# MTHATHA QUARRY PORTION OF ADMINISTRATIVE AREA NO 11 CALLED ZITATELE, MTHATHA, EASTERN CAPE PROVINCE

ENVIRONMENTAL PERFORMANCE ASSESSMENT / ENVIRONMENTAL AUDIT REPORT

DMRE REFERENCE NUMBER:	EC 30/5/1/2/2/0135 MR
AUDIT PERIOD:	August 2023 – May 2024

PREPARED FOR: Transkei Quarries (Pty) Ltd (Mtatha Quarry) Contact Person: Mr A Leeuw Tel: 047 532 7962 Cell: 082 823 7160

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MAY 2024





### 1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT HOLDER			
Company Name	Mthatha Quarry (Pty) Ltd			
Contact Person	Mr. Anthony Leeuw			
Tel Number	047 532 7962			
Cell Number	082 823 7160			
E-mail Address	Anthony.I@raumix.co.za			
Postal Address	P.O. Box 886 Mthatha 5100			
ITEM	CONSULTANT DETAIL			
Company Name	Greenmined Environmental (Pty) Ltd			
Contact Person	Christine Fouché			
Tel Number	021 851 2673			
Cell Number	082 811 8514			
E-mail Address	Christine.f@greenmined.co.za			
	Postnet Suite 62			
Postal Address	Private Bag x15 Somerset West			
	7129			
ITEM	LOCATION AND AREA INFORMATION			
Site Name	Mthatha Quarry			
Property Description	Portion of Administrative Area No 11 called Zitatele			
Location	Mthatha Quarry is situated $\pm 5$ km north-east of Mthatha central. Access to the mine is directly off the N2 highway through the village of Ngolo.			
Size of Mining Area	48.7446 ha			





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### 2. ENVIRONMENTAL AUDIT REPORT

### PROJECT DETAIL

Right Number:	EC 30/5/1/2/2/0135 MR	Date of Commencement:	November 2009
Site Name:	Mthatha Quarry	Inspection Date:	23 May 2024
Right Holder:	Transkei Quarries (Pty) Ltd	Other Authorisations:	Water Use Authorisation:
Report Number:	02	Other Authorisations.	28096792

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

ECO:	Christine Fouché	
EXPERTISE:	Zoology with eighteen years experience compliance monitoring in South Africa Assessment Practitioner (registra	e Conservation and a BSc in Botany and ce in environmental impact assessments and a. Ms Fouché is a registered Environmental ation no: 2019/1003) with EAPASA hers Association of South Africa) since 2019.
DECLARATION OF INDEPENDENCE:	<ul> <li>I act as independent environmental</li> <li>I will perform the work relating to the results and findings are not favour</li> <li>I have expertise in conducting environmental frequencies and comply with all Environmental Management Acta Regulations.</li> <li>I do not have and will not have and set and</li></ul>	environmental control officer declare that- al control officer in this compliance audit; the audit in an objective manner, even if the rable to the holder of the authorisation; environmental compliance audits, including ons that have relevance to the activity; I responsibilities as indicated in the National t and Environmental Impact Assessment any vested interest in the activity other than ed in terms of the Environmental Impact s amended). Date: 01 July 2024





### <u>SCOPE & PURPOSE OF ENVIRONMENTAL AUDIT</u> (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). The EAR focussed on Section 6 Environmental Management Programme of the EMPR (November 2008).

### **OBJECTIVE:**

The objective of the environmental audit report (EAR) is to evaluate compliance of the operational activities with the Environmental Management Programme Report (EMPR) as approved by the Department of Mineral Resources and Energy. To evaluate the effectiveness of the EMPR, identify shortcomings, and discern the need for changes to the EMPR.

### **INSPECTED AREAS:**

The inspection included an assessment of the following areas:

- Offices, storage areas, and supporting infrastructure,
- Diesel storage,
- Workshop and wash bay,
- Salvage yard,
- Plant and stockpile areas;
- Quarry pit,
- Graves and monument,
- East Coast Asphalt Yard, and
- Scribante Readymix Yard.

To establish the environmental compliance assessment of the operation, the mine was inspected by the Environmental Control Officer, Christine Fouché, of Greenmined Environmental accompanied by site management.

### 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 provided by site management. The findings of the previous environmental performance assessment (2023) were also considered. This audit did not consider health and safety aspects, was not intended as a legal assessment, nor was the aspects of the Social and Labour Plan and/or Mine Works Programme reviewed.





### LOCATION

Site Location:	Mthatha Quarry is situated ±5 km north-east of Mthatha central along the N2 when driving through the village of Ngolo.			
Site Map:		Inage to 2023 Airbus		
	A 31º33'15.58"	28º50'07.67"		
	B 31º33'20.13"	28º50'23.18"		
	C 31º33'18.65"	28º50'27.38"		
	D 31º33'11.38"	28º50'25.34"		
	E 31º33'12.10"	28º50'29.58"		
Site Coordinates:	F 31º33'06.54" 28º50'33.75"			
	G 31º33'12.62"	28°50'38.11"		
	H 31º33'45.07" J 31º33'42.64"	28º50'27.53" 28º50'12.06"		
	K 31º33'29.14"	28º50'18.86"		
	L 31º33'26.09"	28°50'11.02"		
	M 31º33'24.07"	28º50'11.33"		
	N 31º33'21.03"	28º50'01.23"		





### **PROJECT DESCRIPTION**

Dolerite is mined using conventional drilling, blasting, and bench-mining methods, with loosened material loaded to haul trucks and transported to the processing plant. The material goes through several crushers and screens to produce different sized aggregates and sand for the ready-mix, construction and road building industry.

### SITE CONDITIONS

Sunny, windless day with dry soil conditions.

### **REPORTABLE ENVIRONMENTAL INCIDENTS**

Incident Date:	
Incident No:	The quarry has an online system where all accidents and incidents are logged.
Incident:	No major incidents occurred during the audit period that had to be reported to
How addressed:	the DMRE.
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
	L	EGISLATION COM	IPLIANCE:	
National Environmental Management Act, 1998 (Act No 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended)	5	-	Compliant	The competent authority deems the approved EMPR and MR of the quarry compatible with an Environmental Authorisation in terms of NEMA, 1998 and the EIA Regulations, 2014 (as amended).
Copy of the EA available on site	N/A	-	-	
Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002)	4	3	To be addressed	<ul> <li>A Section 102 amendment application in terms of the MPRDA needs to be submitted to extend the mining footprint and include the sections were mining historically exceeded the boundary.</li> <li>Since the 2023 EPA, the MWP of the mine was amended and submitted to the DMRE. The S102 application still needs to be submitted.</li> </ul>
Mining right available on site	5	-	Compliant	-
Mine plan annually reviewed	5	-	Compliant	The mine plan was reviewed in April 2024.
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004)	5	-	Compliant	<ul> <li>Although the mining activities do not require an air emissions licence, the requirements of the NEM:AQA are considered on site.</li> <li>The NEM:AQA legal requirements for the sub-contractors, East Coast Asphalt (ECA) and Scribante Readymix (SR), were not assessed as part of this audit.</li> </ul>
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)	4	3	To be addressed	<ul> <li>The waste of the quarry is managed in accordance with the requirements of the NEM:WA.</li> <li>Waste management of East Coast Asphalt and Scribante improved since the 2023 audit. However, proof of safe disposal of all waste must be filed and available for auditing purposes.</li> </ul>





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
National Water Act, 1998 (Act 36 of 1998)	3	3	To be addressed	<ul> <li>The Quarry has an approved Water Use Authorisation that allows for the abstraction of water from the quarry pit.</li> <li>The Quarry does however have other water uses that require authorisation from DWS.</li> <li>The NWA legal requirements for the sub-contractors, ECA and SR, were not assessed as part of this audit.</li> </ul>
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	3	3	Being Addressed	Mthatha Quarry has an Alien Invasive Species Management Plan as well as an Alien Invasive Management Action Plan. The action plan divides the mining area into 17 sections that are progressively cleaned. Sections $1 - 6$ were cleaned during the audit period, although regrowth occurred in some of the areas.
	GENER	AL REQUIREMEN	rs (empr pg 3	1
Mining area demarcated with beacons	5	-	Compliant	The western side of the quarry is demarcated with beacons. The northern and eastern sides border the river, and the north-western boundary is fenced.
Working hours restricted to 07:00 – 17:00 Mon- Fri, 07:00-13:00 Sat, excl public holidays.	1	3	To be addressed	Presently the Quarry operates in two shifts from 07:00 - 17:00, and 17:00 – 04:00. This is in contradiction with the work hours stipulated in the EMPR.
		<b>TOPSOIL (EMPR</b>	PG 31):	
Topsoil removed from all areas where physical disturbance occur.	N/A	-	-	No topsoil was removed during the audit period as no natural vegetated areas were opened. Should mining extend to the northern side of the river, the topsoil must be stripped and stockpiled.
Topsoil stockpiles on high ground inside mining boundary outside the 1:50 flood level.	5	-	Compliant	Although the Quarry has very little topsoil, a topsoil stockpile is present near the south-western bench of the quarry.
Topsoil kept separate from overburden and not used for building or road maintenance.	5	-	Compliant	-





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Topsoil protected from wind- or surface run-off erosion.	5	-	Compliant	The topsoil heap has a vegetation cover.
	ACCE	SS TO THE SITE	EMPR PG 31):	
Access via the existing road leading between the N2 and the Mthatha Quarry security entrance.	5	-	Compliant	All mining related vehicles access the Quarry via the approved road.
Security access gate manned permanently.	5	-	Compliant	-
No other roads used to gain access to the quarry.	3	3	To be addressed	A community road does traverse the northern section of the mining area. Although this road is only used by the community (as a short-cut) and no mining related vehicles, its presence does cause associated issues such as illegal dumping of general waste by the community and the crossing of the Kangisa and Korana rivers without prior authorisation.
Roads adequately maintained to minimise dust, erosion, or surface damage.	5	-	Compliant	-
Liberation of dust effectively controlled (water spraying, speed)	5	-	Compliant	<ul> <li>Mthatha Quarry has a dust suppression contractor that daily combats dust at the quarry.</li> <li>Dust suppression at the ECA and SR sites also improved since the previous audit.</li> </ul>
	<b>CLE MAINTENANC</b>	E AND SECURED	STORAGE ARI	
Responsibility of vehicle maintenance and secured storage area was sub-consulted to Bell Equipment.	5	-	Compliant	Applicable to the Quarry equipment/vehicles.
Workshop and maintenance areas kept clean, and spillages properly cleaned.	4	3	To be addressed	<ul> <li>The workshop and maintenance areas at the Quarry is well managed.</li> <li>At the ECA and SR sites the maintenance of these areas improved substantially since the previous audit although additional attention should be paid to the cleaning of spillages and maintenance areas.</li> </ul>





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE	STATUS	COMMENTS
Storage area securely fenced and hazardous substances and stocks stored therein. Drip pans, concrete slab or impervious lining installed in storage areas to prevent soil and water pollution.	3	SCORE 3	To be addressed	<ul> <li>Mthatha Quarry improved the storage areas, bunds, wash bay and oil sump during the audit period. Drip trays were in use on the day of the audit. Some of the bunds need additional work to prevent spillages leaking from it, and the layout of the oil sump will be further improved.</li> <li>At the ECA and SR sites the management of the storage areas improved since the previous audit. Some of the bunded areas were repaired, and chemicals were placed within the bunds/drip trays. Refer to the General Report for the additional work needed at the two yards.</li> </ul>
No vehicles extensively repaired in the maintenance yard or off-site.	5	-	Compliant	-
	MAINTENANCE OF	VEHICLES AND	EQUIPMENT (E	MPR PG 32):
Maintenance of vehicles and equipment only done in the maintenance yard or off-site.	5	-	Compliant	This was true at the Quarry during the audit.
Mining equipment adequately maintained to prevent spills.	5	-	Compliant	
Hydrocarbon tanks bunded and the service area provided with a concrete slab with a sump for hydrocarbon collection.	3	3	To be addressed	Some of the bunds at the Quarry, ECA and SR yards need additional work.
Mining machinery or equipment do not constitute a pollution hazard.	5	-	Compliant	This appeared true at the time of the audit.
	WAS	STE DISPOSAL (E	MPR PG 33):	
Suitable covered receptacles always available and conveniently placed for the disposal of waste.	4	3	To be addressed	SR obtained new bins during the audit period. It is important that all drums (at ECA and SR) have lids and no general- and hazardous waste may be mixed.
Receptables containing hydrocarbons stored in a bunded area.	3	3	To be addressed	Mthatha Quarry was compliant at the time of the audit.





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Used oils, grease, hydraulic fluids placed in hazardous receptables and removed to a licenced disposal facility.	3	3	To be addressed	• The handling and storage of hydrocarbons at the ECA and SR sites improved but are not fully compliant yet.
Spills cleaned up immediately.	4	3	To be addressed	
Entire mining area subject to a monthly cleanup with specific attention to year end closure.	4	3	To be addressed	Cleaning of the ECA and SR sites improved since the previous audit.
On completion: all areas cleared of contaminated soil that is removed to a licenced waste disposal facility.	N/A	-	-	Not yet applicable as the Quarry is still operational.
All buildings, structures or objects at the vehicle maintenance yard and secured storage areas delt with in accordance with Section 44 of the MPRDA.	N/A	-	-	
Surface ripped or ploughed to a depth of 200 mm and topsoil spread evenly to its original depth.	N/A	-	-	
Site seeded with a vegetation mix adapted to reflect the local grassy vegetation.	N/A	-	-	
	OPERATING PROC	EDURES IN THE N	IINING AREA (B	
Mining only taking place within the approved demarcated mining area.	1	3	To be addressed	The quarry pit exceeds the approved mining right boundaries to the south.
<ul> <li>Restrictions on the potential impact on nearby drainage channels managed throughout the mining process to recommendations contained in the EMPR:</li> <li>Berm structure in place between the river channel and the mine excavation.</li> </ul>	3	3	To be addressed	<ul> <li>Berms have been installed along the reach of the river that borders the mining operations. Sediment traps of gabion rock were added at strategic points in the berms to filter sediment from the stormwater that drains into the river. It is important that the berms are maintained and may not be breached when water accumulates in the processing area or roads.</li> </ul>





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
<ul> <li>Mining related debris scattered in the drainage channels removed.</li> <li>No pumping of water into the river system allowed without DWS authorisation.</li> <li>Suitable silt trap/pond constructed in a low-lying area to collect surface run-off.</li> <li>Concrete wall constructed ±1 m high around the lowermost perimeter of the crusher, from the stockpile area in the west to the confluence of the two drainage systems and southwards beyond the existing excavations.</li> <li>Lowest position of the wall constructed with a spillway.</li> <li>Stormwater infrastructure indicated on the layout plans.</li> </ul>				<ul> <li>The debris cannot be removed from the drainage channels without causing major environmental impacts.</li> <li>The water being released into the river must still be authorised by DWS.</li> <li>The crossings through the Korana and Kangisa rivers must be authorised by the DWS.</li> <li>With the construction of the new processing plant, the addition of a silt trap/pond, and concrete wall is no longer deemed applicable to this site and should be removed when the EMPR is updated.</li> <li>The stormwater infrastructure must be indicated on the mine plans and a site specific stormwater management plan must be compiled.</li> </ul>
Watering applied to minimise the effect of dust generation, and noise kept within reason.	5	-	Compliant	As mentioned earlier, the mining area is constantly moistened by a water truck. Dust suppression also improved at the ECA and SR sites.
No workers allowed to damage or collect indigenous plants or snare animals.	5	-	Compliant	-
Grass and vegetation re-established on completion of mining activities.	N/A	-	-	No rehabilitated areas had to be seeded yet.
No firewood collected on site, and fires prohibited.	5	-	Compliant	-
	E	<b>XCAVATIONS (EM</b>	PR PG 34):	
Topsoil handled as described in the EMPR.	N/A	-	-	Not applicable as no topsoil was stripped during the audit period.





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Excavations only taking place within the approved demarcated mining area as per phased mining approach.	1	3	To be addressed	The quarry pit exceeds the approved mining right boundaries to the south.
Excavations made good as per the requirements of the EMPR with precision blasting implemented to meet the desired post- quarrying topography.	5	-	Compliant	Blasting at the quarry takes place in accordance with the requirements of the rock engineer.
	PROCESSING	AREAS AND WAS	<b>FE PILES (EMP</b>	R PG 35):
Quarry personnel accommodated off-site, and no overnighting allowed apart from the security staff.	5	-	Compliant	-
Field personnel have sufficient kitchen and sanitary facilities during working hours.	5	-	Compliant	The ablutions at the ECA and SR sites improved since the previous audit, and the septic tanks were cleaned.
Toilets provided and situated in an area where no negative impact occurs.	5	-	Compliant	
Clean water available to workers.	5	-	Compliant	The Quarry receives potable water from the municipality.
Rivers and groundwater not impacted negatively.	3	3	To be addressed	<ul> <li>As mentioned earlier, the stormwater berms at the Quarry may not be breached to allow the direct draining of runoff water into the river/streams. The crossings through the rivers must also be authorised by the DWS.</li> <li>The spillages at the ECA and SR sites do/may have a negative impact on the surface- and/or groundwater in the surroundings.</li> </ul>
No natural vegetation unnecessarily disturbed in and around the quarry site.	5	-	Compliant	-
Mining area and surrounds always kept neat and tidy.	4	3	To be addressed	The management of the ECA and SR sites improved, and the Quarry was neatly managed on the day of the inspection.





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Processing area and waste piles established within a clearly demarcated area to the west/north of the mining area.	5	-	Compliant	The processing plant is north of the quarry pit and indicated on the mine plans.
Dust suppressors added to the crushing plant and the stockpile area.	5	-	Compliant	Water sprayers are used on the crusher plant and the stockpile areas are constantly moistened by the dust suppression sub-contractor.
Dust and silt filtered out by the geotextile filter periodically cleaned and mixed with crusher dust to be sold.	5	-	Compliant	-
On completion: Surface of the processing area scarified to a depth of at least 200 mm and graded to an even surface and previously stored topsoil returned.	N/A	-	-	Not applicable yet.
Rehabilitated area seeded with indigenous seed mix. Fertilisers avoided.	N/A	-	-	
	FINAL REHABIL	ITATION - LAND F	ORMING (EMP	PR PG 37):
Cliff sections not exceeding 10 m in height, and bench sections 8 m or wider.	N/A	-	-	Mthatha Quarry did not yet enter the Final Rehabilitation phase.
Upper face blasted to a gradient of 1:3 down to a depth of ±7 m below surface.	N/A	-	-	
Precision blasted face to a gradient of not steeper than 1:2 for the second bench.	N/A	-	-	
Precision blasted 3 <sup>rd</sup> face to a gradient of not steeper than 1:1.	N/A	-	-	
Bench width for the top 3 benches not less than 8 m.	N/A	-	-	
3 m wide bench levels between each 10 m cliff face down to the floor to the quarry.	N/A	-	-	





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Post-quarry landscape not prone to erosion at an unacceptable rate.	N/A	-	-	
FINAL RE	HABILITATION - T	OPSOIL AND SUB	SOIL REPLACI	EMENT (EMPR PG 37):
Stripped overburden backfilled into the worked out areas and used to soften quarry slopes.	N/A	-	-	Mthatha Quarry did not yet enter the Final Rehabilitation phase.
Topsoil spread over the re-profiled areas.	N/A	-	-	
Prepared surfaces seeded with a suitable grass species.	N/A	-	-	
	MONITORI	NG AND REPORT	ING (EMPR PG	
Regular monitoring of all environmental management measures and components carried out by the holder.	5	-	Compliant	<ul> <li>Mthatha Quarry is regularly audited by ASPASA and the mine reports annually to the DMRE on the environmental performance of the quarry.</li> <li>Mine management now assists the ECA and SR sites to monitor all their environmental management measures and components.</li> </ul>
Annual environmental audit carried out by an independent ECO and submitted to DMRE.	5	-	Compliant	The previous environmental audit was carried out by Greenmined Environmental in August 2023.
Performance assessment report submitted to the DMRE after each audit.	5	-	Compliant	
Changes to the mining process documented and the necessary changes recorded to facilitate future mining operations and audit investigations.	4	3	To be addressed	Although some changes such as the working hours were noted in this report, it is proposed that the EMPR of the Quarry is updated simultaneously with the proposed Section 102 application to extend the mining footprint.
Adherence to the impacts associated with dolerite quarrying as outlined in the EMPR addressed during the annual audit.	5	-	Compliance	The impacts associated with the mining operations are addressed in the annual audits.
Inspections and monitoring carried out on both the implementation of the programme and the impact on plant and animal life.	5	-	Compliance	-





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
EMP revised at least every five years.	1	3	To be addressed	The EMPR must be updated with the proposed Section 102 application.
Emergency or unforeseen impact reported to the DMRE within 14 days of event noticed.	5	-	Compliant	When applicable.
Community complaints register kept in the office, and complaints addressed as far as possible.	5	-	Compliant	The mine has a complaints box, and the CLO address community complaints.
Annual surface and groundwater quality monitoring	3	3	To be addressed	The most recent water samples were tested in February 2024. Samples were collected from the Quarry Pit, and the last chamber of the Oil Sump. In 2023 the quality of the drinking water was also tested. No groundwater quality monitoring is done, and the quality of the river water was not tested during the audit period. See General Report.
Noise and air quality monitoring	5	-	Compliant	EEC is responsible for the noise and air quality monitoring.
Blast monitoring	5	-	Compliant	B&E International (Pty) Ltd monitors all blasts.





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

The Quarry has a complaints box where all complaints can be lodged. All complaints received during the audit period have been addressed/considered.

#### AUDITING OF EA, EMPR AND REPORTING THEREOF (REGULATION 34):

Data of province	
Date of previous	
EAR/EPA:	August 2023
Proof of submission	
to DMRE available:	Proof of submission of the EPA/EAR is available at the site office.
EAR/EPA compiled	
by independent	The 2024 EPA was compiled by Greenmined Environmental (Pty) Ltd.
person with	
environmental	
auditing expertise:	
Potential and	
registered I&AP's	The holder of the mining right (Transkei Quarries (Pty) Ltd) must, within 7 days of
notified within 7 days	submission, notify all potential and registered I&AP's of the submission of the
of the submission	report. The report will also be placed on the publicly accessible Greenmined
date, and report	website.
available on publicly	
accessible website	

### GENERAL REPORT

Compliance of the mining site with the EMPR (2008) was reviewed during the site assessment. The mining area recorded a compliance score of 85% for the audit period which is a 5% increase since the previous audit.

### MTHATHA QUARRY

### Section 102 Amendment Application and Heritage Sites:

The mining footprint exceeds the approved mining boundary to the south and a Section 102 amendment application in terms of the MPRDA must be submitted to the DMRE to extend the mining footprint. This application must also entail the amendment of the current EMPR of the quarry to exclude dated sections and include improvements/changes made on site. Since the previous audit the mining work programme (MWP) of the mine was amended/updated and submitted to the DMRE for consideration.

The graves and the monument were intact at the time of the inspection although no fencing has been installed yet. Management is aware of these areas and mine planning considers it. The quarry is also in discussions with the community regarding the sites.





### Storage of Hazardous Substances and/or Chemicals:

The Quarry continued with the improvement of various bund walls near the workshop and storage areas. As discussed, all bunds must be sealed, and no open drains/cracks may be allowed/left in the walls. The bund of the generator at the back of the ablutions must be sealed as the pipe extending from the bund cannot be closed currently. The parking area of the diesel bowser must be fitted with bund walls/berms to prevent dirty water running from the parking area. The water draining from the diesel tanks bunded area into the concrete extension/pit must be controlled. The water may not be allowed to drain into the surroundings and cannot be used for dust suppression as it may contain hydrocarbons. The water can be poured into the oil sump.

A tank was installed that will contain the waste water from the bund of the used oil store. It is proposed that the pipe leading to the tank be lengthened and that the size of the bund be increased to contain 110% of the liquid stored within. The bund walls must also be completed. Bund walls were also added to the used oil storage area that must be sealed.

The generators at the processing area must be fitted with bund walls of appropriate size.

### Waste Handling:

No cement/concrete mixing may be allowed on the bare soil. All cement mixing must take place in wheelbarrows or mixing pans.

All equipment that may cause hydrocarbon spills must be removed from the salvage yard to bunded areas with impermeable surfaces.

The registration documents of Lilliz Hiring Services and Ramatini Service Agents must be obtained and filed.

#### Alien Invasive Species:

The Quarry periodically appoints a service provider to clear the problem plants. During the audit period problem plants were removed from six of the seventeen target areas. The service provider uses machinery to clear most of the plants, upon which general labourers manually remove the remaining plants. Wood from the cleared plants is donated to the community. As discussed, it is proposed that the cleared areas be sown with indigenous grass species to minimise the denuded areas and lessen the re-occurrence of problem species. The use of herbicides, to lessen re-growth of especially Lantana must also be considered by the mine.

Site management should also include the yards of ECA and SR in the alien invader species action plan.

#### Water Related Matters:

As mentioned earlier, the site must compile a site specific stormwater management plan and no water may be released into the rivers prior to authorisation by the DWS. The crossings through the rivers must also be authorised by the DWS.

The 2024 water quality results indicate elevated magnesium and nitrate levels. According to the report, the magnesium levels can be reduced by purification technologies. The report deems the water (of the quarry pit and last chamber of the oil sump) fit for agricultural use. However, it is proposed that the Quarry implement rectification measures to lower the magnesium and nitrate levels to the acceptable standards. Water samples must also be collected from the river upstream and downstream of the mine. The water from the oil sump must also be tested for the presence of hydrocarbons.





### Progressive Rehabilitation:

The mine is in the process of rehabilitating  $\pm 0.4$  ha of the benches in the most southern corner of the quarry pit. Unwanted material is tipped over the benches and will be top dressed in topsoil once ready.

### Expansion of the mining footprint:

Site management mentioned that the excavations may be expanded to the opposite (northern) side of the river. As discussed, should this area be considered for mining, management must timeously apply for relocation/destruction permits for the Aloe's and any other protected plants that may be present in the footprint. The area must be cleared by an appropriately qualified ecologist prior to bush clearance.

### EAST COAST ASPHALT (ECA)

As mentioned earlier the management of the asphalt yard greatly improved since the previous (2023) audit. Bund walls were added to some of the storage areas, and most of the existing bund walls were repaired and sealed. A bunded storage area was also added for the dust material. The main bund walls of the processing area and the generators still need to be sealed and all contaminated soil/material must be removed from the bund. The remaining spills must be cleaned, and drip trays must be placed under old leaking equipment until it is removed from site. Site management mentioned that many of the old bitumen tanks/ers are being sold and removed from site. The site recycles the used oil, bitumen spills and discarded asphalt to manufacture new asphalt and therefor does not have contaminated soil that needs to be disposed at a landfill site.

Stormwater berms must be added to the site to divert clean water from the site and prevent erosion.

A new paint store was added to the site and the MSDS file of the site is kept updated. Mixing of general- and hazardous waste must be prevented, and all drums must be demarcated for either General Waste or Hazardous Waste.

Dust suppression was intensified on site, and the dust levels were low on the day of the inspection.

Site management must ensure that the proof of safe disposal of any waste leaving the site is filed and available for auditing. The registration certificates of all waste handling service providers must also be obtained and kept on site.

### SCRIBANTE READYMIX (SR)

On the day of the audit, management of the SR site also greatly improved. A water truck was spraying the roadways and denuded areas to minimise dust generation.

As discussed on site, all bund walls must be sealed, and management must ensure that the bunds can contain 110% of the liquid stored within. The used oil tank must be placed in a bund and all used oil/filters must also be stored in a bunded area. The generator must be fitted with a bund, and the bund of the diesel tank must be sealed, and the capacity of the bund must comply with the 110% capacity requirement.

The oil store (under the offices) must be bunded. Presently the floor of the container allows spills to seep into the soil. Management of the oil store must improve. Further to this, the oil trap at the service pit must still be directed to an oil sump or tank and may not be allowed to drain into the surroundings. All spills caused in this area must be cleaned and the soil must be treated as hazardous waste.





ECA contracted a service provider to remove the general waste from the site to the municipal landfill site. This service provider also supplied the site with new refuse bins. Mixing of general- and hazardous waste must be prevented, and all drums must be demarcated for either General Waste or Hazardous Waste. The litter between the offices and the fence line must be cleaned.

Management confirmed that the basin water (from the ablutions) drains into the septic tank through the gravel soakaway. The septic tank of the SR site was cleaned by Mkura Business Enterprise in November 2023.

Site management must ensure that the proof of safe disposal of any waste leaving the site is filed and available for auditing. The registration certificates of all waste handling service providers must also be obtained and kept on site.

### DOCUMENT CHECKLIST – MTHATHA QUARRY:

Alien Invasive Species Management Plan, Action Plan & Register	-	Present
Approved EMPR	-	Present
Blasting Procedure	-	Present
Complaints Register / Box	-	Present
CoP: Airborne Pollution	-	Present
Environmental Assessment Report (2023)	-	Present
Environmental Awareness Training	-	Present
Financial provision (2023)	-	Present
Heritage Impact Assessment	-	To be filed on site
Incidents register / Flash Reports	-	Present
Material Safety Data Sheets	-	Present
Mine Plan (2024)	-	Present
Mine works program	-	Present
Mining right	-	Present
Prestart Checklist	-	Present
Proof of waste removal	-	Present
Social and labour plan	-	Present
Waste service providers certification	-	Outstanding service provider's registration certificates to be
		obtained
Water Use Authorisation	-	Present
Monitoring results	-	Dust Monitoring (Present)
		Noise monitoring (Present)
		Water Monitoring (Present)
		Blast Monitoring (Present)

### MATTERS TO BE ADDRESSED – MTHATHA QUARRY:

- 1. Obtain approval in terms of Section 102 of the MPRDA for the expansion of the mining footprint;
- 2. Update the EMPR;
- 3. Obtain approval from DWS for all water related matters on site;
- 4. Continue with the clearing of problem plants from the mining area and consider the use of herbicides to combat Lantana;
- 5. Clean all spills daily;
- 6. Investigate the possibility of taking contaminated soil to ECA for use in their asphalt plant;





- Complete and seal all bund walls and prevent the spraying (for dust suppression) of contaminated water from the bunds;
- 8. Add bund walls/berms to the bowser parking area and generators at the processing plant;
- 9. Test the water from the last chamber of the oil sump for the presence of hydrocarbons as well as the river water quality (upstream of the mine and downstream);
- 10. Ensure all stormwater berms remain intact;
- 11. Address the water quality issues to lower the magnesium and nitrate levels prior to irrigation of the water;
- 12. Fence the graveyards and maintain the 20 m buffer zone. Also add a gate to the fence to allow access to family members;
- 13. Prevent the mixing of cement on the bare soil;
- 14. Remove all equipment/tools/machinery that may cause hydrocarbon spills from the salvage yard and clean spills;
- 15. File the registration certificates of all waste handling service providers;
- 16. Compile a site specific stormwater management plan;
- 17. Arrange a walkthrough by an ecologist to identify all protected plants from the northern side of the river should excavations be expanded. Obtain plant removal permits timeously.

### MATTERS TO BE ADDRESSED – EAST COAST ASPHALT:

- 1. Improve waste management practices and file all safe disposal certificates and registration certificates of waste handling service providers;
- 2. Prevent the mixing of general- and hazardous waste, and demarcate drums as General Waste or Hazardous Waste;
- 3. Ensure all refuse drums/bins have lids;
- 4. Continue with the clearing of problem plants from the yard;
- 5. Clean all spills daily;
- 6. Seal and clean all bunded areas and ensure the bund has a 110% capacity;
- 7. Add stormwater berms to direct clean water away from /around the yard.

### MATTERS TO BE ADDRESSED – SCRIBANTE READYMIX:

- 1. Improve waste management practices and file all safe disposal certificates and registration certificates of waste handling service providers;
- 2. Prevent the mixing of general- and hazardous waste, and demarcate drums as General Waste or Hazardous Waste;
- 3. Ensure all refuse drums/bins have lids;
- 4. Continue with the clearing of problem plants from the yard;
- 5. Clean all spills daily;
- 6. Investigate the possibility of taking contaminated soil to ECA for use in their asphalt plant;
- 7. Seal and clean all bunded areas and ensure the bund has a 110% capacity;
- 8. Replace the floor of the oil store with an impermeable layer and ensure the oil store has secondary containment;
- 9. Direct water from the oil trap at the service pit to an oil sump and prevent oil/water from draining directly into the surroundings. Clean all spills;
- 10. Clean the litter between the offices and the fence.

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

The EMPR was drafted before the requirements of the NEMA EIA Regulations, 2014 were promulgated and therefore not all the requirements of Appendix 4 of the GNR 326 have been considered. Mthatha Quarry has





made significant progress to incorporate improved environmental management processes. It is the opinion of the author that the current EMPR of the Quarry does not adequately manage or mitigate the environmental impacts at the site.

### NEED FOR AMENDMENT OF THE EMPR:

The EMPR of the Quarry must be amended to address all possible impacts and provide guidance on effective environmental management of the operations.

### FINANCIAL PROVISION:

This report is accompanied by a reassessment of the financial provision calculation for the year 2024 that amounts to R 9 165 170.27. The 2024 financial provision exceeds the value of financial guarantee in place at the DMRE, and therefore upon departmental approval and request the MR Holder may have to provide a shortfall.

### ECO SIGNATURE

NAME:	SIGNATURE:	DATE:
Christine Fouche	Jauch	01 July 2024

## **PHOTOGRAPHS**



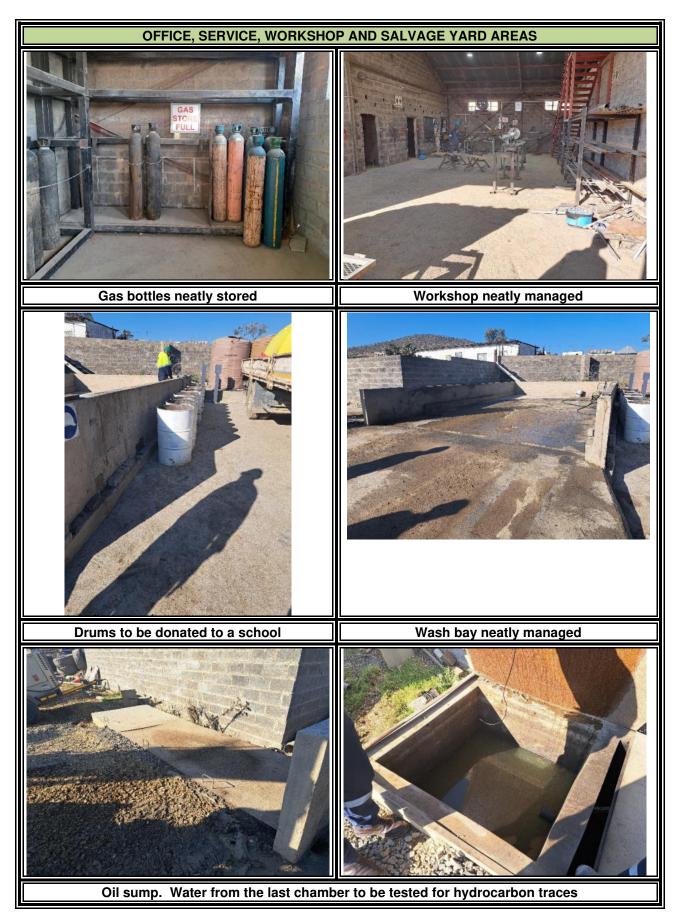












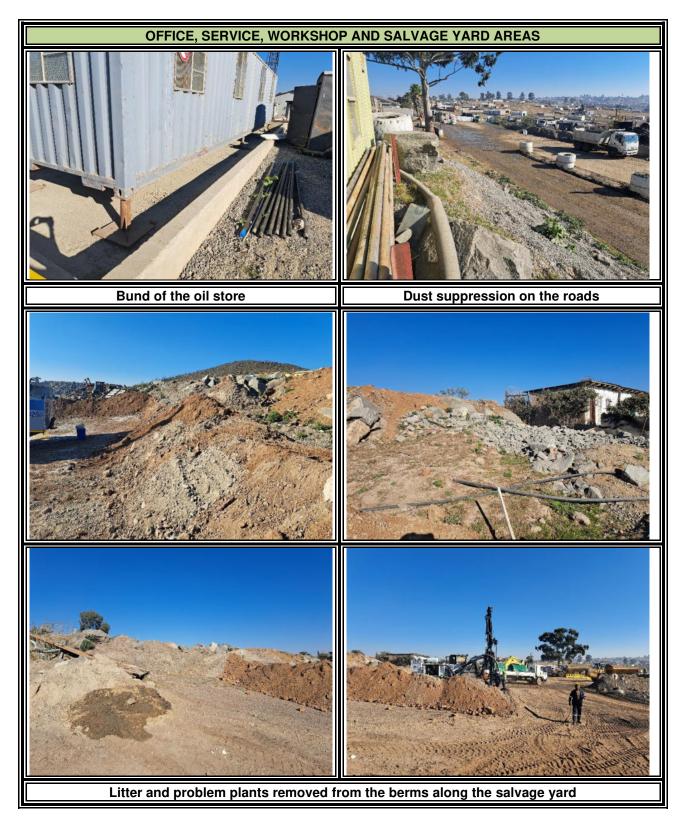














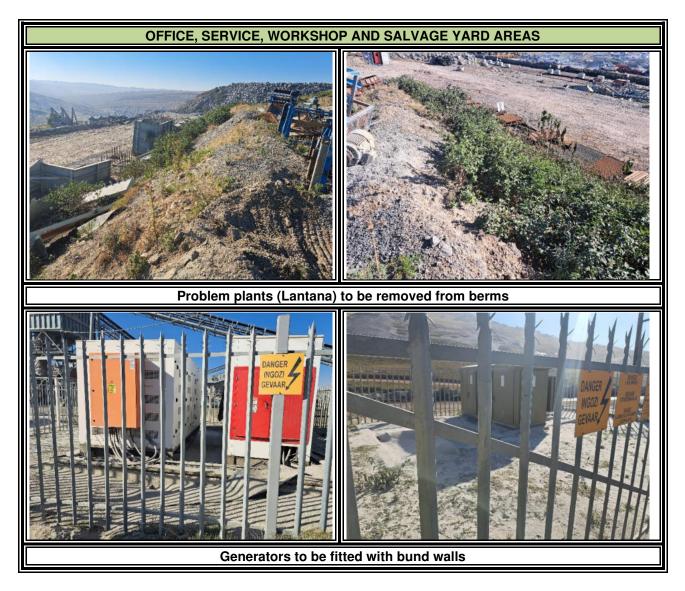


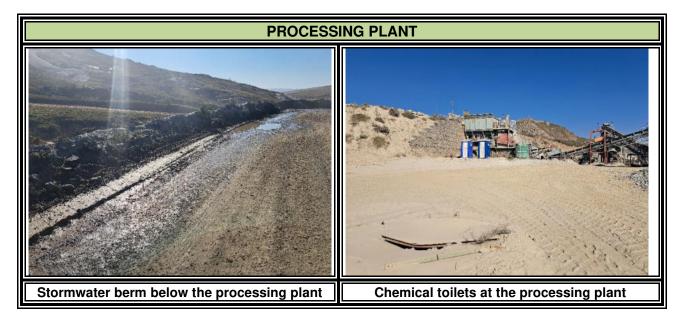


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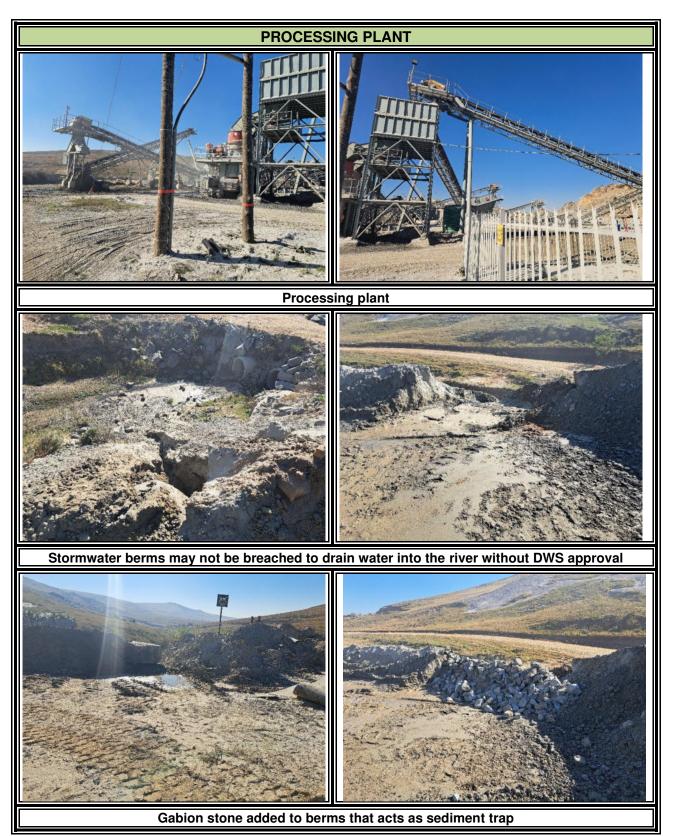






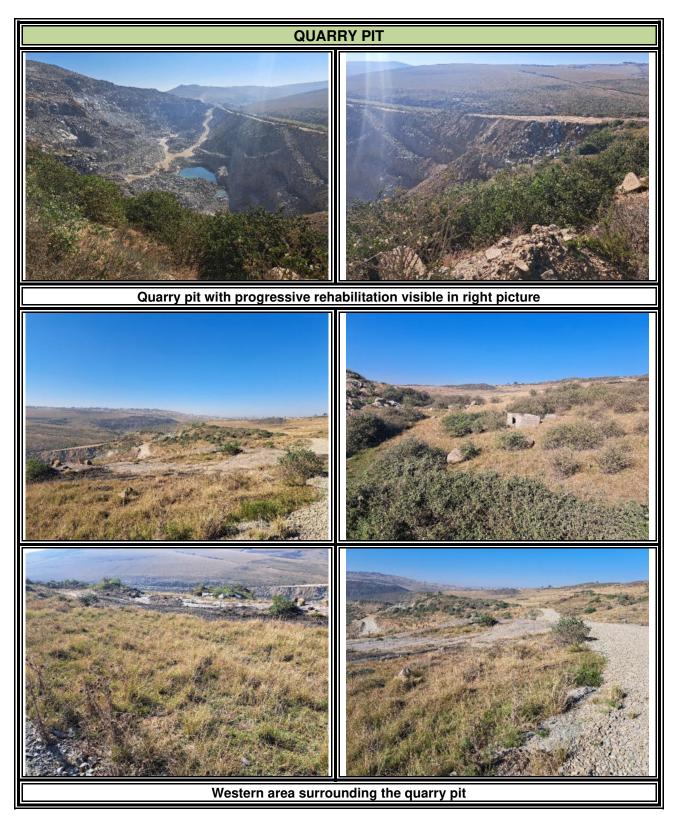






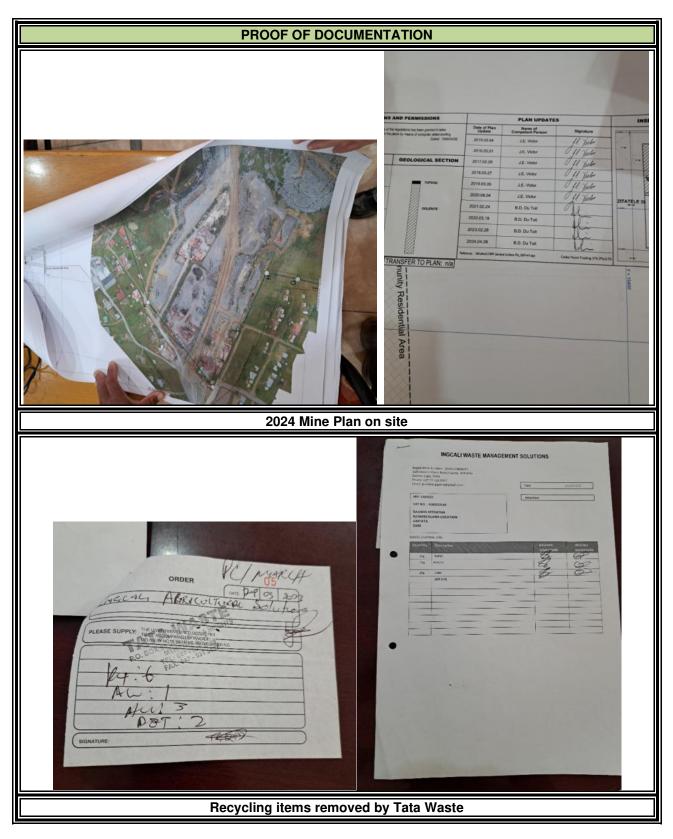
















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#### **PROOF OF DOCUMENTATION** Results 5. Table 1: AGRICULTURAL WATER GUIDELINES AND LABORATORY RESULTS Wash Bay Sample Name Pit Water Water 08 February 2024 Sample Date Recommended Measuring Determinant Unit Limits Results Class 1 PHYSICAL & ORGANOLEPTIC REQUIREMENTS 7.60 pH at 25°C 8.04 pH Units 5.0-9.7 Electrical Conductivity 79.1 106 <170 mS/m at 25°C Not Not ≤ 200 Sodium mg/l Detected Detected mg/l <1.5 10.9 13.7 Magnesium as Mg 71.9 107 N/S Calcium as Ca mg/l 154 101 mg/l <300 Chloride 12.3 <11 12.1 mg/l N Nitrate < 0.50 <0.50 <1.5 Fluoride mg/l 77.0 92.2 Total Alkalinity CaCO3 mg CaCO3/l N/S <500 104 142 Sulphate SO4 mg/l Water test results





