

MINING OF AGGREGATE ON PORTION 18 (PORTION 2) OF THE FARM LOUTERBRONNEN 250, THEUNISSEN DISTRICT FREE STATE PROVINCE

ENVIRONMENTAL PERFORMANCE ASSESSMENT / ENVIRONMENTAL AUDIT REPORT



DMR REFERENCE NUMBER:	FS 30/5/1/2/2/10040 MR
AUDIT PERIOD:	May 2022 – May 2023

PREPARED FOR:

Vengablox (Pty) Ltd
Contact person: Mr. M. du Plessis
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PREPARED BY:

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7129



**ANNUAL ENVIRONMENTAL PERFORMANCE ASSESSMENT
LOUTERBRONNEN AGGREGATE QUARRY**

1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT/PERMIT HOLDER
Company Name	Vengablox (Pty) Ltd
Contact Person	Mr. M. du Plessis
Tel Number	N/A
Cell Number	083 410 8286
Postal Address	PO Box 202, Theunissen, 9410
ITEM	AUTHOR CONSULTANT DETAIL
Company Name	Greenmined Environmental (Pty) Ltd
Contact Person	Christine Fouche
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	Louterbronnen Aggregate Quarry
Property Description	Farm Name: Portion 18 (Portion 2) of the farm Louterbronnen 250 21 Digit Surveyor General Code: F03300000000025000018
Location	±2 km south-east of Theunissen
Size of Mining Area	17.9 ha
Site Coordinates:	A. 28°24'44.18" S; 26°43'37.23" E
	B. 28°24'46.62" S; 26°43'32.64" E
	C. 28°24'49.91" S; 26°43'31.86" E
	D. 28°25'04.37" S; 26°43'39.34" E
	E. 28°24'57.48" S; 26°43'53.11" E



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2. ENVIRONMENTAL AUDIT REPORT

PROJECT DETAIL

Permit / Right Number:	FS 30/5/1/2/2/10040 MR	Date of Commencement:	15 May 2019
Site Name:	Louterbronnen Quarry	Inspection Date:	31 May 2023
Permit / Right Holder:	Vengablox (Pty) Ltd	Other Authorisations:	General Authorisation: 27/2/1/C741/13
Report Number:	EPA 04		

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 eighteen years experience in doing environmental impact assessments and compliance monitoring in South Africa.
DECLARATION OF INDEPENDENCE:	<p>I Christine Fouché declare that –</p> <ul style="list-style-type: none"> I act as independent environmental control officer in this compliance audit; I will perform the work relating to the audit in an objective manner, even if the results and findings are not favourable to the holder of the authorisation; I have expertise in conducting environmental compliance audits, including knowledge of the Act and regulations that have relevance to the activity; I will adhere to and comply with all responsibilities as indicated in the National Environmental Management Act and Environmental Impact Assessment Regulations. I do not have and will not have any vested interest in the activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014. <div style="text-align: center; margin-top: 10px;">  </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> Signature of ECO Date: 09 June 2023 </div>

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SCOPE & PURPOSE OF ENVIRONMENTAL AUDIT

(APPENDIX 7 SUB-REGULATION 3(C)):

This environmental performance assessment (EPA) / environmental audit report (hereafter referred to as the EPA) was compiled in terms of the requirements of the NEMA EIA Regulations, 2014, (as amended).

OBJECTIVE:

The objective of the EPA is to evaluate compliance of the operational activities with the environmental management programme (EMPR) and Environmental Authorisation as approved by the DMRE.

INSPECTED AREAS:

The inspection included an assessment of the following areas:

- Office and parking area;
- Workshop and wash bay;
- Diesel tank, and chemical storage area;
- Washing and screening plant area;
- Settlement pond for processing water;
- Quarry pit;
- Overburden and topsoil dumps;
- Stockpile area; and
- General working areas;

In order to establish the environmental compliance assessment of the operation, the mining site was inspected on foot by the Environmental Control Officer, Christine Fouche of Greenmined Environmental accompanied by site management.

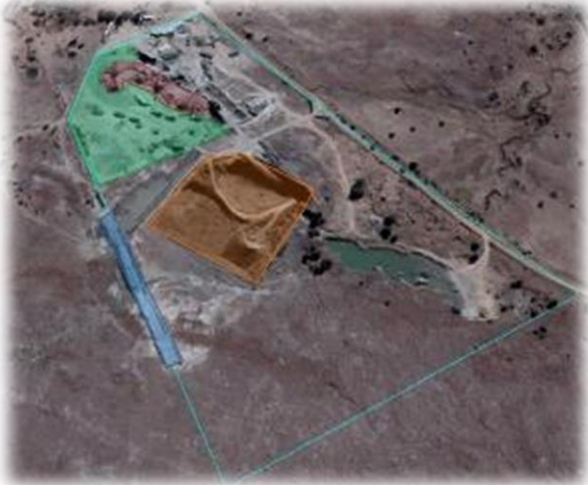
ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE

(APPENDIX 7 SUB-REGULATION 3(F)):

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

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LOCATION

Site Location:	The mine is located ±2 km south-east of Theunissen. The mining footprint was approved over the entire extent of Portion 18 (Portion 2) of the farm Louterbronnen 250. The GPS coordinates to the entrance of the site are 28°24'44.17"S; 26°43'37.76"E.	
Site Map:		
Site Coordinates:	28°24'44.18" S	S 26°43'37.23" E
	28°24'46.62" S	S 26°43'32.64" E
	28°24'49.91" S	S 26°43'31.86" E
	28°25'04.37" S	S 26°43'39.34" E
	28°24'57.48" S	S 26°43'53.11" E

PROJECT DESCRIPTION

The right holder mines the quarry for dolerite by blasting, using explosives in order to loosen the hard rock. The material is then loaded and hauled to the existing crushing, screening and washing plants where it is processed into different sized dolerite. The dolerite is stockpiled where after it is transported to clients using trucks and trailers via the existing access roads linking the farm to the R708. All activities are contained within the boundaries of the site.

SITE CONDITIONS

Cloudy day with wet soil conditions due to earlier rain.

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REPORTABLE ENVIRONMENTAL INCIDENTS

Incident Date:	N/A
Incident No:	N/A
Incident:	No environmental incidents at this stage
How addressed:	N/A
When addressed:	N/A

**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

**ENVIRONMENTAL PERFORMANCE ASSESSMENT
LOUTERBRONNEN AGGREGATE QUARRY**

INSPECTION ASPECTS

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
LEGISLATION COMPLIANCE:				
National Environmental Management Act, 1998 (Act No 107 of 1998) and the Environmental Impact Assessment Regulations, 2014	5	-	Compliant	-
Copy of the EA and EMPR available on site	5	-	Compliant	-
Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002)	5	-	Compliant	-
Mining right available on site	5	-	Compliant	-
Mine plan annually reviewed	5	-	Compliant	-
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)	5	-	Compliant	-
National Water Act, 1998 (Act 36 of 1998)	5	-	Compliant	-
GA Authorisation on site	5	-	Compliant	-
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	5	-	Ongoing	Site management continuously remove the problem plants that germinate on site.
Hazardous Substances Act, 1973 (Act 15 of 1973)	5	-	Compliant	-
National Heritage Resources Act, 1999 (Act No 25 of 1999)	5	-	Compliant	The heritage site is fenced and protected from impacts.
Mine Works Programme	5	-	Compliant	-
Social Labour Plan	5	-	Compliant	-
Copies of Financial Provision Calculation (2022) and Annual Performance Audit (2022) present	5	-	Compliant	-
Waste register and Permits for waste removal	5	-	Compliant	The waste manifests of both HazQuip and Oilkol are available on site.
Complaints Register Present	5	-	Compliant	-
Environmental Awareness training	5	-	Compliant	-
ASPECTS OF THE AFFECTED ENVIRONMENT				
Topsoil: Overburden Management (EMP PG: 55, 97, 100)				
Topsoil stripping	5	-	Compliant	-
Topsoil storage (heaps not exceeding 1.5 m)	5	-	Compliant	-

ENVIRONMENTAL PERFORMANCE ASSESSMENT LOUTERBRONNEN AGGREGATE QUARRY

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Topsoil heaps that are stored for longer than 6 months: Naturally or artificially vegetated with, indigenous grass species.	5	-	Compliant	-
Overburden stripped & stockpiled	5	-	Compliant	-
Stockpiles monitored for erosion, weeds and foreign matter	5	-	Compliant	-
Topsoil returned to rehabilitated area	N/A	-	-	No rehabilitation has occurred to date.
Vegetation (EMP PG: 57, 100, 103)				
Protected plants (if any) sheltered from mining activities	N/A	-	-	No protected, endangered or declining species have been recorded within the mining area.
Removal of vegetation limited to smallest possible area	5	-	Compliant	-
Aliens & weeds controlled on site	5	-	Ongoing	-
Fauna (EMP PG: 58, 59, 103):				
All animals, birds and reptiles protected on site.	5	-	Compliant	-
Air Quality and Noise (EMP PG: 56, 98, 99):				
Dust monitoring plan implemented	5	-	Compliant	-
Dust suppression implemented	5	-	Compliant	-
Speed on access road limited to 40 km/h	5	-	Compliant	This appeared to be true at the time of the inspection.
Dust monitoring equipment operational	5	-	Compliant	-
Mining equipment serviced regularly to ensure noise emissions are minimized	5	-	Compliant	-
Noise control	5	-	Compliant	The noise exposure of the employees are monitored by EEC.
Blasting vibration and blast noise monitoring implemented on site	5	-	Compliant	All blasting related documents are present on site.
I&AP and stakeholders informed prior to a blast.	5	-	Compliant	The proof of blasting notifications are available on site.
Surface and Storm Water Management (EMP PG: 57, 101):				
Storm water Management Plan implemented on site	5	-	Compliant	-
Storm water diverted around the mining area and access roads to prevent erosion	5	-	Compliant	Where possible.

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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Mining conducted in accordance with the Best Practice Guidelines for small scale mining	5	-	Compliant	At the time of the inspection this appeared to be true.
Areas with erosion reinstated	N/A	-	-	No areas of concern were noted on site.
Visual Exposure (EMP PG: 55, 97, 55):				
Is the contractor implementing good visual and housekeeping standards	5	-	Compliant	The housekeeping was to standard at the time of the inspection.
Height of product stockpiles determined based on the visibility of the site	5	-	Compliant	-
Hazardous Chemical Management (EMP PG: 58, 102, 103):				
Hazardous material stored within a bunded area (110% capacity)	5	-	Compliant	-
Regular vehicle management is done at the workshop	5	-	Compliant	-
Drip trays present when refuelling is done outside the service bay	TBC	-	-	This needs to be confirmed as no refuelling was done at the time of the inspection.
Mining equipment mechanically sound without visible oil leaks	5	-	Compliant	This appeared true at the time of the inspection.
Hazardous spills cleaned up, stored and disposed of according to the acceptable procedures and methods	5	-	Compliant	-
Hazardous waste removed by a registered waste handling contractor	5	-	Compliant	Oilkol (Pty) Ltd collects the used oil from the site, and HazQuip (Pty) Ltd collects the remaining hazardous waste.
Waste Management (EMP PG: 58, 102):				
Site free of day-to-day litter	5	-	Compliant	-
Suitable covered receptacles available at all times and conveniently placed for the disposal of waste	5	-	Compliant	-
General waste dumped at a recognised landfill site	5	-	Compliant	Records are available on site.
No waste stockpile area allowed outside the boundaries of the mining area	5	-	Compliant	-
Proper sanitation facilities available to employees	5	-	Compliant	-
Potable Water and Ablution Facilities				
Ablution facilities available on site more than 200 m from a watercourse	5	-	Compliant	-

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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Potable water available on site for use of workers	5	-	Compliant	-
Effluent water from the camp washing facility disposed of in a French drain, situated more than 200 m from a watercourse	N/A	-	-	-
Fire Management				
Firefighting equipment available on-site	5	-	Compliant	-
No open fires at mining site allowed	5	-	Compliant	-
Mine and Equipment Management				
Mining area demarcated with visible beacons	5	-	Compliant	-
Mining conducted within approved footprint area	5	-	Compliant	-
Unnecessary surface disturbance avoided	5	-	Compliant	-
Access Roads, Vehicle and Transporting of Material (EMP PG: 59, 104, 105):				
Access road maintained	5	-	Compliant	-
Movement of project related vehicles and machinery restricted to the approved mining area	5	-	Compliant	-
All trucks weighed before leaving the site in order to prevent overloading	5	-	Compliant	-
Speed limits enforced within the mining area	5	-	Compliant	-
Weighbridge slips filled on-site and are available for auditing	5	-	Compliant	-
Employee and Safety Management (EMP PG: 59, 104):				
Workers inducted and informed of EMP conditions	5	-	Compliant	-
Workers provided with PPE	5	-	Compliant	-
Appropriate notification signage erected at the mining site, warning the public about the hazard around the mining site & presence of heavy vehicles within the mining area.	5	-	Compliant	-
Weatherproof, durable, legible notices displayed at the entrance to the site.	5	-	Compliant	-
Effective access control to prevent unauthorised entry.	5	-	Compliant	-
Surrounding land users informed of blasting events	5	-	Compliant	-



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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Audible warning of a pending blast must be given at least 3 minutes in advance of the blast	5	-	Compliant	-
Measures implemented to limit fly rock	5	-	Compliant	-
Fly rock that falls beyond the working area collected and removed	5	-	Compliant	-

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

No written complaints were received during the audit period.

AUDITING OF EMP AND REPORTING THEREOF
(REGULATION 34):

Date of previous EAR/EPA:	May 2022
Proof of submission of previous EAR/EPA to DMRE available:	The previous EPA was submitted to the DMRE on 24 June 2022.
EAR/EPA compiled by independent person with environmental auditing expertise:	Greenmined Environmental (Pty) Ltd compiled the EPA.
Potential and registered I&AP's notified within 7 days of the submission date, and report available on publicly accessible website	No registered I&AP's exist that needs to be notified of the document. The EPA is however available on the Greenmined website that is a publicly accessible website.

GENERAL REPORT

Compliance of the mining site with the EMPR and EA approved by DMRE was reviewed during the site assessment. The mining area recorded a compliance score of 100% for the audit period.

The overall appearance of the site is neat and managed to standard. As mentioned earlier, the hazardous waste is removed from site by HazQuip. Oilkol collects the used oil from site, and the general waste is dumped at the municipal landfill site. HazQuip and Oilkol provides the site with waste manifests that are filed for auditing purposes. The scrap metal of the site was sold, and the salvage yard was cleaned.

During the audit period the site upgraded the oil sump (of the wash bay) to prevent contaminated water flowing past the sump and/or into the surroundings. The excess water from the sump is pumped into a flow bin that is removed from site once full. As directed by the DMRE a concrete apron and low wall were installed around the oil sump and photographic proof of this was sent to the DMRE in March 2023.

Site management cleaned the dust and excess material from the processing plants to curb dust generation. The spraying of water also increased (during the audit period) and gravel was placed on the road to the quarry. Dust Units 1 and 4 had to be moved to new locations due to changes in the layout of the site. The monthly fallout dust results decreased and have been compliant since December 2022.

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The Category 1b (in terms of the Alien and Invasive Species List, 2016) weeds and/or invader plants are continuously removed from site.

A water sample was collected from the quarry pit in February 2023 to determine, in particular, the pH of the water as instructed by the DMRE. The results showed a pH of 8.76 that is within the SANS 241:2015 limits. The results also showed a high heterotrophic, coliform and *E. coli* count and is therefore not fit as drinking water.

Permission was obtained from Eskom to blast within 50 m of the adjacent power line. This was subsequently also approved by the DMRE.

As part of the LED requirements, the site installed a borehole, solar pump, and JoJo Tank at the municipal property opposite the quarry to supply community members with water.

DOCUMENT CHECKLIST:

<u>RELEVANT DOCUMENTATION</u>	<u>PRESENT ON SITE</u>	<u>COMMENTS</u>
Mining right	Yes	-
Mine works programme	Yes	-
Social and labour plan	Yes	-
Approved EMPR	Yes	-
EA	Yes	-
Regulation 42 Mine Plan (annually updated)	Yes	-
Financial Provision Calculation (2022)	Yes	-
EPA (2022)	Yes	-
General Authorisation	Yes	-
Waste register and Permits for waste removal	Yes	-
Incidents register	Yes	-
Complaints register	Yes	-
Proof of environmental awareness training	Yes	-
MSDS's for chemicals	Yes	-
Written notice to neighbours of each blasting event	Yes	-
Appointment of an on-site ECO	Yes	-
Emergency Preparedness Plan	Yes	-
Invasive plant species plan (part of the EIAR and EMPr – appendix J)	Yes	-

MATTERS TO BE ADDRESSED:

No outstanding matters were identified during the audit period.

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

The approved EMPR and EA of the mine adequately manage/mitigate the environmental impacts on site, and no need was identified to amend the said documents.

FINANCIAL PROVISION:

This EPA is accompanied by the annual review of the financial provision amount for the rehabilitation of the mining area. The right holder has a financial guarantee of R 1 069 891.00 lodged with the DMRE. The 2023 financial provision required to rehabilitate the mining area in accordance with the Guideline Document for the Evaluation of

ENVIRONMENTAL PERFORMANCE ASSESSMENT LOUTERBRONNEN AGGREGATE QUARRY

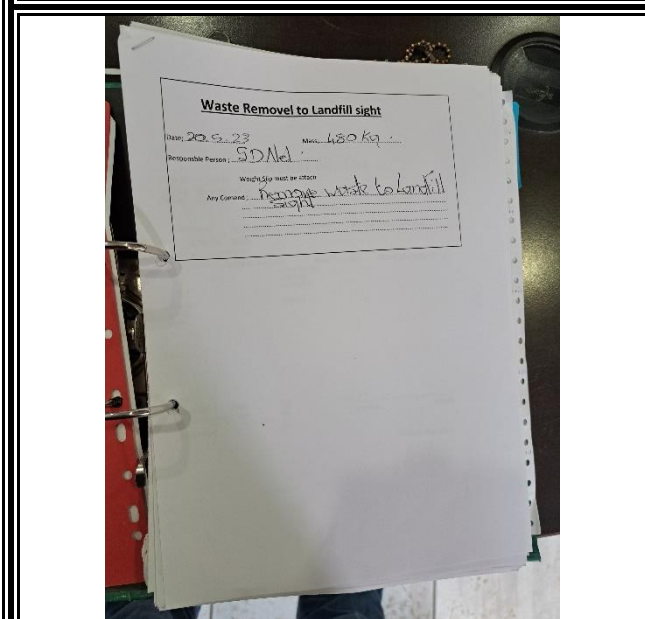
the Quantum of Closure-related Financial Provision by a Mine and as prescribed in terms of Regulation 54 (1) is R 1 068 834.25. The 2023 financial provision does not exceed the value of rehabilitation amount in place at the DMRE, and the right holder therefore does not have to provide a shortfall.

ECO SIGNATURE

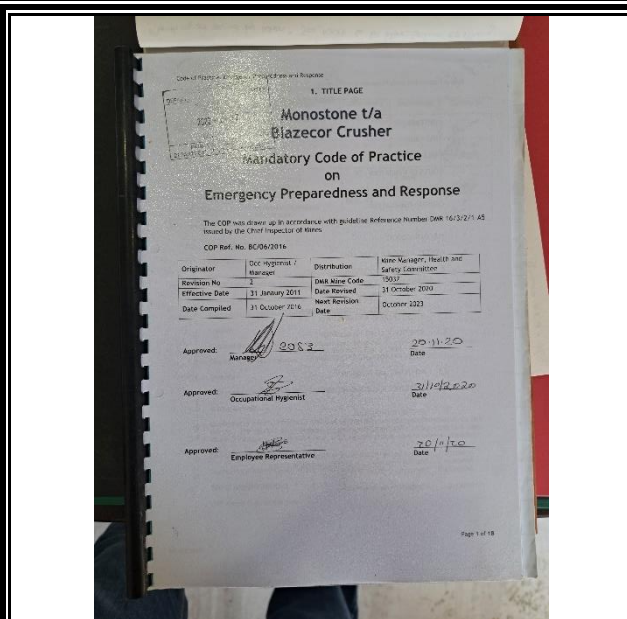
NAME:	SIGNATURE:	DATE:
Christine Fouche		09 June 2023

PHOTOGRAPHS

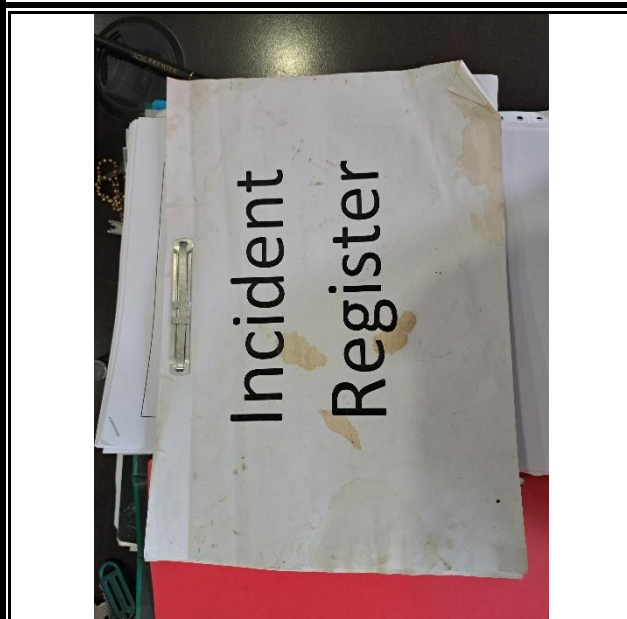
PROOF OF DOCUMENTATION



General waste removal proof



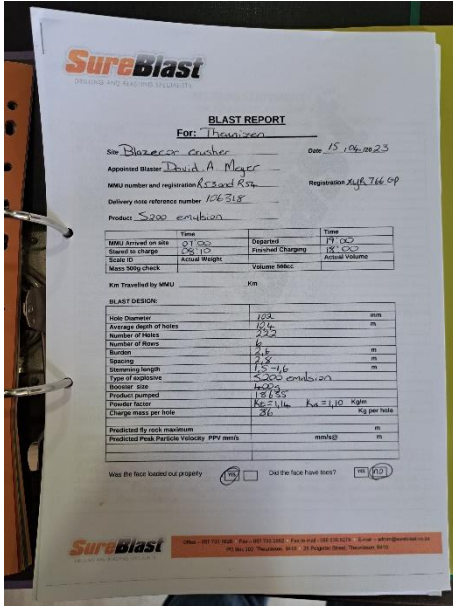
Emergency Preparedness Plan



ENVIRONMENTAL PERFORMANCE ASSESSMENT LOUTERBRONNEN AGGREGATE QUARRY

PROOF OF DOCUMENTATION

Complaints- and Incident Registers



Blast Report

HAZQUIP 24/7 EMERGENCY SPILL RESPONSE		WASTE MANIFEST DOCUMENT AND DANGEROUS GOODS DECLARATION		Date of review: 2019
				Doc Number: WMD001
				Compiled by: PW Botas
				MANIFEST NUMBER:HAZQ/160
GENERATOR DETAILS - COSIGNOR				
GENERATOR NAME: MONO STONE		WIS NO: N/A		
GENERATOR PHYSICAL ADDRESS: 5 RUGBY STREET, 9410		TEL NO: 057 733 0072		
P.O BOX 438, THEUNISSEN		CELL NO: -		
9410		E-MAIL: ADMIN@STONECRUSHER.CO.ZA		
ORIGIN OF WASTE: GENERAL OPERATIONS		DATE GENERATED: 2023/03		
SITE ADDRESS: 5 RUGBY STREET, THEUNISSEN				
TRANSPORTER DETAILS				
TRANSPORTER NAME: 777 FUEL T/A HAZQUIP		CELL NO: 082 467 4087		
TRANSPORTER PHYSICAL ADDRESS: 1 FUEL STREET, VOORSPOED		TEL NO: 057 355 1424		
WELKOM, 9459		EMERGENCY NUMBER: 082 467 4087		
WASTE PACKAGING TYPE: HD BAG		E-MAIL: INFO@HAZQUIP.CO.ZA		
WASTE DESCRIPTION: Soil contaminated with oil		WASTE DELIVERY DATE: 2023/03/27		
COLLECTION DATE: 2023/03/27		TRANSPORT TYPE: LDV		
		EST. QTY COLLECTED: APP. 300KG		
WASTE MANAGEMENT - COSIGNEE				
FACILITY NAME: VLAKFONTEIN		FACILITY LIC. NO:		
FACILITY ADDRESS: VLAKFONTEIN H-H LANDFILL		TEL NO: 074 160 4897		
		ENCAPSULATION CELL NO:		
		DISPOSAL/RECYCLING: DISPOSAL		
		WASTE DISPOSAL DATE:		
WASTE DESCRIPTION: Soil contaminated with oil				
UN NUMBER:		HAZARD RATING:		ACTUAL QTY RECEIVED:

Hazardous waste removal proof

SITE RELATED PHOTOS



General waste bins



Used oil storage

SITE RELATED PHOTOS



Hazardous waste storage



Salvage yard cleaned up



Wash bay with oil sump. Flow bins are visible in the back.



Processing plant

SITE RELATED PHOTOS



Processing area



Quarry

Borehole and water tank of the LED project