

NAME OF APPLICANT: C.J. TERBLANCHE BELEGGINGS (PTY) LTD

REFERENCE NUMBER: FS30/5/1/3/2/10140MP

FARM: WOODLANDS 407 PARYS DISTRICT

ENVIRONMENTAL MANAGEMENT PLAN

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

STANDARD DIRECTIVE

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

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

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

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

The application is over a certain portion of the remaining extend of the farm Woodlands 407, Parys magisterial district. The total application area is 1.5 hectares in extend and is situated 23km north east of the town of Parys.

This application area is within a natural grazing area with no environmental sensitive features or any infrastructure within a 3km radius. The application area is partly in an old existing quarry.

Three are currently two old excavations, excavation 1 on the southern side with dimensions of 30m x 13m x 2.m deep and excavation 2 on the eastern side with dimensions of 35m x 20m x 1.6m deep. See annexure 3 for indication of old excavations as well as on the photo sheet.

These existing old quarries will be rehabilitated concurrent with the new quarries as this old quarries are within the same application area. The first new excavation will be part of the existing quarry as there are still reserves to be mined. All overburden material will be backfilled and the side of the excavation will be sloped to a sustainable angle as part of the final rehabilitation

See locality map as Annexure 1.

This Mining Permit is in terms of Listing 1, Activity 21 and GNR 983

The application area is within the rural farming land community. This application area consists of Stone Aggregate; Gravel (grav); Gravel Sand (Manufactured from Hard Rock) and Dolomite on average 4m deep evenly spread over the 1.5 hectares application area. The minerals to be mined are situated partly within an old existing quarry.

The applicant does accept the environmental liability of the existing quarry that is within the application area.

The existing quarry (±0.6 hectares in extend) was partly rehabilitated by sloping the sides. The open side of the existing quarry will be used to enter the quarry and continue mining to the southern side or high wall side of the existing quarry.

The gravel will be excavated with an excavator and fed into a screening and crushing plant then stockpiled for transporting. The gravel from the stockpile will be transported to the clients directly.

Vegetation & Landscape features: Gently to moderately undulating landscape on the Highveld plateau supporting short to medium-high, dense, tufted grassland dominated almost entirely by *Themeda triandra* and accompanied by a variety of other grasses such as *Elionurus muticus*, *Eragrostis racemosa*, *Heterpogon contortus* and *Tristachya leucothrix*. In places not disturbed, only scattered small wetlands, narrow stream alluvia, pans and occasional ridges or rocky outcrops interrupt the continuous grassland cover.

This area falls in the Soweto Highveld Grassland veld type. The following dominant grass types were note on the site visit:

Andropogon appendiculatus;

Brachiaria serrata:

Cymbopogon pospichilii;

Cynodon dactylon;

Elionurus muticus:

Eragrostis capensis;

E. chloromelas:

E. curvula:

E. plana;

E. planiculmis;

E. racemosa;

Heteropogon contortus;

Hyparrhenia triandra;

Tristachya leucothrix;

Geology and soils: Shale, sandstone or mudstone of the Madzaringwe Formation (Karoo Supergroup) or the intrusive Karoo Suite dolerites which feature prominently in the area. In the south, the Volksrust Formation (Karoo Supergroup) is found and in the west, the rocks of the older Transvaal, Ventersdorp and Witwatersrand Supergroups are most significant. Soils are deep, reddish on flat plains and are typically Ea, Ba and Bb land types. Soils on the application area are shallow with 0 -300mm top soil.

Climate: Summer-rainfall region with over all MAP of 662mm. Cool-temperate climate with thermic continentality (high extremes between maximum summer and minimum winter temperatures, frequent occurrence of frost, large thermic diurnal differences, especially in autumn and spring).

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

The environmental features on site are the topsoil and vegetation that need management and rehabilitation.

- 1.3 Map showing the spatial locality of all environmental, cultural/heritage and current land use features identified on site. See spatial map attached as Annexure 2.
- 1.4 Confirmation that the description of the environment has been compiled with the participation of the community, the landowner and interested and affected parties,

The applicant is also the landowner of the land. The entire EMP was discussed with the landowner and the applicant with the site visit before compilation. The applicant accompanied DERA on the site visit.

- 2 REGULATION 52 (2) (b): Assessment of the potential impacts of the proposed mining or mining operation on the environment, socio- economic conditions and cultural heritage.
 - 2.1 Description of the proposed mining or mining operation.
 - 2.1.1 The main mining activities (e.g. access roads, topsoil storage sites and any other basic mining design features)

2.1.1.1 The main activities will be:

- a) Clearing of road from entrance road to mining area, 4m wide and 50 long.
- Upgrading of existing farm entrance road in order to sustain movement of vehicles not bigger than 4m wide.
- c) Stripping of topsoil for the first excavation of 20m in length and 10m wide and ±5m in depth on the areas next to and inside the existing quarry.
- d) Storing of topsoil next to the excavation.(if the excavation is outside the existing quarry)

- e) Starting on the existing quarry the gravel will be removed directly by excavator and stockpiled.
- f) Stockpile of gravel/stone (product).

2.1.2 Plan of the main activities with dimensions.

The main activities will be the excavating of the gravel/stone by means of an excavator.

The excavations will not be bigger than 10m x 20m x 5m deep and only one excavation will be open at any given time.

The product will be stockpiled next to the excavation.

See layout plan attached as Annexure 3.

2.1.3 Description of construction, operational, and decommissioning phases:

Construction phase:

- a) Construction phase will be the clearing of vegetation on the existing quarry.
- b) Arrival of the equipment on site.
- c) Clearing of road from entrance road to mining area, 4m wide and 20m long.
- d) Upgrading of existing farm entrance road in order to sustain movement of vehicles not bigger than 4m wide.
- e) There will be no permanent buildings or structures constructed. As no permanent structures or buildings will be erected for this operation this phase will consist of the arrival of the equipment.
- f) No fuel or any materials will be stored on site and will be transported on a daily basis.

Operational phase:

The above area will be mined through opencast excavations where the topsoil will be stripped separately and stockpiled. Holes will be drilled for the explosives. One area of 30 x 20 m will be blasted at one stage, once every three months. The gravel/stone and rocks are then removed with a 40 ton excavator and placed next to the excavation.

A Front -end Loader takes the gravel to the crushing and screening plant which is fed at a rate of 40 m³ an hour, 400 m³ a day and 4 000 m³ a month.

All the waste from the crushing and screening plant will be first placed back into the bottom of the excavation, here after the topsoil will be placed back as a growth medium and the sides of the excavation will be properly sloped.

The excavations will be 30m in length 20m wide and ±5 meters deep on average. A total of 5 excavations will be opened. Only one excavation will be opened at a time.

The total estimated reserve of gravel is 60 000 cubic metres taken at a production rate of 4 000 m³ a month it will take 15 - 20 months to work the estimated reserve of 60 000 cubic metres tons.

Concurrently as the mining progresses all the overburden and the material that cannot be sold as aggregate will be backfilled concurrent with the production. The topsoil will be placed back as a growth medium and the sides of the excavation will be properly sloped.

The excavations will be 30m in length 10m wide and ±5 meters deep on average. Only one excavation will be opened at a time.

The disturbance for the excavations including the existing excavations will be 0.2 hectares at any given time and surface disturbance for the plant area 0.5 hectares.

The total estimated reserve of gravel is 60 000 cubic metres taken at a production rate of 4 000 m³ a month it will take 15 - 20 months to work the estimated reserve of 60 000 cubic metres.

The production rate is taken at 4 000 m³/month. The gravel which is relatively thick (4 metres) and the low production rate of the applicant make this 1.5 hectare to be worked sustainably over a period of two years.

The applicant will use 6 permanent employees.

The following equipment will be used:

- 1 x Bell 820E excavator;
- 1 x Bell frond end loader;
- 1 x Tractor with trailer;
- 1 x Chieftan crushing & screening plant

There will be no permanent buildings or structures constructed. As no permanent structures or buildings will be erected for this operation this phase will consist of the arrival of the equipment as described in 2.1.1.2. No fuel or any materials will be stored on site and will be transported on a daily basis. If at any time fuel will be stored at site it will be in a bunded facility or inside a container with a steel floor.

Potential impacts identified:

- a) Stripping of topsoil for the first excavation of 10m x 20m x 5m.
- b) Excavating of the gravel on topsoil, vegetation, noise, and land use.
- Open of new roads to mining area.
- d) Upgrading of existing entrance road.
- e) Screening of gravel, noise and dust.

Decommissioning phase:

- a) All the equipment will be moved from the site.
- b) The last excavation will be rehabilitated by sloping the sides and put water control measures in place to avoid any erosion.
- c) Completing rehabilitation and apply for closure.

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

The only listed activity, as published under Section 24(2) and 24D of the National Environmental Management Act, 1998 (Act No. 107 of 1998), publish Listing Notice 1 of the activities and competent authorities identified in the Schedule, applicable to this proposed project is a listed activity No. 19. "Any activity which requires a mining right or renewal there of as contemplated in section 16 and 18 respectively of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002". The competent authority in respect of activity Nr. 19 in this Schedule is the environmental authority in the province in which the activity is to be undertaken, unless (b) the activity is to be conducted in or on a mining area or is to transform the area where the activity is to be conducted into a mining area in which case the competent authority is the Minister of Minerals and Energy. Thus no EIA is required in terms of NEMA, but only in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), in terms of Section 16.

2.2 Identification of potential impacts (Refer to the guideline)

Potential impacts per activity and listed activities. 2.2.1

The below Table 1 will give a list of the main activities that will be performed under each aspect.

Table 1: Potential impacts of mining activities

	- 1	lable 1. Fotomal mipacio of mining activities		
Activity	AFFECTED ENVIORNMENT	MAIN IMPACTS	SIGNIFICA	DURING WHICH
1. Upgrading and construction of roads	Soil	Surface compaction due to vehicle movement	Low	Construction
	Land use	Loss of land use to support grazing.	Low	Construction Operational, Decommissioning & Closure
	Vegetation	Clearing of vegetation for new road area.	Moderate	Construction & Operational
	Fauna	Destruction/change/disturbance of habitat. Injury or death to wildlife because of vehicle movement.	Low	Construction & Operational
2.Clearing of vegetation on mining area	Vegetation	Clearing of vegetation of the entire mining area and stockpile on topsoil stockpile.	Low	Construction & Operational.
	Fauna	Destruction/change/disturbance of habitat. Injury or death to wildlife because of vehicle movement	Low	Construction & Operational.
3. Stripping of topsoil and excavating of gravel.	Geology	The excavating of the gravel layer up to 5 m.	Moderate	Operational
	Topography	Excavations, stockpile and topsoil heaps The excavation of 5m deep will be sloped as part of the rehabilitation but will leave a slight depression.	Low	Operational & Decommissioning
	Soil	Removal of topsoil and stockpile next to excavation. Surface compaction due to infrastructure and vehicle movement. Movement of trucks and frond end loader.	Low	Operational
	Noise pollution	Generation of noise because of mining related activities.	Low	Operational & Decommissioning
	Air Quality.	Dust generation because of movement of mine vehicle on site such as hauling the gravel out of the farm	Low	Operational
	Fauna	Destruction/change/disturbance of habitat. Injury or death to wildlife because of vehicle movement.	Low	Operational & Decommissioning
	Land use	Temporary loss of utilization of area for grazing purposes.	Low	Operational,

				Decommissioning & Closure
	Socio economics	Job creation and service rendered to mining operation.	Low +	Construction & Operational.
	Interested and affected parties	Mining on site will affect the land use of the landowner on very small scale.	Low	Construction & Operational.
4. Screening of gravel	Noise pollution	The screening plant will raise the noise levels but it will be localise to the site only.	Low	Operational
	Air quality	Dust generation from the screening plant	Low	Operational
5. Blasting	Air quality	Localized dust generation from blasting once in two months	Very Low	Operational
	Noise polution	Localized noise with blast, once every two months.	Low	Operational

2.2.2 Potential cumulative impacts.

The possibility to create or contribute to a cumulative environmental impact within the area, is very low as the only other mining is another Mining Right on the adjacent farm to the north —east. Dust is the only impact that might have a cumulative impact.

2.2.3 Potential impact on heritage resources

No sites of archaeological interest or graves were identified on the application area or nearby with the site visit. This site was disturbed by mining activities before.

None of the above is known to the landowner on this specific application area.

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

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

No negative impact was identified as the mining area will be more than 1.km from any neighbouring farmstead and 10km from any community.

The following positive impacts:

Small-scale mining plays a pivotal role in alleviating poverty in the developing world, and contributes significantly to national revenues and foreign exchange earnings. The potential socio-economic impacts resulting from new and existing mining operations and from eventual mine closure as described by Kilian, J-M are:

- The extent of general development in the area as a result of infrastructure;
- The economic changes that may occur or have occurred as a direct result of mining;
- · Cumulative impacts on the region if this mining turns to a mining right;
- The economic changes that may occur or have occurred as a direct result of mining are such as
 mining fees that is paid to the government on an annual basis. The salaries paid to employees that
 are returned to their families, which are used for household services and basic needs, in turn
 contributing to local economic growth of the people and businesses they buy from.

Potential impacts on cultural and/or heritage resources

No graves or any heritage resources on application area.

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

The potential impacts were discussed and compiled on site with the applicant and landowner. The mining was also discussed with the adjacent neighbours.

2.2.6 Confirmation of specialist report appended.

No specialist report.

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

3.1 Assessment of the significance of the potential impacts

3.1.2 Approach followed

The nature of impacts can vary widely depending on the type of physical environment, the size of the activity and the perceptions and values of each of the effected parties. It must be accepted that any activities will have both physical and social impacts. It is the objective of this assessment to identify both positive and negative impacts. This chapter describes and evaluates the effect of the different mining projects and the associated activities on the natural and social environment.

3.1.3 Methods used to identify impacts

The existing information was reviewed to assess the present status of the environment and the extent to which they have already been modified. The Layout Map – **Annexure 2** is used as a reference to indicate where impacts have been identified. The impact identification and mitigation tables will quantify the identified impacts.

3.1.4 Definitions used in the assessment and evaluation of impacts

The assessment and evaluation of environmental impacts is often complicated by the subjective nature of these impacts. Ideally, the degree of severity or significance of a particular impact should be expressed in quantitative terms, against a quantitative assessment of the conditions that pertained before a particular activity started. There must also be some expression as to whether a particular impact is desirable or not.

In order to address these issues and to provide a basis for comparison of the different impacts associated with the development, a number of standard definitions and approaches were used. The different terms are described in the *Table*2 The impact prediction step will determine whether the expected impact is beneficial (positive) or adverse (negative). While impact evaluation will comprise a rating of the impacts in terms of their magnitude, duration and significance.

Table2: Definitions used in the assessment and evaluation of impacts

CATEGORY	DESCRIPTION OR DEFINITION
Impact	A brief written statement, stating which environmental aspect is impacted by a particular project activity or sequence of project activities.
Impact prediction	Denotes the perceived effect of the impact on the affected area. ② Positive impact ③ No impact ③ Negative impact
Duration	Where duration shall indicate whether the lifespan of the impact will be: Temporary: During construction. 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.
Magnitude:	A prediction of the extent of the impact that may result from the development. Magnitude refers to the size, in both spatial and qualitative terms, of an impact. Site: Impact is site specific Local: Impact is applicable to the local area, including neighbouring farms in the specific district. Regional: Impact is significant for the region, including the rest of the Province National: Impact has national implications.
Impact Rate: Pre- mitigation	This is integration (i.e. an opinion) of the prediction, duration, and magnitude, of the impact. High: The impact is high with permanent duration and substantial disruption. Moderate: The impact is a real but measurable impact and should have an influence on the decision unless it is mitigated. Low: The impact is low and not significant, minor mitigation needed but should not have an influence on

	the decision.
Discussion & mitigation	The relevance of the impact will be discussed and the appropriate mitigation measures provided that will either soften or enhance impacts.
Impact Rate: Post mitigation	Based on the same methodology at Pre-mitigation level, but shows the revised rate if mitigatory measures are taken.

3.2 Impact and Mitigation Tables

The impacts identified are reflected in Table 3, according to operational and closure phase.

The different environmental elements, on which the project may have an impact, are:

- Geology
- 2. Topography
- Soil
- 4. Land capability & Land use
- Vegetation
- 6. Animal life
- 7. Surface water
- 8. Ground water

- 9. Air Quality
- 10. Noise
- 11. Visual Aspects
- 12. Archaeological and Cultural sites
- 13. Sensitive Landscapes
- 14. Socio-economic Structures
- 15. Interested and Affected Parties

Table 4. 1 The construction phase:

No	Impact Description	Impact Prediction	Duration	Magnitude	Impact Rate: Pre- mitigation	Cumulative impacts
Α	NATURAL PHENOMENA					
1.	Climate: No impact	9	N/A	N/A	N/A	N/A
2.	Geology: No impact.	8				None
3.	Soils: Removal and stockpiling of topsoil. Surface compaction due to vehicle movement	9	Temporary	Site	Low -	None
4.	Land Capability: Clearing of mining area of 0.5 hectares.	9	Temporary	Site	Low-	None
5.	Flora: Clearing of vegetation for the mining area on 0.5 hectares, only a very small area. Clearing of vegetation for mine roads.	9	Temp	Site	low	None
6.	Air Quality: Dust generated by vehicle movement.	3	Temporary	Site	Low-	None
7.	Noise: Equipment busy preparing the site, during working hours.	8	Temporary	Site	Low	None
В	CULTURAL IMPACTS					None
8.	Cultural Resources and Heritage Sites: No impact.	9	None	None	None	None
9.	Sensitive Landscape: No sensitive landscapes were identified on the site visit.	(9)	N/A	N/A	N/A	None
С	SOCIO-ECONOMIC IMPACTS					None
10.	Socio-economic Structure: Low positive impact as only 6 labourers will be employed for this construction phase.	0	Temporary	Site & local	Low	Increase in activity will add to current growth and development in the Bethlehem district.
11.	Interested and Affected Parties: If issues arise it will be handled immediately.	9	Temporary	Site	Low	None

Table 4.2 The operational phase:

No	Impact Description	Impact Prediction	Duration	Magnitude	Impact Rate: Pre- mitigation	Cumulative impacts
Α	NATURAL PHENOMENA		19721972			
1.	Geology: Excavating of the gravel layer up to 5m	8	Permanent	Site	Moderate -	None
2.	Soils: Removal and stockpiling of topsoil. Surface compaction due to vehicle movement	(9)	Temporary	Site	Low -	None
3.	Land Capability: Mining of gravel on 0.5 hectares.	8	Temporary	Site	Low-	None
4.	Land use: Mining on 0.5 hectares.	8	Temporary	Site	Low-	None
5.	Flora: Clearing of vegetation for excavations on 0.5 hectares, only a very small area.	8	Temporary	Site	Low-	None
6.	Fauna: Mining related activities will be limited to 0.6 ha during any phase, but will lead to the temporary emigration of local species from the disturbed area onto the adjacent area.	8	Temporary	Site	Low	None
7.	Surface Water Quality: No Impact	(9)	None	Site	None	None
8.	Ground water quality & quantity: No impact because no water to be used.	9	None	None	None	None
11.	Air Quality: Dust generated by vehicle movement and screening plant. Once off, localized dust generated by blasting once every two months.	8	Temporary	Site	Low-	None
12.	Noise: Excavation of the gravel /stone only during working hours. Blasting once every two months.	8	Temporary	Site	Low	None
13.	Visual Aspects: Very Low impact since activities will only be visible from the barrage tar road.	8	Temporary	Site	Low -	None
В	CULTURAL IMPACTS	2.35	1 1998			None
14.	Cultural Resources and Heritage Sites: No impact.	(9)	None	None	None	None
15.	Sensitive Landscape: No sensitive landscapes were identified on the site visit.	⊜	N/A	N/A	N/A	None
С	SOCIO-ECONOMIC IMPACTS					None

No	Impact Description	Impact Prediction	Duration	Magnitude	Impact Rate: Pre- mitigation	Cumulative impacts
16.	Socio-economic Structure: Low positive impact as only six labourers will be employed	9	Temporary	Site & local	Low	Increase in activity will add to current growth and development in the Parys district.
17.	Interested and Affected Parties: If issues arise it will be handled immediately.	(9)	Temporary	Site	Low	None

3.3 Assessment of potential cumulative impacts.

The only aspects that have any possibility to create or contribute to a cumulative environmental impact within the area, this application are situated in is:

Air Quality - Impact low negative

No other active mining activities that is known of within 3km radius.

3.4 Proposed mitigation measures to minimise adverse impacts.

3.2.1 Table 5: Proposed mitigation measures

Impact Description	Impact Prediction	Impact Rate	Discussion/ Mitigation
Geology: No impact	9	None -	None
Soils: Removal and stockpiling of topsoil. Compaction of surfaces where vehicles move.	9	Low -	Vehicle movement will be limited to existing roads and disturbed area to timit compaction of soil surfaces. Spillages of Petrochemicals will be handled in a responsible manner where emergency breakdowns do occur. All available topsoil on top of the gravel will be properly removed and stockpile for rehabilitation purposes.
Flora: Clearing of vegetation on the 0.5 hectare mining area. Dust coverage on plants because of vehicle movement.	8	Low-	The vegetation with seeds will be cleared with the topsoil and stockpiled to be used in rehabilitation. This will ensure the quick germination of natural vegetation after rehabilitation. Vehicle movement will be limited to exciting roads and disturbed area. No collection of firewood will be allowed.
Air Quality: Transporting of gravel on farm roads. Blasting of gravel	8	Low-	Dust suppression will be an ongoing activity on a daily basis, till closure is completed. Vehicles will be properly maintained to reduce CO ² emission.
Noise: Loading and transporting. Impact will be very low and localized. Blasting once every two months	8	Low-	Impact will be very low and localized. Vehicles will be properly maintained to reduce noise. Mining will take place only from 8:00 – 17:00 every week day. All the adjacent neighbours will be informed of the blasting well in advance. Blasting will not take place on cloudy days in order to depress the action of the blasting.
Socio-economic Structure: Profit generated from the operation of the mining activity.	0	Low+	Labour used from local community.

3.4.2 Concomitant list of appropriate technical or management options

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

ENVIRONMENTAL COMPONENT

1.1 SOIL

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

Handling of topsoil as a natural resource:

Any future expansion of the excavations or construction of infrastructure should be preceded by the removal of <u>all available topsoil</u>. The surface of any new areas to be disturbed must be kept to a minimum. All available topsoil/overburden material should be removed and stockpiled for rehabilitation purposes.

Access roads, etc: The clearing of soil surface areas would be restricted to what is really necessary for the construction of infrastructure. Wherever possible all topsoil should be removed and stockpiled for rehabilitation purposes. Overburden material should also be stockpiled separately if practically possible. Topsoil and overburden material should be transported to an area earmarked for rehabilitation.

Soil compaction:

The mining operation should only be restricted to what is really required (demarcated area of exploitation) within the fenced-off area. Access roads towards the sites would be restricted only to the roads (existing farm roads & roads established in consultation with the surface owner). No land would be disturbed unnecessarily. Mining & rehabilitation should be done in a well-planned manner (according to a mining plan) and in the process ensuring that activities are only restricted to surface areas really required. Compaction of soil surface areas would be alleviated once rehabilitation of certain area starts. Certain roads would probable remain for access (in consultation with the surface owner). Those that would not be required would be ripped and rehabilitated.

Potential for soil contamination:

Vehicles to be inspected to ensure no oil and hydraulic fluid leaks occur. All oil spills on soil to be removed and bio-remediate immediately (certain commercial products are available such as Terrasorb or it could be rehabilitated by means of the application of fertilizer and turn with a spade from time to time in order to enhance the natural occurring soil microbial activity). No servicing of vehicles must occur except on a steel floor in an area allocated for that. Training w.r.t pollution hazards and their impact on the environment must be given as part of induction training. An incidence register for this purpose must be kept. Drip trays must be available and used where emergency repairs is done.

CLOSURE OBJECTIVE

The existing excavation that is part of the application area will be rehabilitated by sloping of the sides concurrently as it will be deepened. All overburden material will be backfilled as part of rehabilitation. No waste stockpiles will be on site with closure. The topsoil removed in the site preparation process should be replaced during the rehabilitation exercise.

Alleviation of compaction of soils would be done during rehabilitation of the terrain, including roads.

No soil erosion must be visible and no potential for soil erosion must be present at closure.

No soil contamination must be visible or known before closure can be given.

No compaction of any roads or any other area must be present during closure. If the soil structure is disturbed mitigation measures e.g. the use of organic material, lime and fertilisers must be implemented to restore the soil structure.

The soil must be fertile enough to sustain vegetation.

ENVIRONMENTAL COMPONENT

1.2 LAND USE

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

The disturbance of grazing land must be restricted (kept to a minimum) to the planned active, fenced-off mining site only. Remove topsoil where it is available.

Take care that roads are the only areas used to enter the area for mining purposes. If new land is used for roads to enter the area it must be done in consultation with surface owner.

Topsoil will be placed in areas where it was removed and the areas will be re-vegetated accordingly.

CLOSURE OBJECTIVE

To rehabilitate the existing excavation and new excavation areas by sloping the sides to such a state that vegetation can recover and sustain sustainable growth and be used for natural grazing again. Measures to address soil erosion will be put into place.

ENVIRONMENTAL COMPONENT

1.3 VEGETATION

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

No mitigation exists except to replace the vegetation by reseeding of grasses.

Habitat change, loss of species, spread of alien and invasive species:

No mitigation exists except to replace the vegetation by reseeding and planting trees.

Bulk sampling should be done in a well-planned manner (according to a mining plan) and in the process ensuring that activities are only restricted to surface areas really required.

Develop and implement an invasive and alien control programme to control the spread of weeds and other invasive species.

Eradicate exotic weeds and invader species if it invades the terrain. All illegal invader plants and weeds shall be eradicated as required in terms of Regulation 15 & 16 of the Act on Conservation of Agricultural Resources, 1983 (Act no. 43 of 1983) which list the plants.

An invasive and alien control programme must be drafted and implemented by the mine.

Ensure that all roads (utilized by mine vehicles) are daily sprayed with water to control dust.

Site inspections to ensure the spraying are done.

CLOSURE OBJECTIVE

During rehabilitation indigenous vegetation cover comprising of local plant species should be established in order to ensure a well adapted sustainable plant cover that would be able to prevent erosion of the replaced topsoil on the disturbed mining site exposed surfaces.

No invasive and alien species must be present after closure. A post-closure control program must also be implemented.

No excessive dust must be present during the normal growth season after closure

ENVIRONMENTAL COMPONENT

1.4 WILD LIFE

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

Wildlife or wildlife habitat destruction /change / disturbance :

To take care that no new or unnecessary destruction of habitats, other than the demarcated mining site should take place.

Injury and death to wildlife:

Re-establish trees and grass cover as soon as possible during and after mining

Ensure that the rehabilitation plan is compiled and executed. Keep incidence register on killings and disturbances.

Restoration of habitat:

Make game catching, traps, snares, poaching and any other unnecessary disturbance of animals a disciplinary offence.

Keep an environmental incidence register to log all kills of birds and mammals.

All staff must undergo basic environmental awareness lecture during induction training.

Machine operators and drivers to undergo appropriate level of environmental impact training to ensure they understand their impact on the environment. Ensure all staff working on the opencast section undergo basic lecture during induction phase. The names (signed by them) of staff that has done this training must be provided during the audit.

Introduce the actions as listed above into disciplinary code as offence.

CLOSURE OBJECTIVE

The animal life habitat must be restored after decommissioning. Success will be measured against the extent to which the animals return to the area.

The post-closure phase must be suitable for further restoration of the newly man-made animal habitat. The area must be stable and acceptable for the return of animal- and plant life.

ENVIRONMENTAL COMPONENT

1.5 AIR QUALITY

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

Dust: The mining method will serve as mitigation measure because mining will limit dust to the active mining area (area where the loader & excavator is operating).

Daily spraying of roads with water. Inspection should be done on a daily basis.

If new roads are constructed, in coordination with surface owner, dust pollution must be mitigated by means of spraying the roads with water.

CLOSURE OBJECTIVE

Rehabilitation of the excavations/mining area would ensure that no dust is generated from exposed surfaces.

ENVIRONMENTAL COMPONENT

1.6 NOISE

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

Ensure the required silencers are placed on all engines. No mitigation to reverse hooters is allowed due to safety standards. Inspection of vehicles and machinery to ensure silencers are fitted.

Ensure that a complaints register is created, managed and maintained. Vehicles and earthmoving equipment should be equipped with the necessary silencers and regularly maintained in a good working condition.

CLOSURE OBJECTIVE

No noise attributed to mining will be generated from the site after closure anymore. During decommissioning and closure phase some earth moving equipment and trucks would be utilized for rehabilitation.

ENVIRONMENTAL COMPONENT

1.7 VISUAL ASPECTS

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

Visual impact would be addressed by means of;

* re-vegetation of disturbed areas with grasses;

The visual impact will be significant during mining operations. Specific rehabilitation options would mitigate the impact.

CLOSURE OBJECTIVE

No residual visual impacts will remain after closure. The terrain should blend in with the surrounding landscape.

ENVIRONMENTAL COMPONENT

1.8 SOCIO-ECONOMICS

ENVIRONMENTAL MANAGEMENT/MITIGATION MEASURES/ACTION PLANS/COMMITMENTS

Increase in Socio - economic activity at local level.

CLOSURE OBJECTIVE

The economic development must deliver a multiplier effect that will contribute to the local economy long after closure

3.4.3 Review the significance of the identified impacts

(After bringing the proposed mitigation measures into consideration).

All the impacts will properly mitigated.

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

4.1.1 Plans for quantum calculation purposes.

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

See Annexure 2 for plan indicating the main mining actions.

Construction Phase: a) Clearing of the 1.5 hectare mining area.

b) Clearing of road area from existing farm road to the mining area. 4m wide and 50m long

Operational Phase: The area where the first excavation will be open.

Only one open excavation will be open at any given moment of 10m x 20m x ±5m deep.

The disturbance for the excavations will be 0.1 hectares at any given time and surface disturbance for the plant area 0.5 hectares.

The mine roads will be rehabilitated by means of ripping the surface area and sowing of grass seeds in order to obtain sustainable vegetation which will have no wind or water erosion and ensure no after closure impacts.

The excavation area will be rehabilitated concurrently by means of the following:

- All available mining waste and overburden material will be backfilled into the open excavation.
- b) The sides of the excavation will be sloped to at least 14° in order to sustain vegetation.
- c) The topsoil will be places back onto this sloped area to act as a sustainable growth medium.
- d) If the natural vegetation seeds from the topsoil does not germinate and grow within one growing season, seeds will be sown to assist. As there is a big seed source surrounding this mining area it is foreseen that sufficient growth will take place within the first growing season.
- e) After rehabilitation the land will be back to the pre-mining capability of natural land.

4.1.2 Alignment of rehabilitation with the closure objectives

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

In order for Authorities to determine whether or not rehabilitation is done in accordance with the closure objectives as set out in this document, the applicant will submit information to inform the relevant government department of the impacts and the progress being made with respect to the mitigation of the impacts occurring from the current operation. It will also reflect if rehabilitation is on track to accomplish the closure objectives. The following information will be submitted to the respective Departments within the stipulated time frames:

Submission of information:

✓ Topography:

To ensure that rehabilitation post-mining slopes are stable, free draining and no slopes have an angle in excess of 14°. Monitoring will be done on an **annual basis** to ensure that the levels and the slopes are in order. The existing quarry that is within the application area will also be rehabilitated as described above.

✓ Soil

Monitoring will be done at rehabilitated areas on an annual basis or after a heavy rain event, where soil depth and chemical composition will be tested and possible erosion damage will be assisted and rectified.

✓ Vegetation:

To ensure that the rehabilitated areas become self-maintaining, monitoring will be done at the rehabilitated areas on a *twice* a *year basis* (mid-summer and mid-winter), where species diversity and vegetation cover will be investigated.

✓ Air quality:

To ensure that the mine minimizes dust omissions, so that dust does not become a nuisance for affected parties and a health hazard. Visual inspections will be done and managed by dust suppression by a water tanker.

✓ Submission of the report

- Monthly monitoring of all environmental management measures and the holder of the mining right shall carry out components in order to ensure that the provisions of this programme are adhered to.
- Yearly reporting of the progress of implementation of this programme will be done.
- Various points of compliance will be identified with regards to the various impacts that the operations will have on the environment.
- The layout plan will be updated annually to indicate areas that were cleared and areas that have been
 rehabilitated. Updated copies will be submitted on an annual basis to the Regional Manager: DME.
- Reports confirming compliance with various points identified in the environmental management programme
 will be submitted to the Regional Manager: DMR at the end of every year with special reference to the
 progress of vegetated areas.
- Any emergency or unforeseen impacts will be reported as soon as possible (within 24 hours).
- An assessment of environmental impacts that were not properly addressed or were unknown when the
 programme was compiled shall be carried out and added as a corrective action.

4.1.3 Quantum calculations.

(Provide a calculation of the quantum of the financial provision required to manage and rehabilitate the environment, in accordance with the guideline prescribed in terms of regulation54 (1) in respect of each of the phases referred to). See **Annexure 4** attached.

4.2 Undertaking to provide financial provision

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

The applicant will submit a bank guarantee to the amount of R92 810.00 as soon as the quantum amount is been confirmed.

- 5 REGULATION 52 (2) (e): Planned monitoring and performance assessment of the environmental management plan.
 - 5.1 List of identified impacts requiring monitoring programmes.

Soils: Compaction of surfaces where vehicles move.

Topsoil: Correct handling of petrochemicals.

Air Quality: Wetting of roads regularly especially in the dry season. Monitoring daily

Noise: Daily checking of vehicles in order to lessen noise levels

Flora: Monthly monitoring of rehabilitated areas in order to confirm sufficient re-vegetation.

5.2 Functional requirements for monitoring programmes.

The consultant will properly discuss with the manager and assist where necessary.

As part of the general terms and conditions for a mining permit and in order to ensure compliance with the approved environmental management plan and to access the continued appropriateness and adequacy to the environmental management plan. The applicant/holder shall:

· Conduct monitoring on a continuous basis:

A. Objectives to be reached:

 VEGETATION: To obtain a self-sustaining well-established indigenous vegetation cover on each disturbed area and to eradicate all illegal invaders & weed species in a controlled way.

 NOISE: To monitor the noise levels and create a safe working and better quality environment for the worker and the adjacent landowners.

 DUST: To monitor the dust levels and create a safe working and better quality environment for the worker and the adjacent landowners.

SOIL: To ensure that all available topsoil be stored and spillages of petrochemicals be handled correctly.

B. Variables, which will be considered:

VEGETATION: Basal and crown cover

Specie diversity Vitality of vegetation

NOISE: Measured noise levels in dB

DUST: Measured dust levels (respiratory dust measurements)

C. Location of monitoring points:

VEGETATION: All rehabilitated areas

EROSION: All roads and rehabilitated areas

NOISE: Excavated sites, roads, mine border, farm dwelling (houses).

DUST: Mining area.

SOIL: All rehabilitated areas and active mining site.

D. The nature of monitoring equipment:

VEGETATION: Wheel point apparatus.

NOISE: As specified by the Mine Health and Safety Act no 29 of 1996
 DUST: As specified by the Mine Health and Safety Act no 29 of 1996

SOIL: No equipment – only observation.

E. Frequency of sampling and measurement:

VEGETATION: During and after every raining season

NOISE: 3 months
DUST: 3 months

SOIL: 3 months and concurrently.

F. The format of data recordings:

VEGETATION: Report
 NOISE: Report
 DUST: Report
 SOIL: Report

G. Format of report:

Background

Conditions of approval

Results of the monitoring program

Interpretation of the data

Proposed remedial actions

Action plan

Review of the current monitoring plan

Conclusions

Every report will show the trend of the monitoring results according to the mentioned objectives and variables.

Conduct performance assessment of the environmental management programme as required; and

 Compile and submit a performance assessment report to the minister to demonstrate adherence to the environmental management programme.

5.3 Roles and responsibilities for the execution of monitoring programmes.

The applicant and his appointed manager on site will be responsible and execute the monitoring programme.

5.4 Committed time frames for monitoring and reporting.

Monitoring will be done as described in 5.2. Reporting through Performance Assessment report on an annual basis.

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

6.1 Rehabilitation plan

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

See layout Plan attached as Annexure 3.

The existing quarry that is part of the application area will be the liability of C.J. Beleggings (Pty) Ltd. This old quarry area will be rehabilitated concurrent with the mining activities. All the overburden and waste material will be backfilled into the excavations. The sides of the current excavation will be sloped to a stable angle.

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

SOIL CLOSURE OBJECTIVE

The topsoil removed in the site preparation process should be replaced during the rehabilitation exercise.

Alleviation of compaction of soils would be done during rehabilitation of the terrain, including roads.

No soil erosion must be visible and no potential for soil erosion must be present at closure.

No soil contamination must be visible or known before closure can be given.

No compaction of any roads or any other area must be present during closure. If the soil structure is disturbed mitigation measures e.g. the use of organic material, lime and fertilisers must be implemented to restore the soil structure.

The soil must be fertile enough to sustain vegetation.

LANDUSE CLOSURE OBJECTIVE

To rehabilitate the existing and new excavation areas by sloping the sides to such a state that vegetation can recover and sustain sustainable growth and be used for natural grazing again. Measures to address soil erosion will be put into place.

VEGETATION CLOSURE OBJECTIVE

During rehabilitation indigenous vegetation cover comprising of local plant species should be established in order to ensure a well adapted sustainable plant cover that would be able to prevent erosion of the replaced topsoil on the disturbed mining site exposed surfaces.

No invasive and alien species must be present after closure. A post-closure control program must also be implemented. No excessive dust must be present during the normal growth season after closure

AIR QUALITY CLOSURE OBJECTIVE

Rehabilitation of the excavations/mining area would ensure that no dust is generated from exposed surfaces.

NOISE CLOSURE OBJECTIVE

No noise attributed to mining will be generated from the site after closure anymore. During decommissioning and closure phase some earth moving equipment and trucks would be utilized for rehabilitation.

6.3 Confirmation of consultation

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

The environmental closure objectives were discussed with landowner and applicant.

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

7.1 Identification of interested and affected parties.

(Provide the information referred to in the guideline)

The landowner and neighbours were identified as no other affected parties or nearby communities. This application area is within a rural farming area with the nearest community 5km away.

See report attached as Annexure 5.

- 7.1.2 The land is privately owned.
- 7.1.3 Land Affairs was not identified as an IAP as no land claim is involved.
- 7.1.4 No land claim involved.
- 7.1.5 No Traditional Authority was identified.
- 7.1.6 Landowner: Noord Vrystaat Graan en Vee Eiendoms Beperk
- 7.1.7 Mr. CJ Terblanche is the director of Noord Vrystaat Graan en Vee as well as CJ Terblanche Beleggings
- 7.1.8 No other person or adjacent neighbour will be economically directly affected, as the mining will limited to this specific area on the specific farm with its own entrance roads and infrastructure.
- 7.1.9 Ngwathe Local Municipality.
- 7.1.10 Department Water Affairs and Forestry

National Department Agriculture

Department Environmental Affairs.

7.1.11 See annexure 5 attached.

7.2 The details of the engagement process.

7.2.1 Description of the information provided to the community, landowners, and interested and affected parties.

The landowner and IAP's were personally informed by the applicant about the proposed mining and that it will entail the loading and transporting of the gravel.

The application area was shown to them on a map.

- 7.2.2 List of which parties indentified in 7.1 above that were in fact consulted, and which were not consulted. All the listed parties were consulted; see proof attached in Annexure 5.
- 7.2.3 List of views raised by consulted parties regarding the existing cultural, socio-economic or biophysical environment.

None of the above was raised.

7.2.4 List of views raised by consulted parties on how their existing cultural, socio-economic or biophysical environment potentially will be impacted on by the proposed mining or mining operation.

The landowner only requested that the disturbed areas must be properly rehabilitated back to original land capability of grazing land. Mr. Terblanche is director on both companies, landowner and applicant.

7.2.5 Other concerns raised by the aforesaid parties.

None.

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

See record attached as Annexure 5.

7.2.7 Information regarding objections received.

No objections were received.

7.3 The manner in which the issues raised were addressed.

No issues were addressed as no issues were raised.

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

8.1 Employee communication process

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

The applicant will contract DERA Environmental Consultants to inform the employees after the EMP was approved. The following guidelines will be used:

- Communication
- Urge
- Leadership
- Teamwork
- Understanding
- Recognition

Empowerment (CULTURE).

8.2 Description of solutions to risks

(Describe the manner in which the risk must be dealt with in order to avoid pollution or degradation of the environment) If any emergency action or risk take place it must be reported to the manager immediately who will deal with in the proper manner.

8.3 Environmental awareness training.

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

See table 8.

Table 7: Environmental Awareness Plan (Section 39 (3) (c)

		Table 1. Entrement Arrangings 1 and Section 50 (5) (5)		
Aspects	Objectives	Description	Time/period	Responsible person/party
1. Environmental policy	Demonstrate management commitment to the responsible environmental management	Top management has a role to play in building awareness and motivating employees by explaining the company's environmental values and communicating its commitment to the environmental policy. All workers of the company should understand and be encouraged to accept the importance of implementing the environmental management program. Motivation to continually improve can be enhanced when employees are recognized for achieving environmental objectives and targets and encouraged to make suggestions that can lead to improved environmental performance.	Already done and in place.	Mine Manager
2.HSEC Management System		Identify access and manage risks to employees, non-employees, the environment and the communities, which the mine operates. Set HSEC targets, allocate appropriate resources to achieve those targets, and undertake periodical reporting of the mine's HSEC berformance.	Ongoing	Mine Manager
3. Communication	Describe the manner in which the applicant intends to inform his or her employees of any environmental risks which may result from their work and; The manner in which the risks must be dealt with in order to avoid pollution or the degradation of the environment	Method: How do the employees receive the information? • Workplace meetings with the Operations Manager • At safety training sessions; • Induction programmes; • Regular publications and information leaflets; • Bulletin boards (posters), • Electronic mail messages,	Ongoing	Management and Environmental Consultant
4. Information		Information from internal (EMP, etc) and external sources would be put a language understandable to every worker. Environmental information would be communicated via the methods spelled out above.	Ongoing	Environmental Consultant
5. Training		All employees should receive basic environmental awareness training, either as induction training or later at a special training session. Different levels of responsibility in relation to individual's potential impact on the environment must be addressed in the training session. The further motivation of the workforce would be achieved through in-house and training through attending short courses with regard to environmental management, etc. Appropriate training relevant to the achievement of the environmental policy, implementation of the environmental management program should be provided to all personnel. Employees should have an appropriate knowledge base. The mine should also ensure that the contractors working on site provide evidence that they have the requisite knowledge and skills to perform the work in an "environmentally responsible manner". Education and training is needed to ensure that the employees knowledge of regulatory requirements, internal standards and the mine's policies and objectives is current. Issues to be considered during training: In a handling of topsoil In a suppression In a suppression In a surface run-off control In a surface run-off control In a wash can an administration and a lien control programme In a wash and a lien control programme In a wash can be done in a well-planned manner (according to a mining plan) and in the process ensuring that activities are now restricted to surface and provided manner (according to a mining plan) and in the process ensuring that activities	Ongoing	Mine Manager, Environmental consultant
6. Reporting		Every environmental incident that might happen and which the workers become aware off should be reported to the manager.	Ongoing	ALL

The worker can only report on incidents if he is made aware off the possible environmental risks through the communications methods indicated in section 1. A written reporting format should be put in place. Communication includes establishing processes to report internally and, where desired, externally on the environmental activities of the mine in order to: Demonstrate management commitment to responsible environmental management, Deal with concerns and questions about environmental issues Raise awareness of the organization's environmental policies, environmental management program; and Inform internal or external interested parties about the mine's management system; A formal companient communication is environmental management system; A formal companient companient propriets about the mine's management system;		
The worker can only report on incidents if he is nethods indicated in section 1. A written reporting format should be put in place. Communication includes establishing processes activities of the mine in order to: Demonstrate management commitment to respon Deal with concerns and questions about environm Raise awareness of the organization's environme Inform internal or external interested parties about A formal complaints (concerns and complaints).	A formal complaints/concerns reporting register); The mine must regulatory communicat problems, achievements and all other re	register); The mine must regulatory cor problems, achievements and a

- 9 SECTION 39 (4) (a) (iii) of the Act: Capacity to rehabilitate and manage negative impacts on the environment.
 - 9.1 The annual amount required to manage and rehabilitate the environment.

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

Dust suppression: R3 000.00 Noise control: R 2 000.00

Re- vegetation and sloping: R15 000.00

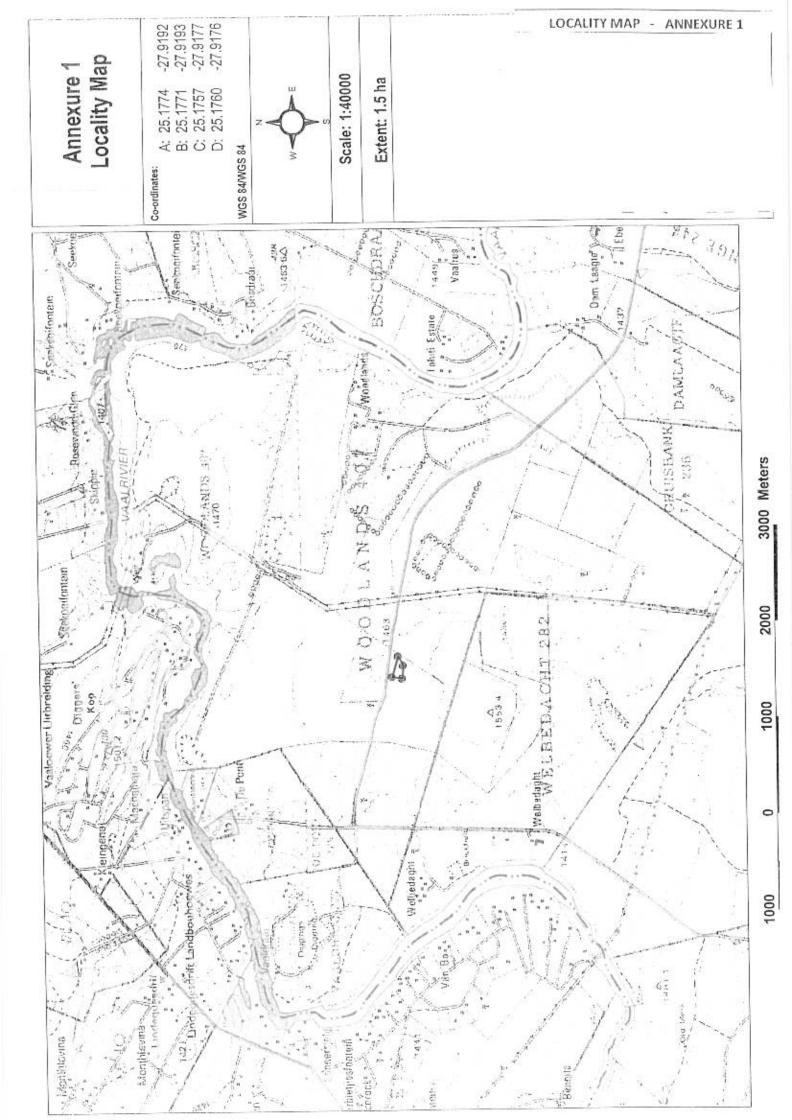
Total: R 20 000.00

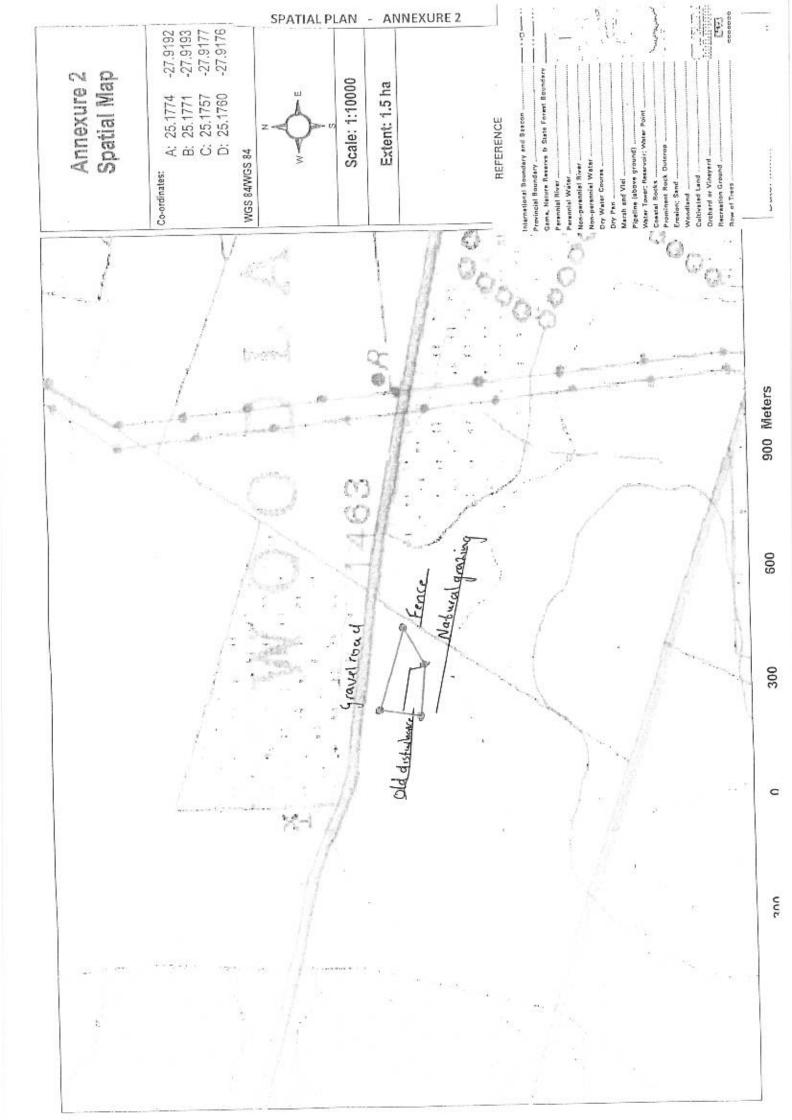
9.2 Confirmation that the stated amount correctly reflected in the Mining Work Programme as required. Yes.

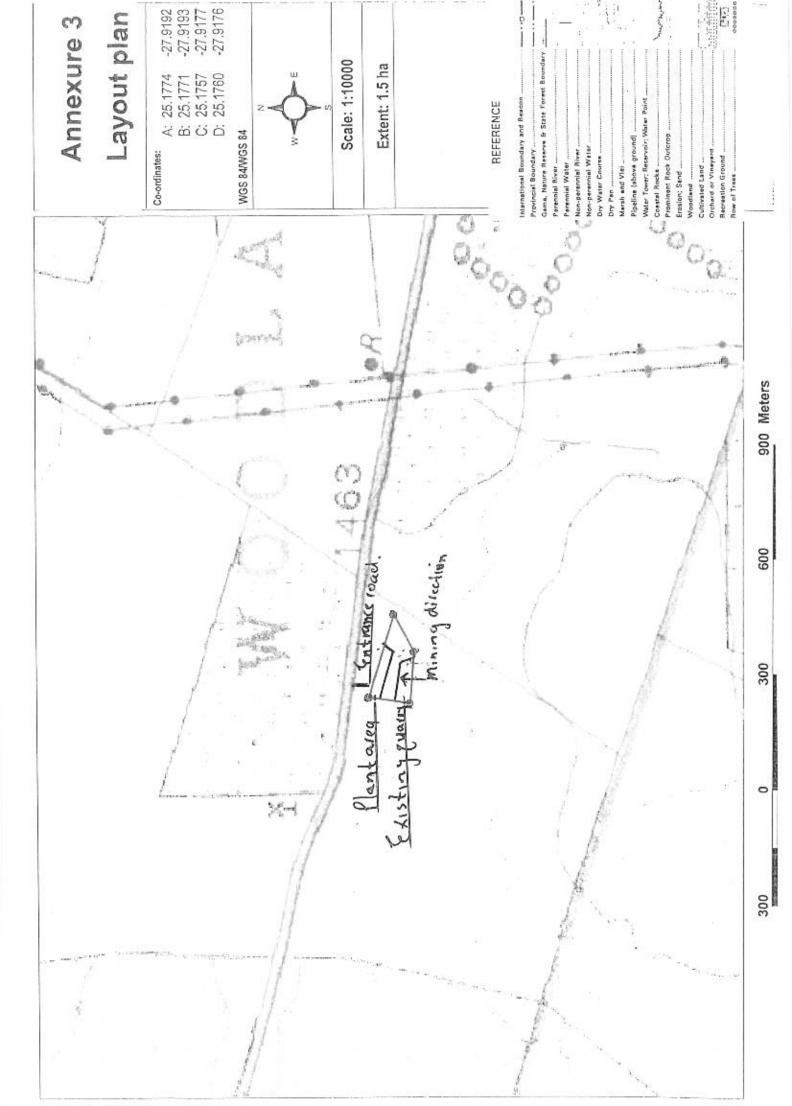
10 REGULATION 52 (2) (h): Undertaking to execute the environmental management plan.

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report comprises EIA and EMP compiled in accordance with the guideline on the Departments official website and the directive in terms of sections 29 and 39 (5) in that regard, and the applicant undertakes to execute the Environmental management plan as proposed.

ivironnientai management pian as proposed.	
Full Names and Surname	DE Erasmus
Identity Number	700907 5033 088







CALCULATION OF THE QUANTUM

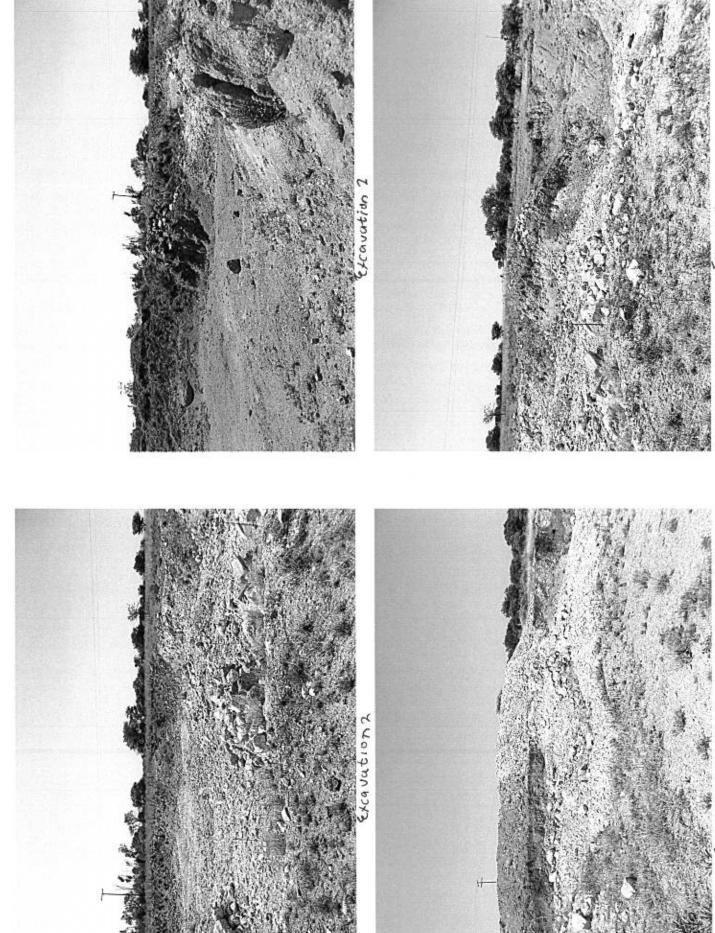
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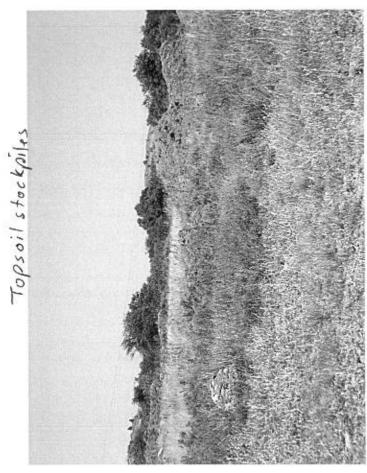
FS30/5/1/0/3/2/1/10140 MP 05-Nov-15 Ref No.: Date:

			A	2	٥	2	1
No.	Description	Unit	Quantity	Master Rate	Multiplication factor	Weighting factor 1	Amount (Rands)
	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	0	12.29	· -	٠	0
2 (A)	Demolition of steel buildings and structures	m2	0	171.18	-	1	0
2(B)	Demolition of reinforced concrete buildings and structures	m2	0	252.26	•	1	0
3	Rehabilitation of access roads	m2	100	30.63	+	1	3063
4 (A)	Demolition and rehabilitation of electrified railway lines	ε	0	297.3	·	1	0
4 (A)	Demolition and rehabilitation of non-electrified railway lines	Ε	0	162.16	1	1	0
5	Demolition of housing and/or administration facilities	m2	0	342.34	1	1	0
9	Opencast rehabilitation including final voids and ramps	ha	0.2	174238	0.5	+	17423.8
7	Sealing of shafts adits and inclines	m3	0	91.89	1	-	0
8 (A)	Rehabilitation of overburden and spoils	ha	0	119642.23	-	-	0
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	0	149012.22	-	٠	0
8(C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	0	432802.15	-	Ann	0
6	Rehabilitation of subsided areas	ha	0	100182.35	•	-	0
10	General surface rehabilitation	ha	0.5	94776.82	-	1	47388.41
11	River diversions	ha	0	94776.82	1	1	0
12	Fencing	٤	0	108.11		+	0
13	Water management	ha	0	36036.81		1	0
14	2 to 3 years of maintenance and aftercare	ha	0.7	12612.88	1	7	8829.016
15 (A)	Specialist study	Sum	0			-	0
15 (B)	Specialist study	Sum				+	0
					Sub Total	1 10	SCC NOTST

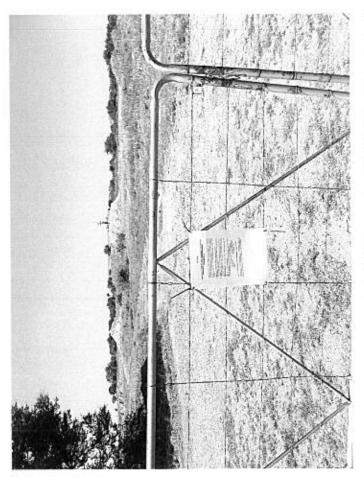
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7		Preliminary and General	31 100:4036	Į.	
	2	Contingencies	7670	3.4226	7670.4226

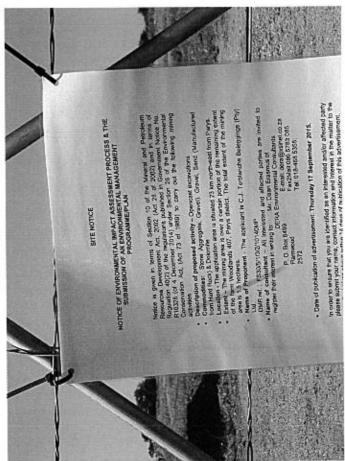
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VAT (14%)	Grand Total	

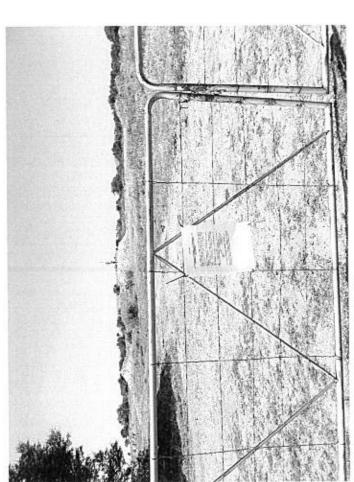


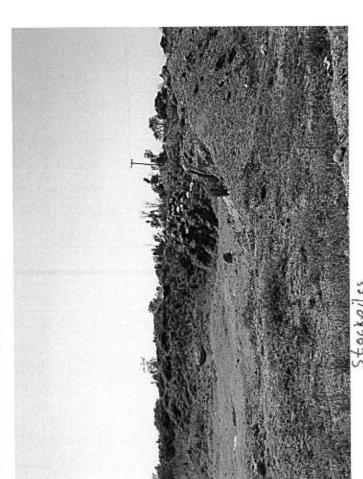












Stockpiles

NAME OF APPLICANT: C.J. TERBLANCHE BELEGGINGS (PTY) LTD.

REFERENCE NUMBER: FS30/5/1/3/2/10140MP

REPORT ON THE RESULTS OF CONSULTATION

WITH COMMUNITIES AND INTERESTED AND AFFECTED PARTIES

AS REQUIRED IN TERMS OF SECTIONS, 16(4)(b) or 27 (5) (b) OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT (ACT 28 of 2002), AND IN ACCORDANCE WITH THE STANDARD DIRECTIVE FOR THE COMPILATION THEREOF AS PUBLISHED ON THE OFFICIAL WEBSITE OF THE DEPARTMENT OF MINERAL RESOURCES.



A Definitions

'consultation' means a two way communication process between the applicant and the community or interested and affected party wherein the former is seeking, listening to, and considering the latter's response, which allows openness in the decision making process.

'community' means a group of historically disadvantaged persons with interest or rights in a particular area of land on which the members have or exercise communal rights in terms of an agreement, custom or law: Provided that, where as a consequence of the provisions of the Act negotiations or consultations with the community are required, the community shall include the members or part of the community, directly affected by prospecting or mining, on land occupied by such members or part of the community.

'Interested and affected' parties include, but are not limited to; -

- Host Communities
- Landowners (Traditional and Title Deed owners) (ii)
- Traditional Authority (iii)
- Land Claimants (iv)
- Lawful land occupier (V)
- The Department of Land Affairs, (vi)
- Any other person (including on adjacent and non-adjacent properties) whose socio-(vii) economic conditions may be directly affected by the proposed prospecting or mining operation
- The Local Municipality, (viii)
- The relevant Government Departments, agencies and institutions responsible for the (ix) various aspects of the environment and for infrastructure which may be affected by the proposed project.

B. Report on the results of consultation

- Methodology applied to consultation.
 - 1.1. Name the community or communities identified, or explain why no such community was identified.

Thera are no communities adjacent to this application area.

1.2. Specifically state whether or not the Community is also the landowner. No, the land is privately owned.

 State whether or not the Department of Land Affairs been identified as an interested and affected party.

NO

- State specifically whether or not a land claim is involved.
 No landclaim.
- Name the Traditional Authority identified

N/A

 List the landowners identified by the applicant. (Traditional and Title Deed owners)

Noord Vrystaat Graan en Vee (Pty) Ltd. (represented by the director Mr. C.J. Terblanche from C.J.Terblanche Beleggings (Pty) Ltd.) is the landowner of a certain portion of portion 6 (portion of portion 1) of the farm Woodlands 407.

List the lawful occupiers of the land concerned.

Nobody is living on the land concerned.

1.8. Explain whether or not other persons' (including on adjacent and non-adjacent properties) socio-economic conditions will be directly affected by the proposed prospecting or mining operation and if not, explain why not.

As this is only a 1.5 ha Mining Permit and the application area is not boundering any neighbours, but the said landowner. The 1.5 hectare will be out of agricutural use for the mining period which will have a very small affect on the landowner as this area is used only for grazing. Operations will only during day time there will be no of the neighbours affected.

1.9. Name the Local Municipality identified by the applicant

Ngwathe Local Municipality

1.10. Name the relevant Government Departments, agencies and institutions responsible for the various aspects of the environment and for infrastructure which may be affected by the proposed project.

National Deparment of Agriculture

Department of Water Affairs and Forestry

Department of Agriculture Conservation and Environment (Free-State)

1.11. Submit evidence that the landowner or lawful occupier of the land in question, and any other interested and affected parties including all those listed above, were notified.

The above named Departments will be notified and consulted with as part of the EMP.

See annexure A.

- Description of the existing status of the cultural, socio-economic or biophysical environment, as the case may be, prior to the proposed prospecting or mining operation.
 - 2.1.1. Confirm that the identified and consulted interested and affected parties agree on the description of the existing status of the environment.

Yes.

2.1.2. Describe the existing status of the cultural environment that may be affected

There are no buildings on the land concerned and no cultural environment that can be impacted upon.

 2.1.3. Describe the existing status of any heritage environment that may be affected There are no graves on this property.

2.1.4. Describe the existing status of any current land uses and the socioeconomic environment that may be directly affected

Will be addressed in the EMP.

2.1.5. Describe the existing status of any infrastructure that may be affected.

No infrastructure will be affected

2.1.6. Describe the existing status of the biophysical environment that will be affected, including the main aspects such as water resources, flora, fauna, air, soil, topography etc.

Will be descibed in the EMP.

2.1.7. Provide any relevant additional information.

None

- 3. The anticipated environmental, social or cultural impacts identified.
 - 3.1. Confirm that the community and identified interested and affected parties have been consulted and that they agree that the potential impacts identified include those identified by them.
 - Provide a list and description of potential impacts identified on the cultural environment.

There will be no impact on cultural environment as no cultural activities exist

 Provide a list and description of potential impacts identified on the heritage environment, if applicable.

No impact, no grave or any heritage structures on site.

3.1.3. Provide a list and description of potential impacts identified on the socioeconomic conditions of any person on the property and on any adjacent or non adjacent property who may be affected by the proposed prospecting or mining operation.

Nobody is living on the land concerned and none of the adjacent neighbours will be affected.

3.1.4. Provide a list and description of potential impacts (positive & negative) identified on: employment opportunities, community health, community proximity.

Positive impact: Potential job creation for Parys community.

3.1.5. Provide a list and description of potential impacts identified on the biophysical environment including but not be limited to impacts on: flora, fauna, water resources, air, noise, soil etc.

a. High impact on soil as test pits and excavations will disturbed the soil.

b. Medium impact on the plant life as the grass will be disturbed .

c. Low impact on animal live as the operations will be concentrated on a small area at a time.

d. No impact on ground water quantity as no water will be used for prosessing.

3.1.6. Provide a description of potential cumulative impacts that the proposed operation may contribute to considering other identified land uses which may have potential environmental linkages to the land concerned.

The only potential comulative impact can be noise levels if mining or prospecting on the adjacent farms starts at the same time.

- Land use or development alternatives, alternative means of carrying out the proposed operation, and the consequences of not proceeding with the proposed operation.
 - 4.1. Provide a list of and describe any alternative land uses that exist on the property or on adjacent or non-adjacent properties that may be affected by the proposed mining operation.

No alternative uses.

4.2. Provide a list of and describe any land developments identified by the community or interested and affected parties that are in progress and which may be affected by the proposed mining operation.

No land developments.

4.3. Provide a list of and describe any proposals made in the consultation process to adjust the operational plans of the mine to accommodate the needs of the community, landowners and interested and affected parties.

No proposals or objections made.

 4.4. Provide information in relation to the consequences of not proceeding with proposed operation

The existing workforce of the applicant will be impacted upon negatively.

- Description of the process of engagement referred to in 3.2.1 and 3.2.2 above with identified communities, landowners and interested and affected parties.
 - 5.1. Provide a description of the information provided to the community, landowners, and interested and affected parties to inform them in sufficient detail of what the prospecting or mining operation will entail on the land, in order for them to assess what impact the prospecting will have on them or on the use of their land;

The landowner is also the applicant and the neighbours were informed personally by the applicant, see annexure A.

- 5.2. Provide a list of which of the identified communities, landowners, lawful occupiers, and other interested and affected parties were in fact consulted.
 See list attached as Annexure A, the applicant is also the landowner.
- 5.3. Provide a list of their views raised in regard to the existing cultural, socioeconomic or biophysical environment, as the case may be.

None

5.4. Provide a list of their views raised on how their existing cultural, socio-economic or biophysical environment potentially will be impacted on by the proposed prospecting or mining operation.

No objections were raised.

- 5.5. Provide list of any other concerns raised by the aforesaid parties.
 No objection.
- 5.6. Provide the applicable minutes and records of the consultations as appendices.

See Annexure A

5.7. Provide information with regard to any objections received.

No Objections received.

6.	Describe the most appropriate means to carry out the proposed operation with
	due accommodation of the issues raised in the consultation process.

No issues raised

C. IDENTIFICATIONOF THE REPORT

The report on the results of consultation must, at the end of the report include a certificate of identification as follows;

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report comprises the results of consultation as contemplated in Section 16 (4) (b) or 27 (5) (b) of the Act, as the case may be.

Full Names and Surname	DE Erasmus
Identity Number	7009075033088

P O Box 6499 Flamwood 2572 Fax. 018-468 4015

Cell. 082 895 3516 E-mail: dera@xsinet.co.za

15 July 2015

Environmental Consultants

The Regional Manager Department of Mineral Resources - Free State Region Private bag X33 Welkom 9460

Reference No. FS 30/5/1/3/2/10140MP

RESULT OF CONSULTATION WITH I & AP'S FOR THE MINING PERMIT APPLICATION: C.J. TERBLANCHE BELEGGINGS (PTY) LTD. OVER A CERTAIN AREA OF PORTION 6 (PORTION OF PORTION 1) OF THE FARM WOODLANDS 407, MAGISTERIAL DISTRICT OF PARYS.

Name of Interested/ affected party	the Public participation process: Contact details: Address & telephone number	How did consultation take place?	What was his / her main concern about the operation?
1. Noord Vrystaat Graan en Vee (Pty) Ltd. (represented by the director C.J. Terblanche) (Lendowner and applicant on the farm Woodlands 407)	Cell: 082 389 6554 P. O. Box 283 Sasolburg 1947	Personally	Didn't have any objection as the applicant is also the landowner.
2. P.J. van Rensburg (Neighbour on the farm Woodlands)	Cell: 073 793 2781 Tel: 056 811 4607 The farm Woodlands Parys 9585	Personally, Telephonically, Via e-mail.	Didn't have any objection.
3. T. van Heerden (Neighbour on the farm Welbedacht 382)	Cell: 083 371 2555 Tell: 056 818 1202 P.O. Box 730 Vanderbijlpark 1900	Personally, Telephonically, Via e-mail.	Didn't have any objection.

For any further comments or enquiries please contact Daan Erasmus.

Yours sincerely

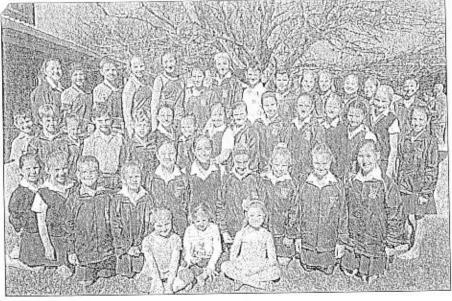
RECORD OF PUBLIC PARTICIPATION AND RESULT THEREOF

	Background:
MINING 28 of 2 MAGIS	rewith confirmed that C.J. TERBLANCHE BELEGGINGS (PTY) LTD applied for a SPERMIT under the Minerals and Petroleum Resources Development Act, 2002 (Act 2002), OVER A PORTION OF PORTION 6 (OF 1) THE FARM WOODLANDS 407, STERIAL DISTRICT OF PARYS, Free State Province.
His mir Rock) of of two	ning activities for Stone Aggregate; Gravel; Gravel, Sand (Manufactured from Hard & Dolomite, will mainly consist of opencast excavations which will extent over a period years.
2.	Interested and/or Affected Party consultation:
ı, C discus	Tvon Reneburg confirm that the mining activities were explained and sed with me, in my capacity as:
•	NEIGHBOUR on the farm. Woodlands ACT (a) on the Robb side of the proposed mining activities.
today,	do not comment on the issuing of this mining permit within 14 (fourteen) days as from the applicant shall accept that you have no objection to the issuing of the above oned mining permit.
1	do not have an objection do have an objection towards the
prop	osed mining activities.
Obje	ctions towards the proposed mining activities are:
355055	

	& is being
Sign	Date: 15.7 205
4.5	_1 ~1 ~1 ~1

RECORD OF PUBLIC PARTICIPATION AND RESULT THEREOF

1.	Background:	*
MININ 28 of MAG	nerewith confirmed that C.J. TERBLANCHE BELEG NG PERMIT under the Minerals and Petroleum Resor 2002), OVER A PORTION OF PORTION 6 (OF 1) ISTERIAL DISTRICT OF PARYS, Free State Provinc	THE FARM WOODLANDS 407, e.
Rock	nining activities for Stone Aggregate; Gravel; Grave) & Dolomite, will mainly consist of opencast excavat o years.	el, Sand (Manufactured from Hard ions which will extent over a period
2.	Interested and/or Affected Party consultation:	
I, J	Signal VAN HEIRIE Confirm that the min ussed with me, in my capacity as:	ing activities were explained and It 282 Dirt Pary,
toda	ou do not comment on the issuing of this mining perm y, the applicant shall accept that you have no obju- ntioned mining permit.	sit within 14 (fourteen) days as from
1	do not have an objection	e an objection towards the
pro	posed mining activities.	
Obj	jections towards the proposed mining activities are:	<u> </u>
5555	//	
62.5		
Si Ad	gnature AU C. ddress: P.O. B.O.Y. 73.0 VANDIER 13.172: PARK	Date: 13/7/2015 Tel: 0.5 & 8181202 Cell: 083 371 8.55



Die Primêre skool HF Verwoerd het vanjaar 98 leerlinge in verskillende kategorieë vir die Vaaloewer-kunswedstryd Ingeskryf waar skitterende prestasies weer behaal is. Die leerlinge op die foto het almal A+-simbole verwert.



Leerlinge van die Primëre skool HF Verwoerd wie almal hut Unisa musiekeksamen prakties met tof geslaag het is agter van links Anné Kruger (graad 2 Lof 82%),Tiaan Bell (graad 3 Lof 80%) en Lana Burger (graad 1 Lof 82%). Voor is Blanke Piensar (graad 1 Lof 85%).



Dié leerlinge kon almal met pronkvere spog by vanjaar se Vaaloewer-kunswedstryd.



Die koor van HF Verwoerd Primêre skool het aan 6 Items by die Vaaloewer-kunswedstryd deelgeneem waar hulle 'n B+, 4 x A+ simbole en 'n A++ simbool verworf het.



ge onder leiding van Petra Pieters het aan blokfluit-items by die Vaal oewer-kunswedstryd deelgeneem. Hulle is van links voor McKayla Kriizinger (A), Barnard Vrey (A+) en Nika Viljoen (A). By hulle is Petra.

Mus-Ik teerlin-



Dia volgende learlinge Is van die leerlinge Arsimbole by vanjaar sa Vaaloewerkunswedstryd behaal het

NOTICE OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS & THE SUBMISSION OF AN ENVI-RONMENTAL MANAGEMENT PROGRAMME/PLAN

NOTICES .

NOTICE IS GIVEN IN TERMS OF SECTION 10 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AND IN TERMS OF THE ENVIRONMENTAL CONSERVATION ACT, 1989 (ACT 73 OF 1989). REGULATION 4(6) OF THE REGULATIONS PUBLISHED IN GOVERNMENT NOTICE NO. R1355 (OF 17 OCTOBER 1997) UNDER SECTION 26 OF THE INTENT TO CARRY OUT THE FOLLOWING ACTIVITIES:

- DESCRIPTION OF PROPOSED ACTIVITY OPENCAST EXCAVATIONS
- COMMODITIES: STONE AGGREGATE; GRAVEL), GRAVEL, SAND (MANUFACTURED FROM HARD ROCK) & DOLOMITE
- LOCATION THE APPLICATION AREA IS SITUATED 23 KM NORTH EAST FROM PARYS.
- EXTENT THE MINING AREA IS OVER A CERTAIN PORTION OF 5 HECTARES.
- NAME OF PROPONENT THE APPLICANT IS C.J. TERBLANCILE
 - BELEGGINGS (PTY) LTD. DMR REF.: F830/5/1/5/2/10140MP
- NAME OF CONSULTANT ALL INTERESTED AND AFFECT-ED PARTIES ARE INVITED TO REGISTER THEIR INTEREST IN WRITING TO: MR. DAAN ERASMUS OF DERA ENVIRONMEN-TAL CONSULTANTS P. O. BOX 6499 FLAMWOOD 2572 E-MAIL: DERA@XSINET.CO.ZA, FAX2MAIL: 086 5783 085, TEL: 018-468 5355.
- DATE OF PUBLICATION OF ADVERTISEMENT: THURSDAY 17 SEPTEMBER 2015.

IN ORDER TO ENSURE THAT YOU ARE IDENTIFIED AS AN IN-TERESTED AND/OR AFFECTED PARTY PLEASE SUBMIT YOUR NAME, CONTACT INFORMATION AND INTEREST IN THE MAT-TER TO THE CONSULTANT GIVEN ABOVE WITHIN 14 DAYS OF PUBLICATION OF THIS ADVENTISEMENT

THE RESERVE OF THE PROPERTY OF

C.J. TERBLANCHE BELEGGINGS (PTY) LTD

(REG NO: 1972/009864)

P.O. Box 283 SASOLBURG 1947

Tel: 016 976 0910

e-mail: terblanchetransport@gwssa.com

Department of Mineral Resources Private Bag X33 Welkom 9460

Re: Rehabilitation on the farm Woodlands 407, Parys District.

Your ref: FS30/5/1/3/2/10140MP

It is hereby confirmed that we have lodged an application for a Mining Permit on the above named farm.

We further confirm that this farm is registered in the name of Noord Vrystaat Graan en Vee Eiendoms Beperk of which Mr. C.J. Terblanche is also the owner and director.

We confirm that we are aware of the existing open trenches and will take full responsibility for this rehabilitation.

Regards.

Mokkie Fourie

Operations Manager

AKTE VAN TRANSPORT

NR: 7 9167/2006

EN die genoemde Komparant het verklaar dat sy/haar Prinsipaal waarlik en wettiglik die ondergenoemde eiendom verkoop het op 2 Maart 2006 en dat, die Komparant, in sy/haar voornoemde hoedanigheid hierby sedeer en transporteer aan en ten gunste van

NOORD VRYSTAAT GRAAN EN VEE (EDMS) BPK

EIENDOMS BEPERK
Registrasie Nr. 1973/010471/07

diese opvolgers in titel of regverkrygendes in volkome en vrye eiendom

GEDEELTE 6 (VAN 1) VAN DIE PLAAS WOODLANDS 407, DISTRIK PARYS, PROVINSIE VRYSTAAT

Groot 134,7209 (EENHONDERD VIER EN DERTIG KOMMA SEWE TWEE NUL NEGE) hektaar

Aanvanklik oorgedra en tans nog gehou kragtens Akte van Transport T20224/2002, met Kaart LG 502/2002 wat daarop betrekking het

- A. SUBJECT to a perpetual Servitude of Storage of Water and other rights of a Gauging Weir as defind in Sections 6 and 16 of Act No 18 of 1914, granted over a portion of the said property measuring 1,5 square roods, indicated by the figure A.B.C. South bank of River D. on diagram SG. 2382/1951, in favour of RAND WATER BOARD, as is more fully described in Notarial Deed of Servitude No. 89-S/1923.
- B. "VERDER ONDERWORPE aan 'n Notariële Prospekteer Kontrak soos meer ten volle sal blyk uit Notariële Prospekteer Kontrak Nr. K713/1995."

 , soos geskep in transportakte sf20224/2002 bransportakte 22022
- C. EN VERDER ONDERWORPE aan die volgende voorwaarde deur die Departement van Openbare Werke, Paaie en Vervoer van Provinsie Vrystaat opgelê in hulle toestemming gedateer 2 April 2002 tot die onderverdeling van die restant van gedeelte 1 van die plaas Woodlands 407, distrik Parys, groot 522,4374 hektaar:

"No buildings in connection with the subdivision must be nearer than 95 metres from the centre line of Secondary Road S171."

WESHALWE die Komparant afstand doen van al die reg en titel wat gemelde:

MARTHINUS PETRUS LINDEQUE

voorheen op genoemde eiendom gehad het en gevolglik ook erken dat hy/sy geheel en al van die besit daarvan onthef en nie meer daartoe geregtig is nie en dat, kragtens hierdie Akte genoemde:

NOORD VRYSTAAT GRAAN EN VEE (EDMS) BPK RIENDOMS BEPERK

COETZEES ING PROKUREURS

LEGALPERFECT Version 9.1.3 ATRFDOT_ALL DOC - 14-09-2005