

**DE AAR STONE CRUSHERS
PORTION 49 AND 50 OF FARM NO 180 DE AAR,
HANOVER MAGISTERIAL DISTRICT,
NORTHERN CAPE PROVINCE**

**ENVIRONMENTAL AUDIT REPORT / ENVIRONMENTAL PERFORMANCE
ASSESSMENT**



DMRE REFERENCE NUMBER:	NC 30/5/1/2/2/10075 MR
AUDIT PERIOD:	April 2021 - January 2022

PREPARED FOR:

De Aar Stone Crushers Empower (Pty) Ltd
Contact Person: Mr J Lambrechts
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PREPARED BY:

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ENVIRONMENTAL AUDIT REPORT DE AAR STONE CRUSHERS

1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT/PERMIT HOLDER
Company Name	De Aar stone Crushers Empower (Pty) Ltd
Contact Person	Mr. J Lambrechts
Tel Number	053 631 0945
Cell Number	083 259 6096
E-mail Address	dasc@oasisnet.co.za
Postal Address	P.O. Box 340 De Aar 7000
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	De Aar Stone Crushers Quarry
Property Description	Portion 49 and 50 of the Farm No 180
Location	The quarry is located ±7 km south of De Aar. Access to the quarry is directly of the R388 that passes the site.
Size of Mining Area	62.8810 ha



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**ENVIRONMENTAL AUDIT REPORT
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2. ENVIRONMENTAL AUDIT REPORT

PROJECT DETAIL

Permit / Right Number:	NC 30/5/1/2/2/10075 MR	Inspection Date:	18/01/2022
Site Name:	De Aar Stone Crushers Quarry	Permit / Right Holder:	De Aar Stone Crushers Empower (Pty) Ltd
Report Number:	01	Other Authorisations:	N/A

DETAIL OF AUDITOR

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

ECO:	Christine Fouché
EXPERTISE:	Ms Fouche is a registered environmental assessment practitioner (Reg No. 2019/1003), has a Diploma in Nature Conservation and a BSc in Botany and Zoology with seventeen years experience in doing environmental impact assessments and compliance monitoring in South Africa.
DECLARATION OF INDEPENDENCE:	<p>I, Christine Fouche, in my capacity as environmental control officer declare that–</p> <ul style="list-style-type: none"> • I act as independent environmental control officer in this compliance audit; • I will perform the work relating to the audit in an objective manner, even if the results and findings are not favourable to the holder of the authorisation; • I have expertise in conducting environmental compliance audits, including knowledge of the Act and regulations that have relevance to the activity; • I will adhere to and comply with all responsibilities as indicated in the National Environmental Management Act and Environmental Impact Assessment Regulations. • I do not have and will not have any vested interest in the activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014. <p align="center">  Christine Fouché </p> <p align="right">Date: 25 January 2022</p>

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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).

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 in April 2021.

INSPECTED AREAS:

The inspection included an assessment of the following areas:

- Chemical storage areas;
- Office area;
- Oil storage area;
- Processing areas;
- Quarry pit;
- Salvage yard;
- Stockpile area;
- Workshop and wash bay.

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


ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE

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

The assumptions made in this document, stem from specific information gathered during the site audit and background information gathered from site management. No uncertainties or gaps in knowledge could be identified that is applicable during this audit period.

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LOCATION

Site Location:	The quarry is located ± 7 km south of De Aar. Access to the quarry is directly of the R388 that passes the site.	
Site Map:		
Site Coordinates:	A 30°42'28.06" S	24°00'08.01" E
	B 30°42'40.34" S	24°00'27.89" E
	C 30°42'42.11" S	24°00'51.57" E
	D 30°42'56.57" S	24°00'49.53" E
	E 30°42'51.99" S	24°00'03.17" E

PROJECT DESCRIPTION

De Aar Stone Crushers is an aggregate mining site which has been in operation since the 1960's. The mining activities were approved over Portion 49 and 50 of Farm No 180. The mine loosens the hard rock through blasting, upon which the loosened material is recovered using drilling, excavation and earth-moving equipment. Trucks transport the rock to the processing area where it is screened and stockpiled according to various sizes. A cement and brick making factory also operates on the site, and the undisturbed part of the farm is used for grazing purposes. Since the granting of the mining right in April 2021, the mining activities are confined to Portions 49 and 50 of Farm No 180.

SITE CONDITIONS

Sunny, windless day with moist soil conditions in some areas.

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REPORTABLE ENVIRONMENTAL INCIDENTS

Incident Date:	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

**ENVIRONMENTAL AUDIT REPORT
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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 2017)	5	-	Compliant	The competent authority deems the approved EMPR of the quarry compatible with an Environmental Authorisation in terms of NEMA, 1998.
Copy of the EA and EMPR available on site	5	-	Compliant	The site has a copy of the approved EMPR.
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	The mine plan was last reviewed in June 2021 and submitted to the DMRE.
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 is considered on site, and reported on by the occupational hygienists (SHE Management).
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)	TBC	-	To be confirmed	Site management must obtain safe disposal certificates for all waste removed from the site.
National Water Act, 1998 (Act 36 of 1998)	5	-	Compliant	The boreholes on the farm is registered with the DWS.
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	4	3	Management to be intensified	The listed weeds/invader plants that germinated at the mine must be removed.
Hazardous Substances Act, 1973 (Act 15 of 1973)	4	3	To be addressed	All chemicals/hazardous substances must be kept in bunded areas with impermeable surfaces.
National Forest Act, 1998 (Act No 84 of 1998) & Northern Cape Nature Conservation Act, 2009 (Act No 9 of 2009)	5	-	Compliant	No protected plants occur on the site.

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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
TOPSOIL- (EMPR PG 33) AND WASTE ROCK MANAGEMENT (EMPR PG 35):				
Topsoil stripping (± 300 mm)	N/A	-	-	No new areas were opened during the audit period where topsoil had to be stripped.
Topsoil storage/stockpiling on designated areas (not near or in drainage lines)	5	-	Compliant	The previously stripped topsoil heaps were in place at the time of the inspection, and had a good vegetation cover.
Topsoil heaps free of weeds	4	3	To be addressed	A few invader plant species were noted on some of the stockpiles that needs to be removed. See General Report below.
Topsoil covered to safeguard against erosion	N/A	-	-	Not applicable as the stockpiles have a good vegetation cover that protects it against runoff.
Mixing of topsoil and subsoil prevented	5	-	Compliant	As mentioned earlier, the historic stockpiles are in place, and no new topsoil had to be stripped during the audit period.
Settlement facilities for effluents from concrete mixing and washing provided	5	-	Compliant	-
Spill containment facilities for hazardous material provided.	4	3	To be addressed	Although the storage of fuel and oil is neatly managed, the storage of used oil needs to be improved. See General Report.
Topsoil returned to rehabilitated area	N/A	-	-	No areas were rehabilitated yet.
Waste rock stored in designated areas with demarcated boundaries	5	-	Compliant	When applicable.
Placement of waste rock does not cause unnecessary vegetation disturbance	5	-	Compliant	-
VEGETATION:				
Indigenous seed mix used to rehabilitate	N/A	-	-	Not yet applicable.
Recent vegetated areas protected against grazing.	N/A	-	-	
No unauthorised collection of firewood	5	-	Compliant	-
FAUNA:				
All animals, birds and reptiles protected on site	5	-	Compliant	-
Operation pits providing an escape route for trapped animals	5	-	Compliant	-
Operational areas daily inspected for signs of trapped animals	5	-	Compliant	-



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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
AIR QUALITY & NOISE (EMPR PG 33):				
Dust suppression implemented	5	-	Compliant	Although the mine did not need dust suppression at the time of the inspection (heavy rains received in the area), site management confirmed that a water truck is used to spray to the operational areas, and water sprayers were added to the crusher plant to alleviate dust when necessary.
Processing plant fitted with water sprayers	5	-	Compliant	
Monthly fallout dust monitoring implemented	5	-	Compliant	SHE Management is responsible for the monthly fallout dust monitoring on the site.
Machinery and the plant regularly cleaned to prevent accumulation of dust.	TBC	-	-	At the time of the inspection, the mine was still closed after the December break. However, the machinery and plant seen on site were clean.
Speed of vehicles controlled to lessen dust generation and road deterioration	5	-	Compliant	-
Noise control	5	-	Compliant	-
Hearing protection available to employees	5	-	Compliant	-
Mining equipment serviced regularly to ensure noise emissions are minimized	5	-	Compliant	-
Operation hours restricted to daylight hours.	5	-	Compliant	-
Silencers fitted to equipment.	5	-	Compliant	-
Surrounding residents informed of unusually noisy activities.	N/A	-	-	According to site management there are no nearby residents that need to be informed prior to blasting. Traffic control is implemented on the road immediately before, during and after a blast.
ARCHAEOLOGICAL AND CULTURAL INTEREST:				
Archaeological and/or cultural remnants protected.	N/A	-	-	To date no archaeological or cultural remnants were discovered at the mine.
SURFACE WATER:				
Storm water diverted around the stockpiled area and access roads to prevent erosion	5	-	Compliant	No erosion was noted at the time of the inspection even though the area received ample rains during the preceding weeks.
Areas with erosion reinstated	N/A	-	-	No signs of erosion were noted during the site inspection.



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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
VISUAL EXPOSURE:				
Is the contractor implementing good visual and housekeeping standards.	5	-	Compliant	With the exception of the used oil storage area, the housekeeping of the mine was of high standard.
Mined areas progressively backfilled and made safe	N/A	-	-	Not yet applicable.
MANAGEMENT OF HAZARDOUS PRODUCTS AND WASTE (EMPR PG 34):				
Hazardous products stored within a bunded area with impermeable surface (110% capacity)	4	3	To be addressed	As mentioned earlier, the used oil and other hazardous waste needs to be placed in a designated bunded area with impermeable surface.
Employees trained in the proper handling and disposal of fuel and oil.	4	3	To be addressed	Once the hazardous waste bunded area was erected, all (applicable) employees need to receive training on the handling and disposal of hazardous waste.
PPE available to employees	5	-	Compliant	This appeared to be true at the time of the inspection.
Storage of chemicals and refuelling done according to prescribed standards.	5	-	Compliant	This was true at the time of the inspection.
Servicing taking place in a designated area	5	-	Compliant	The site has a well-established workshop where servicing of vehicles and/or machinery takes place.
Management of fuel and oil spills	4	3	To be addressed	The spills noted at the used oil storage area need to be cleaned.
Emergency preparedness plan in place (reviewed at least bi-annually)	1	3	To be implemented	An Emergency Preparedness Plan needs to be drafted and implemented on site.
Integrity of bund walls sound to prevent spillage of contaminated water	5	-	Compliant	-
Above-ground fuel tanks at least 3.5 m from buildings, boundaries or other combustible material.	N/A	-	-	According to Health and Safety, the fuel tanks of the property complies with the necessary requirements.
Fuel drums equipped with proper dispensing equipment, that is stored in a waterproof container when not in use.	N/A	-	-	No fuel was dispensed from drums at the time of the inspection. A diesel bowser was present on site, although empty at the time of the audit.
Mixing of cement, concrete, paints, or similar products done in specified areas on lined surfaces.	5	-	Compliant	-
Absorbent materials available on site	5	-	Compliant	-



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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Hazardous waste removed by a registered waste handling contractor	5	-	Compliant	Fuel44 collects the used oil and –filters from the site. Management must ensure that any other hazardous waste, not accepted by Fuel44, is kept separate from the general waste, and that proof of safe disposal is filed when applicable.
Remediation of contaminated soil implemented on site	N/A	-	-	Not yet implemented by the site.
Drip trays present when refuelling is done outside the service bay	5	-	Compliant	The drip trays noted on site was of adequate size and well managed.
Mining equipment mechanically sound without visible oil leaks	5	-	Compliant	This appeared to be true at the time of the inspection.
Sump and oil separator operational	5	-	Compliant	Site management confirmed that the wash bay drains into an oil sump that is emptied by a service provider when needed.
Material safety data sheets (MSDS) available on site	5	-	Compliant	To be updated continuously.
Site free of day-to-day litter	5	-	Compliant	-
Waste collected in sealable containers	4	3	To be improved	The drums used for the storage of general waste must be fitted with lids to keep rainwater out and prevent litter from blowing out of the bins. These bins must also be marked “General Waste” to prevent the mixing of general- and hazardous waste.
General waste dumped at a recognised landfill site	5	-	Compliant	The general waste is dumped at the De Aar landfill site. The landfill does however not provide the site with proof, and therefore the use of a waste register is proposed. See General Report.
Waste disposal permits on site	4	3	To be obtained	Waste registers must be started at the quarry, and the safe disposal certificates (SDC) for the removal of all hazardous waste must be filed for auditing purposes.
No waste stockpile area allowed outside the boundaries of the mining area	5	-	Compliant	-
Proper sanitation facilities available to employees.	5	-	Compliant	The ablution facilities drain into a septic tank that is serviced by the municipality when needed. As mentioned earlier, proof of this must be filed.
Recycling and reuse encouraged on site.	5	-	Compliant	Old drums are repurposed as drip trays.

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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Waste storage area equipped with an impermeable, chemical resistant floor, and roof to prevent direct sunlight and rain water coming in contact with the waste.	3	3	To be addressed	As mentioned earlier, a storage area must be erected where used oil can be kept, and all refuse bins must be marked and fitted with lids.
Fuel storage below 80 m ³	5	-	Compliant	The fuel storage of the site does not exceed 80 m ³
FIRE MANAGEMENT (EMPR PG 33):				
Firefighting equipment available on-site	5	-	Compliant	-
Fires contained to facilities specially constructed for the purpose. No open fires.	5	-	Compliant	-
Employees trained in firefighting	5	-	Compliant	-
Combustibles kept away from fuel storage receptacles	5	-	Compliant	-
Vegetation in vicinity of fuel storage removed	5	-	Compliant	-
Gas and liquid fuel stored separately	5	-	Compliant	-
No smoking permitted within 3 m of fuel or chemical storage area.	5	-	Compliant	"No smoking" signs were placed at all the chemical/fuel storage area.
MINE & EQUIPMENT MANAGEMENT:				
Mining area demarcated with visible beacons	5	-	Compliant	The mining area is fenced.
Mining contained to approved mining area	5	-	Compliant	At the time of the inspection mining was contained to Portion 49 and 50 of the Farm No 180.
Unnecessary surface disturbance avoided	5	-	Compliant	-
HIA (heritage impact assessment) done prior to commencement of mining, and submitted to SAHRA.	1	3	To be addressed	Site management is in the process of addressing this matter.
ACCESS ROADS, VEHICLES & TRANSPORTING OF MATERIAL:				
Existing roads used and access road maintained.	5	-	Compliant	-
Movement of project related vehicles and machinery restricted to the approved mining area. No crisscrossing through undisturbed areas.	5	-	Compliant	-
Speed limit enforced within the mining area	5	-	Compliant	-

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DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Daily inspection of vehicles with a checklist accompanying each logbook	5	-	Compliant	The site makes use of pre-start checklists.
Monthly audits done by management on the condition of the vehicles and machinery.	5	-	Compliant	Proof of these audits are available on site.
Haul roads clearly marked and sign posted.	5	-	Compliant	-
EMPLOYEE AND SAFETY MANAGEMENT (EMPR PG 35):				
Workers inducted and informed of EMPr conditions	5	-	Compliant	The employees are inducted as they join the quarry.
Proof of training available	5	-	Compliant	-
Procedures for the handling of explosive devices in place	5	-	Compliant	To be complied with by the blaster when applicable.
Are there signs present, indicating the mining site and speed restrictions	5	-	Compliant	-
Effective access control to prevent unauthorised entry.	5	-	Compliant	-
Regular safety checks implemented	5	-	Compliant	SHE Management regularly audits the safety aspects of the mine.
Weekly team meetings (toolbox talks) with personnel	5	-	Compliant	-
Monthly environmental checklists done	4	3	To be updated	It is proposed that the monthly checklists be updated to include the requirements as listed on page 53 of the EMPr. See General Report.
Annual report on incidents.	4	3	To be added	Even though no incidents occurred during the audit period that had to be reported on, it is proposed that the site adds an incident register to the site file.
DMRE informed of all major incidents	N/A	-	-	No incidents occurred that had to be reported to the DMRE.

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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:	The EMPR of the mine was approved in April 2021, and in light thereof this is the first EAR/EPA to be submitted to the DMRE.
Proof of submission to DMRE available:	This EAR/EAP will be submitted to the DMRE and proof will be filed for auditing purposes.
EAR/EPA compiled by independent person with environmental auditing expertise:	The 2022 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	No I&AP's registered during the EIA phase of this project. However, the report will be available on the Greenmined website within 7 days of submission.

GENERAL REPORT

The DMRE approved the EMPR of De Aar Stone Crushers in April 2021, and subsequently this Environmental Audit Report (EAR)/Environmental Performance Assessment (EPA) was conducted to determine the compliance of the mine with the approved EMPR. The mining area recorded a compliance score of 95% for the audit period.

At the time of the inspection, mining operations did not yet resume after the December holiday, and the main activities were focussed at the brickworks. Site management did however confirm that no new areas were opened (from April 2021 to January 2022), and that mining continues within the already altered footprints on Portion 49 and 50 of Farm No 180. According to site management the mine sets off ±1 to 2 blasts a year (depending on market demand).

As mentioned earlier, the De Aar region received ample rains during the weeks preceding the audit, and in this circumstance some rainwater pools were still evident during the inspection. However, no signs of serious erosion were noted that required attention.

Documentation:

An Emergency Preparedness Plan must be compiled for the site, and all personnel (applicable) must receive training on the implementation of it. As required in the EMPR Approval, this plan must bi-annually be reviewed.

Further to this, site management must add an Incident Register and Complaints Register to the site file (see examples attached to this report).

As mentioned earlier, it is proposed that the following matters be added to the monthly checklists (page 53 of the EMPR):

- Spills;
- Topsoil stripping and storage effectively;
- The presence of weeds and alien plants;
- Litter;
- Ablution facilities operational;
- Health and safety requirements;
- Presence of firefighting equipment.

Site management is in discussion with an archaeologist regarding the need for a Heritage Impact Assessment at the quarry. The outcome of the discussions will be reported on in the following EAR.

Weeds and Invader Plants:

The high rainfall received in the region prompted the germination of weeds/invader plant species in some areas that have to be eradicated as soon as possible. The species of concern, noted during the inspection, included the following:

- | | | | |
|----------------------|--------------------|----------------------|-----------------------------------|
| • Russian Tumbleweed | Russiese Rolbossie | <i>Kali tragus</i> | Category 1b |
| • Mesquite | Muskietboom | <i>Prosopis spp.</i> | Category 3 (in the Northern Cape) |

It is important for management to take note that all plants listed as Category 1a or b invasive species in terms of the National Environmental Management: Biodiversity Act, 2004 and Alien and Invader Species Regulations, amended 2016 must be controlled. In terms of this legislation plants classified as category 1 a or b species are invasive species which must be controlled and whenever possible, removed and destroyed. Any form of trade or planting is strictly prohibited. Category 3 species often have ornamental value and may be grown where they currently exist but cannot be planted, propagated or traded. Therefore, the young Mesquite trees germinating within the mining boundaries must be removed, but the adult trees can be retained.

Chemical/Hazardous Substance Storage and Waste Management:

The overall condition of the site was very clean and well managed with drip trays of sufficient size placed under stationary equipment; site management is commended for the effort to keep the site clean.

As discussed on site, it is proposed that management implement the use of waste registers to keep track of all waste materials that leaves the site (see examples attached to this report). Presently, Fuel44 (or on occasion Oilkol) collects the used oil and –filters of the site, upon which they provide the site with proof of collection. Any hazardous waste not accepted by Fuel44 or Oilkol, must be removed by another registered hazardous waste handling contractor to an appropriately registered landfill site. No hazardous waste may be mixed with general waste or be disposed of at a general waste landfill site.















The mine empties the general waste bins at the De Aar landfill. As the municipal landfill does not provide the mine with proof of disposal, it is suggested that the mine implements the use of a general waste register to monitor this activity. In addition, it is recommended that all general waste bins be marked “General Waste” and fitted with lids to prevent rainwater accumulating in the bins, and/or waste blowing from the bins.

It is also proposed that an area be designated for the storage of the used oil or unwanted hazardous substances. This area must be bunded, have a lined impermeable surface and be able to contain 110% of the volume of the liquid stored within it. The area must be signed posted as the "Hazardous Waste Storage Area", and hence forth all hazardous waste (including contaminated soil, -rags, -absorbent material etc.) must be stored, within bins/drums with sealable lids, within the bund. Further to this, the used oil drums noted along the north-eastern corner of the quarry pit, must immediately be moved to a bunded area and the associated spills must be cleaned. The contaminated soil must be treated as hazardous waste and may not be mixed with other soil. Alternative, the soil can be treated as the EMPR (page 34) does allow for the remediation of soil at the site.

The ablution facilities at the mine drains into a septic tank that is serviced by the municipality when needed. Site management must ensure that there is a record of each service conducted by the municipality. The use of a liquid waste register is proposed.

Servicing of the oil sump (when needed) must also be recorded in the hazardous waste register, and the proof of safe disposal must also be filed for auditing purposes.

DOCUMENT CHECKLIST:

 Mining right	-	Present
 Mine works program	-	Present
 Social and labour plan	-	Present
 Approved EMPR	-	Present
 Updated Mine Plan	-	Present
 Financial provision (2021)	-	Present (electronic copy)
 Proof of waste removal	-	To be elaborated on
 Monitoring results	-	Dust, Noise, Vibration Monitoring (Present)
 Waste spreadsheet	-	Present (to be completed)
 Incidents register	-	To be added
 Complaints Register	-	To be added
 Environmental Awareness Training	-	Present
 Material Safety Data Sheets	-	Present
 Environmental Preparedness Plan	-	To be added

MATTERS TO BE ADDRESSED:

1. The invader plant species must be removed;
2. Construct a sufficient bunded area for the storage of used oil and other hazardous waste;
3. Train all employees on the handling and disposal of hazardous waste;
4. Clean the oil spills at the used oil storage area;
5. Compile an Emergency Preparedness Plan;
6. Mark the general waste drums and fit them with lids;
7. Start the use of general-, hazardous-, and liquid waste registers;
8. Obtain an opinion from an archaeologist regarding the need for an HIA;
9. Update the monthly audits to include the requirements of page 53 of the EMPR; and
10. Add an Incident Register and Complaints Register to the site file.

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

The DMRE approved the EMPR of the mine in 2021, and since then no major changes occurred at the mine that requires the amendment of the EMPR.

NEED FOR AMENDMENT OF THE EMPR:

No need was identified for the amendment of the EMPR.

FINANCIAL PROVISION:

This report is accompanied by an updated financial provision calculation for the year 2022 that amounts to R3 127 460.19. The right holder has a financial guarantee to the value of R 4 437 873.00 lodged with the DMRE, and therefore does not have to provide for a shortfall amount for the year 2022.

ECO SIGNATURE

NAME:	SIGNATURE:	DATE:
Christine Fouche		25 January 2022

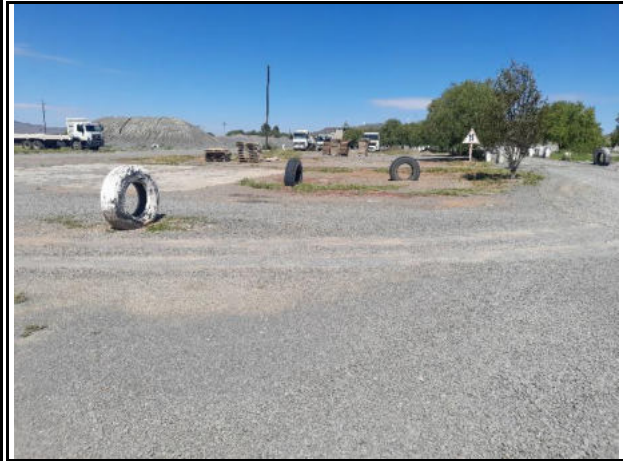
PHOTOGRAPHS

QUARRY PIT



Quarry pit neatly managed. Note safety signage that is in place.

PARKING- AND PROCESSING AREA



Work areas neatly demarcated with white painted tyres.



Drip trays used under stationary trucks.

PARKING- AND PROCESSING AREA



Processing area neatly managed

PARKING- AND PROCESSING AREA



Water at processing area due to heavy rains received in the region. Note the drums used as waste bins.



Russian Tumbleweed to be removed from processing area.

STORAGE AND WORKSHOP AREAS



Diesel storage tank enclosed in a properly bunded area.



Wash bay that drains into an oil sump.

STORAGE AND WORKSHOP AREAS



Oil store, with appropriate signage, where the oil is kept.



MSDS's and register kept inside the oil store.



STORAGE AND WORKSHOP AREAS



Workshop area neatly managed. Note drip tray used by mechanic.



Paint store inside the workshop.



Gas storage area.



All containers to be marked.



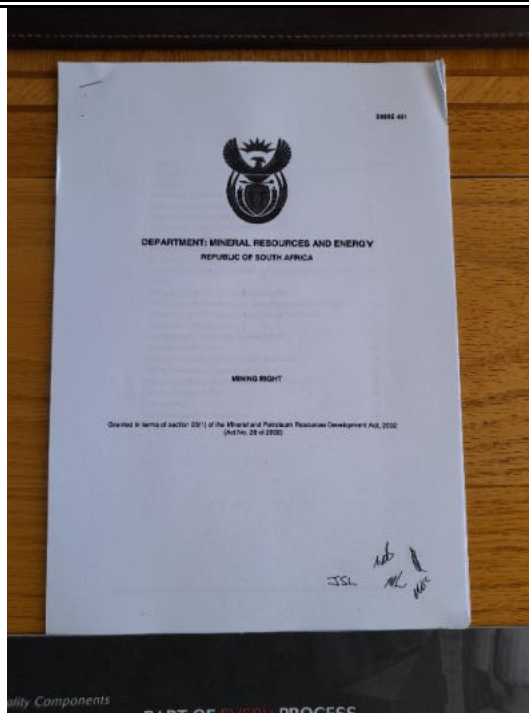
Storage area neatly managed.

STORAGE AND WORKSHOP AREAS



Used oil to be kept in a bunded area until removed from site, and spillage to be cleaned.

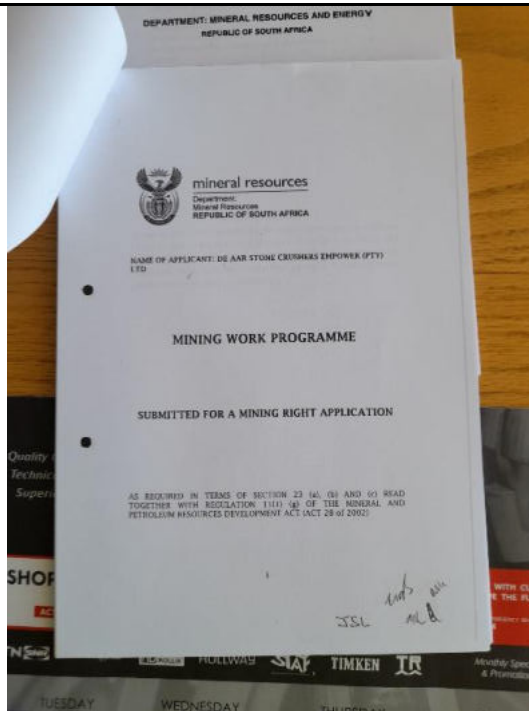
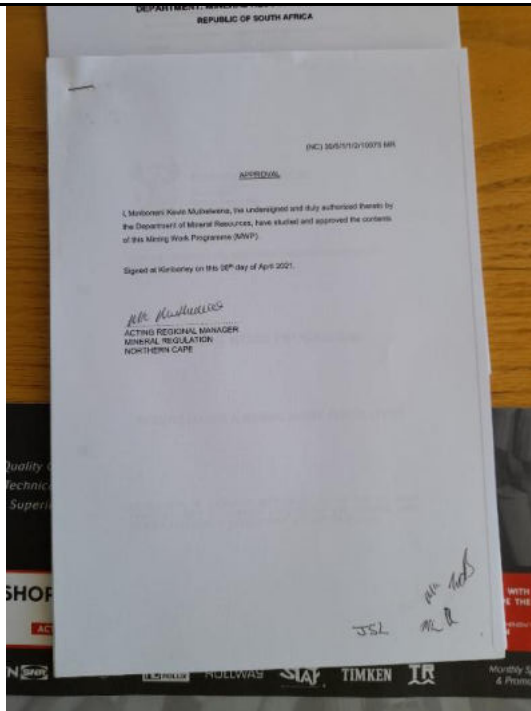
PROOF OF DOCUMENTATION



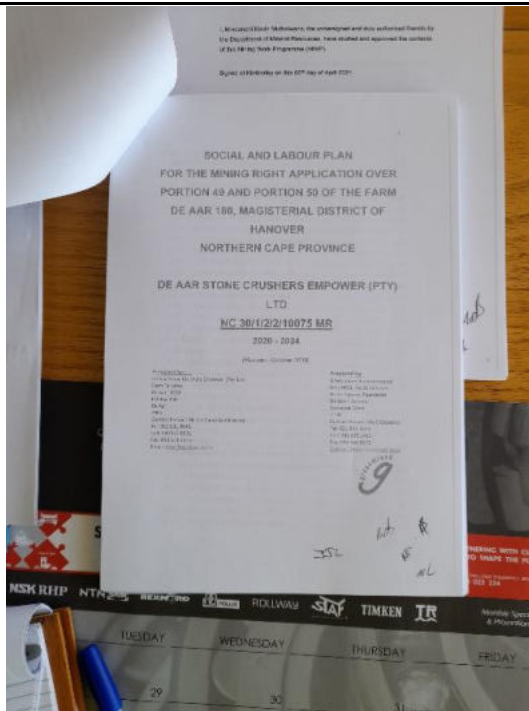
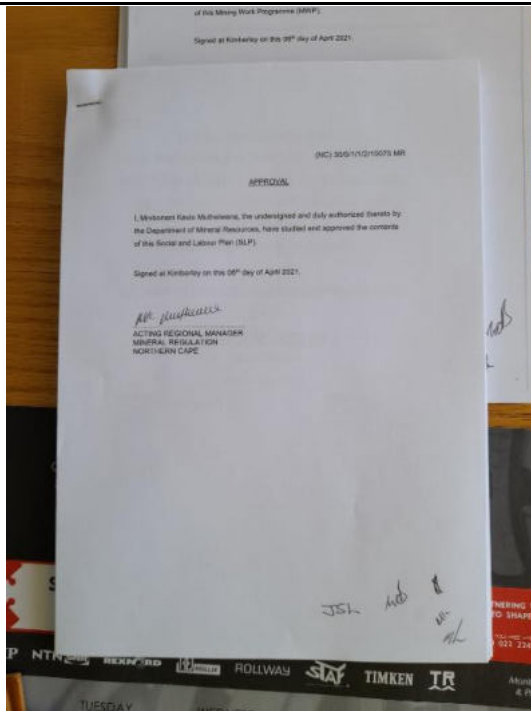
DMRE approved EMPR, and mining right on site.

ENVIRONMENTAL AUDIT REPORT DE AAR STONE CRUSHERS

PROOF OF DOCUMENTATION

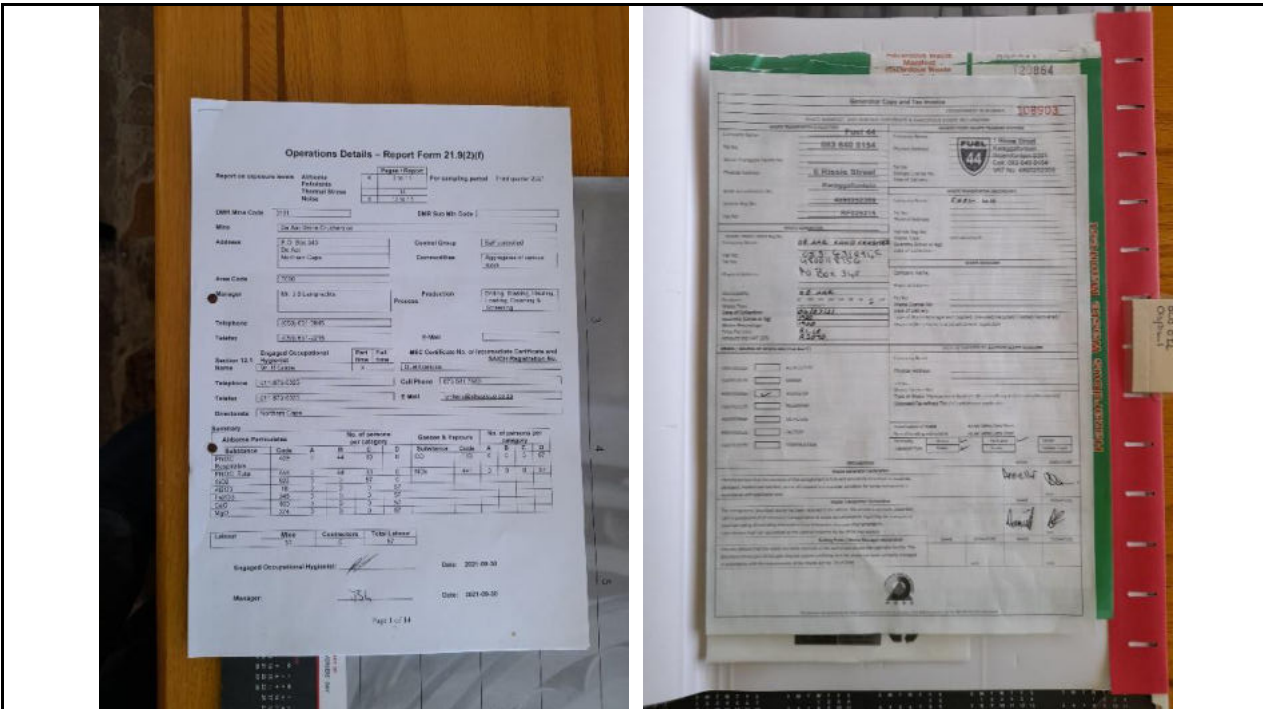


DMRE approved MWP on site.

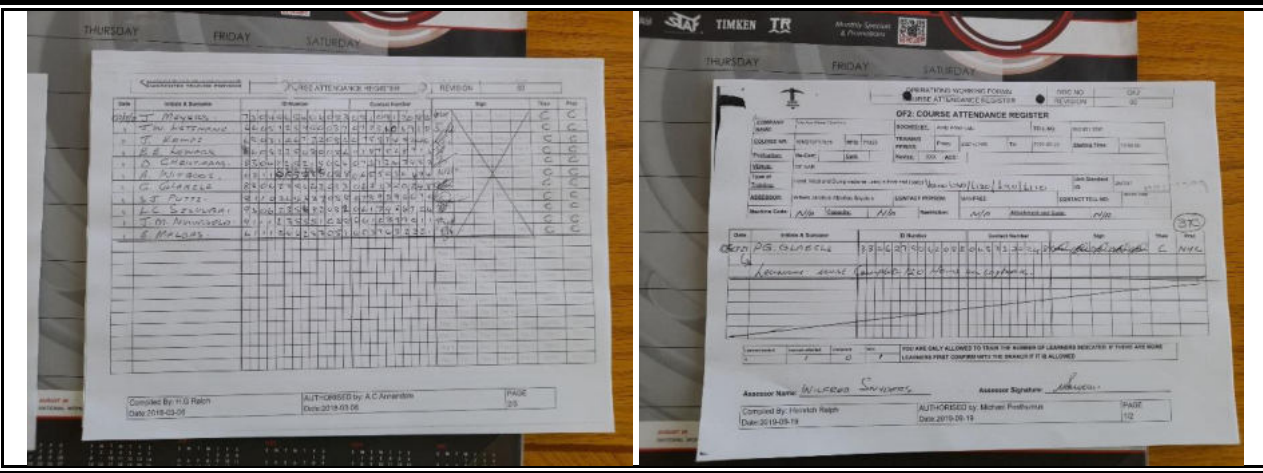


DMRE approved SLP on site.

PROOF OF DOCUMENTATION



Proof of occupational hygienic monitoring (dust and noise), as well as proof of removal of hazardous waste (used oil).



Proof of induction training done with employees.



**ENVIRONMENTAL AUDIT REPORT
DE AAR STONE CRUSHERS**

EXAMPLES OF REGISTERS TO BE IMPLEMENTED ON SITE

ENVIRONMENTAL INCIDENT REGISTER

**DE AAR STONE CRUSHERS QUARRY ON PORTION 49 AND 50 OF FARM NO 180 DE AAR, HANOVER MAGISTERIAL DISTRICT,
NORTHERN CAPE PROVINCE**

INCIDENT NUMBER	NAME OF PERSON REPORTING THE INCIDENT	INCIDENT	DATE INCIDENT IDENTIFIED	HOW WAS INCIDENT ADDRESSED?	DATE OF RECTIFICATION	SIGNATURE



**ENVIRONMENTAL AUDIT REPORT
DE AAR STONE CRUSHERS**

PUBLIC COMPLAINTS REGISTER

**DE AAR STONE CRUSHERS QUARRY ON PORTION 49 AND 50 OF FARM NO 180 DE AAR, HANOVER MAGISTERIAL DISTRICT,
NORTHERN CAPE PROVINCE**

COMPLAINANT	COMPLAINT	DATE COMPLAINT LODGED	HOW WAS COMPLAINT HANDLED



**ENVIRONMENTAL AUDIT REPORT
DE AAR STONE CRUSHERS**

GENERAL WASTE DISPOSAL REGISTER

**DE AAR STONE CRUSHERS QUARRY ON PORTION 49 AND 50 OF FARM NO 180 DE AAR, HANOVER MAGISTERIAL DISTRICT,
NORTHERN CAPE PROVINCE**

DISPOSAL DATE	DISPOSAL SITE	QUANTITY DISPOSED	WASTE TYPE	RECEIPT	SIGNATURE



ENVIRONMENTAL AUDIT REPORT
DE AAR STONE CRUSHERS

HAZARDOUS WASTE DISPOSAL REGISTER

DE AAR STONE CRUSHERS QUARRY ON PORTION 49 AND 50 OF FARM NO 180 DE AAR, HANOVER MAGISTERIAL DISTRICT,
NORTHERN CAPE PROVINCE

DISPOSAL DATE	DISPOSAL SITE	QUANTITY DISPOSED	WASTE TYPE	RECEIPT	SIGNATURE



ENVIRONMENTAL AUDIT REPORT
DE AAR STONE CRUSHERS

LIQUID WASTE DISPOSAL REGISTER

DE AAR STONE CRUSHERS QUARRY ON PORTION 49 AND 50 OF FARM NO 180 DE AAR, HANOVER MAGISTERIAL DISTRICT,
NORTHERN CAPE PROVINCE

DISPOSAL DATE	DISPOSAL SITE	QUANTITY DISPOSED	WASTE TYPE	RECEIPT	SIGNATURE