

**PETRA QUARRY
PORTION 0 OF THE FARM HILLSIDE 2830,
BLOEMFONTEIN, FREE STATE PROVINCE**

ENVIRONMENTAL PERFORMANCE ASSESSMENT / ENVIRONMENTAL AUDIT REPORT

DMRE REFERENCE NUMBER NMPS REFERENCE NUMBER	FS 30/5/1/2/2/10059 MR FS 30/5/1/2/2/10069 MR
AUDIT PERIOD:	June 2024 – April 2025

PREPARED FOR:

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PREPARED BY:

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1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT HOLDER
Company Name	Petra Quarry (Pty) Ltd
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ITEM	CONSULTANT DETAIL
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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	Petra Quarry
Property Description	Portion 0 of the farm Hillside No 2830
Location	Petra Quarry is situated within Bloemfontein, approximately 5 km north of the Central Business District (CBD). The mine is bordered by the R700 also known as Kenneth Kaunda Road.
Size of Mining Area	54.9874 ha

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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 2 of the EMPR (2015), in particular Part 2: Environmental Objectives and Goals, Part 6: Action Plans, and Part 8: Monitoring and Environmental Management Programme Performance Assessment.

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:

- Diesel depot;
- Offices and storage areas;
- Plant and stockpile areas;
- Quarry;
- Salvage yard;
- Settling ponds;
- Wash bay; and
- Workshop.

To establish the environmental compliance of the operation, the mine was inspected on foot by the Environmental Control Officer, Christine Fouché, of Greenmined Environmental accompanied by Me Ellen van der Westhuizen from Petra Quarry and Me Jacomien de Bruyn representing Raumix Aggregates (Pty) Ltd.

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 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 were the aspects of the Social and Labour Plan and/or Mine Works Programme reviewed.

LOCATION

Site Location:	Petra quarry is situated within Bloemfontein, approximately 5 km north of the Central Business District (CBD). The mine is bordered by the R700 also known as Kenneth Kaunda Road.																																																										
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Site Coordinates:	<table border="1"> <tr><td>A</td><td>29°03'30.75" S</td></tr> <tr><td>B</td><td>29°03'37.41" S</td></tr> <tr><td>C</td><td>29°03'55.15" S</td></tr> <tr><td>D</td><td>29°03'55.13" S</td></tr> <tr><td>E</td><td>29°03'56.29" S</td></tr> <tr><td>F</td><td>29°03'55.83" S</td></tr> <tr><td>G</td><td>29°03'55.91" S</td></tr> <tr><td>H</td><td>29°03'55.87" S</td></tr> <tr><td>I</td><td>29°03'56.17" S</td></tr> <tr><td>J</td><td>29°03'57.67" S</td></tr> <tr><td>K</td><td>29°03'58.44" S</td></tr> <tr><td>L</td><td>29°03'58.50" S</td></tr> <tr><td>M</td><td>29°03'58.18" S</td></tr> <tr><td>N</td><td>29°03'55.06" S</td></tr> <tr><td>O</td><td>29°03'55.03" S</td></tr> <tr><td>P</td><td>29°03'48.80" S</td></tr> <tr><td>Q</td><td>29°03'52.44" S</td></tr> <tr><td>R</td><td>29°03'45.88" S</td></tr> <tr><td>S</td><td>29°03'41.06" S</td></tr> </table>	A	29°03'30.75" S	B	29°03'37.41" S	C	29°03'55.15" S	D	29°03'55.13" S	E	29°03'56.29" S	F	29°03'55.83" S	G	29°03'55.91" S	H	29°03'55.87" S	I	29°03'56.17" S	J	29°03'57.67" S	K	29°03'58.44" S	L	29°03'58.50" S	M	29°03'58.18" S	N	29°03'55.06" S	O	29°03'55.03" S	P	29°03'48.80" S	Q	29°03'52.44" S	R	29°03'45.88" S	S	29°03'41.06" S	<table border="1"> <tr><td>26°14'29.32" E</td></tr> <tr><td>26°14'55.87" E</td></tr> <tr><td>26°14'55.72" E</td></tr> <tr><td>26°14'48.80" E</td></tr> <tr><td>26°14'47.00" E</td></tr> <tr><td>26°14'44.66" E</td></tr> <tr><td>26°14'42.47" E</td></tr> <tr><td>26°14'39.77" E</td></tr> <tr><td>26°14'38.81" E</td></tr> <tr><td>26°14'38.43" E</td></tr> <tr><td>26°14'37.94" E</td></tr> <tr><td>26°14'37.74" E</td></tr> <tr><td>26°14'30.82" E</td></tr> <tr><td>26°14'30.91" E</td></tr> <tr><td>26°14'29.15" E</td></tr> <tr><td>26°14'29.17" E</td></tr> <tr><td>26°14'21.72" E</td></tr> <tr><td>26°14'19.45" E</td></tr> <tr><td>26°14'29.24" E</td></tr> </table>	26°14'29.32" E	26°14'55.87" E	26°14'55.72" E	26°14'48.80" E	26°14'47.00" E	26°14'44.66" E	26°14'42.47" E	26°14'39.77" E	26°14'38.81" E	26°14'38.43" E	26°14'37.94" E	26°14'37.74" E	26°14'30.82" E	26°14'30.91" E	26°14'29.15" E	26°14'29.17" E	26°14'21.72" E	26°14'19.45" E	26°14'29.24" E
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PROJECT DESCRIPTION

Dolerite is extracted using conventional drilling, blasting, and bench-mining methods. The loosened material is loaded onto haul trucks and transported to the processing plant, where it passes through a series of crushers and screens to produce various sizes of aggregates and sand for use in the ready-mix, construction, and road-building industries.

SITE CONDITIONS

Partly cloudy day with very wet soil conditions due to ample rain received in the area. No wind.

REPORTABLE ENVIRONMENTAL INCIDENTS

Incident Date:	The quarry has an online system where all accidents and incidents are logged (see example attached to this document under <i>Photographs</i>). 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 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 <i>Need for Amendment of the EMPR</i> under <i>General Report</i> below.
Copy of the EA available on site	N/A	-	-	
Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002)	5	-	Compliant	The mining right is valid until 14 April 2043.
Mining right available on site	5	-	Compliant	
Mine plan annually reviewed	5	-	Compliant	The surveyor reviewed the mine plan in March 2025 and copies of the plan is available on site.
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004)	5	-	Compliant	Although the activities at the mine do not require an air emissions licence, site management is mindful of the requirements of the NEM:AQA.
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008) (NEM:WA)	5	-	Compliant	The waste generated at the Quarry is managed in accordance with the requirements of the NEM:WA. The Quarry is also registered with SAWIS.
National Water Act, 1998 (Act 36 of 1998) (NWA)	4	3	Being Addressed	<ul style="list-style-type: none"> The quarry holds an approved Water Use Certificate (Reference Number: 23096392), which authorizes the abstraction of water from the quarry pit for industrial use, the irrigation of wastewater for dust suppression, and the disposal of water containing waste. However, the recent audit revealed that these permitted uses are outdated and require review. Additional water uses may also be applicable under Section 21 of the National Water Act (NWA).

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
				<ul style="list-style-type: none"> Petra Quarry is currently reviewing its water use registration to ensure full compliance. Annual water monitoring is implemented with the most recent water quality results dated January 2025. See General Report below.
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	4	3	Ongoing	Petra Quarry has an Alien Invasive Species Management Plan (Revised April 2024) as well as an Alien Invasive Management Action Plan. The action plan divides the mining area into 17 sections that are progressively cleaned. Site management focussed on the clearing of plants from sections 1 – 3 during the audit period.
VISUAL MITIGATION (EMPR PG 87):				
Is the site implementing good visual and housekeeping standards.	5	-	Compliant	The overall appearance of the mining area was neat on the day of the inspection.
Upon closure: Is the site rehabilitated and sloped to minimise visual impacts.	N/A	-	-	-
DUST HANDLING (EMPR PG 87):				
Dust suppression implemented (roads, stockpile areas etc.)	5	-	Compliant	Water sprayers are used to suppress dust in key areas of the mining operation, including roadways and the processing plant. The water used for this purpose is sourced from the quarry sump.
Continuous assessment of all dust suppression equipment implemented to confirm effectiveness.	5	-	Compliant	-
Speed of vehicles controlled to lessen dust generation and road deterioration	5	-	Compliant	Signage reducing speed in the mining area are present.
Hauling stopped when dust increases until all roads are effectively watered down to control dust.	5	-	Compliant	-

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Dust regularly cleared from the crusher.	5	-	Compliant	The plant is daily cleaned from 07:00 to 10:00.
Monthly fallout dust monitoring implemented	5	-	Compliant	EEC is responsible for the fallout dust monitoring of the site. At the time of the inspection the dust monitoring units were in place.
NOISE HANDLING (EMPR PG 87):				
Noise control implemented on site	5	-	Compliant	EEC is responsible for the noise surveys of the site.
Mining equipment serviced regularly to minimise noise	5	-	Compliant	The site has a maintenance register that keeps track of the service records of the mining equipment.
Blasting planned with due cognisance of other land users. Surrounding landowners informed prior to blasting.	5	-	Compliant	The most recent blast was on 08 April 2025 and the surrounding landowners/occupiers were informed prior to the blast. Proof of notifications are available on site.
Quarterly noise monitoring implemented.	5	-	Compliant	The noise monitoring results are quarterly reported to the DMRE.
MANAGEMENT OF WEED OR INVADER PLANTS (EMPR PG 88):				
Weed and invader plant control management programme implemented on site.	4	3	To be intensified	As mentioned earlier, the site does have an alien invasive species management plan and -action plan. The implementation of this plan must be intensified.
Declared invader or exotic species controlled on rehabilitated areas.	4	3	Ongoing	
Stockpiles kept free of weeds (invader plants).	4	3		
STORMWATER HANDLING (EMPR PG 88):				
Storm water diverted around the stockpiled area and access roads to prevent erosion	4	3	To be addressed	The stormwater berms designed to control and direct runoff remain in place. Gabion rock was strategically placed along sections of the berms to function as sediment traps before stormwater enters the adjacent drainage lines. During the audit, it was observed that the berm along the southern drainage line had been breached, allowing sediment-laden water to flow into the watercourse.
Clean water kept clean and routed to a natural water course to prevent clean water from running or spilling into dirty water systems	4	3	To be addressed	
Dirty water collected and contained in a system separate to the clean water system	3	3	To be addressed	<ul style="list-style-type: none"> Refer to earlier comment regarding the breach of the southern stormwater berm.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
				<ul style="list-style-type: none"> On the day of the audit, wastewater from the wash bay was observed draining into the oil sump, with no evidence of water escaping into the surrounding environment. The system was fully operational, and all contaminated water was effectively contained. The tap in the bund wall of the hazardous waste storage area was found open. This poses a risk of contaminated water escaping from the bunded area into the surrounding environment.
Storm water management plan implemented on site	5	-	Compliant	The site has a generic Storm Water & Erosion Management Plan that is supported by a Floodline delineation diagram and Water Reticulation Map.
Water from tertiary crushers draining into the settlement ponds.	5	-	Compliant	-
MANAGEMENT OF HEALTH AND SAFETY RISKS (EMPR PG 89):				
Surrounding land users informed of blasting events	5	-	Compliant	The mine has two sign boards announcing every blasting event. Centlec and the nearby nursery (Urth) are notified via email, while the surrounding landowners are directly informed (visited).
Measures implemented to limit flyrock	5	-	Compliant	-
Audible warning of pending blast given at least 15 m before blast.	5	-	Compliant	A siren is used as warning.
Flyrock that falls beyond the working area collected and removed.	5	-	Compliant	-
Workers provided with PPE	5	-	Compliant	-
HANDLING OF HAZARDOUS MATERIALS AND SUBSTANCES (EMPR PG 90):				
Hazardous material stored within a closed storage facility with impermeable floor.	5	-	Compliant	At the time of the inspection all hazardous materials were stored within closed storage facilities with impermeable floors.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Storage area equipped with a level impermeable floor.	5	-	Compliant	-
Storage area out of the 1:100 year floodline or further than 100 m from the edge of a watercourse.	4	3	To be addressed	Although all the storage areas are out of the 1:100 floodline and >100 m from the edge of watercourse, rainwater did flood one of the storerooms. All the chemicals must be removed from the flooded storage area, and the water must be considered contaminated.
Access controlled to the storage area.	5	-	Compliant	-
Fuel storage tanks equipped with secondary containment with impermeable floor and bund wall. (110% capacity).	5	-	Compliant	The bund of the 23 000 l diesel tank was intact with an impermeable floor. Site management test the integrity of the bund annually (last test done in January 2025).
Formal inspection routine implemented to check all equipment in the bunded area as well as the bund itself for malfunctions or leakages.	5	-	Compliant	A formal inspection routine was implemented since the 2024 audit.
Contaminated water prevented from mixing with clean water and contained until collected by a registered waste handling contractor.	4	3	To be addressed	<ul style="list-style-type: none"> • EnviroTech cleaned and resealed the oil sump. Proof of safe disposal of the hazardous waste from the sump is available for auditing purposes. • Rainwater must daily be removed from the drip trays. This water must be poured into the oil sump. No water may be thrown onto the ground/grass. • The taps of all bunded areas must remain closed.
Drip trays used under all stationary equipment/vehicles.	4	3	Ongoing	As discussed, the rainwater that collects in the drip trays must daily be emptied into the oil sump.
WASTE MANAGEMENT (EMPR PG 91):				
Vehicle repairs contained to the service bay and waste products disposed of into a closed container/bin.	5	-	Compliant	This was true on the day of the audit.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Effluents containing oil, grease or other industrial substance collected in a suitable receptacle and removed from site to a registered facility.	5	-	Compliant	The used oils, grease and other industrial substances are removed from site by registered waste handling companies, and the effluent from the wash bay is directed to the oil sump.
All spills cleaned immediately	5	-	Compliant	The wet soil conditions on the day of the audit made identifying hydrocarbon spills hard. However, no major spills were noted, and site management confirmed that all spills are cleaned immediately.
Empty oil/fuel drums or containers stored in a bunded area until removed to a licenced disposal facility	4	3	To be addressed	The empty drums in the salvage yard must be kept upright and moved to a designated area.
Biodegradable and non-biodegradable refuse stored in a closed container at a collection point until removed to a recognised landfill site.	5	-	Compliant	-
Water from wash bay draining into an oil sump.	5	-	Compliant	-
Fines from the settlement dam placed at a designated and demarcated area and used in the rehabilitation of the quarry.	5	-	Compliant	-
MANAGEMENT OF ACCESS ROADS (EMPR PG 92):				
Access roads adequately maintained.	5	-	Compliant	-
Storm water directed around the access roads to prevent erosion.	4	3	Being Addressed	On the day of the audit, sheet erosion was observed on some of the haul roads, caused by recent heavy rainfall in the area. Site management is in the process of rehabilitating all affected areas.
Vehicle movement restricted to existing access routes and crisscrossing of tracks through undisturbed areas prevented.	5	-	Compliant	-
TOPSOIL HANDLING (EMPR PG 92):				
Topsoil stripping implemented (first 200 mm) and stored at a demarcated signposted area.	N/A	-	-	No topsoil was stripped during the audit period.

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Topsoil stockpiles free of invader plants.	4	3	Ongoing	The problem plants identified during the audit must be removed from the topsoil heaps.
Topsoil storage/stockpiling on a level area that is protected from stormwater. Heaps <2 m.	5	-	Compliant	-
Storm- and runoff water diverted around the stockpile areas and access roads.	5	-	Compliant	-
Topsoil stored longer than 6 months vegetated with indigenous grass seed mix.	5	-	Compliant	A grass layer did establish on the topsoil since the heaps have been in existence for many years.
MONITORING PROGRAMMES (EMPR PG 93) (NOT ALREADY ASSESSED):				
Surface and storm water monitoring: • Bi-annual water monitoring on settlement dams and wash bay.	5	-	Compliant	Petra Quarry submitted water quality samples in January 2025 and will submit the next samples in June 2025. Samples are collected from the two quarry pit sumps, the slimes dams (settling ponds), drainage line (when water is available), and the last chamber of the oil sump. The tap water is also tested for drinking water quality
Effectiveness of the stormwater infrastructure.	3	3	To be addressed	Refer to the earlier comment regarding the stormwater berm near the southern drainage line.
Monitoring of waste generation and waste register in place.	5	-	Compliant	See proof attached.
Ground vibration and airblast level monitoring implemented.	5	-	Compliant	B&E International (Pty) Ltd is responsible for the blasting and associated vibration monitoring of the mine.
Topsoil returned to rehabilitated area	N/A	-	-	Not yet applicable. Presently the fines from the settling ponds are used to rehabilitated some of the mined areas.
Proof of induction meeting with employees.	5	-	Compliant	-

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

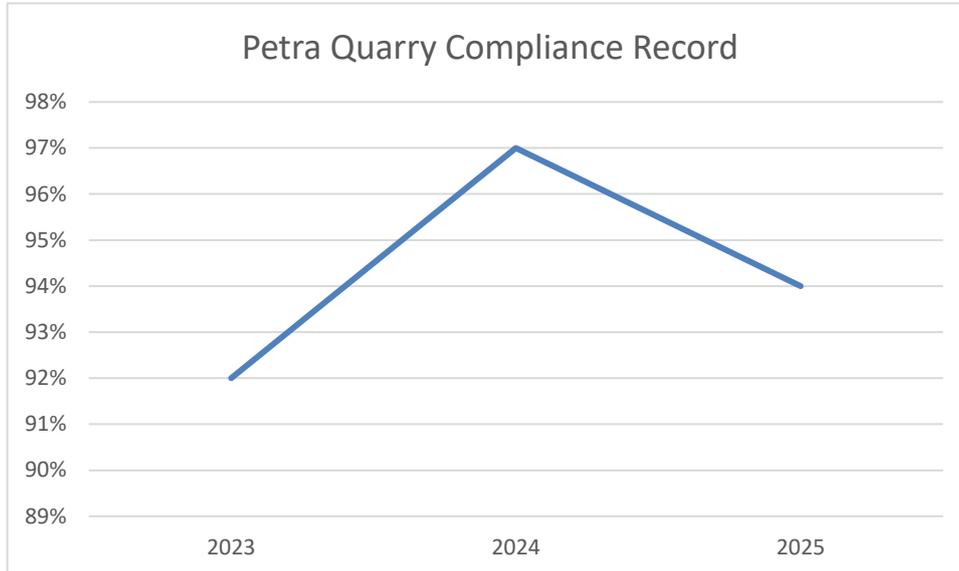
The Quarry has a complaints register where all complaints can be logged. The register is available on site and no complaints were received during the audit period.

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

Date of previous EAR/EPA:	03 June 2024
Proof of submission to DMRE available:	Proof of submission of the EPA/EAR is available at the site office.
EAR/EPA compiled by independent person with environmental auditing expertise:	This EAR/EPA was compiled by 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 (Petra 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 mine with the EMPR (2008) was reviewed during the site assessment. The mine recorded a compliance score of 94% for the audit period.



The area received substantial rains during the three months prior to the audit, and the terrain was therefore wet and muddy.

The mine was generally well-maintained, with improvements observed at the oil sump and wash bay. Mining operations have shifted to the eastern corner of the quarry pit, and an additional area along the south-eastern face has been rehabilitated.

Stormwater/Water Management:

As mentioned earlier, the stormwater berm that controls runoff and prevent sediment rich water draining into the southern drainage line must be repaired.

Based on the January 2025 water quality report the:

- Bacterial counts of the drinking water sample are low and complies with the standards for drinking water.
- The turbidity and potassium values in the drinking water sample are above the limits and fails the SANS drinking water standards. The client should install a filtration system to remove turbidity from the water.
- The calcium and magnesium concentrations in the water sample are low, indicating that a water softener system is probably installed to remove minerals such as calcium and magnesium ions from hard water. If potassium chloride is used in the softener unit, the potassium levels in the water can be very high. The recommended strategy is to limit or prevent the addition of potassium to water intended for human consumption is by having a proportion of the water bypass the softener altogether.
- The chemical data indicated elevated levels of total suspended solids in the slimes dam water sample that exceeds the discharge limits. The nitrate value is also high but still falls within the set limits. The nitrate value in the Quarry pit 1 sample is high and exceed the limits of GA standards. The data proposed that the nitrate most likely originates due to blasting activity from the quarry.

- The sodium absorption ratio (SAR) is a measure of the amount of sodium relative to calcium and magnesium and an indicator of the suitability of water for use in agricultural irrigation. The SAR value is over the recommended limit for irrigation purposes.
- Raumix ought to understand that the high nitrate levels will impact the environment, and it should be managed as it poses a significant environmental risk. iWater recommends bioremediation strategies through groundwater infiltration.

Petra Quarry must implement relevant management activities/techniques to address the above.

Further to this, it is proposed that Petra Quarry collect two samples from the southern drainage line (when water is available), one upstream of the mine, and one downstream of the mine as this will indicate whether any contamination results from the surrounding industrial areas or the mine.

Dirty Water & Waste Management:

EnviroTech was contracted to empty, clean and reseal the oil sump of the site. On the day of the audit the oil sump was well signposted and neatly managed. It is proposed that a lid be placed on the first tank of the oil sump to prevent the addition of clean rainwater to the system.

The January 2025 Water Sample Analysis for Hydrocarbons in the last tank of the oil sump notes that although, South Africa is yet to set any standard limit for TPH in its waters, the EU standard limit is 300 µg/L. The quantification limit for TPH of the laboratory is set at <382 µg/L and from the results, the TPH value in the water sample falls just outside the limit set by the EU but is still low and in compliance with the TPH limit of the laboratory (iWater).

Site management is urged to either lock all taps in the bund walls or remove the head of the tap to prevent employees leaving the taps open.

The quarry monitors energy use/carbon footprint related data with an ESG register that reports on the following:

- Vehicle Transportation,
- Machinery (Yellow) Use,
- Genset and Water Pump Combustion,
- Electricity Use,
- Water Use, and
- Waste Generation

As discussed, a column could be added that shows the water use allowances in terms of the Water Certificate. This will highlight when the water allowance limit is reached.

The waste generated at the quarry is handled/removed in the following manner or by the following service providers:

- FS Ewaste removed the electronic waste,
- B&E International is responsible for all blasting related waste,
- The general waste is removed to the Mangaung Landfill site by the mine,
- RT Recycling removed the unwanted metal/steel,
- Fuel44 collects the used oil,
- Envirotech removes the hazardous waste of the site,
- There was no need to service the septic tank during the audit period,
- Scrap office paper is donated to the Bayview Primary School, and

- Conveyors and tyres are re-used on site.

Progressive Rehabilitation:

The slimes removed from the settling ponds are stockpiled in a designated area (east of the ponds) and when dry it is used to rehabilitate the benches/faces of the excavation. During the audit period an area of ±1 000 m² was rehabilitated along the south-eastern entrance of the quarry pit, and the mine proposes to expand this area with an additional ±1 000 m² during the next twelve months.

Invasive Plant Species Management:

Invasive plant species removed from the site are buried in a designated pit. Site management must ensure that no general waste or litter is disposed of in this pit, as the burial of waste constitutes a listed activity under the National Environmental Management: Waste Act (NEM:WA).

Species that were noted on the day of the inspection included:

- Fountain Grass *Cenchrus setaceus*
- Queen of the Night *Epiphyllum oxypetalum*
- Russian Tumbleweed *Salsola tragus*
- Silverleaf Nightshade *Solanum elaeagnifolium*
- Wild Tobacco *Nicotiana glauca*

While ongoing monitoring of the cleared sections (Sections 1 – 3) remains important, control efforts must also be extended to the remaining sections (Sections 4 – 17). All progress must be documented in the problem plant clearing register.

DOCUMENT CHECKLIST:

 Alien Invasive Species Management Plan, Action Plan & Register	-	Present
 Approved EMPR	-	Present
 Blasting Procedure	-	Present
 Complaints Register	-	Present
 Environmental Assessment Report (2024)	-	Present
 Environmental Awareness Training	-	Present
 Financial Provision (2024)	-	Present
 Hazardous Chemicals Register	-	Present
 Incidents Register / Flash Reports	-	Present
 Material Safety Data Sheets	-	Present
 Mine Works Program	-	Present
 Mining Right	-	Present
 Oil and Hazardous Substances Bunding Area Inspection Register	-	Present
 Proof of Waste Disposal	-	Present
 Refuelling Bay Inspection Register	-	Present
 Social and Labour Plan	-	Present
 Stormwater Management Plan / Floodline Delineation Diagram	-	Present
 Updated Mine Plan	-	Present
 Waste Spreadsheet	-	Present
 ESG Spreadsheet	-	Present
 Water Use Authorisation	-	Present
 Monitoring Results	-	Dust Monitoring (Present) Noise monitoring (Present)

Blast Monitoring (Present)
Water Monitoring (Present)

MATTERS TO BE ADDRESSED:

1. Ensure all water uses complies with the NWA;
2. Intensify the clearing of invader plant species and monitor the cleared sections for reoccurrence;
3. Repair the stormwater berm that prevent sediment rich water from draining into the southern drainage line;
4. Lock taps in bund walls or remove tap heads to prevent unauthorised use;
5. Remove the chemicals from the flooded storeroom and consider the water contaminated;
6. Empty drip trays daily;
7. Ensure all empty drums remain in a bunded area;
8. Reinstate the erosion on the haul roads;
9. Expand the water samples of the drainage line to include one upstream (of the mining area) and one downstream sample;
10. Implement rectification measures to lower the water quality results to acceptable standards; and
11. Add a column to the ESG/water management spreadsheet that indicates water allowance.

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

The current EMPR 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. While Petra Quarry has consistently worked to improve its environmental management practices, it is the opinion of the author that the EMPR should be amended to ensure full compliance with the latest NEMA EIA Regulations.

FINANCIAL PROVISION:

This report is accompanied by a reassessment of the financial provision calculation for the year 2025, amounting to R 10 537 853.09 in accordance with the Financial Provision Regulations, 2015 (as amended). Should the DMRE approve the reassessment, the Right Holder may be required to provide for a shortfall of R 737 359.87.

ECO SIGNATURE

NAME	SIGNATURE	DATE
Christine Fouché	<i>Christine Fouché</i>	01 May 2025

PHOTOGRAPHS



Stockpile area with stormwater berm along the southern boundary



Stockpile area neatly managed



Rainwater to be removed from drip tray



Discard station for used blasting cords/wires and explosives remains



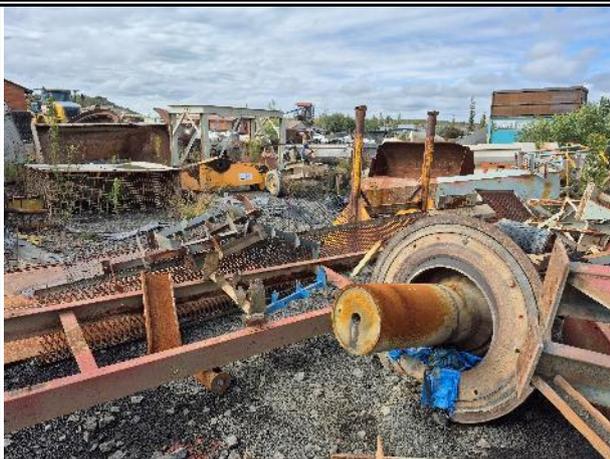
Used drums to be kept upright



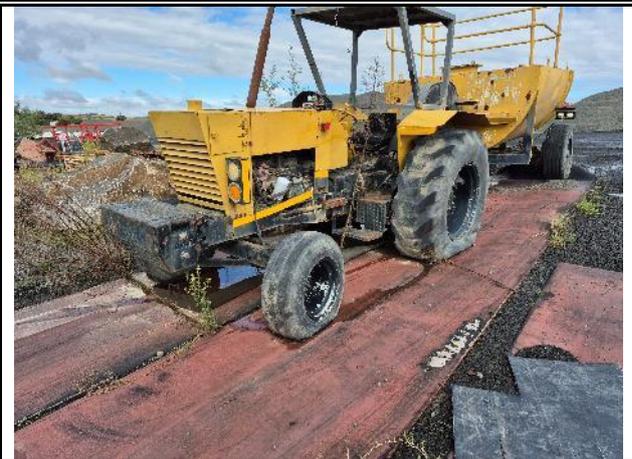
Salvage yard fenced



Empty drums to be kept upright and packed in a designated area until removed from site



Salvage yard



Rainwater to be removed from drip trays



Improved oil sump with clear signage



Roadway signage on site



Quarry pit



Quarry pit



Problem plants to be removed from the topsoil heaps



Pit used to bury problem plants removed from the mining area

Sheet erosion to be corrected



Surrounding land use

New section of the quarry being mined



New section of the quarry being mined



Overloading of drip trays – to be prevented



Pipe added to prevent waste water escaping from the wash bay



Drain directing waste water of the wash bay to the oil sump



First tank of the oil sump – lid to be considered to prevent infiltration of rainwater



Rainwater to be emptied from drip trays



Stand for the hydraulic breaker effectively preventing oil spills



Workshop area where services take place



Tap of bunded area left open



Hazardous waste storage area



Chemicals to be removed from the flooded storage area



Oil store neatly managed



Refuse bins used on site



Oil spill kit available on site



Notices used to inform the community of blasting at Petra Quarry



Diesel tank in bund



Waste management practices to be intensified



Process water running to settling ponds



Plant area neatly managed



General area neatly managed



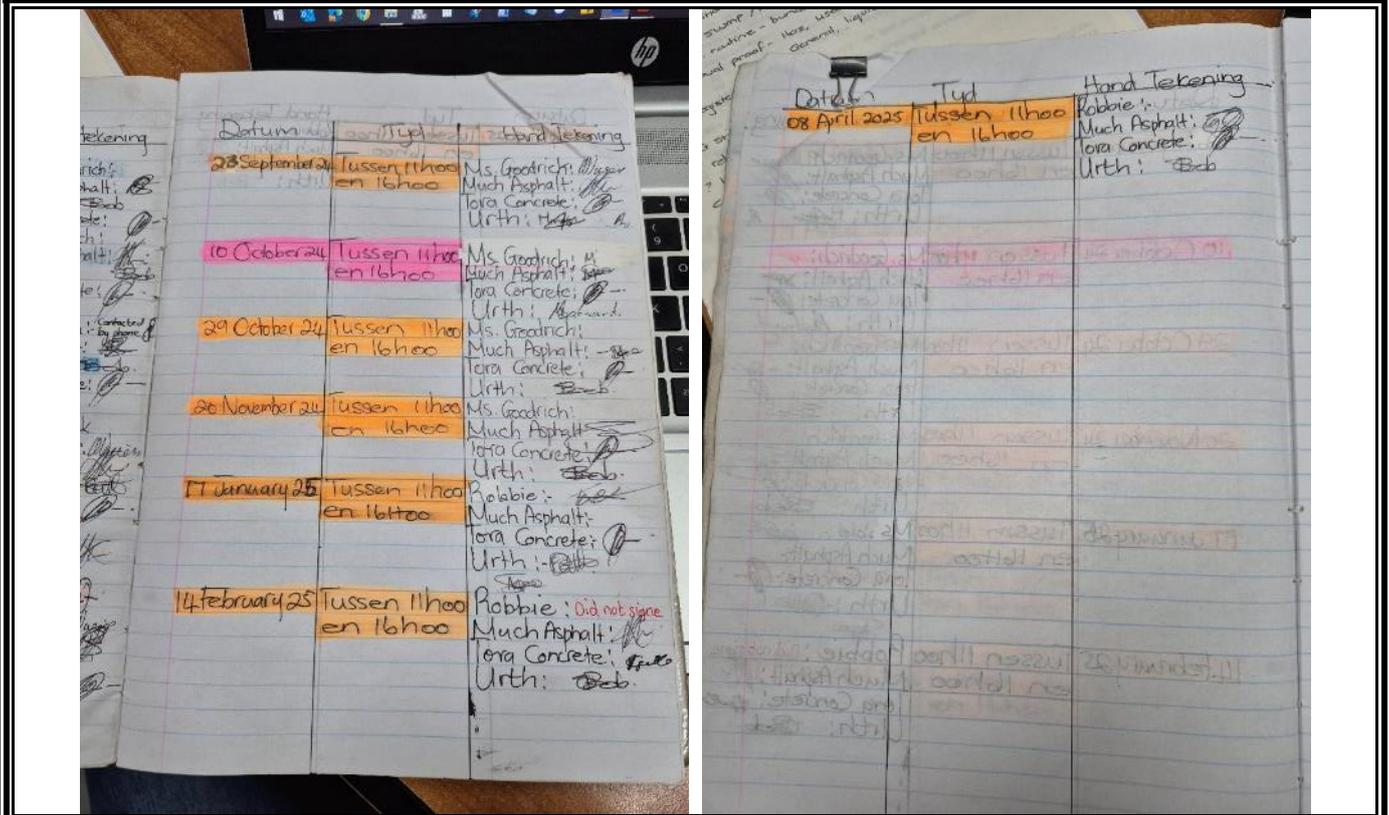
Breach of the stormwater berm along the southern drainage line

PROOF OF DOCUMENTATION

Name	Status	Defect/Status
Incident Flash Report - 19 February 2024 - Assessment Data - Petra Quarry	🟢	2024-02-19 10:27
Incident Flash Report - 18 September 2024 - O&M - 1 Management Spill - Mining - Petra Quarry (B&B)	🟢	2024-09-18 10:28
Incident Flash Report - 20 January 2024 - Waste Control - Spill - Petra Quarry	🟢	2024-01-20 10:28
Incident Flash Report - 21 August 2024 - PMU - Assets - Workshop - Petra Quarry	🟢	2024-08-21 10:28
Incident Flash Report - 21 August 2024 - Environmental - Petra Quarry	🟢	2024-08-21 10:28
Incident Flash Report - 28 May 2024 - Environmental - Petra Quarry	🟢	2024-05-28 10:28
Physical Inspection - down low - non flash 18/01/2024	🟢	2024-01-18 10:27

Proof of non-conformance logging system used by at the Quarry

PROOF OF DOCUMENTATION



Proof of blasting notifications

WASTE DETAILS					
Process that generated the waste					
WASHBAY - SEPARATOR SYSTEM					
Waste Type	HW0701 - WASTE OIL				
Waste Description					
HYDROCARBON SLUDGE					
SANS 10234 waste classification	HW07				
SANS 10228 class number					
PPE					
Rate of Generation Service Interval	Clean-Up	Recurring			
	Daily	Weekly			
	Monthly	Quarterly			
	Annual	Other	x		
Physical Nature			Odour		
Solid	(Moisture 0-39%)	None			
Sludge-Solid	(Moisture 40-59%)	Low			
Sludge-Liquid	x (Moisture 60-79%)	Moderate			
Liquid	(Moisture 80-100%)	Strong			
Description	Volumes	Kg/Lt	Ton	210L	Skip Other
HYDROCARBON WASTE				6	
PUMP OUT, DECON SEPARATOR SYSTEM					
JET DRAIN LINES					
Recyclable			Yes	No x	
Type of Treatment / Disposal Method					
SAFE DISPOSAL					
Manifest No			ENV00002619		
Date			31/01/2025		
Booking Reference					
Instruction			COLLECTION, TRANSPORT, SAFE DISPOSAL		
GENERATORS DETAILS					
Site Name:			RAUMIX BLOEMFONTEIN		
Physical Address:			PETRA QUARRY SOUTH CHRISTO GROENEWALD, BAYSWATER		
Contact Details:			ELLEN VAN DER WESTHUIZEN 051 433 2964		
Email:			Ellen@raumix.co.za		
Order Number:					
TRANSPORTERS DETAILS					
Company Name:			ENVIRO-TECH SA (PTY)LTD		
Physical Address:			3 FRIKKIE VAN KRAAYENBURG RD NEW EAST END BLOEMFONTEIN		
Contact Details:			safedispose@enviro-techsa.co.za		
Fleet Number:			FVCO63FB		
Driver Name:			SANDISO		
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					
<p>Three Signatures Constitutes a safe disposal</p>					
Generators declaration					
Content of the consignment is fully and accurately described, classified, packed, marked and labelled and in proper condition for transportation in accordance with the applicable laws & regulations					
COBUS GROBLER Name					
[Signature] Signature					
31-01-2025 Date collected / received					
Transporters					
Acknowledgement of receipt of the waste					
SANDISO Name					
[Signature] Signature					
31/01/2025 Date collected / received					
Disposal site/Consignee/Waste Manager					
Acknowledgement of receipt of materials					
Name					
Signature					
Date collected/received					

Proof of hazardous waste removal

PROOF OF DOCUMENTATION



Proof of water monitoring at Petra Quarry

PROOF OF DOCUMENTATION

CERTIFICATE OF COMPETENCY

In accordance with the Occupational Health and Safety Act 85 of 1993

This is to certify that

JOHN G JAPP

6206265156080

Attended and successfully completed the outcomes of the following programme

MONITOR AND MAKE RECOMMENDATIONS ON THE APPLICATION OF HEALTH AND SAFETY PRINCIPLES REGARDING HAZARDOUS SUBSTANCES IN THE WORKING PLACE

Unit standard: 120370

NQF Level 3 | Credits 4

SPECIFIC OUTCOMES AND ASSESSMENT CRITERIA

- MONITOR, ADVISE AND REPORT ON THE SCOPE AND UNDERSTANDING OF THE SPECIFIED REQUIREMENTS AS REGARDS TO HAZARDOUS SUBSTANCES IN A WORK PLACE.
- DEMONSTRATE KNOWLEDGE PERTAINING TO THE APPLICATION OF METHODS IN PREVENTING EXPOSURE TO HAZARDOUS SUBSTANCES IN A WORK PLACE.
- DEMONSTRATE KNOWLEDGE PERTAINING TO THE CLASSIFICATION, PHYSICAL STATE, HEALTH EFFECTS AND DISPOSAL METHODS OF HAZARDOUS SUBSTANCES IN A WORKPLACE.

Assessor Registration Number 699

Moderator Registration Number 1282

05/07/2023

DATE

Accredited by the Construction Education and Training Authority (CETA) in compliance with SAGA requirements, accreditation number 4840246 and registered with department of labour in terms of general safety regulation 314 (a) of the Occupational Health and Safety Act 85 of 1993, CI 642



HSWP/2023/007

CERTIFICATE VALID FOR A PERIOD OF 2 YEARS

Training of employees regarding the handling of hazardous substances

PROOF OF DOCUMENTATION

 <small>Producers of Aggregates for Construction</small>	Raumix Aggregates (South) and Transkei Quarries Waste Control Register	
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Area/Mine: <u>Petra Quarry</u>	Location: <u>Scrap Steel</u>	Environmental Control officer: <u>Ellen</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)
23/01/23	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	3.78 Ton	RT Recyclers	PO 199125
28/05/23	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	6.06 Ton	RT Recyclers	PO 503493
08/05/23	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	3.16 T	RT Recyclers	PO 503499
15/05/23	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	3.48 T	RT Recyclers	PO 503787
19/06/23	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	3.34 T	RT Recyclers	PO 504769
7/8/23	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	3.68 T	RT Recyclers	PO 506232
11/10/23	FS Scrap Metals	Jack	DL04KFGP	Scrap Motors	5.98 T	Tannery Site Hamilton	PO 508553
12/10/23	FS Scrap Metals	George Blouk	FGP	Sub grade steel	2.9 T	Tannery Rd, Hamilton	PO 508599
12/10/23	FS Scrap Metals	George Blouk	FGP	Scrap Motors	0.82 T	Tannery Rd, Hamilton	PO 508599
24/11/23	FS Scrap Metal	Hendrik	QLV025	Brass	353 kg	Tannery Rd Hamilton	937352
01/02/24	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	452 kg	RT Recyclers	PO 510893
01/07/24	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	550 kg	RT Recyclers	PO 510904
08/12/24	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	210 kg	RT Recyclers	PO 511082
08/02/24	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	308 kg	RT Recyclers	PO 511090
08/05/24	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	390 kg	RT Recyclers	PO 513675
08/05/24	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	430 kg	RT Recyclers	PO 513672
04/06/24	RT Recycling	P Rademeyer	FBcb21FS	Scrap Steel	6.920 T	RT Recyclers	PO 514238/244
02/07/24	RT Recycling	P Rademeyer	PO 515017	Scrap Steel	2.04 T	RT Recyclers	PO 515017
09/10/24	RT Recycling	P Rademeyer	PO 516896	Scrap Steel	3.74	RT Recyclers	PO 516896
09/10/24	RT Recycling	P Rademeyer	PO 516896	Scrap Steel	2.76	RT Recyclers	PO 516896
4/11/24	RT Recycling	P Rademeyer	PO 518946	Scrap Steel	2.5	RT Recyclers	PO 518946
5/12/24	RT Recycling	P Rademeyer	PO 520599	Scrap Steel	2.36	RT Recyclers	PO 520599
5/12/24	RT Recycling	P Rademeyer	PO 520599	Scrap Steel	3.76	RT Recyclers	PO 520599

Scrap Metal Removal Register

PROOF OF DOCUMENTATION

	Raumix Aggregates (South) and Transkei Quarries Waste Control Register	
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Area/Mine: Raumix Aggregates	Location: Petra Quarry	Environmental Control officer: Lesego Maaroganye	Year: 2024 - 2025
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)
14/02/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
1/03/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
20/03/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
2/04/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
23/04/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
6/05/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
21/05/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
4/06/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
26/06/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
10/07/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
26/07/24	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
6/08/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
22/08/24	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
5/09/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
26/09/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
4/10/24	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
24/10/24	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
15/11/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
27/11/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
13/12/2024	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
9/01/2025	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100
31/01/25	GEORGE		BLF040GP	GENERAL WASTE	1 TON	DUMPING SITE	QFT100

General Waste Control Register

PROOF OF DOCUMENTATION



FS Ewaste (PTY) Ltd

6 Dennis Pooley Street, New East End, Bloemfontein.
Cell: 072 119 5760
E-mail: henriettes@fsewaste.co.za

FS Ewaste

CERTIFICATE OF MANAGED E-WASTE DISPOSAL

Date: 24-01-2025 Certificate no: REF2214
Supplier: Raumix Aggregates (PTY)Ltd – Petra Quarry, Bloemfontein – FSE25-1731
Date goods received: 16-01-2025

To whom it may concern

This serves to certify that FS Ewaste (PTY) Ltd has successfully completed the managed disposal of your Electronic Waste, consisting of Various Electronic and other waste items, on your behalf.

The items were destroyed and recycled in an environmentally acceptable and approved manner.

Project Name: **RAUMIX AGGREGATES (PTY)Ltd**
– **PETRA QUARRY**
Total weight: **22.25kg**

We certify that all equipment has been recycled and all national, provincial and local legislation has been upheld.

If you have any queries, please do not hesitate to contact us.

Yours Faithfully
FS Ewaste

The contents and information supplied in this document are confidential and private remaining the sole property of FS E-waste. (PTY)Ltd.

Reg: 201530101107 VAT No: 4770294116



Proof of E-Waste Disposal