MINING OF SAND AND GRAVEL FROM A PORTION OF THE FARM DOORNKRAAL 832, MALMESBURY, WESTERN CAPE PROVINCE

ENVIRONMENTAL AUDIT REPORT

 DMR REFERENCE NUMBER:
 WC 30/5/1/2/2/10096 MR

 AUDIT PERIOD:
 24 March 2021

PREPARED FOR:

Purple Rain Properties No 411 (Pty) Limited Contact Person: L.Burger Tel: 022 – 1250 042/3 Cell: 082 453 4345 Fax: 086 725 239 Postal Address: Po Box 536 Wellington 7654 Greenmined Environmental Auditor: Murchellin Saal Tel: 021 851 2673 Cell: 079 979 8766 Fax: 086 546 0579 Postal Address: Suite 62 Private Bag x15 Somerset West 7129

PREPARED BY:





PROJECT DETAIL:

Permit Number:	WC 30/5/1/2/2/10096 MR	Date of Commencement:	14 February 2018
Site Name:	Purple Rain	Inspection Date:	24 March 2021
Permit Holder:	Purple Rain Properties No 411 Pty Ltd	Other	Still outstanding (DWS) - Pretoria
Report Number:	4	Authorisations:	

DETAIL OF AUDITOR (APPENDIX 7 SUB-REGULATION 3(A) & (B)):

ECO:	Murchellin Saal
Expertise:	Mrs. MD Saal has 9 years of experience in environmental legal compliance audits, (GIS) geographic information system, mining right and permit applications and applications for environmental authorisations & Water use applications.
Declaration of Independence:	 I Murchellin Saal declare that – I act as independent environmental control officer in this compliance audit; I will perform the work relating to the audit in an objective manner, even if the results and findings are not favourable to the holder of the authorisation; I have expertise in conducting environmental compliance audits, including knowledge of the Act and regulations that have relevance to the activity; I will adhere to and comply with all responsibilities as indicated in the National Environmental Management Act and Environmental Impact Assessment Regulations. I do not have and will not have any vested interest in the activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014 (as amended 2017). Matuana Signature of ECO Enter 24 March 2021



SCOPE & PURPOSE OF ENVIRONMENTAL AUDIT (APPENDIX 7 SUB-REGULATION 3(C)):

This environmental audit report was compiled in terms of the requirements of the NEMA EIA Regulations, 2014 (as amended 2017).

OBJECTIVE:

The objective of the environmental performance assessment (EPA) is to evaluate compliance of the operational activities with the Environmental Management Programme Report (EMPR) and Environmental Authorisation as approved by the Department of Mineral Resources.

INSPECTED AREAS:

The inspection included an assessment of the mining right footprint area.

ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE (APPENDIX 7 SUB-REGULATION 3(F)):

The assumptions made in this document, stem from specific information gathered during the site audit and background information gathered from site management.



LOCATION:

Site Location:	The location is situated on a 115.43 ha area on the Farm Doornkraal No 832, Malmesbury, Swartland DC, Western Cape Province Approximately +/-11km south of Malmesbury.			
Site Coordinates:	A 33°33'10.140"S B 33°33'13.329"S C 33°33'36.500"S D 33°33'35.671"S E 33°34'02.986"S F 33°33'34.202"S G 33°33'36.693"S H 33°33'35.265"S I 33°33'35.294"S J 33°33'35.962"S K 33°33'28.382"S L 33°33'24.349"S M 33°33'14.143"S	18°45'11.950"E 18°45'20.605"E 18°45'30.482"E 18°45'38.087"E 18°45'17.731"E 18°45'06.759"E 18°44'58.384"E 18°44'56.817"E 18°44'55.352"E 18°44'39.204"E 18°44'35.475"E		

PROJECT DESCRIPTION:

Purple Rain Properties (Pty) Ltd, applied for environmental authorisation to mine and process sand and gravel through crushing, screening and washing of 115.43ha of the farm Doornkraal 832, Malmesbury, Western Cape Province.

SITE CONDITIONS:

Warm and dry weather conditions

REPORTABLE ENVIRONMENTAL INCIDENTS:

Incident Date:	
Incident No:	
Incident:	The site has a register in place in the event of incidents.
How addressed:	
When addressed:	



ADOPTED METHODOLOGY (APPENDIX 7 SUB-REGULATION 3(D):

COMPLIANCE SCORE	DESCRIPTION
1	Task not achieved
2	Task 20% achieved
3	Task 50% achieved
4	Task 80% achieved
5	Task 100% achieved in accordance with the EMP

NON-COMPLIANCE SCORE	DESCRIPTION
1	LOW – Mitigation not needed / mitigation measures to be maintained
2	MEDIUM – Mitigation should be considered
3	HIGH – Mitigation compulsory

INSPECTION ASPECTS:

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
LEGISLATION COMPLIANCE:				
National Environmental Management Act,1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2014	5	-	Compliant	
National Environmental Management Act: Biodiversity Act, 2004 (Act No. 10 of 2004) and amendments	5	-	Compliant	
Mine Health and Safety Act, 1996 (Act No 29 of 1996)	5	-	Compliant	
Copy of the EA and EMPr available on site	1	3	Non - Compliant	Site Manager was instructed to ensure the ECO file with the EA and EMPr is on site always.
Mineral and Petroleum Resources Development Act	3	3	Partially Compliant	Client instructed to ensure all the conditions listed in EA is implemented. Ensure boundary markers are clearly visible.
Department of Water and Sanitation)Act 1998	3	3	Partially Compliant	Application currently awaiting final signature, awaiting outcome after the lockdown period.
National Heritage Resources Act No 25 of 1999	5	-	Compliant	
Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983)	5	-	Compliant	
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004)	5	-	Compliant	
Western Cape Nature Conservation Act, 1998 (Act 10 of 1998)	3	3	Non - Compliant	Buffer areas must be implemented around wetland areas.
Western Cape Land Use Planning Act, 2014 (Act No. 3 of 2014)	5	-	Compliant	
Swartland Municipality: Land Use Planning Bylaws, 2015 (No 264 of 2015) Swartland Municipal Spatial Development Framework	5	-	Compliant	Application approved on 21 January 2019.
Western Cape Provincial Spatial Development Framework	5	-	Compliant	18 February 2019



DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS		
ASPECTS OF THE AFFECTED ENVIRONMENT						
TOPSOIL MANAGEMENT (FBAR F	PG NO 136-137)					
The upper 500 mm of the soil, whether it contains gravel or not, must be stripped and stockpiled before mining.	5	-	Compliant	Application in start-up phase.		
Topsoil is a valuable and essential resource for rehabilitation and it must therefore be managed carefully to conserve and maintain it throughout the stockpiling and rehabilitation processes.	5	-	Compliant			
Topsoil stripping, stockpiling and re- spreading must be done in a systematic way. The mining plan have to be such that topsoil is stockpiled for the minimum possible time by rehabilitating different mining blocks progressively. Topsoil must ideally be used for rehabilitation within 3 months of it being stockpiled.	5	-	Compliant	The 1 st mining area was completed and the rehabilitated.		
Topsoil stockpiles must be placed in previously disturbed areas as far away from wetlands and watercourses as possible. No topsoil or other materials or equipment may be stored in the no-go areas or buffer areas.	5	-	Compliant	Client was instructed on the placement of all stockpiles.		
Topsoil heaps may not exceed 1.5 m.	5	-	Compliant			
Topsoil stockpiles must be protected against losses by water and wind erosion. Stockpiles must be positioned	5	-	Compliant	Stockpiles will be placed on levelled areas		



DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
so as not to be vulnerable to erosion. The establishment of plants on the stockpiles will help to prevent erosion.				
The stockpiled topsoil must be evenly spread over the entire mining area, so that there is a depth of 500 mm of sandy topsoil above the underlying clay. The depth must be monitored during spreading to ensure that coverage is adequate and even.	5	-	Compliant	
Strive to re-instate topsoil at a time of year when vegetation cover can be established as quickly as possible afterwards, so that erosion of returned topsoil by both rain and wind, before vegetation is established, is minimized. The best time of year is at the end of the rainy season, when there is moisture in the soil for vegetation establishment and the risk of heavy rainfall events is minimal. areas or buffer areas.	5	-	Compliant	
A cover crop must be planted and established immediately after spreading of topsoil, to stabilize the soil and protect it from erosion. The cover crop must be fertilized for optimum production. It is important that rehabilitation be taken up to the point of cover crop stabilization.	5	-	Compliant	



DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Rehabilitation cannot be considered complete until the first cover crop is well established.				
Run-off water must be controlled via temporary banks during mining, where necessary on the slopes, to ensure that accumulation of run-off does not cause down-slope erosion.	5	-	Compliant	
The rehabilitated area must be monitored for erosion, and appropriately stabilized if any erosion occurs for at least 24 months after reinstatement.	5	-	Compliant	1 section fully rehabilitated.
All activities are within the approved boundaries	5	-	Compliant	Client to ensure that the boundary markers are visible.
VEGETATION MANAGEMENT (FB	AR PG NO 142)			
No vegetation, alien species or other is dumped in areas with indigenous vegetation	5	-	Compliant	
Temporary stockpiles free of weeds	5	-	Compliant	At the time of inspection all stockpiles were weed free.
Invader or exotic species controlled on the rehabilitated areas	5	-	Compliant	
Removal of invader or exotic plant species need to be done according to the weed and invader plant management plan.	5	-	Compliant	



DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Weed and invader plant management plan implemented	5	-	Compliant	
A 40 m buffer area must be demarcated, sign posted and managed as no-go area around areas with natural vegetation.	1	3	Non - Compliant	Client and site manager to ensure this is done prior to April inspection.
FAUNA (FBAR PG NO 144)				
All animals, birds and reptiles protected on site.	5	-	Compliant	
Mining area daily monitored for trapped fauna or snares	5	-	Compliant	
AIR QUALITY AND NOISE (FBAR	PG NO 134)			
Dust suppression implementation	5	-	Compliant	Water use application still in process. However if required water from the milkery will be used on discretion.
Dust suppression equipment functional	5	-	Compliant	
Vehicles utilising the access road are adhering to the speed 40km/h limit	5	-	Compliant	Speed limit sign visible.
Employees and staff conducted themselves in an acceptable manner.	5	-	Compliant	
No load music permitted on site	5	-	Compliant	
All stockpiling vehicles must be equipped with silencers and maintained in a road worthy condition	5	-	Compliant	



SURFACE AND STORM WATER MANAGEMENT (FBAR PG NO 139)						
Storm water diverted around the topsoil heaps, and access roads to prevent erosion and loss of material.	5	-	Compliant			
All effluents containing oil, grease or other industrial substances are removed from site	5	-	Compliant	At the time of inspection there was no visible industrial substances.		
Spills cleaned immediately and proof filed.	5	-	Compliant	No spills on site.		
Mining conducted in accordance with the best Practice Guidelines for small scale mining	5	-	Compliant			
Damming of water at the mining area prevented	5	-	Compliant			
VISUAL EXPOSURE (FBAR PG NO	D 133)					
Is the contractor implementing good visual and housekeeping standards	5	-	Compliant			
Concurrent rehabilitation must be done as strip mining progress to limit the visual impact on the aesthetic value of the area.	5	-	Compliant	1 st mining strip rehabilitated		
HAZARDOUS CHEMICAL MANAG	EMENT (FBAR PG. I	NO 139-140)				
Hazardous and general waste are stored in separate containers	5	-	Compliant	Three covered bins are located at the current mining area		
Hazardous waste stored in a sealed, non-leaking containers This must be removed daily.	5	-	Compliant			
All containers containing hazardous closed and store only in approved areas	5	-	Compliant			



Always put drip trays under vehicles and machinery	5	-	Compliant	All vehicles will be serviced off site.
Upon discovery of a hydro-carbon spill (leak), work is to stop immediately and the manager is to be notified to initiate a clean-up.	5	-	Compliant	
WASTE MANAGEMENT (FBAR PG	i. NO 139)			
Site free of day-to-day litter	5	-	Compliant	Site was clean and tidy.
Waste separated into labelled containers	5	-	Compliant	Three covered bins are located at the current mining area
Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc, should be stored in a container with a closable lid.	5	-	Compliant	
No waste stockpile area established outside the stockpiling site boundaries.	5	-	Compliant	
Vehicle maintenance conducted within the service bay area.	5	-	Compliant	
Any effluents containing oil, grease or other industrial substances to be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognised facility.	5	-	Compliant	
Diesel bowser to be equipped with a drip tray at all times	5	-	Compliant	
POTABLE WATER AND ABLUTION FACILITIES (EMPR PG NO 145)				
Ablution facilities available on site more than 200m from a watercourse	5	-	Compliant	



Chemical toilets serviced regularly by an accredited waste handling contractor	5	-	Compliant	It has not been necessary for any cleaning to date.
FIRE MANAGEMENT				
Firefighting equipment available on-site	5	-	Compliant	Firefighting equipment is kept in the loader.
No open fires at mining area allowed	5	-	Compliant	
MINE AND EQUIPMENT MANAGE	MENT (EMPR PG NC	D 193)	-	
Mining will be done in daylight hours	5	-	Compliant	
Mining conducted within approved footprint area	5	-	Compliant	
Incident register maintained on site	5	-	Compliant	
Emergency preparedness plan and register implemented on site	5	-	Compliant	
ACCESS ROADS, VEHICLES AND	TRANSPORTING O	F MATERIAL (EMPR PO	G NO 138)	
Storm water must be diverted around the access road and haul roads to prevent erosion.	5	-	Compliant	
Vehicular movement must be restricted to existing access routes to prevent crisscrossing of tracks through undisturbed areas.	5	-	Compliant	
The existing gravel tracks, that is present on the farmland area, be utilized as internal roads in order to access the mining development.	5	-	Compliant	
EXISTING INFRASTRUCTURE				



ESKOM INFRASTRUCTURE (EMPR PG NO 144)				
Buffers of 10 m must be implemented and maintained in respect of the two Eskom power lines to ensure that: No construction work is executed too close to any Eskom Structure or structure-supporting mechanism; No work or machinery is near to the conductors of the respective power lines; and There is an obstruction free zone around all pylons.	1	3	Non -Compliant	Client was instructed to implement the boundary and no go areas as a matter of urgency. However at the time of inspection this was still not implemented and they were again requested to do this urgently.
No stockpiling of material is allowed within the servitude areas.	5	-	Compliant	Demarcations needs to be in place to ensure no stockpiling is done in servitude areas.
TELKOM INFRASTRUCTURE (EMPR PG NO 144)				
As the Telkom mast is situated outside the proposed footprint of the mining area, the mining activities are not expected to impact the infrastructure. The mast must however be managed as a no-go area and should any damage occur Telkom must immediately (within 2 hours) be notified.	3	1	Partially Compliant	Area barricaded – A No Go sign must be erected.
EMPLOYEE AND SAFETY MANAGEMENT (EMPR PG NO 145)				
Workers inducted and informed of EMP conditions	1	3	Non - Compliant	Site Manager to be fully familiarized with the EMPr.
Suitable covered receptacles should be available at all times	5	-	Compliant	



Workers must have access to the correct personal protection equipment (PPE) as required by law.	5	-	Compliant	
Effective access control to prevent unauthorised entry.	5	-	Compliant	
Area fenced off with lockable gates	5	-	Compliant	The site has two lockable gates.

<u>COMMENTS OR COMPLAINTS RECEIVED FROM I&AP'S</u> (APPENDIX 7 SUB-REGULATION 3(G) & (J)):

No written comments /complaints were received during the audit period February to March 2021.

GENERAL REPORT:

Compliance of the mining site with the EMP approved by DMR was reviewed during the site assessment. The Mining area recorded a compliance score of 87% for the month of 24 March 2020.

The Mining right was executed ("Effective Date) on the 7th of May 2019. The site commenced on the 14th of February 2020. Site induction was also done on the 14th of February 2020. The first inspection was conducted on the 27th of February 2020. At the time of inspection, no mining had started.

All ECO reports are filed on the Greenmined Environmental website, www.greenmined.co.za.

The Swartland Municipality approved the zoning application on 21 January 2019. The Department of Environmental Affairs and Development Planning approved the Land Use Application on February 2019. All mining activities and infrastructure will be taking place within the mining right area. At the time of inspection, the client was instructed on notice boards and boundary areas that must be implemented.

A water use application was submitted in October 2017. The outcome of this application is still outstanding. However, it has been confirmed that the application was sent to head office awaiting approval signature.

Management of Dust Generation:

The fallout dust monitoring was implemented on the 14th of February 2020. The client incorrectly placed the dust monitoring poles and was instructed to move to the poles to the provided coordinates. Poles are all in the correct positions now.

Waste Management:

The client has placed three sealable refuge bins on site. For hazardous waste, general waste and Non-biodegradable waste. Up to date no hazardous waste was generated on site. A register must be kept on site with proof of waste removals. *An oil spill kit must be kept on site.*

Telkom Mast:

As the Telkom mast is situated outside the proposed footprint of the mining area, the mining activities are not expected to impact the infrastructure. The mast must however be managed as a no-go area and should any damage occur Telkom must immediately (within 2 hours) be notified. The area is currently barricaded; client must still erect a no go sign for this section.

Eskom: Client still needs to implement barricading

No work is allowed within Eskom reserve areas and servitudes (132kV - 15.5 m & 11kV - 9.0 m either side of centre line);

- No stockpiling of material will be allowed within the servitude areas
- No construction work may be executed closer than 10 meters from any Eskom structure or structure-supporting mechanism;
- No work or no machinery nearer than 3.8 m to the conductors of the 132 kV and 3.0 m to the 11kV;
- Eskom must have at least a 10m obstruction free zone around all pylons; Any development which necessitates the relocation of Eskom's services will be to the account of the developer."

Access roads:

Vehicles utilising the access road must restrict speed to 40km/h.

These restrictions were erected and placed in all the areas which are highly visible.

Hauling routes for construction vehicles and machinery is clearly marked and appropriate signalling was posted.



Employee and Safety Management:

Workers were inducted and informed of EMPr conditions. All workers signed as confirmation of understanding the induction. Appropriate notification signage was erected at the mining site. This gives a clear warning to the public about the hazard around the mining site and presence of heavy vehicles and machinery.

DOCUMENT CHECKLIST:

•	Environmental Authorisation	- Present
•	Mining Right	- Present
•	Environmental Management Plan	- Present
•	Confirmation of Contractors	
	Awareness of EA Conditions	- Present
•	Environmental Induction and Awareness Training	- Present
•	Letter of Enactment to DMR	- Present
•	Alien Vegetation Control Programme	- Present
•	Dust Monitoring Plan	- Present
•	Emergency Preparedness Plan	- Present
•	Complaints Register	- Present
•	Waste Registers	- Present
•	Reporting of Environmental Incidents	- Present
•	Incidents and Accidents Register	- Present
•	Environmental Audit Report	- Present
•	Water Authorisation	- Not present application currently at head office awaiting approval

from DWS. POSITIVE FINDINGS:

- Bins with lids were placed closer to the current mining area.
- Chemical toilet.
- Eating area
- Dust unit 4 moved to correct location.
- Housekeeping in a good state.
- Gates were closed no animals in the mining area
- Speed limit signs erected

NEGATIVE FINDINGS:

- Client still to implement clear visible boundary markers,
- Bin labels
- No go area signage boards



- Buffers of 10m must be implemented and maintained in respect of the two Eskom power lines to ensure that no
 construction work is executed close to any Eskom structure or structures supporting mechanisms. No work or
 machinery is near to the conductors of the respective power lines and there is an obstruction free zone around all
 pylons.
- A 40 m buffer area must be demarcated, sign posted and managed as no-go area around areas with natural vegetation.

MATTERS TO BE ADDRESSED ON SITE:

- Client still to implement clear visible boundary markers,
- Bin labels
- No go area signage boards
- Buffers of 10m must be implemented and maintained in respect of the two Eskom power lines to ensure that no
 construction work is executed close to any Eskom structure or structures supporting mechanisms. No work or
 machinery is near to the conductors of the respective power lines and there is an obstruction free zone around all
 pylons.
- A 40 m buffer area must be demarcated, sign posted and managed as no-go area around areas with natural vegetation.
- Site manager must make sure the ECO file with EA and MP is on file and familiarize himself with the EMPr.

ABILITY OF EMPR TO ADEQUATELY MANAGE OR MITIGATE ENVIRONMENTAL IMPACTS (APPENDIX 7 SUB-REGULATION 3(E):

It is believed that the EMPR currently adequately manage and/or mitigate environmental impacts at mining area.

NEED FOR AMENDMENT OF THE EMPR:

N/A

FINANCIAL PROVISION:

The 2019 financial provision required to rehabilitate the processing area in accordance with the Guideline Document for the evaluation of the Quantum of Closure-related Financial Provision by a Mine and as prescribed in terms of Regulation 54 (1) is R923 967.85.

Bank Guarantee: R923 967.85



ECO SIGNATURE:

NAME:	SIGNATURE:	DATE:
Murchellin Saal	Msd.	24 March 2020

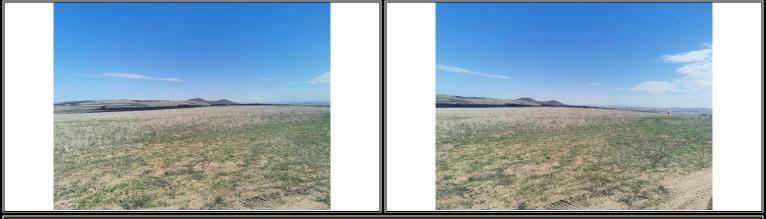
PHOTOGRAPHS:











ESKOM POWER LINES: Buffers of 10m must be implemented and maintained in respect of the two eskom power lines to ensure that no construction work is executed close to any eskom structure or structures supporting mechanisms. No work or machinery is near to the conductors of the respective power lines and there is an obstruction free zone around all pylons.





1ST MINING STRIP – COMPLETELY REHABILITATED

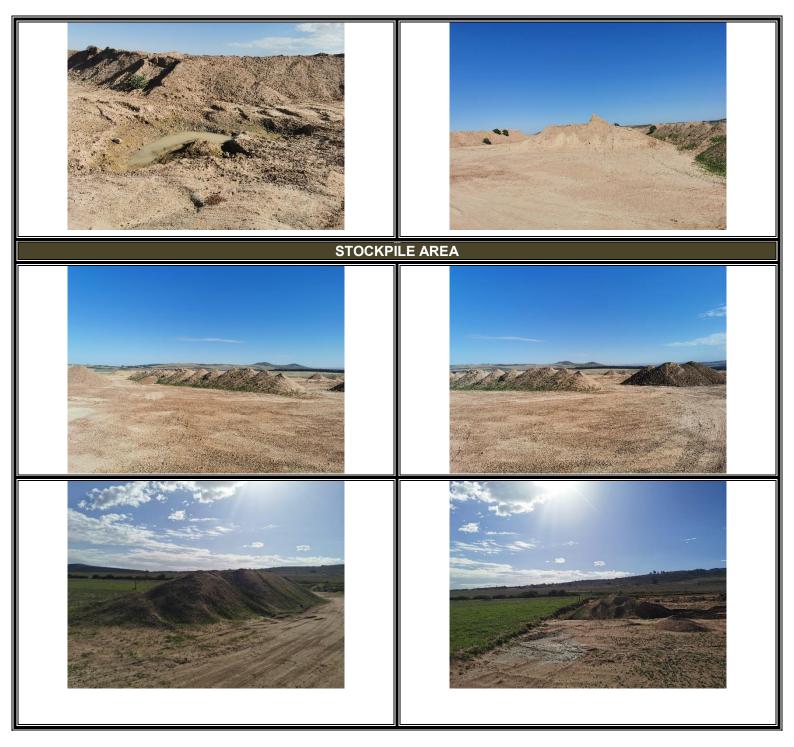












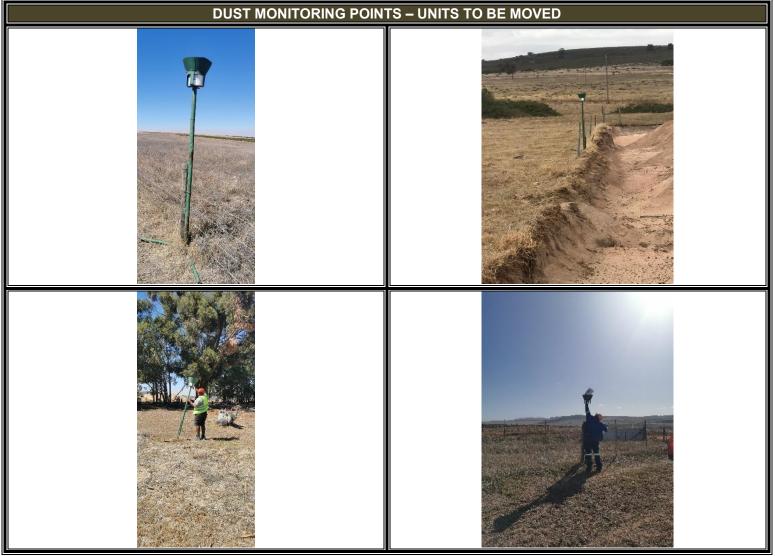






TELKOM MAST—AREA BARACADED CLIENT TO INCLUDE A SIGNAGE BOARD AS NO GO AREA	TOILETS – CLOSE TO 1 ST MINING STRIP AREA (NOT IN USE AT TIME OF INSPECTION)
ESKOM POWER LINES: Buffers of 10m must be implemented ensure that no construction work is executed close to any eskom s machinery is near to the conductors of the respective power lines	structure or structures supporting mechanisms. No work or





END OF MARCH REPORT