

BUTTERWORTH QUARRY

ERF 725 (PORTION OF ERF NO 153 BUTTERWORTH), BUTTERWORTH, EASTERN CAPE PROVINCE

ENVIRONMENTAL PERFORMANCE ASSESSMENT / ENVIRONMENTAL AUDIT REPORT

DMRE REFERENCE NUMBER:	EC 30/5/1/2/2/0183 MR
AUDIT PERIOD:	August 2023 – May 2024

PREPARED FOR:

Transkei Quarries (Pty) Ltd
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PREPARED BY:

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1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT HOLDER
Company Name	Butterworth Quarry (Pty) Ltd
Contact Person	Mr. David Vorster
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Cell Number	082 336 4462
E-mail Address	David.v@transkeiquarries.co.za
Physical Address	Transkei Quarries Kentani Road Butterworth
ITEM	CONSULTANT DETAIL
Company Name	Greenmined Environmental (Pty) Ltd
Contact Person	Christine Fouché
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Cell Number	082 811 8514
E-mail Address	Christine.f@greenmined.co.za
Postal Address	Postnet Suite 62 Private Bag x15 Somerset West 7129
ITEM	LOCATION AND AREA INFORMATION
Site Name	Butterworth Quarry
Property Description	Erf No 725 (Portion of Erf No 153 Butterworth)
Location	Butterworth Quarry is situated ±3 km east of Butterworth central.
Size of Mining Area	16.1634 ha



**ENVIRONMENTAL PERFORMANCE ASSESSMENT /
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2. ENVIRONMENTAL AUDIT REPORT

PROJECT DETAIL

Right Number:	EC 30/5/1/2/2/0183 MR	Date of Commencement:	January 2010
Site Name:	Butterworth Quarry	Inspection Date:	22 May 2024
Right Holder:	Transkei Quarries (Pty) Ltd	Other Authorisations:	General Authorisation: 27/2/2/T420/2/1
Report Number:	02		

DETAIL OF AUDITOR

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

ECO:	Christine Fouché
EXPERTISE:	Ms Fouché has a Diploma in Nature Conservation and a BSc in Botany and Zoology with eighteen years experience in environmental impact assessments and compliance monitoring in South Africa. Ms Fouché is a registered Environmental Assessment Practitioner (registration no: 2019/1003) with EAPASA (Environmental Assessment Practitioners Association of South Africa) since 2019.
DECLARATION OF INDEPENDENCE:	<p>I, Christine Fouche, in my capacity as environmental control officer declare that–</p> <ul style="list-style-type: none"> • 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). <p align="center"></p> <p align="center">Christine Fouché Date: 13 June 2024</p>

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). The EAR focussed on Section 6 Environmental Management Programme of the EMPR (May 2007).

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 and Storage Areas;
- Parking Area;
- Processing Area (new & old plants);
- Quarry Pit;
- Salvage Yard;
- Stockpile Areas;
- Wash Bay;
- Weigh bridge;
- Workshop.

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 gathered from 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:	Butterworth Quarry is situated ±3 km east of Butterworth central.	
Site Map:		
Site Coordinates:	A 32°19'46.98"	28°10'49.94"
	B 32°19'45.97"	28°10'52.78"
	C 32°19'49.08"	28°10'59.12"
	D 32°19'50.83"	28°11'04.13"
	E 32°19'55.95"	28°11'01.66"
	F 32°20'00.75"	28°10'57.30"
	G 32°20'00.92"	28°10'46.82"
	H 32°20'01.39"	28°10'43.09"

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. The boundaries of the pit are limited by the mining boundaries that stand in relation the adjacent Gcuwa River (west) and in the north by the processing and mining infrastructure/buildings.

The right holder applied for a Section 102 amend of the mine boundaries in terms of the MPRDA, 2002 in December 2023 that is still in process with the DMRE.

SITE CONDITIONS

Cloudy, 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 the DMRE.
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 (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)	3	3	Being addressed	A Section 102 amendment application was submitted to expand the mining boundaries and include the section historically mined outside the approved mining footprint.
Mining right available on site	5	-	Compliant	-
Mine plan updated annually and submitted to the DMRE	5	-	Compliant	The mine plan was updated in April 2024.
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004)	5	-	Compliant	Although the mining activities do not require an air emissions licence, the requirements of the NEM:AQA are considered on site.
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)	5	-	Compliant	The waste management of the mine is in accordance with the NEM:WA requirements.
National Water Act, 1998 (Act 36 of 1998)	5	-	Compliant	In 2019 DWS confirmed that the activities at Butterworth Quarry does not require a formal water use authorisation. Water usage is monitored with the ESG spreadsheet.
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	3	3	Being Addressed	Butterworth 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 zones that are progressively cleaned. During the audit period the site focussed on re-growth in zones No 1, 4-6, and 12.
GENERAL REQUIREMENTS (EMPR PG 30):				
Mining area demarcated with beacons	5	-	Compliant	Soil berms are used to define the mining area and poles were added at the perimeter of the pit.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
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 - 18:00, and 17:00 – 03:00. It is proposed that the operating hours of the quarry be updated when the EMPR is amended.
TOPSOIL (EMPR PG 31):				
Topsoil removed from all areas where physical disturbance occur.	N/A	-	-	No topsoil was removed during the audit period.
Topsoil stockpiles on high ground inside mining boundary outside the 1:50 flood level.	4	3	To be addressed	The topsoil heaps are on high ground, however the 1:50 year flood line of the river is unknown.
Topsoil kept separate from overburden and not used for building or road maintenance.	5	-	Compliant	Although topsoil and overburden were mixed historically, management now takes more care and keeps the topsoil and overburden heaps separate. The topsoil stockpiles were also signposted during the audit period.
Topsoil protected from wind- or surface run-off erosion.	5	-	Compliant	The topsoil heaps are vegetated.
ACCESS TO THE SITE (EMPR PG 31):				
Access via the existing Kentani Road.	5	-	Compliant	-
Security access gate manned permanently.	5	-	Compliant	-
No other roads used to gain access to the quarry.	5	-	Compliant	-
Roads adequately maintained to minimise dust, erosion, or surface damage.	5	-	Compliant	The access road was well maintained at the time of the inspection.
Liberation of dust effectively controlled (water spraying, speed)	5	-	Compliant	A dust suppression sub-contractor is appointed on site.
VEHICLE MAINTENANCE AND SECURED STORAGE AREA (EMPR PG 32):				
Responsibility of vehicle maintenance and secured storage area was sub-consulted to Bell Equipment.	5	-	Compliant	-
Workshop and maintenance areas kept clean, and spillages properly cleaned.	5	-	Compliant	-

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	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.	5	-	Compliant	Since the previous audit, a concrete lined parking area was made for the diesel bowser.
No vehicles extensively repaired in the maintenance yard or off-site.	5	-	Compliant	-
MAINTENANCE OF VEHICLES AND EQUIPMENT (EMPR PG 32):				
Maintenance of vehicles and equipment only done in the maintenance yard or off-site.	5	-	Compliant	This appeared true on the day of the audit.
Mining equipment adequately maintained to prevent spills.	5	-	Compliant	At the time of the inspection this appeared true.
Mining machinery or equipment do not constitute a pollution hazard.	4	3	To be addressed	<ul style="list-style-type: none"> As mentioned earlier, the bowser is parked on a concrete lined area, and the used oil was removed from the old processing plant previously (2023) reported on. The salvage yard was also cleaned and equipment that may spill hydrocarbons were removed. However, the bunds of the diesel tank, used oil tank and generator must still be sealed.
WASTE DISPOSAL (EMPR PG 32):				
Suitable covered receptacles always available and conveniently placed for the disposal of waste.	4	3	To be addressed	The mine needs to obtain a hazardous waste bin where contaminated rags and other -waste can be placed.
Used oils, grease, hydraulic fluids placed in hazardous receptacles and removed to a licenced disposal facility.	5	-	Compliant	Proof of waste disposal is available on site.
Spills cleaned up immediately.	5	-	Compliant	The spillages previously (2023) noted at the bowser parking area, old plant and the salvage yard were cleaned, and the leaking equipment was removed.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
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 PROCEDURES IN THE MINING AREA (EMPR PG 33):				
Mining only taking place within the approved demarcated mining area.	1	3	In process	The mine submitted (December 2023) a Section 102 amendment application to the DMRE to extend the mining boundary and include the sections where mining exceeded the approved footprint.
Restrictions on the potential impact on nearby drainage channels managed throughout the mining process to recommendations contained in the EMPR: <ul style="list-style-type: none"> • Mining related debris scattered in the drainage channels removed. • Runoff generated in the Butterworth Quarry, directed into the quarry excavation. • Berms constructed along the western boundary to ensure surface water from the stockpiles and crushing plant fed towards the excavation. 	4	1	-	<ul style="list-style-type: none"> • The debris that were historically deposited to close to the river has not been removed as it is believed that removing the rock will have a larger impact than leaving it in place. • Berms are in place to direct runoff from the mine areas into the excavation.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Watering applied to minimise the effect of dust generation, and noise kept within reason.	5	-	Compliant	-
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	-	-	Not yet applicable.
No firewood collected on site, and fires prohibited.	5	-	Compliant	-
EXCAVATIONS (EMPR PG 33):				
Topsoil handled as described in the EMPR.	N/A	-	-	Not applicable as no topsoil was stripped during the audit period.
Excavations only taking place within the approved demarcated mining area as per phased mining approach.	1	3	Being addressed	Refer to the comment regarding the Section 102 application.
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 WASTE PILES (EMPR PG 34):				
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	-
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.	4	3	To be addressed	<ul style="list-style-type: none"> • EEC takes annual water samples at the river before and after the quarry and in the quarry pit. The most recent

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
				<p>results (February 2024) did not comment on the findings, but it appears that the nitrate level of the water in the pit is above standard. See General Report.</p> <ul style="list-style-type: none"> It is also suggested that the water in the last chamber of the oil sump must be tested for the presence of hydrocarbons.
No natural vegetation unnecessarily disturbed in and around the quarry site.	5	-	Compliant	-
Mining area and surrounds always kept neat and tidy.	5	-	Compliant	On the day of the audit the mining area was neat and tidy.
Processing area and waste piles established within a clearly demarcated area to the west/north-west of the mining area.	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 yet applicable.
Rehabilitated area seeded with indigenous seed mix. Fertilisers avoided.	N/A	-	-	
FINAL REHABILITATION – LAND FORMING (EMPR PG 35):				
Cliff sections not exceeding 10 m in height, and bench sections 3 m or wider.	N/A	-	-	Butterworth Quarry did not yet enter the Final Rehabilitation phase.
Upper face blasted to a gradient of 1:3 down to a depth of ±6 m below surface.	N/A	-	-	
Precision blasted face to a gradient of not steeper than 85° in 10 m cliff sections.	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 REHABILITATION – TOPSOIL AND SUBSOIL REPLACEMENT (EMPR PG 36):				
Stripped overburden backfilled into the worked out areas and used to soften quarry slopes.	N/A	-	-	Butterworth 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 specie.	N/A	-	-	
MONITORING AND REPORTING (EMPR PG 38):				
Regular monitoring of all environmental management measures and components carried out by the holder.	5	-	Compliant	Butterworth Quarry is regularly audited by ASPASA and the mine reports annually on the environmental performance of the quarry.
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 and submitted to the DMRE on 09 October 2024.
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.	5	-	Compliant	As mentioned earlier, a Section 102 application was submitted to the DMRE for the extension of the mining boundaries.
Adherence to the impacts associated with dolerite quarrying as outlined in the EMPR addressed during the annual audit.	5	-	Compliant	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	-	Compliant	-
Emergency or unforeseen impact reported to the DMRE within 14 days of event noticed.	N/A	-	-	No emergencies or unforeseen impacts occurred during the audit period that had to be reported to the DMRE.



**ENVIRONMENTAL PERFORMANCE ASSESSMENT / ENVIRONMENTAL AUDIT REPORT
BUTTERWORTH QUARRY**



DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Community complaints register kept in the office, and complaints addressed as far as possible.	5	-	Compliant	The mine has a complaints box. As discussed, a sign must be added to the complaints box to note it as such.
Blast monitoring implemented	5	-	Compliant	B&E International is responsible for the blasting and monitoring thereof at the mine.

**COMMENTS OR COMPLAINTS RECEIVED FROM I&AP'S
(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):**

Date of previous EAR/EPA:	August 2023
Proof of submission to DMRE available:	The previous EAR was submitted to the DMRE on 09 October 2023, and proof of this is available from the right holder.
EAR/EPA compiled by independent person with environmental auditing expertise:	This EAR was compiled by Ms Christine Fouché from Greenmined Environmental (Pty) Ltd.
Potential and registered I&AP's notified within 7 days of the submission date, and report available on publicly accessible website	The holder of the mining right (Transkei Quarries (Pty) Ltd) must, within 7 days of submission, notify all potential and registered I&AP's of the submission of the report. The report will also be placed on the publicly accessible Greenmined 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 92% for the audit period (1% increase since the previous audit).

On the day of the audit the mining area was neat and well managed. Numerous signs were added to direct traffic, notify employees and visitors of the safety requirements, control speed, demarcate work areas etc. Site management is in the process of adding a new processing plant and removing the old plant (no longer in use) at the back of the site.

Section 102 Amendment Application:

As mentioned earlier, the mining footprint exceeds the approved mining boundary and a Section 102 amendment application in terms of the MPRDA, 2002 to extend the mining footprint was submitted to the DMRE in December 2024. The application is still in process and proof of submission is available at the mine.

Site Improvements:

Butterworth Quarry implemented/corrected most of the findings of the 2023 EPA, in that the hydrocarbon spills previously noted were cleaned, the leaking equipment was removed from the salvage yard and old processing

plant and the areas cleaned, a concrete lined parking area was made for the diesel bowser, and the generator was bunded.

Spekboom (*Portulacaria afra*) was planted in the office gardens and the topsoil heaps were signposted. Sediment traps were added to the stormwater berms to retain the fines from the stormwater that flows into the quarry pit or the surroundings.

The litter previously noted along the fence line where the client trucks park was removed and refuse bins were added that can be used by the drivers.

Alien Invasive Species:

Site management removed the problem plants that re-established in zones 1, 4-6, and 12. Unfortunately the mine and surrounding areas are heavily infested with invader plant species such as Bugweed (*Solanum mauritianum*), Castor-oil (*Ricinus communis*), and Seringa (*Melia azedarach*) that requires constant management. It is proposed that the cleared areas are sown with indigenous grass species to minimise the denuded areas and lessen the re-occurrence of problem species.

Waste Handling and Chemical Storage:

As mentioned earlier, the bunds of the diesel tank, used oil tank and generator must be sealed and management must ensure that the bunds are large enough to contain 110% of the liquid stored within.

A hazardous waste bin must be added at especially the workshop where hazardous waste such as oil rags etc. can be deposited. This waste must then be removed from site by the hazardous waste handling contractor and proof must be filed.

It is proposed that the soil cleaned through bioremediation is tested at least once a year to proof that the cleaning methods are effective, and the soil is clear of hydrocarbons at the end of the process. The test results must be filed for auditing purposes.

As requested in 2023, site management accompanied the sewerage removal service provider and took pictures as proof that the waste is disposed of at the municipal sewerage works. As discussed, Jadezweni (sewerage handling service provider) must provide the site with a copy of the letter from the municipality that allows them to dispose of the sewerage at the municipal sewerage works.

Water Monitoring:

EEC annually collects water samples from the river (before and after the quarry) and the sump in the quarry pit. As mentioned earlier, the nitrate levels of the pit water seems high (even though the water results do not show guidelines/standards). The level of nitrate exceeds the limits for both sewage discharge as well as drinking water standards given by the National Water Act 1998 (ACT No. 36 of 1998). It also exceeds most GA (General Authorizations) limits. The nitrate most likely originates from blasting activity in the quarry. The mine must therefore note that the high nitrate levels will impact the environment and should be managed as it poses a significant environmental risk. Bioremediation or filtration management strategies must be implemented.

It is also proposed that the water quality tests must include a sample from the last chamber of the oil sump to test for the presence of hydrocarbons.

DOCUMENT CHECKLIST:

■ Alien Invasive Species Management Plan, Action Plan & Register -	Present
■ Blasting Procedure	- Present
■ Complaints Register/Box	- Present
■ EMPR	- Present
■ Environmental Assessment Report (2023)	- Present
■ Environmental Awareness Training	- Present
■ Financial provision (2023)	- Present
■ Incidents register / Flash Reports	- Present
■ Material Safety Data Sheets	- Present
■ Mine Plan (2024)	- Present
■ Mine works program	- Present
■ Mining right	- Present
■ Pre-start Checklists	- Present
■ Social and labour plan	- Present
■ Waste disposal proof & service provider registration proof	- Present
■ Monitoring results	- Dust Monitoring (Present) Noise Monitoring (Present) Blast Monitoring (Present) Water Monitoring (Present)

MATTERS TO BE ADDRESSED:

1. Continue with the removal of problem plants and monitor cleared areas for re-occurrence;
2. Amend the EMPR to allow for shift work at the quarry;
3. Determine the 1:50 year flood line of the river;
4. Seal the bunds of the diesel tank, used oil tank, and generator;
5. Designate a drum for hazardous waste;
6. Address the high nitrate levels of the water in the pit;
7. Expand the water monitoring programme to include a sample from the last chamber of the oil sump;
8. Test the remediated soil to proof it does not contain hydrocarbons;
9. Request a municipal registration letter from Jadezweni regarding the disposal of sewerage;
10. Add a sign on the complaints box.

**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. Butterworth 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 will be amended as part of the pending Section 102 application that was submitted to the DMRE 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 5 293 566.06. The 2024 financial provision exceeds the value of financial guarantee in place at the DMRE (table below). However, the mine has a Section 102 amendment application pending with the DMRE to expand the mining footprint. It accordance with this application the financial guarantee of the mine will be increased should the S102 application be successful. The increased financial guarantee will then also account for the 2024 financial provision shortfall, and therefore the guarantee will not be increased until a decision is made on the Section 102 application.

ECO SIGNATURE

NAME:	SIGNATURE:	DATE:
Christine Fouche		14 June 2024

PHOTOGRAPHS

SITE BUILDINGS AND SURROUNDING AREAS



Drinking water available on site



Colour coded refuse bins available on site

SITE BUILDINGS AND SURROUNDING AREAS



Spekboom plants added in garden



Weigh bridge and entrance road



Diesel tank bund wall to be sealed



Diesel bowser parking area



Used oil tank bund to be sealed



Generator bund to be sealed

SITE BUILDINGS AND SURROUNDING AREAS



Wash bay and workshop areas



Bioremediation of soil in progress

Refuse bins available – hazardous waste bin to be added



Oil store

Signage added to site

SITE BUILDINGS AND SURROUNDING AREAS



Signage added to site



Litter cleaned from truck entrance



Complaints box to be signposted

PROCESSING PLANT



New plant to be erected



Problem plants to be removed

PROCESSING PLANT



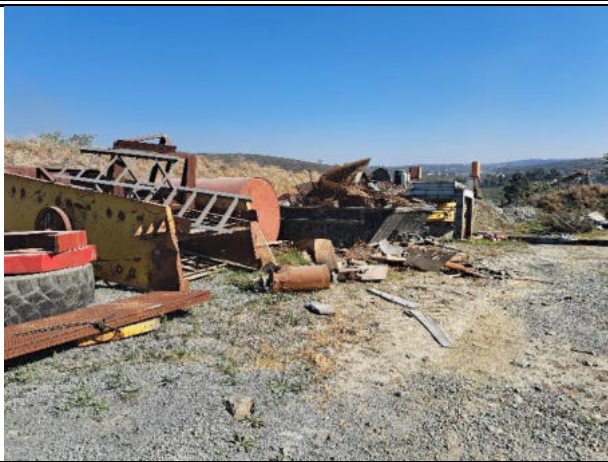
Old plant being removed

QUARRY PIT



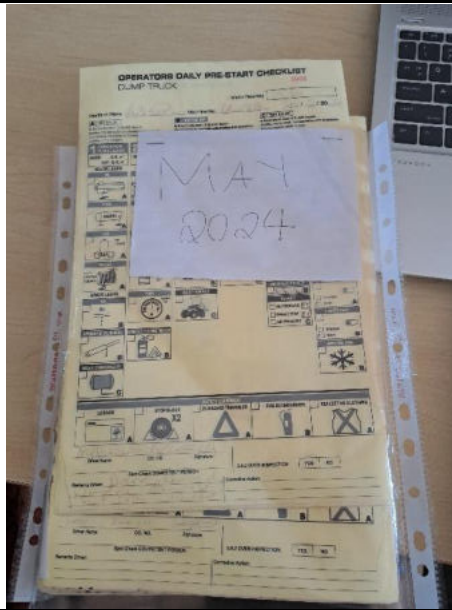
Alien invader plants to be removed

STOCKPILE AREAS, SALVAGE YARD AND OLD PLANT



Cleaned salvage yard with sediment trap in the stormwater berm

PROOF OF DOCUMENTATION



Example of pre-start checklists

RAUMIX		Raumix Aggregates (South) and Transkei Quarries Waste Control Register		TRANSKEI QUARRIES			
Area/Mine: <u>Transkei Quarries</u>		Location: <u>Butterworth</u>		Environmental Control officer: <u>Phakiso Luke</u>			
				Year: <u>2023</u>			
This register must be completed every time waste is disposed or delivered							
DATE	REMOVED BY	SIGNATURE REMOVER	VEHICLE REG NO	TYPE OF WASTE	QUANTITY OF WASTE	TAKEN TO: NAME OF WASTE SITE	REF NO (WASTE SITE)
08/15/23	G. Lock	<i>[Signature]</i>	FF100812	General waste	3/4 kg	Butterworth landfill site	Butterworth landfill site
03-07-23	G. Lock	<i>[Signature]</i>	FF100812	General waste	160 kg	Butterworth landfill site	Butterworth landfill site
31-8-23	G. Lock	<i>[Signature]</i>	FF100812	General waste	480 kg	Butterworth landfill site	Butterworth landfill site

General waste register

PROOF OF DOCUMENTATION

nicAm-Waste



Registration No: 200418094923
VAT No: 446223060

RAUMIX Membership No: 103 318 042
Certificate No: J09W02TW0214

Physical Address

2 Nicas Close
Sheer Avon Estate
Plot 12 of Sheer Avon Farm 27
Butterworth
Mthatha
5800

Postal Address

7 Cradock Street
Mthatha
5800

Tel/Fax: 072 226 1309/066 066 3307
Fax: 047 480 0000
E-Mail: nicamwaste@nicamwaste.co.za
www.nicamwaste.co.za

Date: 14th February 2024

The Environmental Officer
Raumix (Pty) Ltd T/A
Transkei Quarries Butterworth
Butterworth

Sir/Madam

**RE: CERTIFICATE OF DISPOSAL FOR GENERAL WASTE
MATERIAL**

It is hereby acknowledged that the below mentioned waste material is collected and disposed off safely by ourselves from the properties of Transkei Quarries in Butterworth, and no environmental law contravened or breached.

Stock Type: General Waste
Method: Landfill Disposal
Location: KSD Landfill Mthatha
Classification: G-L-B-
Date of Disposal: As required.

Registration certificate of Nicam Waste (general waste service provider)

DEE'S RECYCLING C.C

- BUYER OF FERROUS & NON FERROUS METALS -
Tel/Fax +27-047 531 3886 - Call 083 272 1229
Private Bag X 5100 Suite 83 Mthatha 5800 - 99 Kellie Street Vulliamle Heights, Mthatha, South Africa
Email: deesrecycling@deesrecycling.co.za

SAFE DISPOSAL CERTIFICATE

DEES RECYCLING CC, TOGETHER WITH TRANSKEI QUARRIES
BUTTERWORTH, IS WORKING TOWARDS RESPONSIBLE
ENVIRONMENTAL MANAGEMENT

DATE RECEIVED : 06.02.2024
CUSTOMER : TRANSKEI QUARRY - BT
INVOICE : TB 225443
WEIGHT RECEIVED : 11140 KG
DESCRIPTION OF LOAD : SCRAP STEEL

The contents of this load have been recycled at our Mthatha Branch in accordance with safe environmental practices.

Yours faithfully

L. A. Harding
(Manager)

Safe disposal certificate for the scarp metal removed from site

PROOF OF DOCUMENTATION

DOC. NAME	FLASH REPORT	DOC. DATE	5/12/2022	
PAGE	1 of 5	REV. DATE	5/12/2024	

FLASH REPORT

INCIDENT DETAILS

Site:	Butterworth Quarry
Type of Incident:	Environmental Incident
Date of Incident:	24 February 2023
Area of Incident:	Quarry Pit
Person(s) Involved:	Vusi Ntshambani
Person(s) ID numbers:	8503046130089
Person(s) Emp. Numbers:	(Not available)
Occupation:	B&E Drilling Team Supervisor
Time of Incident:	09H50
Fleet no:	ECM-660 IV
Estimated Repair Cost:	N/A
Investigation Cost:	R 3 000

Description:

Xolisa Ntantala, the water truck operator (Sub-Contractor) was in the pit when he noticed oil spills on the bench and under the drill rig parked next to the haul road. Xolisa came to the office and reported the incident. The drilling team left the machinery with no drip tray placed under the rig, no traffic triangle and traffic cones placed around the machinery.



Example of a flash report

	Raumix Aggregates (South) and Transkei Quarries Attendance Register	
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Date	16-01-24	Location	Butterworth Quarry	
Discussed by whom	Bathabile Jada	Signature		
Item Discussed – Environmental Management Plan (EMP)				
Name & Surname	Company	Occupation	Date	Signature
Loyiso Bam	TQ: Butterworth	Supervisor	16-01-24	
Nomalande Ntanga	TQ: Butterworth	Admin	16-01-24	
Ivy Taleni	TQ: Butterworth	Cleaner		
Bonisile Siswana	TQ: Butterworth	Plant Operator	16-01-24	
Mcebisi Vumendlini	TQ: Butterworth	Plant Operator	16-01-24	
Siyanda Bomela	TQ: Butterworth	Plant Operator	16-01-24	
Mduduzi Bam	TQ: Butterworth	General Worker	16-01-24	
Mzimasi Nongqavu	TQ: Butterworth	General Worker	16-01-24	
Loyiso Kwazayo	TQ: Butterworth	General Worker	16-01-24	
Amandla Coki	TQ: Butterworth	General Worker	16-01-24	
Lubabalo Mbambaniso	TQ: Butterworth	ADT Operator	16-01-24	
Luvuyo Samente	TQ: Butterworth	ADT Operator	16-01-24	
Lyford Mkhangel	TQ: Butterworth	ADT Operator	16-01-24	
Mbulelo Mazinyo	TQ: Butterworth	ADT Operator	16-01-24	
Siphe Sikiti	TQ: Butterworth	FEL Operator	16-01-24	
Cinga Bijana	TQ: Butterworth	FEL Operator	16-01-24	
Siyambonga Devu	TQ: Butterworth	FEL Operator	16-01-24	

Training done on the EMPR