ALIWAL QUARRY

ERF 2928 (A PORTION OF ERF 1) & PART OF PORTION 5 OF THE FARM MELKSPRUIT NO 12, ALIWAL NORTH, EASTERN CAPE PROVINCE

ENVIRONMENTAL PERFORMANCE ASSESSMENT / ENVIRONMENTAL AUDIT REPORT

DMR REFERENCE NUMBER:	**EC 30/5/1/2/2/215 MR & EC0017MR/102**
AUDIT PERIOD:	**May 2024 – May 2025**

PREPARED FOR:

Aliwal Dolerite Quarry (PTY) Ltd
Contact Person: Edmund Vorster
Tel: 051 633 3346
Cell: 079 897 7697
E-mail: Edmund.v@raumix.co.za
Postal Address:
P.O. Box 314
Aliwal North
9750

PREPARED BY:

Greenmined Environmental (Pty) Ltd
Auditor: Christine Fouché
Tel: 021 851 2673
Cell: 082 811 8514
Fax: 086 546 0579
Postal Address:
Suite 62
Private Bag x15
Somerset West
7129

1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT HOLDER
Company Name	Aliwal Dolerite Quarries (Pty) Ltd
Contact Person	Mr Edmund Vorster
Tel Number	051 633 3346
Cell Number	079 897 7697
E-mail Address	Edmund.v@raumix.co.za
Postal Address	P.O. Box 314 Aliwal North 9750

ITEM	CONSULTANT DETAIL
Company Name	Greenmined Environmental (Pty) Ltd
Contact Person	Ms. Christine Fouché
Tel Number	021 851 2673
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	Aliwal Quarry
Property Description	Erf 2928 (Portion of Erf 1) & Part of Portion 5 of the farm Melkspruit No 12
Location	The Aliwal Dolerite Quarry is located 3 km to the south-west of Aliwal North and the N6 National Road on a portion of Erf 2928.
Size of Mining Area	62.299 ha (since approval of the 6.7824 ha S102 amendment).

TABLE OF CONTENTS

1. PROJECT SPECIFIC DETAIL 2

2. ENVIRONMENTAL AUDIT REPORT 4

PROJECT DETAIL 4
DETAIL OF AUDITOR 4
SCOPE & PURPOSE OF ENVIRONMENTAL AUDIT 5
ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE 5
LOCATION 6
PROJECT DESCRIPTION 7
SITE CONDITIONS 7
REPORTABLE ENVIRONMENTAL INCIDENTS 7
ADOPTED METHODOLOGY 7
INSPECTION ASPECTS 8
COMMENTS OR COMPLAINTS RECEIVED FROM I&AP'S 29
AUDITING OF EA, EMPR AND REPORTING THEREOF 29
GENERAL REPORT 30
ECO SIGNATURE 33
PHOTOGRAPHS 33

2. ENVIRONMENTAL AUDIT REPORT

PROJECT DETAIL

Right Number:	EC 30/5/1/2/2/215 MR	**Date of commencement:**	June 2010
Site name:	Aliwal Quarry	**Inspection date:**	20 May 2025
Right Holder:	Aliwal Dolerite Quarries (Pty) Ltd	**Other authorisations:**	Water Use Authorization No: 23086105 & 27/2/1/D114/48
Report number:	03		

DETAIL OF AUDITOR

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

ECO:	Christine Fouché
Expertise:	Ms Fouche has a Diploma in Nature Conservation and a BSc in Botany and Zoology with nineteen 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).
Declaration of independence:	I, Christine Fouche, in my capacity as environmental control officer 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). *Christine Fouché* Date: 26 May 2025

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 Part 11 Environmental Management and Monitoring of the 2011 EMPR. The conditions of the Environmental Authorisation and EMPR (*3.13 Proposed Impact Management Objectives and the Impact Management Outcomes for inclusion in the EMPr*) associated with the Section 102 amendment application to extend the mining footprint of the Quarry were also incorporated into this report.

OBJECTIVE:

The objective of the environmental audit report (EAR) is to evaluate compliance of the operational activities with the 2011 Environmental Management Programme Report (EMPR), Section 102 Environmental Authorisation (2019), and the 2018 Section 102 EMPR as approved by the Department of Mineral Resources and Energy. To evaluate the effectiveness of the EMPR's, identify shortcomings, and discern the need for changes to the environmental management programmes.

INSPECTED AREAS:

The inspection included an assessment of the following areas:

- Offices and storage areas;
- Workshop and wash bay;
- Wash plant and settling ponds;
- Crusher plants and stockpile areas;
- Salvage yard;
- Quarry Pit;
- Overburden dumps;
- Diesel depot;
- Stockpile area;
- Weigh bridge.

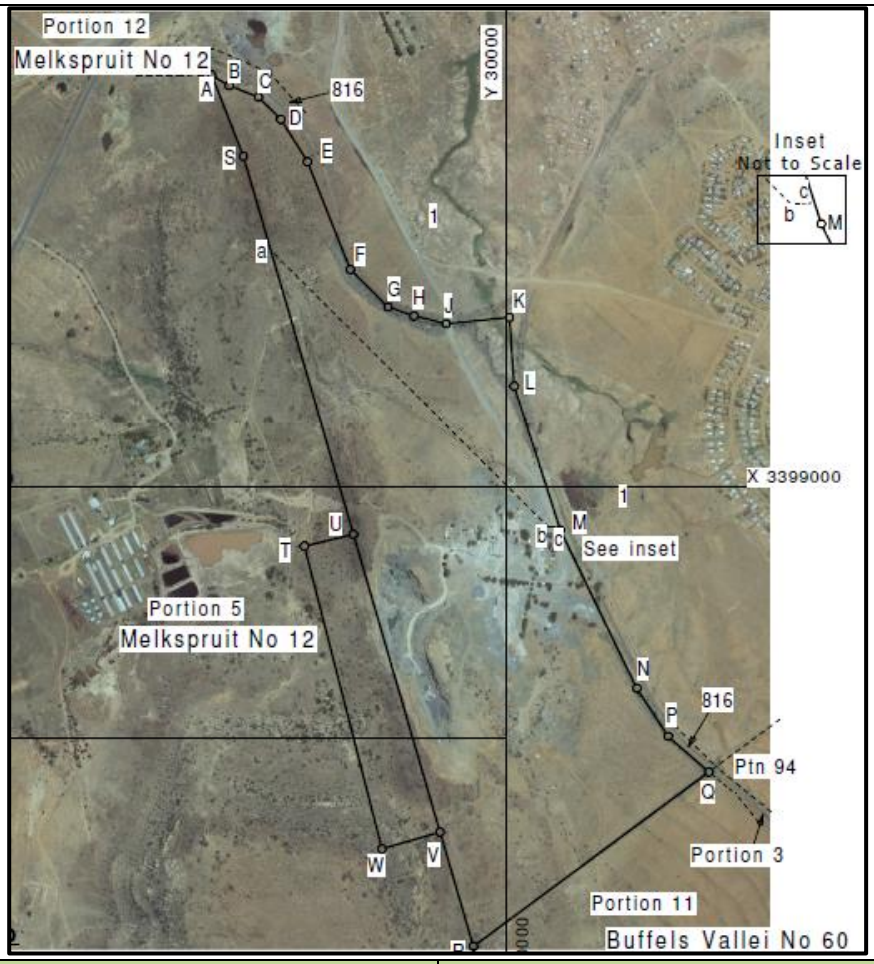
To establish the environmental compliance assessment of the operation, the mining site was inspected on foot by the Environmental Control Officer, Ms Christine Fouché, from Greenmined Environmental accompanied by Me Thembi Mteto of Aliwal Quarry.

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 (2024) 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:	The Aliwal Quarry is located 3 km to the south-west of Aliwal North and the N6 National Road on a portion of Erf 2928.
Site map	

		South Coordinate (Latitude)	East Coordinate (Longitude)
Original Site Coordinates (55.5166 ha)	A	-30° 42’ 13.85311”	26° 40’ 50.67110”
	B	-30° 42’ 14.52522”	26° 40’ 51.96911”
	C	-30° 42’ 15.26281”	26° 40’ 54.15002”
	D	-30° 42’ 16.69336”	26° 40’ 55.80857”
	E	-30° 42’ 19.43279”	26° 40’ 57.71013”
	F	-30° 42’ 26.37506”	26° 41’ 00.95086”
	G	-30° 42’ 28.79195”	26° 41’ 03.75398”
	H	-30° 42’ 29.36976”	26° 41’ 05.68111”
	J	-30° 42’ 29.87858”	26° 41’ 08.08949”
	K	-30° 42’ 29.49021”	26° 41’ 12.78943”
	L	-30° 42’ 33.91468”	26° 41’ 13.13291”
	M	-30° 42’ 43.18546”	26° 41’ 16.53533”
	N	-30° 42’ 53.37863”	26° 41’ 22.20009”
	P	-30° 42’ 56.47420”	26° 41’ 24.52185”
	Q	-30° 42’ 58.77362”	26° 41’ 27.55764”
	R	-30° 43’ 09.95726”	26° 41’ 09.97288”
	S	-30° 42’ 19.06215”	26° 40’ 53.01130”
Section 102 extension coordinates		**Y Coordinates: (WG 27˚)**	**X Coordinates**
	T	+30 400.83	+3 399 117.57
	U	+30 303.71	+3 399 093.88

(6.7824 ha)	V	+30 131.91	+3 399 684.25
	W	+30 247.08	+3 399 717.62

PROJECT DESCRIPTION

The Aliwal Quarry is an open cast mine that has been in existence since 1976. The solid dolerite is mined using conventional drilling, blasting, and bench-mining methods, with loosened material loaded to haul trucks and transported to the processing plant situated to the east of the mining area. The material goes through several crushers and screens to produce different sized aggregates and sand for the ready-mix, construction and road building industry. Facilities exist for washing products when required.

The DMRE approved a Section 102 amendment application in terms of the MPRDA, 2002 (as amended) to expand the mining footprint in December 2022. The said approval increased the mining footprint with 6.7824 ha to a total of 62.299 ha.

SITE CONDITIONS

Cloudy cool day with intermittent drizzle.

REPORTABLE ENVIRONMENTAL INCIDENTS

Incident date:	The quarry has an online system where all accidents and incidents are logged (see example attached to this document). No major incidents occurred during the audit period that had to be reported to the DMRE.
Incident no:	
Incident:	
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 2011 EMPR and MR of the quarry compatible with an Environmental Authorisation in terms of NEMA, 1998 and the EIA Regulations, 2014 (as amended). • Also refer to *Need for Amendment of the EMPR* under *General Report* below. • The Environmental Authorisation (EA) regarding the Section 102 amendment of the mining right was approved in 2019 and a copy of the authorisation is available on site.
Copy of the EA available on site	5	-	Compliant	
Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002)	5	-	Compliant	The Section 102 application to extend the mining footprint was granted on 02 December 2022 and executed on 14 February 2024.
Mining right available on site	5	-	Compliant	The mining right as well as the amendment/variation of the mining right is available on site.
Mine plan annually reviewed	5	-	Compliant	The mine plan was reviewed in February 2025, and a copy is available on site.
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004)	5	-	Compliant	Although the activities at the mine does 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 of the quarry is managed in accordance with the requirements of the NEM:WA.
National Water Act, 1998 (Act 36 of 1998)	5	-	Compliant	The Quarry has an approved Water Use Authorisation that allows for the abstraction of water from boreholes and the quarry pit for industrial use, the use of wastewater (dust suppression), and a contaminated stormwater storage facility. Water monitoring is also implemented at the site.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Copy of Water Use Authorisation available on site.	5			-
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	3	3	Being addressed	Aliwal Quarry has an Alien Invasive Species Management Plan as well as an Alien Invasive Management Action Plan. The 2025 action plan divides the mining area into 10 sections that are progressively cleaned. See *General Report.*
MINE PLANNING (2011 EMPR PG 11.2)				
Long-term mine plans generated and maintained that consider final closure requirements.	1	3	To be implemented	The site does not have a long term plan as required in the EMPR.
Short-term mine plan (annual) in place that are aligned to achieve long-term mine plan.	5	-	Compliant	The blasting plan shows the short term planning of the quarry.
Mining coordinated in accordance with short-term mine plan.	5	-	Compliant	-
Short term mine plan showing at least the following: • Boundary and 9 m boundary pillar, • Disturbed area subjected to current mining, • Indicated future mining areas, • Topsoil stockpiles, • Overburden dumps, • Storm water control structures.	4	3	To be implemented	The 2025 Mine Plan shows the 9 m boundary pillar and the overburden stockpiles (aka waste rock dump). The topsoil stockpiles are not indicated on the plan, nor does the plan show the stormwater control structures. However, the Quarry has a separate plan (Water Diagram) that shows the stormwater control structures. It is suggested that this condition is amended when the EMPR is reviewed.
Agenda of quarry planning meetings include environmental issues as prescribed in the EMPR (topsoil, overburden, visual, dust, noise, monitoring, storm water, closure requirements, complaints).	5	-	Compliant	Environmental matters are discussed during the quarry planning meeting.
STRIPPING OF VEGETATION AND TOPSOIL (2011 EMPR PG 11.3):				
Reduce area of impact by only striping areas demarcated for mining.	N/A	-	-	No topsoil was stripped nor was new areas disturbed during the audit period.
Unnecessary stripping of vegetation along the ridge avoided	N/A	-	-	
Vegetation and topsoil stripping only 20 m ahead of working face, or 3 months prior to mining.	N/A	-	-	This condition is no longer deemed applicable as the S102 application was approved and the quarry face now extends

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
				into an approved area with a separate EMPR. Additional thereto, no vegetation and/or topsoil was stripped in the original mining footprint during the audit period. It is suggested that this condition be removed when the EMPR is reviewed.
Concurrent rehabilitation implemented.	5	-	Compliant	Site management continues with the installation of the bridge that will connect the western side of the pit with the eastern side. The bridge contribute towards the rehabilitation of the previously mined areas. Additionally, oversize and unwanted material are used to refill the sump/dam of Pit 1.
Employees educated on poaching and snares	5	-	Compliant	Toolbox talks address this matter.
Security inspecting the mining area weekly and removing snares.	5	-	Compliant	According to site management, no snares have been found during the audit period.
Fauna sightings book maintained	5	-	Compliant	Fauna sightings are recorded, and proof is available on site.
Top 50 cm of material treated as topsoil, and below as overburden. Topsoil and overburden stripped separately.	N/A	-	-	No topsoil was stripped nor was new areas disturbed in the original mining area during the audit period.
Topsoil and overburden stripped separately.	N/A	-	-	
No soil stripped when windy/wet (if practical).	N/A	-	-	
Topsoil and overburden stockpiled separately.	N/A	-	-	
Topsoil/overburden stockpiles not stored in future mining area or area where it will be compacted by vehicles	N/A	-	-	
Topsoil storage (heaps not exceeding 3 m)	N/A	-	-	Topsoil stockpiles were established in the expansion area, but no stockpiled topsoil occur in the “original” mining area.
Topsoil and overburden stockpiles clearly labelled	5	-	Compliant	The overburden heaps were signposted.
Soil stockpiles protected from compaction by vehicles and storm water run-off.	N/A	-	-	The “original” quarry does not have topsoil stockpiles.
Stockpiles indicated on all mine plans.	N/A	-	-	

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Stockpiles monitored for correct use, erosion, alien vegetation, foreign matter. Corrections implemented when necessary.	N/A	-	-	
Erosion identified and addressed.	N/A	-	-	No erosion were noted on site.
Alien vegetation removed by hand pull methods.	5	-	Compliant	-
Foreign matter removed and disposed in accordance with the waste management plan.	5	-	Compliant	-
STRIPPING AND STOCKPILING OF OVERBURDEN (2011 EMPR PG 11.4):				
Overburden handled separately to topsoil.	5	-	Compliant	-
Overburden used for concurrent rehabilitation under topsoil.	5	-	Compliant	Overburden and oversize rocks are used to construct the bridge in the quarry and refill the sump/dam of Pit 1.
Overburden dumps located outside future mining areas, or areas prone to excessive surface water runoff. Stormwater control implemented and dumps captured on mine plans.	5	-	Compliant	-
Overburden dumping planned so the exterior of the dump is only undertaken between 08:00 and 18:00 during weekdays.	5	-	Compliant	-
Earthmoving equipment kept in good working order.	5	-	Compliant	This appeared true during the audit.
Structures/measures/filters in place to filter “dirty” water from overburden dumps.	4	3	To be implemented	Gabions were installed to filter sediment from runoff water that leaves the mining area. As discussed, the gabions should be connected to the adjacent stormwater berms to prevent water flowing around the installations.
Overburden dumps monitored (stormwater, revegetation, alien vegetation, erosion). Inadequacies rectified.	4	3	Ongoing	The remaining alien invader plants must be removed from the overburden dumps.
Overburden dump restricted to a max of 20 m	5	-	Compliant	-
DRILLING BLASTING AND SECONDARY BREAKING (2011 EMPR PG 11.5):				
Drilling and blasting undertaken in compliance with the short-term mine plans.	5	-	Compliant	-
Blasting conducted by a certified blaster i.t.o the Blasting Procedure.	5	-	Compliant	B&E International (Pty) Ltd is the responsible blasters of the quarry.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Blast monitoring implemented.	5	-	Compliant	-
Concerns regarding blasting addressed.	4	3	Ongoing	The quarry is in the process of addressing a blasting related concern.
Explosive magazine permit on-site and requirements implemented.	N/A	-	-	The magazine was removed from site.
Drill rigs fitted with dust suppression / extraction equipment and maintained according to a schedule.	5	-	Compliant	-
Blasting postponed when windy.	5	-	Compliant	Although the November 2024 blast wasn't postponed due to windy conditions, it had to be postponed due to cloudy conditions.
Secondary breaking taking place in the quarry.	N/A	-	-	No secondary breaking takes place at the quarry.
Drilling and secondary breaking undertaken during normal operational hours and within the quarry.	5	-	Compliant	-
Blasting conducted between 12:00 and 16:00	5	-	Compliant	-
Water monitoring conducted on water in the quarry sump for levels of nitrate	4	3	To be addressed	The most recent water samples (from the pits) were collected in June 2024. The results indicated elevated nitrate levels that must be addressed. See *General Report*.
LOADING AND HAULING (2011 EMPR PG 11.7):				
Vehicle and earth moving equipment checks undertaken prior to a shift.	5	-	Compliant	Proof of pre-start registers are available on site.
Dust resulting from vehicle entrainment on all haul roads suppressed.	5	-	Compliant	Water sprayers are used to control dust on the road ways and the weigh bridge.
Loading and hauling of blasted material to the primary crusher restricted to normal work hours.	5	-	Compliant	• Hauling of the blasted material to the primary crusher is restricted to normal work hours. • Presently, the quarry does not work after hours.
Earthmoving equipment kept in good working and if possible, fitted with noise abatement technology.	5	-	Compliant	-

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
CONCURRENT REHABILITATION (2011 EMPR PG 11.7):				
Concurrent rehabilitation implemented.	5	-	Compliant	-
Annual concurrent rehabilitation guideline developed and reported on.	5	-	Compliant	The Annual Rehabilitation Plan forms part of the Financial Provision Report that is annually reviewed.
Priority given to external perimeter of the mining area when concurrent rehabilitation is implemented.	N/A	-	-	Not applicable as the quarry pit is being extended in a westerly direction. It is suggested that this condition be removed when the EMPR is reviewed.
At least 10 indigenous trees planted a year.	1	3	To be implemented	-
Local horticulturalist/nursery used to supply seeds/plants.	N/A	-	-	Not applicable as no areas were rehabilitated where plants needed to be established.
Indigenous species used.	N/A	-	-	
Fast growing evergreen trees used.	N/A	-	-	
Concurrent rehabilitated areas monitored, and corrective actions implemented when needed.	N/A	-	-	
Alien vegetation control plan (AVCP) implemented on site.	5	-	Ongoing	The AVCP was reviewed, and the Action Plan was updated. The plan was implemented on site during the audit period.
AVCP reviewed and if necessary updated annually	5	-	Compliant	
Continued existence of beneficial alien vegetation legalised through the DWS.	N/A	-	-	It was established that the *Eucalyptus* trees at the mine is of the *Eucalyptus citriodora* species (Blue spotted gum / Lemon eucalyptus) that is not listed as an invader plant species in South Africa. It is suggested that this condition be removed when the EMPR is reviewed.
Inspection programme for all buildings implemented (maintenance, redundancy)	5	-	Compliant	Although no formal inspection programme exist, maintenance and repairs are constantly done.
Open pits progressively backfilled and made safe (such as the old sandstone pit)	4	1	Ongoing	The sandstone pit was refilled, and site management is in the process of rehabilitating mined areas at the quarry pit. However, the quarry pit will never be completely backfilled, and the amendment of this condition must be considered when the EMPR is reviewed.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
CRUSHING, SCREENING, WASHING AND STOCKPILING (2011 EMPR PG 11.10):				
Plant kept in good working order through scheduled maintenance.	5	-	Compliant	-
Build-up of fines reduced around the plants.	5	-	Compliant	The plant is cleaned daily.
Enclosures at the existing crushers/screens maintained.	5	-	Compliant	-
Exposed transfer points fitted with dust suppression systems and working effectively.	5	-	Compliant	The plant is fitted with water sprayers.
Drop height from crushing plants onto the plant stockpiles reduced by maintaining a stockpile	5	-	Compliant	-
Vehicles speed restricted to 20 km/h and roads watered around the plant.	5	-	Compliant	-
Dust management measures monitored.	5	-	Compliant	-
Pre-shift inspection of the plant implemented to identify potential oil leaks.	5	-	Compliant	Pre-start registers are available on site.
DISPATCH (2011 EMPR PG 11.11):				
Dust suppression implemented	5	-	Compliant	-
Sales and dispatch during normal operational hours.	5	-	Compliant	-
Vehicles not leaking oil/fuel.	5	-	Compliant	On the day of the audit, no spills were noted at the dispatch area.
No excessive exhaust emissions.	5	-	Compliant	-
Bucket of the vehicle suitable for the products being collected.	5	-	Compliant	-
Unroadworthy vehicles reported to the owner and entry to the mine prevented.	5	-	Compliant	The site has a system where the roadworthiness of all vehicles that enter is checked.
Vehicle parking area clear of oil/hydrocarbon spills.	5	-	Compliant	The parking area was clear of spills.
Overloading prevented.	5	-	Compliant	All trucks leaving the site must pass over the weighbridge and no overloading is allowed.
Use of tarpaulins on haulage vehicles requested and encouraged by mine	5	-	Compliant	Although this is not implemented by the clients, the quarry does encourage the use of covers on the trucks.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Potholes reported to the relevant traffic department	N/A	-	-	-
WATER SUPPLY AND USE (2011 EMPR PG 11.12):				
All water uses licenced by DWS and a copy available on site.	5	-	Compliant	-
Operation in accordance with the WUL conditions and audited every 2 years.	1	3	Being Implemented	Aliwal Quarry is in the process of reviewing the water usages of the site.
Changes in water uses affecting the current authorisation.	N/A	-	-	Not application as the water uses of the Quarry did not change during the audit period. However, the site is still in the process of re-evaluating the water uses and will align this with the latest legislative requirements if applicable.
Monthly water balance diagram maintained.	4	3	To be implemented	The water balance diagram needs to be updated to correspond with the figures presented in the ESG spreadsheet.
Biannual water management inspections conducted of all areas stipulated in the EMPR and rectifications implemented.	3	3	To be implemented	The Quarry do annual water monitoring instead of biannual.
Potable water obtained from the boreholes and available on site for use of workers	5	-	Compliant	-
Monthly water consumption monitoring implemented and used to update the water balance diagram.	4	3	To be implemented	The monthly water consumption of the mine is captured in the ESG spreadsheet however, this information must be used to update the water balance diagram.
Taps, water pipelines and pumps inspected for leaks (weekly)	5	-	Compliant	-
Water captured in the quarry used for process water.	5	-	Compliant	-
Process water recycled (settling dam).	3	3	To be addressed	Although the wash plant wasn't in use on the day of the audit, the settling ponds are overgrown and does not comply with the requirements of the EMPR. The ponds need to be cleaned, and all process water must be directed to the dams.
Freeboard level (0.8m) indicated on the settlement dam and training sessions done to prevent exceedance.	1	3	To be implemented	
Training sessions conducted to prevent exceedance of the freeboard level.	1	3	To be implemented	

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Regular maintenance of the settlement dam side wall carried out to detect erosion/leakages.	1	3	To be implemented	Since the 2024 audit, the alien trees were cut, but regrowth must be controlled.
"Clean" water separated from "dirty" water and directed around the site	4	3	To be addressed	As mentioned earlier the settling ponds are overgrown and need to be cleaned before the washing of material can commence.
Uncontrolled discharge of "dirty water" from mining site prevented.	4	3	To be addressed	
Stormwater control structures evaluated biannually.	5	-	Compliant	See earlier comment regarding the gabion baskets that must be connected to the stormwater berms.
Regular maintenance of berms/trenches carried out to keep clean and dirty water separate.	4	3	To be implemented	
Responsible person appointed to monitor the level and integrity of septic tanks. Strong odours reported to a responsible person.	5	-	Compliant	-
Septic tanks emptied when more than 75% full	5	-	Compliant	The municipality empties the tank when needed and proof is available on site.
Biannual surface and ground water monitoring implemented.	3	3	To be addressed	Presently the mine does annual surface water monitoring. No groundwater monitoring was done during the audit period.
ELECTRICITY SUPPLY AND ASSOCIATED WORKSHOP (2011 EMPR PG 11.14):				
All spares and parts stored in a workshop.	5	-	Compliant	-
Workshop neat and tidy.	5	-	Compliant	-
Potentially oily electrical equipment stored in a concreted area.	5	-	Compliant	-
Sealed drum for the disposal of fluorescence tubes maintained in the workshop.	N/A	-	-	According to site management no fluorescence tubes had to be disposed of during the audit period.
Technology to reduce energy consumption investigated.	5	-	Ongoing	The mine constantly considers energy reducing technology such as LED light bulbs, efficient motors etc.
Transformers/gensets kept in a concrete lined bunded area.	5	-	Compliant	A bund was placed around the generator of the site.
Transformers maintained by a qualified electrician.	5	-	Compliant	-
Transformer areas kept free of vegetation.	N/A	-	-	

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Transformers tested for PCB contamination and if necessary polluted oil replaced with virgin oil.	N/A	-	-	Site management is not allowed to enter the onsite Eskom transformer area.
Monthly electricity consumption recorded.	5	-	Compliant	Part of the ESG spreadsheet.
MAINTENANCE / WORKSHOP (2011 EMPR PG 11.14):				
General housekeeping within the workshop maintained.	5	-	Compliant	The workshop was very neat on the day of the audit.
Polluting chemicals stored within a protected area.	5	-	Compliant	-
New oils moved/stored in a designated oil store.	5	-	Compliant	-
Old oil captured and recycled.	5	-	Compliant	Oilkol (Pty) Ltd collects the used oil of the site.
Old oil stored within a sealed container prior to recycling.	5	-	Compliant	-
All lubrication containers stored in a concreted protected area in line with the MSDS.	5	-	Compliant	-
MSDS sheets reviewed and audited (annually).	5	-	Compliant	-
Hydrocarbon spills cleaned up.	4	3	To be addressed	The few spills noted on the day of the audit must be cleaned.
Clean water falling outside the workshop area directed away through trenches and berms.	5	-	Compliant	-
Water falling within the workshop captured and directed into an oil separator. Clean water from the oil separator used as process water.	5	-	Compliant	-
Vehicle checks done prior to start of a shift.	5	-	Compliant	-
Vehicle parking area allocated for vehicles not in use and kept clear of spills.	5	-	Compliant	-
Drip trays placed under vehicles.	5	-	Compliant	-
Vehicles and earthmoving equipment maintained in accordance with a maintenance schedule and records kept.	5	-	Compliant	-
Maintenance conducted within covered concreted workshop.	5	-	Compliant	-
Drains leading to the oil trap inspected weekly and cleaned routinely.	5	-	Compliant	The drains and first chamber of the oil trap are continuously cleaned.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Level of sludge in the first chamber of the oil trap monitored and cleaned when full.	5	-	Compliant	
Water from last chamber of oil separator system tested to prove effectiveness. Corrective measures taken if necessary.	1	3	To be addressed	The latest (2024) test results show that the water from the last chamber of the oil sump falls outside the acceptable limit.
DIESEL (2011 EMPR PG 11.16):				
Above ground diesel tank located within a bunded area that can contain 110% of the capacity of the tank.	4	3	To be addressed	The capacity of the bund wall is less than 110% of the fuel stored within.
Responsible person present when fuel is delivered or dispensed.	5	-	Compliant	-
Structural integrity of the bund inspected monthly and corrected if needed.	4	3	To be addressed	As mentioned earlier, the capacity of the bund must be increased whereafter it must be sealed.
Outlet valve of the bund always kept closed.	5	-	Compliant	The valve was closed on the day of the audit.
Bund wall clear of excessive fines and vegetation.	5	-	Compliant	**-**
Area around the refuelling stations inspected.	5	-	Compliant	The area around the refuelling station was neat on the day of the audit.
Environmentally acceptable absorbent available at locations where potential spills may occur.	5	-	Compliant	The site has an oil spill kit.
Staff members who dispense fuel trained in spill handling	5	-	Compliant	Emergency drills are done on site where the responsible employees are trained.
Diesel bowser inspected for leaks and stored on a concreted area when not in use.	4	3	To be addressed	The parking area is concrete lined with berms along three sides. However, it is suggested that the entrance be fitted with a small berm to prevent spills/water draining from the parking area into the surroundings.
Fuel consumption monitoring implemented.	5	-	Compliant	This forms part of the ESG spreadsheet.
SALVAGE YARD (2011 EMPR PG 11.17):				
Equipment that may result in small oil leaks stored in a plastic lining or drip tray.	N/A	-	-	No longer applicable, as all the old equipment that may result in oil leaks were removed from site.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
No stormwater flows through salvage yard.	5	-	Compliant	The stormwater flows around the concrete lining of the salvage yard.
Salvage yard neat and stored in orderly fashion.	5	-	Compliant	-
Usefulness of materials at the salvage yard evaluated annually.	5	-	Compliant	-
WASTE (2011 EMPR PG 11.17):				
Waste management inventory developed and maintained: • List of waste produces generated, • Classification of waste (gen/haz), • Disposal records, • Off-site disposal records, with contact details of contractor. Authorisation/licence of contractor, • Record of amount.	5	-	Compliant	The Quarry added the registration certificates of their waste removal contractors since the last audit.
Employees trained in need to separate general/hazardous waste.	5	-	Compliant	-
Small salvage yard for non-polluting salvage material (screens) maintained.	5	-	Compliant	-
Mine patrolled to remove litter.	5	-	Compliant	-
Temporary waste storage facilities signposted for different types of waste	5	-	Compliant	-
Suitable number of waste receptacles available.	5	-	Compliant	-
Bunded tanks for recycling of old oil drained from vehicles and equipment available.	5	-	Compliant	-
Skip for scrap metal in waste processing area.	5	-	Compliant	-
Recycling area for glass, cans, and paper	N/A	-	-	No recycling companies have been identified in the vicinity of the Quarry where glass/cans/paper can be disposed of separately. Oil, scrap metal, filters, and building rubble are recycled.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Bunded, concreted, covered storage area for hazardous waste. No hazardous waste stored >90 days.	4	3	To be addressed	The bunds of the hazardous waste storage areas must be sealed. A bund was added to the additional (adjacent) storage area since the 2024 audit.
Store for old tyres and conveyor belts.	5	-	Compliant	A specific area was designated for the storage of these materials.
Capacity of the waste processing area of sufficient size.	5	-	Compliant	-
Appropriate storm water management system at the waste processing areas.	5	-	Compliant	-
Proof that the company contracted to collect and dispose waste is authorised available.	5	-	Compliant	-
Proof of disposal and/or recycling of waste available.	5	-	Compliant	-
Authorisation of the disposal and/or recycling facility.	5	-	Compliant	-
ADMINISTRATION (2011 EMPR PG 11.19)				
Adherence and validity of permits/registrations/licences confirmed annually: • Mining Right, • WUL, • Waste disposal permits, • Explosive magazine permit,	5	-	Compliant	The mine no longer has a magazine.
Contracts between the mine and sub-contractors stipulate environmental commitments.	5	-	Compliant	The quarry uses contractor packs on site that stipulate the relevant conditions and requirements.
Induction training done with all sub-contractors.	5	-	Compliant	-
Proof of annual liaison with surrounding landowners.	5	-	Compliant	The surrounding landowners are informed of each blast via notices and a verbal announcements (speaker broadcast in community).
Complaints registered maintained on site.	5	-	Compliant	The mine has a complaints box and register.
ENVIRONMENTAL MANAGEMENT DURING DECOMMISSIONING AND CLOSURE (2011 EMPR PG 11.21):				
This section was not audited as the decommissioning phase has not yet commenced nor is the mine in closure.				

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
HAZARDOUS CHEMICAL / HYDROCARBON SPILLS (2011 EMPR PG 11.22):				
Source of the spill stopped, and the spill contained	5	-	Ongoing	-
Contaminated area cleaned as prescribed in the EMPR	4	3	To be addressed	The spills around the workshop area must be cleaned.
Contaminated material disposed of as hazardous waste or transported to a bioremediation site.	5	-	Compliant	EnviroTech removes the contaminated soil from the mine and proof is available on site.
Record kept of safe disposal.	5	-	Compliant	-
FIRE (2011 EMPR PG 11.23):				
Potential for spread of veld fires reduced	5	-	Ongoing	A fire break is maintained around the mining area.
Fires reported to emergency services	N/A	-	-	Not applicable during the audit period.
Fire extinguishers available on site	5	-	Compliant	-
Employees trained in firefighting	5	-	Compliant	-
SECTION 102 EMPR – TOPOGRAPHY (2018 EMPR PG 57):				
Mining carried out in such a way that the slopes are not dangerously steep.	3	3	In process	The sloping of some of the old faces of the quarry is in progress.
Slopes profiled to a 1:3 gradient and monitored continually.	3	3		
Topsoil redressed and hydroseeding with local grass species done once mining completed.	N/A	-	-	Not yet applicable
Steep slopes battered and stabilised.	N/A	-	-	
Wind erosion monitoring implemented.	5	-	Compliant	No wind erosion concerns were noted on site.
Road surfaces stabilised and maintained during mining operations.	5	-	Compliant	-
Vehicles remain within the designated road to prevent soil erosion.	5	-	Compliant	-
SECTION 102 EMPR – FLORA (2018 EMPR PG 57):				
Topsoil kept safe to be used for rehabilitation	5	-	Compliant	The topsoil removed from the expansion area is stored separately.
Indigenous vegetation reintroduced through rehabilitation	N/A	-	-	Not yet applicable.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Mining area monitored for the occurrence of alien plant species and such plants appropriately removed.	3	3	To be addressed	The problem plants must be cleared from the extension area.
Rehabilitation area monitored for occurrence of alien plant species until 90% of the natural vegetation cover is established.	N/A	-	-	Not yet applicable.
SECTION 102 EMPR – FAUNA (2018 EMPR PG 58):				
Concurrent rehabilitation implemented.	N/A	-	-	Not yet applicable for the extension area.
Exotic vegetation removed.	3	3	To be addressed	The problem plants must be cleared from the extension area.
Disturbance limited to minimum mining footprint.	5	-	Compliant	-
Indigenous plant species planted during rehabilitation.	N/A	-	-	Not yet applicable.
No faunal species collected, hunted, or killed on site.	5	-	Compliant	Site management confirmed this.
Poaching, and/or hunting addressed through an Environmental Awareness Plan	5	-	Compliant	-
SECTION 102 EMPR – SURFACE WATER RESOURCES (2018 EMPR PG 58):				
Diesel/hydrocarbons storage according to the DWS minimum requirements.	N/A	-	-	No diesel/hydrocarbons are stored in the extension area.
Drip trays used during refuelling of machinery.	5	-	Compliant	When applicable.
Waste stored, transported, and disposed of at a registered waste disposal site.	5	-	Compliant	Although no waste is stored at the extension area, the waste practices of the Quarry is compliant.
Waste handling/storage areas restricted to a designated waste handling area.	5	-	Compliant	
Waste bins weather and scavenger proof and securely placed to avoid waste overflows.	5	-	Compliant	
SECTION 102 EMPR – AIR QUALITY (2018 EMPR PG 59):				
Dust from gravel roads reduced using appropriate dust suppression measures.	5	-	Compliant	Dust suppression is extended to this area when needed.
Dust fallout monitoring implemented.	1	3	To be addressed	The fallout dust monitoring must include the extension area.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Work suspended during extreme windy conditions.	N/A	-	-	-
Vehicles maintained in a roadworthy condition to limit the emissions to air.	5	-	Compliant	-
SECTION 102 EMPR – NOISE (2018 EMPR PG 59):				
Equipment operating on site maintained in a workable condition to minimise noise emissions.	5	-	Compliant	-
Unnecessary lighting avoided.	5	-	Compliant	No lighting was added to the extension area.
Machineries neatly placed.	N/A	-	-	No machines were placed in the extension area yet.
SECTION 102 EMPR – ARCHAEOLOGICAL AND CULTURAL SITES (2018 EMPR PG 59):				
Mining area continually monitored for archaeological artefacts.	5	-	Compliant	-
Artefacts with significant conservation status removed prior to mining.	N/A	-	-	No artefacts were discovered yet.
SECTION 102 EMPR – SOCIO-ECONOMIC (2018 EMPR PG 59):				
No dangerous excavations left in rehabilitated areas.	N/A	-	-	Not yet applicable.
Entry and exit to the mining area controlled.	5	-	Compliant	-
No fires allowed on the mining area.	5	-	Compliant	-
Required heavy vehicle signs erected at the access point.	5	-	Compliant	-
SECTION 102 ENVIRONMENTAL AUTHORISATION SITE SPECIFIC CONDITIONS (EA PG 5):				
Mining area clearly demarcated, and all vehicles remain within the demarcated footprint.	5	-	Compliant	Beacons were added to the extension area although some of them were stolen. Mining is within the approved footprint.
Blasting events communicated in writing to all abutting landowners two weeks prior to the scheduled blast. Proof of notifications recorded and included in the EAR.	5	-	Compliant	-
Concurrent mining and rehabilitation adopted during the operation of the mining activities. A rehabilitation plan implemented and complied with the approved EMPr.	N/A	-	-	Concurrent rehabilitation of the extension area was not yet possible.
Wastewater generated not discharged into the natural environment. Wastewater contained and safely disposed.	N/A	-	-	No wastewater was generated in the extension area.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Dust control measures implemented. Loads transporting mined material covered with hessian sheets or watered down to ensure dust control in transit.	5	-	Compliant	-
Drainage contoured to ensure runoff is contained and do not culminate in off-site pollution.	N/A	-	-	No drainage problems were noted on site during the audit.
Alien Eradication Programme established and implemented on site.	3	3	Being addressed	The problem plants must be cleared from all areas.
WULA applied for if required.	N/A	-	-	The extension area does not require authorisation in terms of the NWA.
Development footprint kept as small as possible not encroaching onto sensitive areas and neighbouring community.	5	-	Compliant	-
Upon closure: aftercare period of at least one year to remove alien invasive species implemented.	N/A	-	-	Not yet applicable.
SECTION 102 ENVIRONMENTAL AUTHORISATION STANDARD CONDITIONS – COMMENCEMENT OF THE ACTIVITIES (EA PG 9):				
All employees supplied with the necessary PPE	5	-	Compliant	-
EA provided to the site operator	5	-	Compliant	A copy of the EA is available on site.
Hauling roads clearly marked and appropriate signalling posted. Movement of vehicles restricted to areas outside of the drainage line or wet areas.	5	-	Compliant	-
Appropriate signage erected warning the public about the hazard around the site and presence of heavy vehicles and machinery.	5	-	Compliant	-
Construction include design measures to allow surface and subsurface movement of water along the drainage lines so as not to impede natural surface and subsurface water flow and drainage measures promote the dissipation of stormwater runoff.	N/A	-	-	Not applicable for this mining operation.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Vegetation clearance limited to areas where the individual activities occur, and mitigation measures implemented to reduce the risk of erosion and alien species invasion.	3	3	Being addressed	The alien invader plants must be controlled on the denuded areas of the extension.
No protected plant species cut, disturbed, damaged, destroyed or the products possessed, collected, removed, transported, exported, donated, purchased, or sold without permission from DAFF.	5	-	Compliant	No protected plants were noted at the time of the inspection.
Topsoil and subsoil from construction areas protected from contamination or pollution. No stockpiles placed in drainage lines or where it will impede surface water runoff.	5	-	Compliant	-
Contaminated soil removed to a licensed waste disposal facility and the site rehabilitated to the satisfaction of DWS. Onsite remediation and re-use of contaminated soil investigated prior to disposal.	N/A	-	-	No contaminated soil originated from the extension area during the audit period.
Integrated waste management approach implemented. Uncontaminated rubble re-used on site. No refuse placed, dumped, or deposited on the adjacent properties or public places and open spaces.	5	-	Compliant	Aliwal Quarry does follow an integrated waste management approach.
Costs incurred to remedy environmental damages borne by the person responsible for the damage.	N/A	-	-	Not applicable during the audit period.
Construction vehicles serviced and maintained to prevent excessive smoke, reduce noise pollution, and prevent oil leaks.	5	-	Compliant	All mining vehicles are kept in good condition.
Residents on the property and surrounding areas informed of unusually noisy activities.	5	-	Compliant	Blasting notifications inform the residents of unusually noisy activities.
Dust suppression measures implemented.	5	-	Compliant	-
Mixing of cement, concrete, paints, solvent, sealants, and adhesives done in a specific area on concrete aprons or protected plastic linings.	N/A	-	-	Not applicable for the extension area during the audit period.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Heritage remains immediately reported to SAHRA.	N/A	-	-	
Material and excavated soil required for backfilling free of contamination from hydrocarbons.	5	-	Compliant	The overburden that will be used for rehabilitation was free of contamination during the audit.
Hydraulic fluid or chemicals stored in a concrete lined surface with bund walls designed in such a manner that any spillage is contained.	5	-	Compliant	All chemicals used on site is kept in the storerooms of Aliwal Quarry.
Chemical sanitation facilities provided with a ratio of 1 for every 15 workers, placed in such a way to prevent spills, and the contents disposed of at an authorised wastewater treatment works.	N/A	-	-	Employees make use of the Aliwal Quarry ablutions. No chemical toilets are needed on site.
Water uses authorised by the DWS.	N/A	-	-	Not applicable for the extension area.
Rehabilitation of the disturbed areas comply with the approved EMPR (2018).	N/A	-	-	Not yet applicable.
Waste management in accordance with the conditions of the EA (conditions 3.24 & 3.25).	5	-	Compliant	-
Waste storage site fitted with a firm, impermeable, chemical resistant floor, and roof.	5	-	Compliant	Although no waste is stored in the extension area the waste handling facilities of the Quarry do comply with the requirements.
Hydrocarbons stored in bund walls with adequate capacity to contain the maximum volume that is stored in the area. Uncontaminated stormwater prevented from meeting waste.	5	-	Compliant	-
SECTION 102 ENVIRONMENTAL AUTHORISATION STANDARD CONDITIONS – MANAGEMENT OF ACTIVITIES (EA PG 12):				
A copy of the EA and EMPR kept at the property.	5	-	Compliant	-
Content of the EMPR made known to all contractors, subcontractors, agent, and any other people working on the site. Updates submitted to the Department for approval.	5	-	Compliant	An induction was done (30 April 2024) with the relevant site employees where the EA and EMP was discussed.
Regular monitoring and maintenance of stormwater drainage facilities conducted.	N/A	-	-	Not yet applicable as no drainage facilities were established in the extension area.
Nuisance conditions or health hazards prevented.	5	-	Compliant	-

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Non-recyclable waste disposed of at licensed waste management facilities.	5	-	Compliant	-
All liquid wastes diverted to sewer after testing water quality and receiving written approval from the relevant local authority.	N/A	-	-	No liquid wastes originates in the extension area.
Rehabilitation of the disturbed surfaces comply with the approved EMPR	N/A	-	-	Not yet applicable.
Name and contact details of the ECO sent to the Regional Manager within 30 days of commencement. ECO always available on site.	5	-	Compliant	Although this did not happen within 30 days of commencement, the name and contact details of the site ECO (Me Thembi Mteto) were sent to the DMRE in October 2024.
Footprint limited to the areas authorised and all other areas regarded as no-go areas.	5	-	Compliant	-
Erosion and soil loss prevented, and erosion stabilising implemented where necessary.	5	-	Compliant	No erosion problems were noted on site.
Personnel working with hazardous waste trained and records available.	5	-	Compliant	-
Storage skips and bins not overfilled.	5	-	Compliant	-
SECTION 102 ENVIRONMENTAL AUTHORISATION STANDARD CONDITIONS – REPORTING TO THE DEPARTMENT (EA PG 14):				
Annual reporting done and submitted to the DMRE in accordance with the requirements of the EA.	5	-	Compliant	The previous EPA was submitted to the DMRE in July 2024.
SECTION 102 ENVIRONMENTAL AUTHORISATION STANDARD CONDITIONS – SITE SECURITY AND ACCESS CONTROL (EA PG 14):				
Effective access control on site and signs indicating the risks displayed at the entrance.	5	-	Compliant	-
Weatherproof durable legible notices in at least three official languages displayed at the entrance to the site.	4	3	To be addressed	The signage at the entrance to the site does not display three official languages.
SECTION 102 ENVIRONMENTAL AUTHORISATION STANDARD CONDITIONS – EMERGENCY PREPAREDNESS PLAN (EA PG 15):				
Emergency preparedness plan in accordance with the EA conditions (7.1) implemented and annually reviewed.	5	-	Compliant	This forms part of the CoP's of the site.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Emergency register kept on site.	5	-	Compliant	The mine lists all accidents/incidents on an online SHEQ system.

COMMENTS OR COMPLAINTS RECEIVED FROM I&AP'S

***(APPENDIX 7 SUB-REGULATION 3(G) & (J))*:**

No written environmental related complaints were received during the audit period.

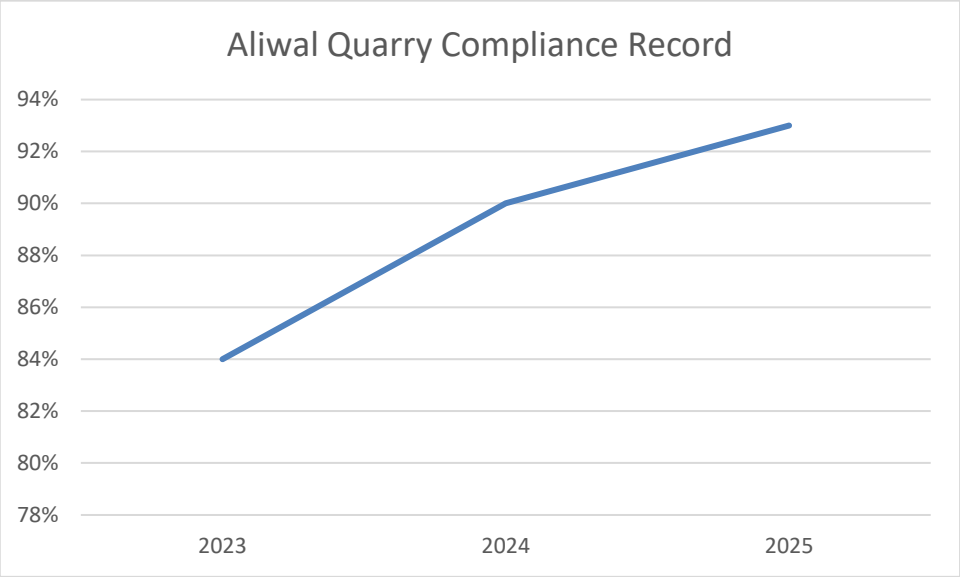
AUDITING OF EA, EMPR AND REPORTING THEREOF

***(REGULATION 34)*:**

Date of previous EAR/EPA:	May 2024
Proof of submission to DMR available:	The previous EAR was submitted to the DMRE on 12 July 2024, 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 (Aliwal Dolerite Quarry (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 2011 EMPR, Section 102 EMPR (2018) and the Section 102 EA was reviewed during the site assessment. The mining area recorded a compliance score of 93% for the audit period.



Section 102 Amendment Application – Extension of the Mining Footprint:

The Section 102 application for the extension of the mining footprint was granted in December 2022 and executed by DMRE on 14 February 2024.

The topsoil of the extension area was stockpiled along the western boundary of the mining area. As mentioned earlier, beacons were placed along the boundaries of the extension area. Although some of the beacons (drums) were stolen, the quarry fence contains the operations within the approved footprint.

The fallout dust monitoring consultant must amend/increase the number of monitoring units to include the expansion area.

Invader Plant Species:

The removal of problem plants such as Wild Tobacco (*Nicotiana glauca*), Large Thorn-apple (*Datura ferox*), and Dense-thorned Bitter Apple (*Solanum sisymbrifolium*) was intensified during the audit period and the results are evident on site. Sections 4, 6, and 10 do however still have numerous weeds that need to be attended to.

It was also noted that the Eucalyptus and Pepper trees at the settling ponds were cut. The regrowth must however be controlled.

Dirty Areas & Water Management:

Aliwal Quarry is in the process of reviewing the water uses of the site to ensure compliance with the NWA.

Site management must attend to the oil sump as the latest water results (2024) still showed hydrocarbons within the last tank of the sump. This water cannot be used for dust suppression until this matter was addressed.

The bund of the hazardous waste/used oil storage area must still be sealed, and management must ensure that all drums and drip trays containing used oil or other chemicals are stored inside the bunded areas.

As mentioned earlier, the settling ponds are overgrown and needs to be cleaned, barricaded and signposted prior to use. The eucalyptus- and pepper trees regrowth must also be removed.

The bund of the diesel tank must be increased to comply with the 110% capacity requirement. A berm must also be placed at the entrance to the diesel bowser parking area to prevent spills/water draining from the concrete lined area.

The chemical water quality results indicated elevated levels of nitrate that 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 Authorisations) limits. The data suggest that the nitrate most likely originates from blasting activity in the quarry (iWater, 2024). iWater further noted that Raumix must understand 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.

As mentioned earlier, the site installed some gabion baskets along the eastern perimeter of the mine to prevent runoff water with a high sediment load leaving the site. It is important that the baskets must be connected with the adjacent stormwater berms to prevent runoff water flowing around the installations. As discussed, riprap rock can be used to filter the sediment from the water before it drains through the berms.

Progressive Rehabilitation:

Installation of the bridge in the mined part of the quarry contributes to the progressive rehabilitation of the quarry. Once finished the bridge will connect the western side of the pit with the eastern side. As mentioned earlier, the oversize and unwanted material are being used to refill the sump/dam of Pit 1.

DOCUMENT CHECKLIST:

- Alien vegetation control plan & action plan - Present
- Blasting Notifications - Present
- Blasting Procedure - Present
- Complaints Register - Complaints box and register
- Concurrent rehabilitation plan - Part of the Financial Provision Report
- Dust Monitoring Report - Present
- EMPR 2011 - Present
- Environmental Awareness Plan - Present
- Environmental Performance Assessment (2024) - Present
- Fauna Sighting Book - Present
- Financial Provision (2024) - Present
- Incident Reports / Flash Reports - Present
- Long Term Mine Plan - To be developed
- Mine Plan (2024) - Present
- Mine Works Programme - Present
- Mining Right - Present
- Executed S102 Mining Right - Present
- MSDS's - Present
- Noise Monitoring Report - Present
- Plant/Vehicle Inspection Records - Present

• Proof of Environmental Awareness Training	-	Present
• Proof of Waste Removal	-	Present
• Section 102 Application EA	-	Present
• Section 102 EMPR	-	Present
• Section 102 Granting Letter	-	Present
• Short Term Mine Plan	-	Present
• Social and Labour Plan	-	Present
• Waste Service Providers Registration/Certification	-	Present
• Water Use Authorisation	-	Present
• Water Use Balance	-	Present to be updated
• Monitoring results	-	Dust Monitoring (Present) Water monitoring (Present) Fuel Consumption (Present) Electricity Consumption (Present) Waste Generation (Present)

MATTERS TO BE ADDRESSED:

1. Continue with the clearing of invader plant species and monitor the cleared sections for reoccurrence;
2. Draft a long term mine plan for the site;
3. Review the water uses of the Quarry and apply to DWS for amendment/rectification if needed;
4. Connect the gabions with the adjacent stormwater berms;
5. Address the blasting related complaint;
6. Implement bioremediation/filtration to address the high nitrate levels of the water in the quarry;
7. Plant indigenous trees as required in the EMPR;
8. Update the water balance diagram;
9. Increase water monitoring from annual to bi-annual as stipulated in the EMPR;
10. Clean all hydrocarbon spills;
11. Clean the settling ponds and ensure all wash water drain into the ponds;
12. Indicate the freeboard level on the settling ponds and arrange training with the relevant employees;
13. Correct the oil sump to prevent hydrocarbons washing/seeping into the last chamber;
14. Seal the bund of the hazardous waste storage area;
15. Increase the capacity of the diesel tank bund and seal the walls;
16. Include the extension area in the fallout dust monitoring plan;
17. Ensure the notices at the entrance to the mine display at least three official languages.

ABILITY OF EMPR TO ADEQUATELY MANAGE OR MITIGATE ENVIRONMENTAL IMPACTS & NEED FOR AMENDMENT OF THE EMPR *(APPENDIX 7 SUB-REGULATION 3(E)*:

The 2011 EMPR of the quarry was compiled prior to the promulgation of the NEMA EIA Regulations, 2014 and therefore does not fully address the requirements set out in Appendix 4 of GNR 326. The Quarry also has a second EMPR (2018) approved as part of the Section 102 application. It is the opinion of the author that the 2011 EMPR should be amended to ensure full compliance with the latest NEMA EIA Regulations and that the 2018 EMPR be merged with the 2018 EMPR to provide Aliwal Quarry with a single EMPR and simplify compliance.

FINANCIAL PROVISION:

This report is accompanied by a reassessment of the financial provision calculation for the year 2025 that amounts to R 5 791 522.87. The 2025 financial provision exceeds the value of financial guarantee in place at the DMRE, and the Right Holder may need to provide a shortfall amount upon departmental request.

ECO SIGNATURE

NAME:	SIGNATURE:	DATE:
Christine Fouché	Christine Fouché	26 May 2025

PHOTOGRAPHS

Building removed to increase service bay area.
Also note drum used to contain contaminated water that collects in drip trays.

Wash bay and oil sump improvements

Hazardous materials storage area. Note bund added to the cement slab in the righthand picture

Grey water from the basins directed away from septic tank

Wash plant

Settling ponds to be cleaned before use

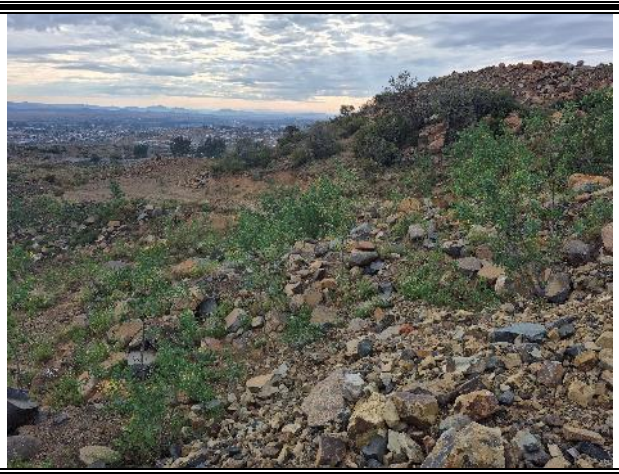
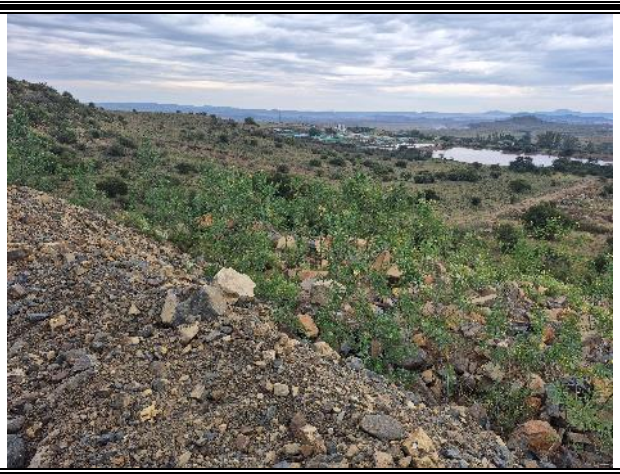
Pit to be supplied with a mesh grid to prevent injuries

Generator fitted with a bund wall

Plant area

Salvage yard neatly managed

Quarry pit

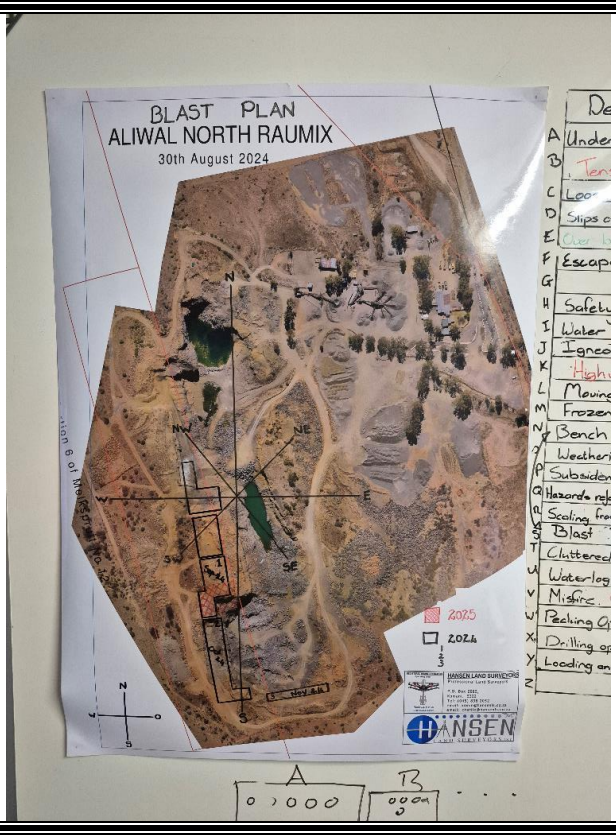
Problem plants to be cleaned from the extension area

Haul road. Numerous problem plants cleared from the areas adjacent to the haul road

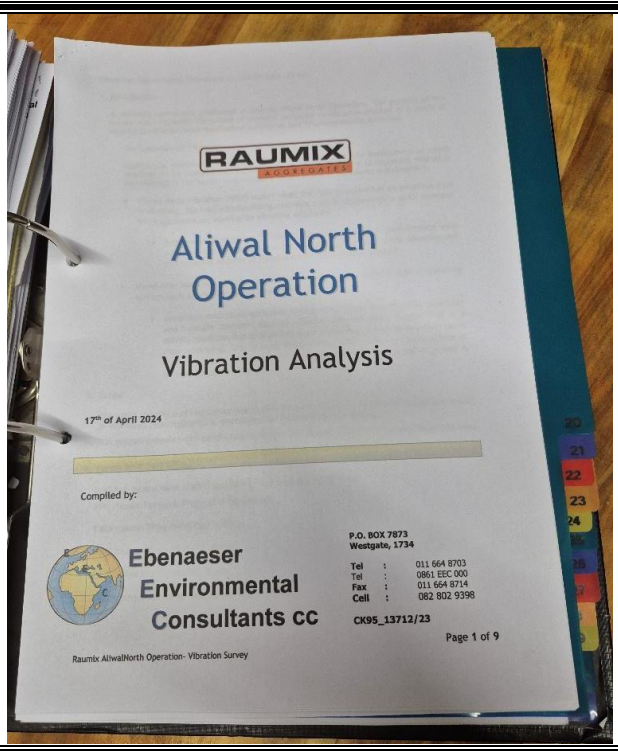
Diesel tank bunded area to be increased and sealed

Gabion baskets added to control stormwater runoff

PROOF OF DOCUMENTATION



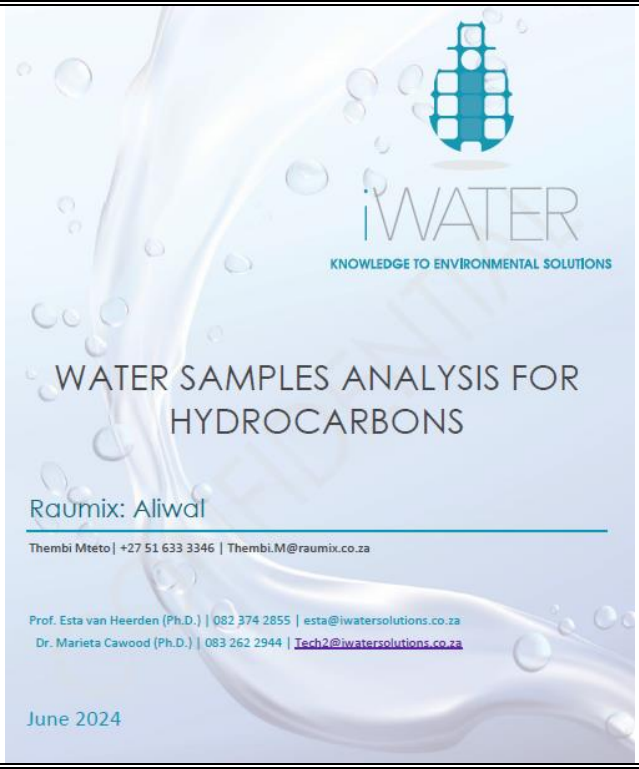
Blast Plan available on site



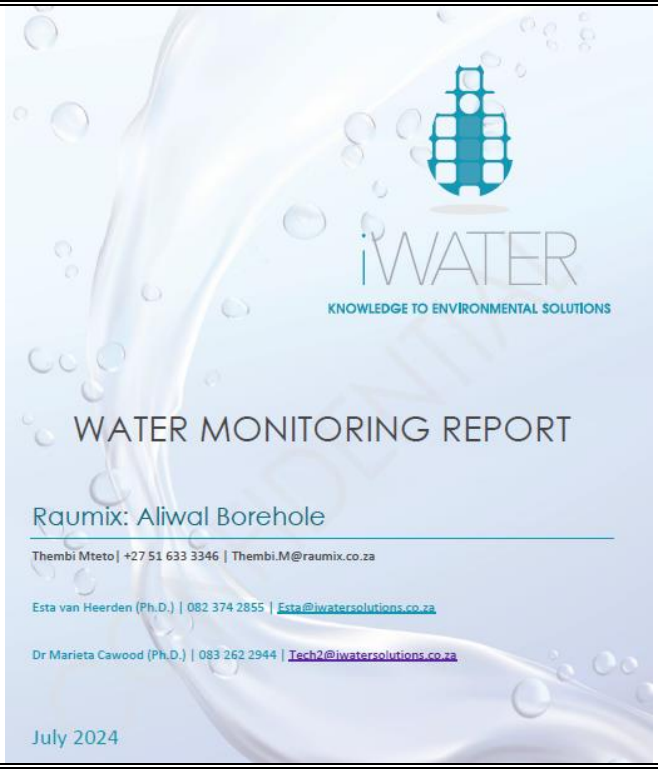
Vibration analysis available on site

Complaints box and -book available on site

Water monitoring report (quarry water)



Water monitoring report (oil sump water)



Water monitoring report (borehole water)

RAUMIX	Raumix Aggregates (South) and Transkei Quarries Waste Control Register	TRANSKEI QUARRIES

Area/Mine: ALIWAL QUARRY	Location:	Environmental Control officer:	Year: 2024
This register must be completed every tie 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)
20-2-24	Nico		BPOOJJGP	General wast	280 kg	Aliwal North	Municipality
19-3-24	Nico		"	"	245 kg	"	Municipality
10-4-24	Nico		"	"	221 kg	"	"
3-5-24	Nico		"	"	0,158	"	"
23-5-24	Nico		"	"	0,142	"	"
12-6-24	Nico		"	"	0,202	"	"
25-6-24	Nico		"	"	0,192	"	"
27-7-24	Nico		"	"	0,162	"	"

General waste control register

SEPTIC TANK

TARIFFS FOR DISTANCE

R47.25 X 4 = R189.00

R606.42 = R606.42

TOTAL = R795.42

JOE GQABI DISTRICT MUNICIPALITY
09 APR 2024

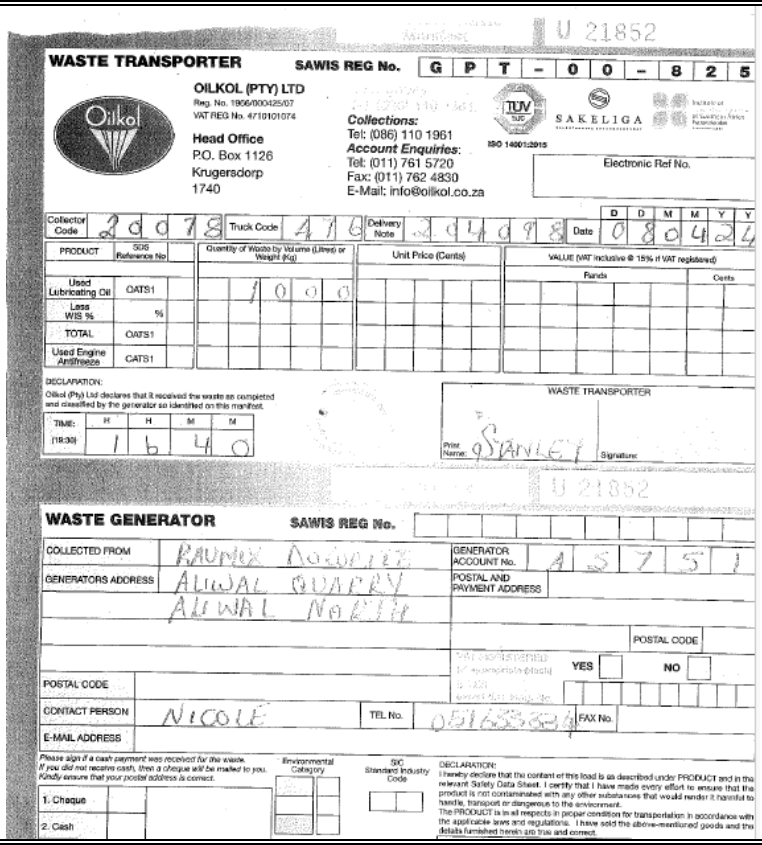
RAUMIX
ALIWAL QUARRY

Joe Gqabi Municipality
Corner Cole & Graham Street 8062 Barkly Ea
9876
VAT Registration Number: 4280128101

Receipt No	10042024/1089.
Receipt Date	10/04/20 11:09:
R - RAUMIX ALIWAL QUARRY	
Honey sucking - Septic Tank - Other SEPTIC TANK ALIWAL QUARRY	
Amount	692,
Vat Amount	103,
Total	795,96
Tender Amount	800.00
Change	4,05
Payment Type	Ca
Cashier	Lassie Qi
Cash Office	Maletsw

Thank you.

Proof of septic tank service



U 21852

WASTE TRANSPORTER SAWIS REG No. G P T - 0 0 - 8 2 5

OILKOL (PTY) LTD
Reg. No. 1966/000425/07
VAT REG No. 4710101074

Head Office
P.O. Box 1126
Krugersdorp
1740

Collections:
Tel: (086) 110 1961
Account Enquiries:
Tel: (011) 761 5720
Fax: (011) 762 4830
E-Mail: info@oilkol.co.za

ISO 14001:2015

Electronic Ref No.

Collector Code 20078 Truck Code 476 Delivery Note 294098 Date 08 04 24

PRODUCT	SOS Reference No	Quantity of Waste by Volume (Litres) or Weight (Kg)	Unit Price (Cents)	VALUE (VAT inclusive @ 15% if VAT registered) Rands	Cents
Used Lubricating Oil	OATS1	1000			
Less WIS %	%				
TOTAL	OATS1				
Used Engine Antifreeze	OATS1				

DECLARATION:
Oilkol (Pty) Ltd declares that it received the waste as completed and classified by the generator as identified on this manifest.

TIME: (18:30) H H M M 1 6 4 0

WASTE TRANSPORTER
Print Name: SANLEY Signature:

U 21852

WASTE GENERATOR SAWIS REG No.

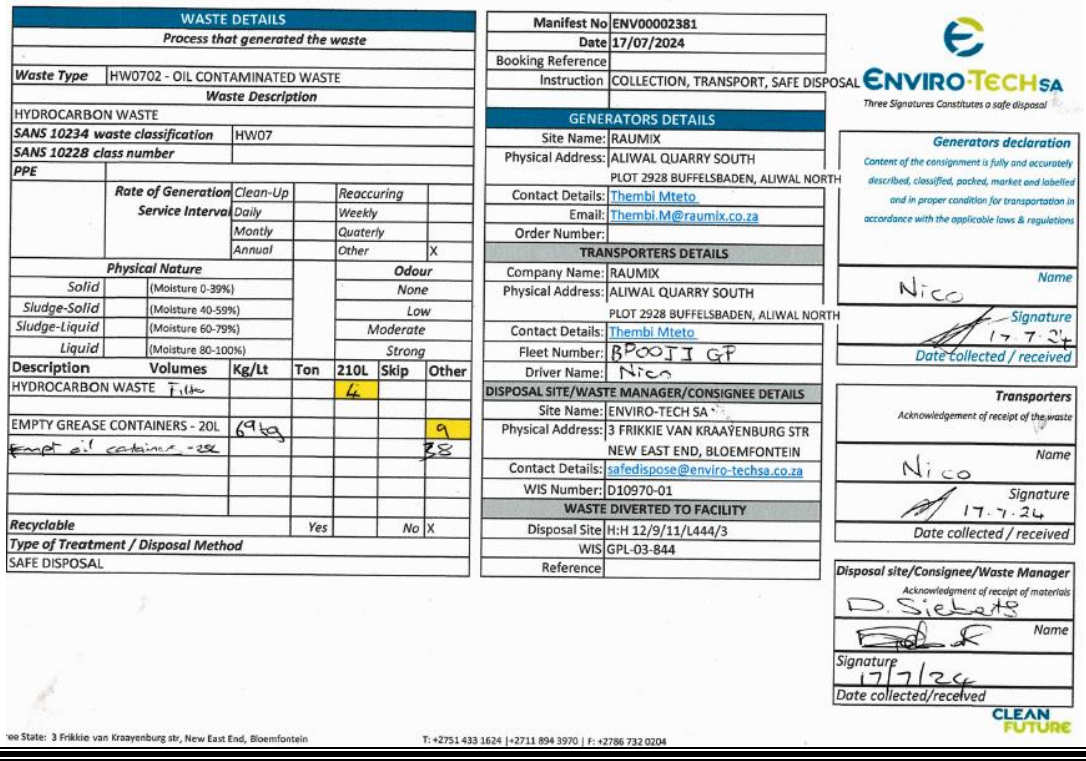
COLLECTED FROM: RAUMIX AGGREGATES
GENERATORS ADDRESS: ALIWAL QUARRY ALIWAL NORTH
GENERATOR ACCOUNT No.: A 5 7 5 1
POSTAL AND PAYMENT ADDRESS:
POSTAL CODE:
VAT REGISTERED (Vendorista-Plastic) YES NO
POSTAL CODE:
CONTACT PERSON: NICOLE TEL No.: 051 6333 FAX No.:
E-MAIL ADDRESS:

Please sign if a cash payment was received for the waste. If you did not receive cash, then a cheque will be mailed to you. Kindly ensure that your postal address is correct.
1. Cheque
2. Cash

Environmental Category
SIC Standard Industry Code

DECLARATION:
I hereby declare that the content of this load is as described under PRODUCT and in the relevant Safety Data Sheet. I certify that I have made every effort to ensure that the product is not contaminated with any other substances that would render it harmful to handle, transport or dangerous to the environment.
The PRODUCT is in all respects in proper condition for transportation in accordance with the applicable laws and regulations. I have sold the above-mentioned goods and the details furnished herein are true and correct.

Collection of used oil by Oilkol



WASTE DETAILS

Process that generated the waste

Waste Type: HW0702 - OIL CONTAMINATED WASTE

Waste Description: HYDROCARBON WASTE

SANS 10234 waste classification: HW07

SANS 10228 class number:

PPE:

Rate of Generation / *Service Interval*			
Clean-Up		Reaccuring	
Daily		Weekly	
Montly		Quaterly	
Annual		Other	X

Physical Nature		*Odour*
Solid	(Moisture 0-39%)	None
Sludge-Solid	(Moisture 40-59%)	Low
Sludge-Liquid	(Moisture 60-79%)	Moderate
Liquid	(Moisture 80-100%)	Strong

Description	Volumes	Kg/Lt	Ton	210L	Skip	Other
HYDROCARBON WASTE	Filter			4		
EMPTY GREASE CONTAINERS - 20L	69kg					9
Empt oil containers - 25L						28

Recyclable: Yes / No X

Type of Treatment / Disposal Method: SAFE DISPOSAL

Manifest No	ENV00002381
Date	17/07/2024
Booking Reference	
Instruction	COLLECTION, TRANSPORT, SAFE DISPOSAL

GENERATORS DETAILS

Site Name:	RAUMIX
Physical Address:	ALIWAL QUARRY SOUTH PLOT 2928 BUFFELSBADEN, ALIWAL NORTH
Contact Details:	Thembi Mteto
Email:	Thembi.M@raumix.co.za
Order Number:	

TRANSPORTERS DETAILS

Company Name:	RAUMIX
Physical Address:	ALIWAL QUARRY SOUTH PLOT 2928 BUFFELSBADEN, ALIWAL NORTH
Contact Details:	Thembi Mteto
Fleet Number:	BP00JJ GP
Driver Name:	Nico

DISPOSAL SITE/WASTE MANAGER/CONSIGNEE DETAILS

Site Name:	ENVIRO-TECH SA
Physical Address:	3 FRIKKIE VAN KRAAYENBURG STR NEW EAST END, BLOEMFONTEIN
Contact Details:	safedispose@enviro-techsa.co.za
WIS Number:	D10970-01

WASTE DIVERTED TO FACILITY

Disposal Site	H:H 12/9/11/L444/3
WIS	GPL-03-844
Reference	

ENVIRO-TECHSA
Three Signatures Constitutes a safe disposal

Generators declaration
Content of the consignment is fully and accurately described, classified, packed, market and labelled and in proper condition for transportation in accordance with the applicable laws & regulations
Name: Nico
Signature
Date collected / received: 17.7.24

Transporters
Acknowledgement of receipt of the waste
Name: Nico
Signature
Date collected / received: 17.7.24

Disposal site/Consignee/Waste Manager
Acknowledgment of receipt of materials
D. Siebats
Name
Signature
Date collected/received: 17/7/24

CLEAN FUTURE

ee State: 3 Frikkie van Kraayenburg str, New East End, Bloemfontein T: +2751 433 1624 | +2711 894 3970 | F: +2786 732 0204

Collection of hazardous waste by Enviro-Tech SA

RAUMIX AGGREGATES

Raumix Aggregates (South) and Transkei Quarries
SHEQ MANAGEMENT SYSTEM – ISO 45001
Alien Invasive Species Removal Register

TRANSKEI QUARRIES

DATE	SPECY NAME	LOCATION	REMOVAL METHOD	DISPOSAL METHOD	COORDINATOR	MANAGER SIGNATURE
10/07/2024	NICOTIANA	1	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	1	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	1	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	1	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	2	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	2	MANUAL	1M TRENCH	THEMBI	
10/07/2024		2	MANUAL	1M TRENCH	THEMBI	
10/07/2024		2	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	2	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	2	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	2	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	2	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	3	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	3	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	3	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	DATURA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	DATURA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	NICOTIANA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	DATURA	4	MANUAL	1M TRENCH	THEMBI	
10/07/2024		4	MANUAL	1M TRENCH	THEMBI	
10/07/2024	DATURA	4	MANUAL	1M TRENCH	THEMBI	

Alien invader plant control register and action plan

Aliwal Dolerite Quarry
Tel.: (051) 633 3346 **Fax:** (051) 633 3348
Postal Address: PO Box 314, Aliwal North, 9750

RAUMIX AGGREGATES
Producers of Aggregate for Construction

DATE: 11/04/2024

NUMBER TWO PIGGERIES

Dear Sir/Madam

Aliwal Quarry would herewith like to inform you that blasting will take place at the quarry on the 16TH of April at/or between 10.00am and 15.00pm.

Please do not hesitate to contact us in the event of any uncertainties or concerns.

Kind regards

N Borges
Raumix Aggregates
Aliwal North

We acknowledge receipt of this letter dated the 11/04/2024

SIGNATURE pp NUMBER TWO PIGGERIES

Philip

Proof of blasting notifications to neighbours