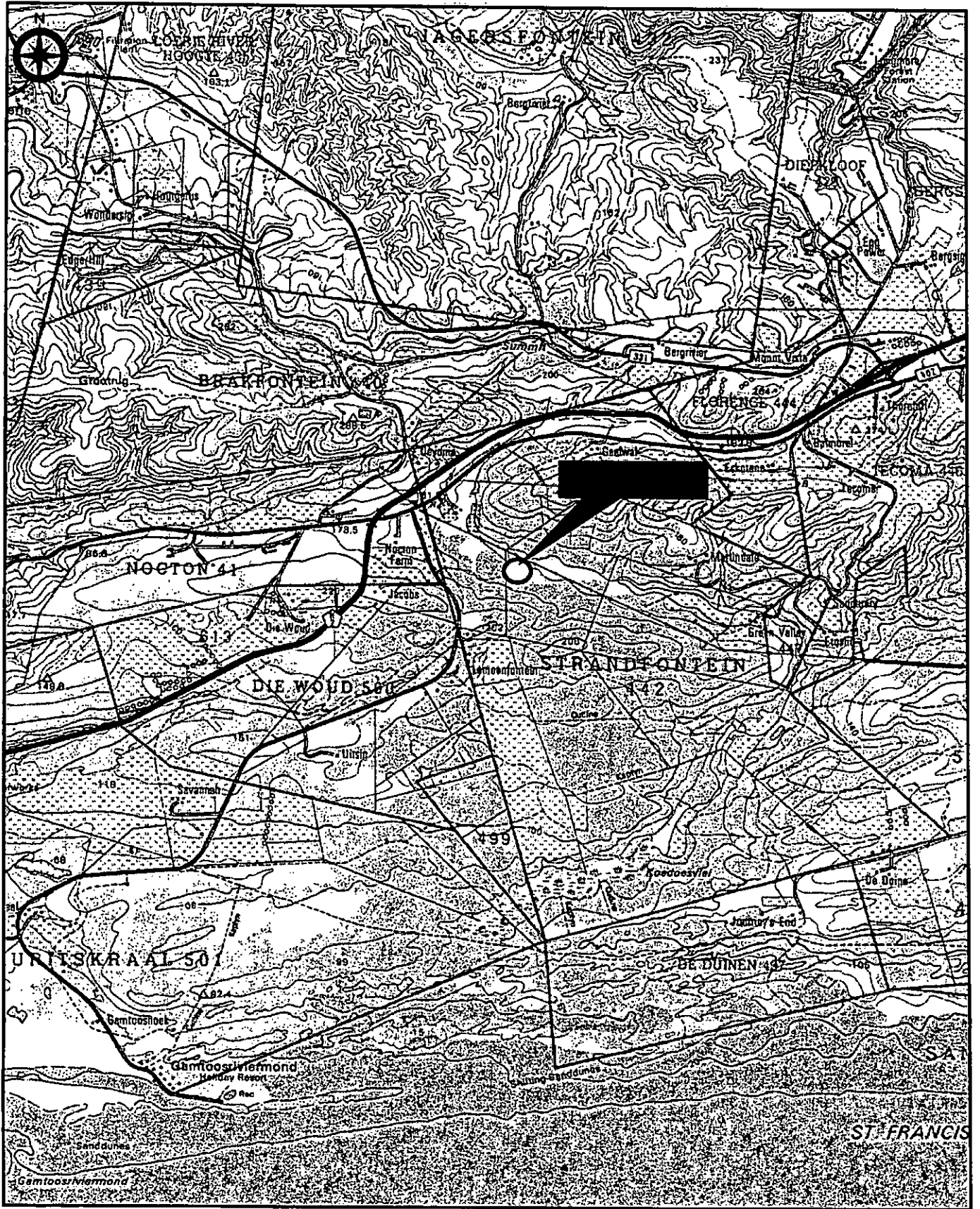


Figure 1

Location of site

(taken from 1: 50 000 3325CC - not to scale)



CO-ORDINATE SYSTEM LO 25°

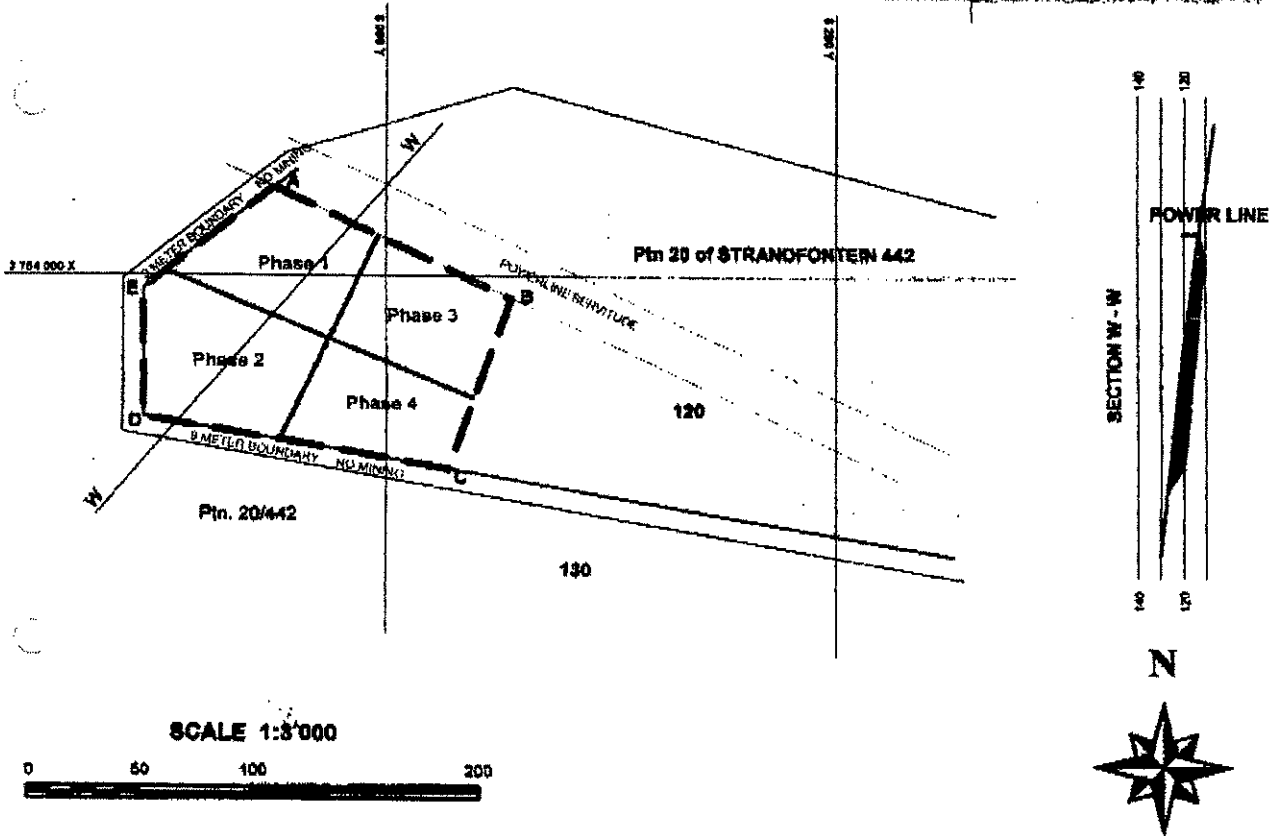
A	Y -7 951,2	X 3 783 069,3
B	Y -8 056,1	X 3 784 010,7
C	Y -8 028,3	X 3 784 069,6
D	Y -7 893,6	X 3 784 069,9
E	Y -7 893,6	X 3 784 006,1

AREA 1,44 HA

3225CC LOERJE 25° 05' E



33° 56' S



SURVEYOR *J. Victor*

DATE *6-10-2009*

APPLICANT *M. van Rooyen*

DATE *6-04-2009*

JOHN VICTOR SURVEYS
PORT ELIZABETH
TEL/FAX (041) 5813644

OFFICE USE

REGIONAL MANAGER
EASTERN CAPE

DATE

The above figure lettered A,B,C,D, E represents an area of land, in extent 1,44 Ha situated on the farm STRANFONTERN 442 district of Humansdorp, Eastern Cape Region, in respect of which a mining permit has been issued to

ID No _____

Figure 2

Proposed mining blocks



**APPLICATION FOR A MINING PERMIT W.R.T.
PORTION 20 OF THE
FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE.**

*Reference number assigned by the Department of Minerals and Energy:
EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM*

It would be appreciated if you could indicate on this form whether you have any comments with regards to the proposed mining permit application.

NAME:	TEL:
SURNAME:	FAX:
POSTAL ADDRESS:	CELL:
	E-MAIL:
PHYSICAL ADDRESS:	
PREFERRED LANGUAGE:	

Do you wish to remain on the mailing list?

 YES
 NO

Do you have any comments and/or suggestions regarding the proposed project?

 YES
 NO

If Yes, please indicate what your comments/suggestions are:

.....
Signed

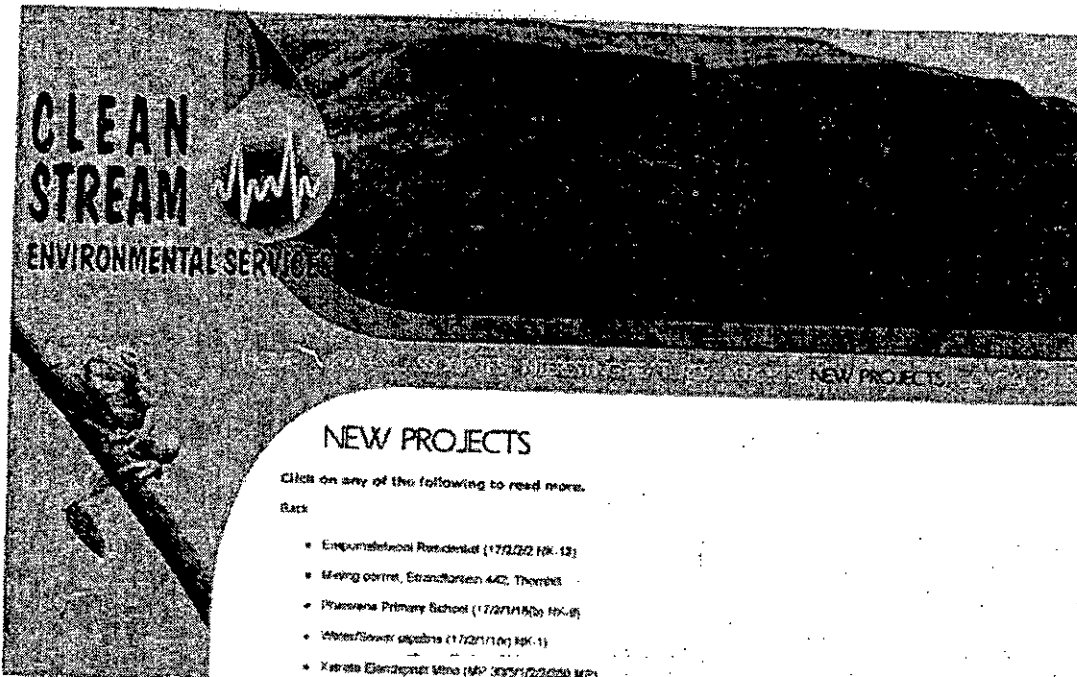
.....
Date

NOTE:

Please forward the completed form to Clean Stream Environmental Services.



Clean Stream Environmental Services
P.O. Box 947
Humansdorp
Tel/fax: 0422 - 951 284
Contact person: Tom Daines
e-mail: tdaines@telkomsa.net



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STREAM**
ENVIRONMENTAL SERVICES

NEW PROJECTS

NEW PROJECTS

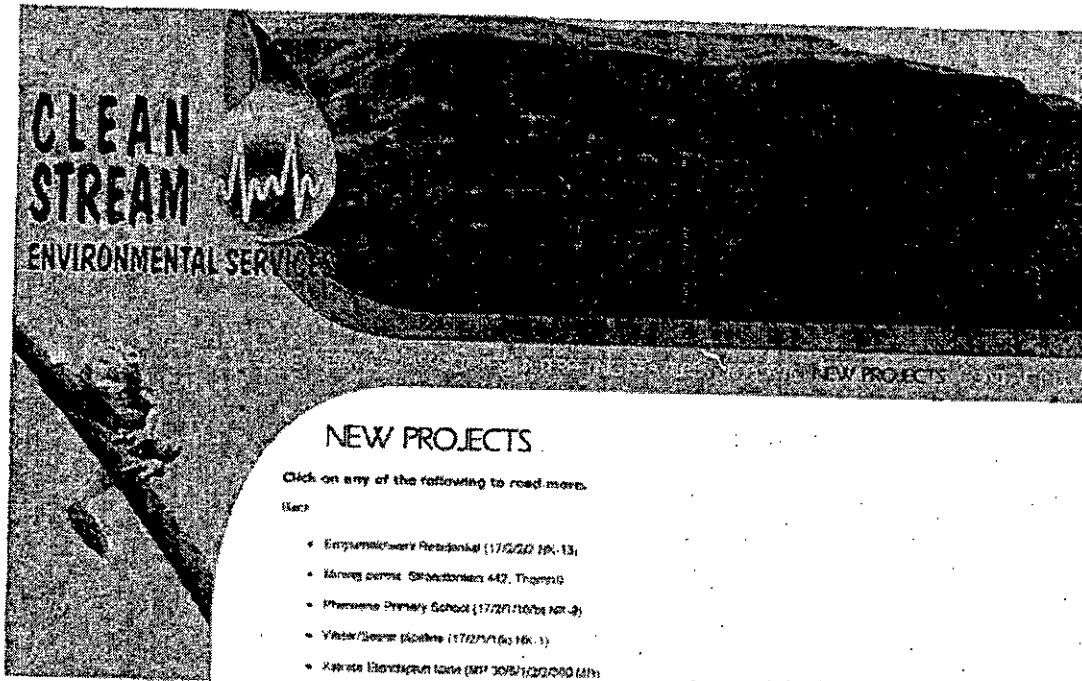
Click on any of the following to read more.

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- Empumafeni Residential (17/2/02 NR 12)
- Masing corridor, Etzandarsen 402, Thornhill
- Phaswana Primary School (17/2/11/05) NK-05
- Water/Sewer pipeline (17/2/11/04) NK-1
- Xaroto Elephant Mine (MP 3025/12/2000 MP)
- Xaroto Zirconium Mine (MP 3025/12/2000 MP)

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Notices



**CLEAN
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NEW PROJECTS

NEW PROJECTS

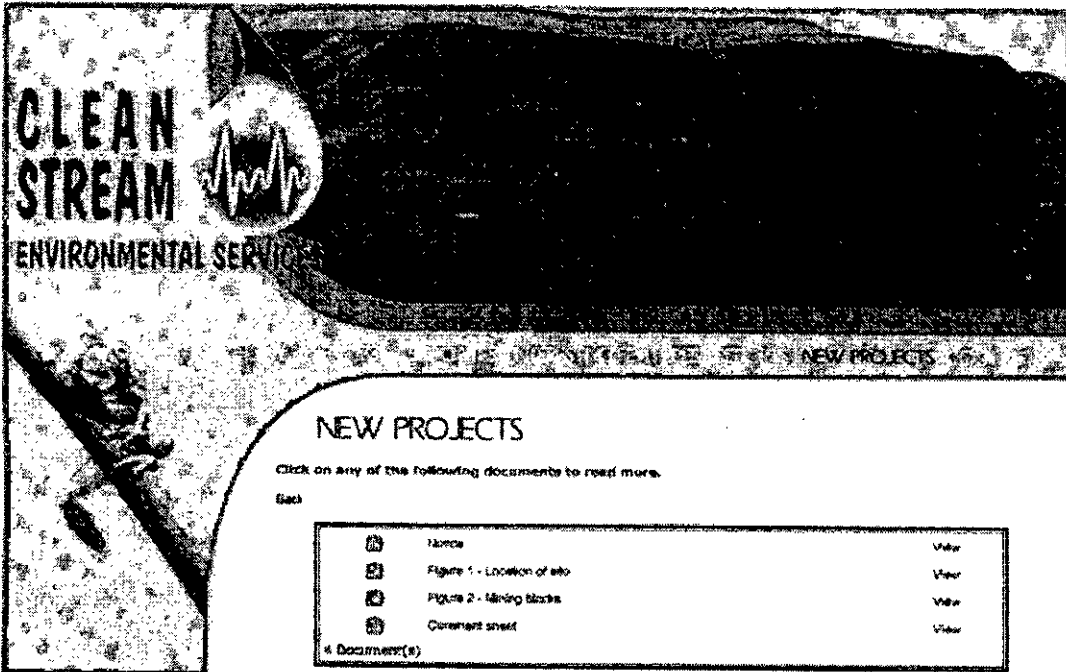
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Back

- Employment/Retirement (17/02/2010 10:13)
- Mining permit - Sibabeni 442, Thembu
- Phuzane Primary School (17/02/2010 10:13)
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- Kamek Borehole (17/02/2010 10:13)
- Xstrata Zweneploem Mine (17/02/2010 10:13)

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Background Information Documents







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NEW PROJECTS

Click on any of the following documents to read more.

Each

	Name	View
	Figure 1 - Location of site	View
	Figure 2 - Mining blocks	View
	Consent sheet	View
4 Documents(s)		

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APPENDIX 2:

CORRESPONDENCE WITH INTERESTED AND AFFECTED PARTIES

- ❖ Example of the Background Information Document (BID) including:
 - Notice of a mining permit application (1 page);
 - Map indicating the location of the site (Figure 1);
 - Map indicating the proposed mining blocks (Figure 2);
 - Comment sheet.
- ❖ A copy of the register signed by the landowners acknowledging receipt of documentation.
- ❖ Completed comment sheet: Arno Moore (De Woud, Thornhill; dated: 15 June 2009);
- ❖ Completed comment sheet: Rian Moore (Die Woud, Thornhill; dated: 12 June 2009);
- ❖ Completed comment sheet: Brian Quinton Aubrey (corner of Old Cape Road and Gamtoos Mouth Road, Thornhill; dated: 13 June 2009);
- ❖ Summary of discussions held with the land owner, Mr. P.E. van Niekerk.
- ❖ Email from Clean Stream Environmental Services (dated: 28 June 2009) to Mr. P. Retief (Department of Water Affairs and Forestry).
- ❖ Email from Clean Stream Environmental Services (dated: 28 June 2009) to Mr. D. Govender, Mr. A. Struwig and Ms. N. Gerber (Department of Economic Development and Environmental Affairs).
- ❖ Letter from Eskom Distribution (dated: 20 July 2009).

MPUMALANGA OFFICE:

P.O. Box 647

Witbank (Emalahleni)

1035

EASTERN CAPE OFFICE:

P.O. Box 947

Humansdorp

6300

Tel/Fax: (013) 6975021 (Adie Erasmus)

Cell: 083 271 8260

E-mail: adie@cleanstreams.co.za

Website: www.cleanstreams.co.za

Tel/Fax: (0422) 951284

Cell: 0825724310

E-mail: tdaines@telkomsa.net



FAX NUMBER:

TEL. NUMBER:

TO:

ATTENTION:

FROM: TOM DAINES

TEL/FAX: 0422 - 951284

E-MAIL: tdaines@telkomsa.net

DATE: 2009/

PAGES: 1 +

Dear

RE: NOTICE OF A MINING PERMIT APPLICATION W.R.T. PORTION 20 OF THE FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE (DME REF. NO.: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM)

Clean Stream Environmental Services (CSES) has been appointed as independent environmental consultant to compile the necessary mining permit application and environmental management plan (EMP) as required in terms of Section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). Part of the process is to inform interested and affected parties of the proposed mining activity and to obtain any issues of concern/comments and/or objections.

Please find attached the following documentation with regards to the proposed project:

- Notice of a mining permit application (1 page).
- Map indicating the location of the site (Figure 1).
- Map indicating proposed mining blocks (Figure 2).
- Comment sheet.

This information can also be downloaded from our website: www.cleanstreams.co.za (New projects).

It would be appreciated if you could indicate (on or before 18 July 2009) whether you have any issues of concern/objections/requirements w.r.t. the proposed mining permit application.

If you have any queries, please contact me at Tel/fax: 0422 – 951284 or tdaines@telkomsa.net.

Thanking you
Tom Daines Pr. Sci. Nat.

ACKNOWLEDGEMENT OF RECEIPT OF DOCUMENTATION:

Name of official:

Signature of official:

Date:

NOTICE OF A MINING PERMIT APPLICATION

Notice is herewith given in terms of Section 27 of the Mineral and Petroleum Resources Development Act (MPRDA) (Act 28 of 2002), 2002, of the following application for a mining permit and the preparation of the required Environmental Management Plan:

Description of the activity:

The applicant has applied for a mining permit in order to mine sand on Portion 20 of the farm Strandfontein 442, division of Uitenhage, Eastern Cape.

Location of the activity:

The proposed sand mining operation will be located on Portion 20 of the farm Strandfontein 442, Division of Uitenhage, Eastern Cape

Extent (area) of the development:

The proposed sand mining operation will cover an area of not greater than 1.5 hectares.

Name of proponent:

Margene Transport CC (Mrs M van Rooyen)

Date of this notice:

18 June 2009

Reference number assigned by the Department of Minerals and Energy:

EC 30/5/1/3/2/00346MP

It would be appreciated if you could forward any comments, concerns and/or objections with regards to the proposed sand mining application by no later than 18 JULY 2009.

Name of consultant:

Clean Stream Environmental Services
P.O. Box 947
Humansdorp, 6300
Tel/fax: 0422 - 951284
E-mail: tdaines@telkomsa.net
Contact person: Tom Daines



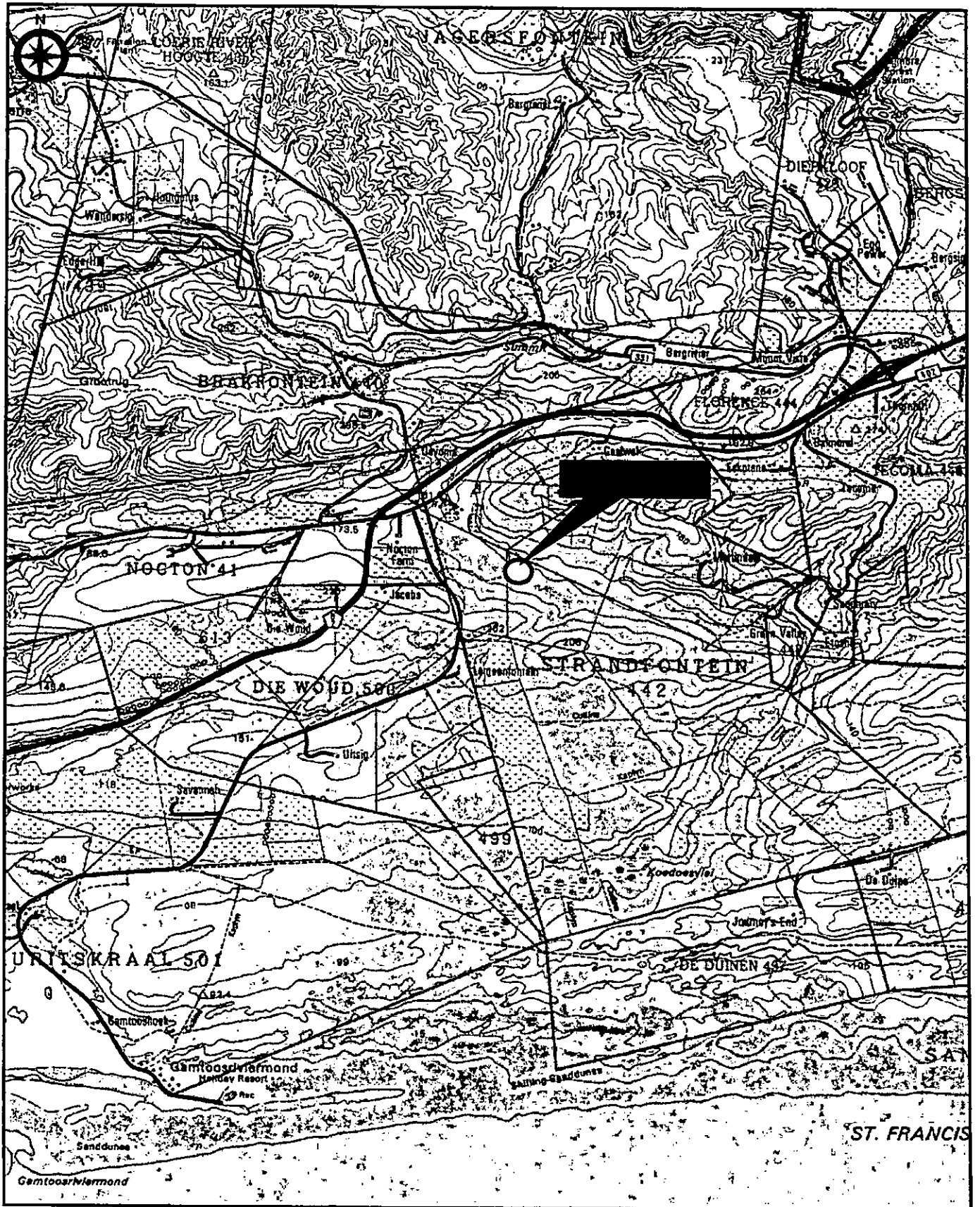


Figure 1

Location of site

(taken from 1: 50 000 3325CC - not to scale)



CO-ORDINATE SYSTEM LO 25°

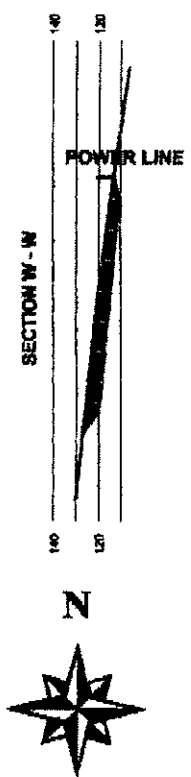
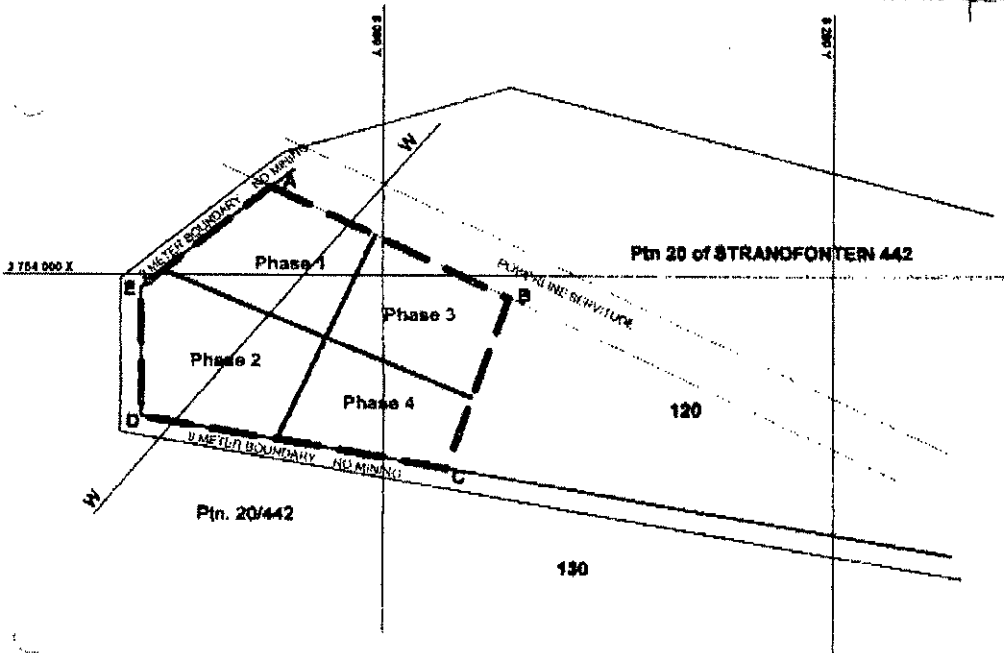
A Y -7 851,2 X 3 783 889,3
 B Y -8 086,1 X 3 784 010,7
 C Y -8 028,3 X 3 784 089,6
 D Y -7 893,8 X 3 784 086,9
 E Y -7 893,8 X 3 784 006,1

AREA 1,44 HA

3228CC LOERIE

28° 05' E

33° 56' S



SCALE 1:5'000



SURVEYOR *J. Victor*
 DATE *6-04-2009*

APPLICANT *M. van Rooyen*
 DATE *6-04-2009*

JOHN VICTOR SURVEYS
 PORT ELIZABETH
 TEL/FAX (041) 5813444

OFFICE USE

REGIONAL MANAGER
 EASTERN CAPE

DATE

The above figure lettered A,B,C,D, E represents an area of land, in extent 1,44 Ha situated on the farm STRANDFONTEIN 442 district of Humansdorp, Eastern Cape Region, in respect of which a mining permit has been issued to

ID No _____

Figure 2

Proposed mining blocks



**APPLICATION FOR A MINING PERMIT W.R.T.
PORTION 20 OF THE
FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE.**

*Reference number assigned by the Department of Minerals and Energy:
EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM*

It would be appreciated if you could indicate on this form whether you have any comments with regards to the proposed mining permit application.

NAME:	TEL:
SURNAME:	FAX:
POSTAL ADDRESS:	CELL:
	E-MAIL:
PHYSICAL ADDRESS:	
PREFERRED LANGUAGE:	

Do you wish to remain on the mailing list?

YES	NO
------------	-----------

Do you have any comments and/or suggestions regarding the proposed project?

YES	NO
------------	-----------

If Yes, please indicate what your comments/suggestions are:

.....
Signed

.....
Date

NOTE:

Please forward the completed form to Clean Stream Environmental Services.



Clean Stream Environmental Services
P.O. Box 947
Humansdorp
Tel/fax: 0422 - 951 284
Contact person: Tom Daines
e-mail: tdaines@telkomsa.net

ACKNOWLEDGEMENT OF RECEIPT OF NOTICE OF A MINING PERMIT APPLICATION W.R.T. PORTION 20 OF THE FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE (DME REF. NO.: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM)

I hereby acknowledge that I received the following documentation with regards to the above-mentioned project:

- > Notice of a mining permit application (1 page).
- > Map indicating the location of the site (Figure 1).
- > Map indicating proposed mining blocks (Figure 2).
- > Comment sheet.

NAME	PHYSICAL ADDRESS (NAME OF FARM)	POSTAL ADDRESS	TELEPHONE NUMBERS	FAX NUMBERS	SIGNATURE
A. MOORE	DE WOND	P.O. Box 501, Jefferys Bay.	042 2860978	0866750393	
R. MORRE	DE WOND	P.O. Box 501, Jefferys Bay.	042 2860604	0866756333	
B. Aubrey	NOKTORI		042-2860780		
P. HUNTER	RELIUK ALAUN	P.O. Box 103, THOKHILL	0422860710	0832703377	
P. van der Merwe	Strandfontein	Postbus 25 Thornhill ROUGHER MUNICIPALITY	042-2860637	—	
CAROLINE BANSU	50 DE GRAMA JIBAY	P. BOX 21 JIBAY	042 200 2247	042 293 2238	
TAN V.O WANG	3 KEMP STR.	ESKOM7 OFFICE	042-2910973	042-2910148	
S. Matthee	12 du Plessis Str.	Dept agriculture Box 39 Humansdorp 6300	042-2910596	0866593124 0866298052	

**APPLICATION FOR A MINING PERMIT W.R.T.
 PORTION 20 OF THE
 FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE.**

*Reference number assigned by the Department of Minerals and Energy:
 EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM*

It would be appreciated if you could indicate on this form whether you have any comments with regards to the proposed mining permit application.

NAME: ARNO	TEL: 042-2860978
SURNAME: MOORE	FAX: 086 675 0393
POSTAL ADDRESS: P.O. Box 901	CELL: 087-2706866
PHYSICAL ADDRESS: DE WOUDE	E-MAIL: arno@biciproducts.com
PREFERRED LANGUAGE: THORN HILL	

Do you wish to remain on the mailing list? YES NO

Do you have any comments and/or suggestions regarding the proposed project? YES NO

If Yes, please indicate what your comments/suggestions are:

.....
 Signed

.....
 Date 15/6/09

NOTE: Please forward the completed form to Clean Stream Environmental Services.



Clean Stream Environmental Services
 P.O. Box 947
 Humansdorp
 Tel/fax: 0422 - 951 284
 Contact person: Tom Daines
 e-mail: tdaines@telkomsa.net

**APPLICATION FOR A MINING PERMIT W.R.T.
PORTION 20 OF THE
FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE.**

*Reference number assigned by the Department of Minerals and Energy:
EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM*

It would be appreciated if you could indicate on this form whether you have any comments with regards to the proposed mining permit application.

NAME: <u>Brian Quinton</u>	TEL: <u>0422 860780</u>
SURNAME: <u>Aubrey</u>	FAX: <u>0422 860780</u>
POSTAL ADDRESS: <u>P.O. Box 143</u>	CELL: <u>076 196 0080</u>
<u>Titard Hill 6375</u>	E-MAIL:
PHYSICAL ADDRESS: <u>4 Old Camp Rd +</u>	
<u>Gautschoop Rd Titard Hill</u>	
PREFERRED LANGUAGE: <u>English</u>	

Do you wish to remain on the mailing list?

<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
---	-----------------------------

Do you have any comments and/or suggestions regarding the proposed project?

<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
------------------------------	--

If Yes, please indicate what your comments/suggestions are:

Signed [Signature]

Date 13.06.2009

NOTE:

Please forward the completed form to Clean Stream Environmental Services.



Clean Stream Environmental Services
P.O. Box 947
Humansdorp
Tel/fax: 0422 - 951 284
Contact person: Tom Dalnes
e-mail: tsdalnes@telkomso.net

MPUMALANGA OFFICE:

P.O. Box 647
Witbank (Emalahleni)
1035

Tel/Fax: (013) 6975021 (Adie Erasmus)
Cell: 083 271 8260
E-mail: adie@cleanstreamsa.co.za

EASTERN CAPE OFFICE:

P.O. Box 947
Humansdorp
6300

Tel/Fax: (0422) 951284
Cell: 0825724310
E-mail: tdaines@telkomsa.net



14 July 2009

NOTICE OF A MINING PERMIT APPLICATION W.R.T. PORTION 20 OF THE FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE (DME REF. NO.: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM)

Consultation with the land owner: Mr. P.E. van Niekerk

Mr. P.E. van Niekerk is the owner of Portion 20 of the farm Strandfontein 442.

Mr and Mrs Van Rooyen of Margene Transport CC (the project applicant) hand delivered (15 June 2009) the following documentation to Mr. P.E. van Niekerk in order to inform him of the proposed project:

- ❖ Notice of a mining permit application (1 page);
- ❖ Map indicating the location of the site (Figure 1);
- ❖ Map indicating the proposed mining blocks (Figure 2);
- ❖ Comment sheet.

Mr. and Mrs. Van Rooyern verbally informed Mr. van Niekerk of the proposed project and the changes that were going to take place at the mining site and that the new area to be mined would be located within the previously demarcated area.

In addition, Mr. van Niekerk was informed that Margene Transport CC was not going to convert the old mining right into a new mining right. The reason for this was insufficient sand to justify applying for a new mining right. The remaining sand on site covers an area of approximately 1.5 ha.

Mr. van Niekerk requested time to read the provided documentation before commenting. Mr. van Niekerk however signed the register indicating that he had received the said documentation (see attached register).

29 June 2009:

Mr T.Daines of Clean Stream Environmental Services visited Mr P.E. van Niekerk at Strandfontein farm on 29 June 2009. It was explained that Clean Stream Environmental Services was involved in the preparation of the permit application for the applicant, Margene Transport CC.

Mr Daines informed Mr. van Niekerk of the proposed project and the changes that were going to take place at the mining site. The new area to be mined would be located within the previously demarcated area.

In addition, Mr. van Niekerk was informed that Margene Transport CC was not going to convert the old mining right into a new mining right. The reason for this was insufficient sand to justify applying for a new mining right.

It was explained that rehabilitation would take place on the previously mined area whilst sand was being extracted from the new permit block and that rehabilitation of the site is required in order to obtain closure for the site. As part of the rehabilitation process, banks would be correctly sloped and the floor of the mined area would be levelled and

covered with stored topsoil. The area would be fertilized and seeded (grass species as detailed in the approved EMP to be used).

Mr P.E. van Niekerk requested that he be informed of all activities that take place at the mining site. In addition, he requested to be informed when changes to the mining operation were decided upon. He also requested a copy of the EMP and the annual performance assessment report.

It was agreed that Mr. T. Daines would convey these points to the applicant, Margene Transport CC.

Mr van Nierkerk verbally indicated that he would not have any objections to the continuation of the sand mining on the area leased to Margene Transport cc.

This is a true reflection of discussions that took place between Mr. P.E. van Niekerk (the landowner of Portion 20 of the farm Strandfontein 442), the Applicant (Margene Transport CC) and Mr. T. Daines (Clean Stream Environmental Services).

Additional comments:

[Empty rectangular box for additional comments]

Landowner *P.E. van Niekerk*

Date _____

Margene Transport *Mr. Alan Rooyen*

Date _____

Clean Stream Environmental Services _____

Date *T. Daines*
15/7/09

adie erasmus

From: "Adie Erasmus" <adie@cleanstreamsa.co.za>
To: "Pieter Retief" <retiefp@dwaf.gov.za>
Cc: "Tom Daines" <tdaines@telkomsa.net>
Sent: 28 June 2009 03:26 PM
Attach: Email to DWAF.pdf; Notice to Dept.pdf; Figure 1 Location of site.doc; Figure 2.doc; 7. Comment sheet.doc
Subject: Mining permit application: Portion 20 of Strandfontein 442, Thornhill

Dear Mr. Retief

Please find attached information regarding the mining permit application (sand mining) wrt Portion 20 of the farm Strandfontein 442, Thornhill.

It would be appreciated if you could indicate if the Department has any issues of concern regarding this proposed application.

If you have any queries, please contact me.
Regards

Adie Erasmus Pr. Sci. Nat.
Clean Stream Environmental Services: Coalfields cc
P.O. Box 647
Witbank
1035
Tel/fax: 013 - 6975021
Cell: 0832718260
Email: adie@cleanstreamsa.co.za
www.cleanstreamsa.co.za

2009/06/28

adie erasmus

From: "Adie Erasmus" <adie@cleanstreamsa.co.za>
To: "Dayalan Govender" <Dayalan.Govender@deaet.ecape.gov.za>; "Nicole Gerber" <Nicole.Gerber@deaet.ecape.gov.za>; "Andries Struwig" <Andries.Struwig@deaet.ecape.gov.za>
Cc: "Tom Daines" <tdaines@telkomsa.net>
Sent: 28 June 2009 03:18 PM
Attach: Email to DEDEA.pdf; Notice to Dept.pdf; Figure 1 Location of site.doc; Figure 2 Proposed mining blocks.pdf; 7. Comment sheet.doc
Subject: Mining permit application: Portion 20 of Strandfontein 442, Thornhill

Dear Mr. Struwig

Please find attached information regarding the mining permit application (sand mining) wrt Portion 20 of the farm Strandfontein 442, Thornhill.

It would be appreciated if you could indicate if the Department has any issues of concern regarding this proposed application.

If you have any queries, please contact me.

Regards

Adie Erasmus Pr. Sci. Nat.
Clean Stream Environmental Services: Coalfields cc
P.O. Box 647
Witbank
1035
Tel/fax: 013 - 6975021
Cell: 0832718260
Email: adie@cleanstreamsa.co.za
www.cleanstreamsa.co.za

2009/06/28



Date: 20 July 2009

CLEAN STREAM ENVIRONMENTAL SERVICES
PO Box 947
HUMANSDORP
6300

Enquiries: Ms N Makonza
Tel: +27 43 703 2586
Fax: +27 43 703 2392
E-mail: MakonzN@eskom.co.za

Our Ref: - Clean Stream Co-use- STRANDFONTEIN PTN 20
Your Ref: - TOM DAINES

**APPLICATION FOR CO-USE OF ESKOM SERVITUDE: STRANDFONTEIN FARM: PTN
20 – UITENHAGE.**

We refer to the above matter and to our previous correspondence.

Please be advised that permission for co-use of Eskom servitude is hereby granted subject to the conditions listed on the document attached hereto. Eskom has two lines traversing the farm and they are:-

- Kudu/ Melkhout 132 kV
- Grassridge/ Melkhout 132 kV

Kindly indicate your acceptance of these conditions by initialling each page and signing in the appropriate area on the last page.

Furthermore, kindly sign the second copy of the letter as well and return it together with the signed conditions to Eskom at the following address:-

**The Land Development Manager
Private Bag X1
Beacon Bay
5205**

We hope that you will find the above in order.

Yours faithfully

**T V SMITH
LAND DEVELOPMENT MANAGER
DISTRIBUTION - EAST LONDON (Southern Region)**

Land Development

Cnr Bonza Bay Road and Quenera Drive, Beacon Bay 5241 Private Bag X1 Beacon Bay, East London 5205 SA
Tel +27 43 703 2124 Fax +27 43 703 2392 www.eskom.co.za

Directors: RM Godsell (Chairman) PJ Maroga (Chief Executive) LCZ Cele SD Dube LG Josefsson (Swedish) HB Lee (Korean)
WE Lucas-Bull PM Makwana J Mirenge (Rwandan) JRD Modise AJ Morgan
U Nene **Company Secretary** TN Msomi
Eskom Holdings Limited Reg No 2002/015527/06



I,..... (FULL NAMES AND SURNAME)

herewith unconditionally accept the stipulations in the Letter of Consent pertaining to my co-use of an Eskom servitude.

SIGNED ATTHIS..... DAY OF.....2008.....

.....
APPLICANT

WITNESS.....

WITNESS.....



**CONDITIONS IMPOSED TO CLEAN STREAM ENVIRONMENTAL SERVICES, FOR CO-USE OF
ESKOM REGISTERED SERVITUDE IN STRANDFONTEIN FARM, PTN 20, UITENHAGE
REGISTRATION DIVISION.**

In this agreement, the words "Eskom services and structures" shall include but not be limited to the following: pylons, structures, works, appliances, conductors or cables

A.1 Access and egress

Eskom shall at all times retain unobstructed access to and egress from its servitudes.

A.2 Approvals (additional)

A.2.1 Eskom's consent does not relieve the Applicant from obtaining the necessary statutory, land owner or council approvals.

A.2.2 The Applicant will adhere to all relevant environmental legislation. Any cost incurred by Eskom as a result of non-compliance will be charged to the Applicant.

A.3 Dimensions

No construction or excavation work shall be executed within six meters from any Eskom powerline structure, and/or within six meters from any stay wire.

The angle of the crossing should preferably be 45^o degrees to 90^o degrees.

A.4 Expenditure

If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the Applicant's activities or because of the presence of its equipment or installation within the servitude area, the Applicant shall pay such costs to Eskom on demand.

A.5 Explosives

The use of explosives of any type within 500 meters of Eskom's services shall only occur with Eskom's previous written permission. If such permission is granted the Applicant must give at least fourteen working days prior notice of the commencement of blasting. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued in terms of the blasting process.

A.6 Ground level variations

Changes in ground level may not infringe statutory ground to conductor clearances or statutory visibility clearances. After any changes in ground level, the surface shall be rehabilitated and stabilized so as to prevent erosion. The measures taken shall be to Eskom's requirements.

A.7 Indemnity

Eskom shall not be liable for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the servitude area by the Applicant, his agent, contractors, employees, successors in title, and assigns. The Applicant indemnifies Eskom against loss, claims or damages including claims pertaining to consequential damages by third parties and whether as a result of damage to or interruption of or interference with Eskom's services or apparatus or otherwise. Eskom will not be held responsible for damage to the Municipality's equipment. The Applicant's attention is drawn to the *Electricity Act, 1987, (Act 41 of 1987, as amended in 1994)*, Section 27(3), which stipulates that the Applicant can be fined and/or imprisoned as a result of damage to Eskom's apparatus.

A.8 Machinery

No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the Applicant must give at least seven working days prior notice of the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued. **Mr Ishwar Ramcherita of Eskom's Uitenhage Technical Services Centre can be contacted at 041-994 8188.**

Eskom may charge the Applicant appropriately for the time on site during excavation.

A.9 Permission to do work

A.9.1 No work shall commence unless Eskom has received the Applicant's written acceptance of the conditions specified in the letter of consent and/or permit.

A.9.2 Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with.

Note: Where an electrical outage is required, at least fourteen work days is required to arrange same.

A.10 Remedial action

Under no circumstances shall rubble, earth or other material be dumped within the servitude area. The Applicant shall maintain the area concerned to Eskom's satisfaction. The Applicant shall be liable to Eskom for the cost of any remedial action which has to be carried out by Eskom.

A.11 Safety

A.11.1 The clearances between Eskom's live electrical equipment and the proposed construction work shall be observed as stipulated by *Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993)*.



A.11.2 Equipment shall be regarded electrically live and therefore dangerous at all times.

A.11.3 In spite of the restrictions stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), as additional safety precaution, Eskom will not approve the erection of Houses, or structures occupied or frequented by human beings under the powerlines and only after consideration of all alternatives, within the servitude area.

A.11.4 Eskom may stipulate any additional requirements to eliminate any possible exposure to Customers or Public to coming into contact or be exposed to any dangers of Eskom plant.

A.11.5 It is required of the Applicant to familiarize himself with all safety hazards related to Electrical plant.

B.1 Blasting, opencast mining and undermining.

B.1.1 Persons investigating the application and compiling the letter of consent should preferably refer such applications to the power line engineer.

B.1.2 Ensure that a specific document of permission in respect of the blasting or mining activity as issued by the Inspector of Mines, is submitted with the application to encroach on Eskom's servitudes.

B.1.3 Blasting in close proximity to Eskom's overhead powerlines or substations is prohibited unless the following precautions are met [refer to the Minerals Act, 1991 (Act 50 of 1991) Regulations 5.31 and 5.32]:

- a blasting plan submitted with the application,
- a Peak Particle Velocity (PPV) to be kept below 75 mm/s, for lines and 50 mm/s for buildings,
- a seismic control device is set up to record the readings,
- ensure fly rock and air blast control by means of adequate matting,
- in the interest of air blast control, only single shot blasting shall be allowed.

B.1.4 The applicant will be held liable for damage to Eskom's towers or substation equipment, as a result of blasting activities.

B.1.5 Costs incurred by Eskom to comply with statutory requirements in terms of an applicant's (or his contractor's) works, equipment or plant in the servitude area, shall be paid to Eskom on demand.

B.1.6 Eskom may charge the applicant appropriately for time on site during blasting operations.

B.1.7 Eskom reserves the right to withdraw its consent if the blasting process becomes hazardous and likely to result in power interruptions.



B.1.8 If permission for the blasting process is granted the applicant must give at least fourteen working days prior notice of the commencement of blasting. This allows time for arrangements to be made for supervision of and/or precautionary instructions to be issued in terms of the blasting operation. [The internal assessor must provide the applicant with the details of an Eskom person to be contacted in this regard].

It is required of the Applicant to familiarise himself with all safety hazards related to Electrical conductors, services and structures within the servitude area.

I..... (Full Names and Surname) in my capacity asHereby unconditionally accept the stipulations.

SIGNED AT.....THIS.....DAY OF..... (MONTH) (YEAR).....

.....
APPLICANT

.....
ID NO.

.....
WITNESS

.....
WITNESS

APPENDIX 3:

CORRESPONDENCE WITH THE DEPARTMENT OF MINERALS AND ENERGY

- ❖ Letter from the Department of Minerals and Energy (dated: 28 May 2009; Ref: EC 30/5/1/3/2/0346 MP; EC 30/5/1/3/3/2/1/0346 EM) with regards to the acceptance of an application for a mining permit.
- ❖ Letter from the Department of Minerals and Energy (dated: 10 June 2008; Ref: PE 5/3/2/840) with regards to the conversion of the old order mining right to a new order mining right.
- ❖ Letter from Margene Transport CC (dated: 30 April 2009) with regards to the conversion of the old order mining right to a new order mining right.
- ❖ Letter from the Department of Minerals and Energy (dated: 22 May 2009; Ref: PE 5/3/2/840) with regards to the closure certificate.

**the dme**Department:
Minerals and Energy
REPUBLIC OF SOUTH AFRICAPrivate Bag 26076, Port Elizabeth, 6001
Tel. (041) 386 3900
Corner of Olaz and Mount Roads
Mount Cross
Port Elizabeth, 6001

DME 12

Enquiries: S van den Berg
E-mail: Samuel.vandenberg@dme.gov.zaReference: EC 30/5/1/3/2/0346 MP
Date: 28 May 2009**PER REGISTERED MAIL**The Manager
Margene Transport CC
P O Box 7
Melon
Loerie
6365

Sir

APPLICATION FOR A MINING PERMIT IN TERMS OF SECTION 27 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) (MPRDA): SAND (GENERAL) MINING ON PORTION 20 OF THE FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE, EASTERN CAPE.

I refer to the above matter and I confirm that your application for a mining permit in terms of Section 27 of the MPRDA has been accepted.

In terms of Section 27(5) of the MPRDA you are therefore required:

- (a) to notify in writing and consult with the landowner or lawful occupier and any other affected party;
- (b) to submit the result of such consultation to this office on or before 27 June 2009 (i.e. within 30 days of this notice); and
- (c) to submit an environmental management plan, in sevenfold, on or before 27 July 2009 (i.e. within 60 days of this notice);

Where State Land is affected by the application, community consultation should be done, and a community resolution should be obtained in conjunction with the Departments of Land Affairs and Traditional Affairs. (See the enclosed list for the relevant contact details.)

Kindly be advised that this notice of acceptance must not be construed as the approval of the Mining Permit, since the process of approval or refusal that will commence on the date of acceptance, must run its course.

Yours faithfully


REGIONAL MANAGER
EASTERN CAPE
S.291.MP.346.Margene let ecc



the dme

Department:
Minerals and Energy
REPUBLIC OF SOUTH AFRICA

DME 12

Private Bag X8076, Port Elizabeth, 6000
Tel: (041) 585 3882;
Fax: (041) 585 3881
Auto & General Towers 14th floor,
180 Govan Mbeki Avenue,
Port Elizabeth, 6001

Enquiries: Mr. S. van den Berg
E-mail: Samuel.vandenberg@dme.gov.za

Reference: PE 5/3/2/840
Date: 10 June 2008

REGISTERED MAIL

The Manager
Margene Transport cc T A M&E Enterprises
P O Molen
EASTERN CAPE
6365

Sir

CONVERSION OF AN OLD ORDER MINING RIGHT INTO A MINING RIGHT IN TERMS OF ITEM 7 IN SCHEDULE II (TRANSITIONAL ARRANGEMENTS) OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) (MPRDA): PORTION 20 (PORTION OF PORTION 8) OF STRANDFONTEIN 442, DIVISION OF UITENHAGE

My letter dated 15 August 2007 refers (copy included).

According to the records of this office, no response has as yet been received.

Items 7(1) and (2) in Schedule II of the Transitional Arrangements of the said Act provide that:

- (1) Any old order mining right in force immediately before this Act took effect continues in force for a period not exceeding five years from the date on which this Act took effect subject to the terms and conditions under which it was granted or issued or was deemed to have been granted or issued; and
- (2) A holder of an old order mining right must lodge the right for conversion within the period referred to in sub-item (1) at the office of the Regional Manager in whose region the land in question is situated.

PLEASE NOTE THAT: In terms of Item 1(iii) of Schedule II (Transitional Arrangements) of the Act an old order mining right means, *inter alia*, "any mining authorization or right listed in Table 2 of this Schedule, in force immediately before the date on which this Act took effect and in respect of which mining operations are being conducted."

According to the terms and conditions under which Mining License numbered 23/2004 ML was issued to you on 30 April 2004, this license and also the period within which you may submit an application for conversion in terms of the MPRDA

provided that mining operations are being conducted in terms thereof, **will expire on 30 April 2009.**

Please note that the project plan of the Department, for processing an application for conversion, determines that the turn around time for finalizing such an application is thirteen months.

If it is your intention to continue with your mining activities, you are urged to submit your application timeously and if not, to submit an application for a closure certificate at the time.

Your attention is drawn to Section 5(4)(b) of the MPRDA which provides *inter alia* that *no person may prospect for, remove or mine any mineral or petroleum or commence with any work incidental thereto on any area without a prospecting right, permission to remove, mining right or mining permit, as the case may be.*

Your co-operation will be appreciated.

Yours faithfully



**REGIONAL MANAGER
EASTERN CAPE REGION**
s.11et.Reminder Letters.840.Margene

P.O.BOX 6
Melon
6365

The Department of Minerals and Energy
Private Bag X6076,
Port Elizabeth
6000
30 April 2009

Dear Sir,

Conversion of old mining right to new mining right
Margene Transport – Sand mine on Portion 20 of Strandfontein
farm 442

Please take note that Margene Transport will not be applying for the conversion of the old mining right to a new mining right at the expiry of the old mining right.

The reason for this decision is that the remaining sand to be mined at the site is insufficient to justifying applying for a new mining right. On the expiry date of the old right only a small area of the site remains to be mined.

An application is being submitted for a permit to mine the area remaining, which is 1.44 ha in extent.

Yours faithfully,

Mrs M van Rooyen
Margene Transport

**the dme**Department:
Minerals and Energy
REPUBLIC OF SOUTH AFRICA

3

DME 12

Private Bag X6076, Port Elizabeth, 6000
Tel: (041) 3963900
Fax: (041) 3963946
Corner of Mount and Diaz Roads
Mount Okeke, Port Elizabeth, 6001Enquiries: S van den Berg
E-mail: Samuel.vandenberg@dme.gov.zaReference: PE 5/3/2/840
Date: 22 May 2009**REGISTERED MAIL**The Manager
Margene Transport CC T/A M&E Enterprises
PO Melon
Eastern Cape
6365

Sir

CONVERSION OF EXISTING RIGHTS HELD IN TERMS OF THE MINERALS ACT, 1991, (ACT 50 OF 1991) TO A RIGHT AS PRESCRIBED IN THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002): SAND MINING ON PORTION 20 (PORTION OF PORTION 8) OF THE FARM STRANDFONTEIN 442, DIVISION OF UITENHAGE

My letter dated 10 June 2008 (copy included for your convenience) and your undated letter, which was received in this office on 14 May 2009, refer.

Item 7(1) of Schedule II of the Transitional Arrangements of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) stipulates that "any old order mining right in force immediately before this Act took effect continues in force for a period not exceeding five years from the date on which the said Act took effect subject to the terms and conditions under which it was granted or issued or was deemed to have been granted or issued". Item 7(8) of Schedule II of the said Act stipulates that "if the holder fails to lodge the old order right for conversion before the expiry of the period referred to in sub-item (1), the old order right ceases to exist". Your old order mining right 123/2004MLI thus expired on 30 April 2009.

Your attention is therefore drawn to Section 5(4)(b) of the MPRDA which provides *inter alia* that no person may prospect for, remove or mine any mineral or petroleum or commence with any work incidental thereto on any area without a prospecting right, permission to remove, mining right or mining permit, as the case may be.

You are hereby instructed to:

1. Stop all mining activities on the relevant area with immediate effect.
2. Apply for a closure certificate in terms of section 43(3)(a) read with section 43(4) of the MPRDA.

Yours faithfully


REGIONAL MANAGER
EASTERN CAPE

s 1letClosure870Margene

APPENDIX 4:
CORRESPONDENCE –
DEPARTMENT OF ROADS AND TRANSPORT

- ❖ Letter from the Department of Roads and Transport (letter dated: 17 September 2008; Ref: 5/15/1/3/9(EC 108)0614.08) regarding the access road.
- ❖ Letter from Eskom Distribution (dated: 23 April 2009; Ref: M and E Transport, Jeffreys Bay) regarding an application to mine under Eskom servitude.





Province of the
EASTERN CAPE

Department of Roads & Transport

P O Box 11100, ALGOA PARK, 6005, REPUBLIC OF SOUTH AFRICA

Enq. Mr. M T Keyser Tel No [041] 4036000

Fax No: [041] 4561666 Date: 17 September 2008

Our Ref: 5/15/1/3/9(EC 108)0614.08

MARGERE TRANSPORT

Posbus 7

MELON

6365

ATTENTION: MS M. VAN ROOYEN

VERSKUWING VAN INGANG

Toestemming word gegee om ingang na Sandgroef op MR434 (Gamtoosmond-pad) te verskuif. Die ingang skuif vanaf Km 54.4 na Km 54.3 om veiligheidsredes en om toegang vanaf groef te vergemaklik.

M T KEYSER
DISTRICT ROADS ENGINEER
CACADU REGION
SR



M AND E TRANSPORT
PO Melon
6235

Date: 23 April 2009

Enquiries: Ms N. Makonza
Tel: +27 43 703 2586
Fax: +27 43 703 2392
e-mail: makonzn@eskom.co.za

Our Ref: - M and E Transport, Jeffreys Bay
Your Ref: -

RE: APPLICATION TO MINE UNDER ESKOM SERVITUDE

Permission is hereby granted under the conditions listed on the attached document.
Kindly indicate your acceptance of these conditions by initialling each page and signing in the appropriate area on the last page.

Kindly sign the second copy of the letter as well and return these to Eskom at the following address:-

**The Land Development Manager
Private Bag X1
Beacon Bay
5205**

We hope that you will find the above in order.

Yours faithfully

A handwritten signature in black ink, appearing to be 'T. Smith', written over a circular stamp or mark.

**T. SMITH
LAND DEVELOPMENT MANAGER
DISTRIBUTION - EAST LONDON (Southern Region)**

2/.....

Land Development

Chr Bonza Bay Road and Quenera Drive, Beacon Bay 5241 Private Bag X1 Beacon Bay, East London 5205 SA
Tel +27 43 703 2124 Fax +27 43 703 2392 www.eskom.co.za

Directors: RM Godsell (Chairman) PJ Maroga (Chief Executive) LCZ Cele SD Dube LG Josefsson (Swedish) H B Lee (Korean)
WE Lucas-Bull PM Makwana J Mirenge (Rwandan) JRD Modise AJ Morgan U Nene B Nqwababa* (*Executive Director)
Company Secretary: M Adam
Eskom Holdings Limited Reg No 2002/015527/06



I, MARLENE ANETTE VAN ROOYEN..... (FULL NAMES AND SURNAME)

herewith unconditionally accept the stipulations in the Letter of Consent pertaining to my co-use of an Eskom servitude.

SIGNED AT HUMANSDORP THIS 14TH DAY OF MAY.....2009.....

M. van Rooyen
APPLICANT

WITNESS [Signature]

WITNESS.....



**CONDITIONS IMPOSED TO M AND E TRANSPORT, FOR MINING NEAR
ESKOM'S SERVITUDE IN STRANDFONTEIN FARM, JEFFREYS BAY AREA
AS DEPICTED ON THE ATTACHED SKETCH:-**

In this agreement, the words "Eskom services and structures" shall include but not be limited to the following: pylons, structures, works, appliances, conductors or cables

A.1 Access and egress

Eskom shall at all times retain unobstructed access to and egress from its servitudes.

A.2 Approvals (additional)

A.2.1 Eskom's consent does not relieve the Applicant from obtaining the necessary statutory, land owner or council approvals.

A.2.2 The Applicant will adhere to all relevant environmental legislation. Any cost incurred by Eskom as a result of non-compliance will be charged to the Municipality.

A.3 Dimensions

No construction or excavation work shall be executed within six meters from any Eskom powerline structure, and/or within six meters from any stay wire.

The angle of the crossing should preferably be 45° degrees to 90° degrees.

A.4 Expenditure

If Eskom has to incur any expenditure in order to comply with statutory clearances or other regulations as a result of the Applicant's activities or because of the presence of its equipment or installation within the servitude area, the Applicant shall pay such costs to Eskom on demand.

A.5 Explosives

The use of explosives of any type within 500 meters of Eskom's services, shall only occur with Eskom's previous written permission. If such permission is granted the Applicant must give at least fourteen working days prior notice of the commencement of blasting. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued in terms of the blasting process.

A.6 Ground level variations

Changes in ground level may not infringe statutory ground to conductor clearances or statutory visibility clearances. After any changes in ground level, the surface shall be rehabilitated and stabilized so as to prevent erosion. The measures taken shall be to Eskom's requirements.

A.7 Indemnity

Eskom shall not be liable for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the servitude area by the Applicant, his agent, contractors, employees, successors in title, and assigns. The Applicant indemnifies Eskom against loss, claims or damages including claims pertaining to consequential damages by third parties and whether as a result of damage to or interruption of or interference with Eskom's services or apparatus or otherwise. Eskom will not be held responsible for damage to the Municipality's equipment. The Applicant's attention is drawn to the *Electricity Act, 1987, (Act 41 of 1987, as amended in 1994)*, Section 27(3), which stipulates that the Applicant can be fined and/or imprisoned as a result of damage to Eskom's apparatus.

A.8 Machinery

No mechanical equipment, including mechanical excavators or high lifting machinery, shall be used in the vicinity of Eskom's apparatus and/or services, without prior written permission having been granted by Eskom. If such permission is granted the Applicant must give at least seven working days prior notice of the commencement of work. This allows time for arrangements to be made for supervision and/or precautionary instructions to be issued. **Mr Rodney Jackson of Eskom's Humansdorp Technical Services Centre can be contacted at 042 291 2019.** Eskom may charge the Applicant appropriately for the time on site during excavation.

A.9 Permission to do work

A.9.1 No work shall commence unless Eskom has received the Applicant's written acceptance of the conditions specified in the letter of consent and/or permit.

A.9.2 Eskom's rights and duties in the servitude shall be accepted as having prior right at all times and shall not be obstructed or interfered with.

Note: Where an electrical outage is required, at least fourteen work days is required to arrange same.

A.10 Remedial action

Under no circumstances shall rubble, earth or other material be dumped within the servitude area. The Applicant shall maintain the area concerned to Eskom's satisfaction. The Applicant shall be liable to Eskom for the cost of any remedial action which has to be carried out by Eskom.

A.11 Safety

A.11.1 The clearances between Eskom's live electrical equipment and the proposed construction work shall be observed as stipulated by *Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993)*.

A.11.2 Equipment shall be regarded electrically live and therefore dangerous at all times.

A.11.3 In spite of the restrictions stipulated by Regulation 15 of the Electrical Machinery Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), as additional safety precaution, Eskom will not approve the erection of Houses, or structures occupied or frequented by human beings under the powerlines and only after consideration of all alternatives, within the servitude area.

A.11.4 Eskom may stipulate any additional requirements to eliminate any possible exposure to Customers or Public to coming into contact or be exposed to any dangers of Eskom plant.

A.11.5 It is required of the Applicant to familiarize himself with all safety hazards related to Electrical plant.

B. Roads

B.1 Conditions prescribed by the Government or Local Authority Roads Department (as applicable) shall be complied with. These conditions include existing agreements between Eskom and provincial or local Roads Departments.

B.2 The road reserve may overlap to a certain extent into the Eskom servitude where the roads run parallel to Eskom services. Eskom shall determine the overlap. The norm is not more than one meter.

B.3 Barriers must be installed where deemed necessary by Eskom.

B.4 Eskom Standard gates must be installed in the road reserve fence to ensure access to Eskom's services.

The permission granted to the Applicant in terms hereof is only applicable to the activities as may fully appear on the attached map. Any work /activities outside portion of servitude vide the said drawing shall be subject to re-application.

It is required of the Applicant to familiarise himself with all safety hazards related to Electrical conductors, services and structures within the servitude area.

I..... (Full Names and Surname) in my capacity as Hereby unconditionally accept the stipulations.

SIGNED AT..... THIS..... DAY OF..... (MONTH) (YEAR).....

APPLICANT..... ID NO.

..... WITNESS

..... WITNESS