

**SAND MINING ON PORTION 0 AND PORTION 1
(REMAINING EXTENT) OF THE FARM DE KLERKS
KRAAL NO 231, THEUNISSEN DISTRICT
FREE STATE PROVINCE**

**ENVIRONMENTAL PERFORMANCE ASSESSMENT /
ENVIRONMENTAL AUDIT REPORT**

DMRE REFERENCE NUMBER:	FS 30/5/1/2/2/10071 MR
AUDIT PERIOD:	MAY 2024

Prepared For:

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Prepared By:

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1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT 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
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Contact Person	Christine Fouche
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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 Klerks Kraal Sand Mine
Property Description	❖ Portion 0 of the farm De Klerks Kraal No 231 ❖ Portion 1 (Remaining Extent) of the farm De Klerks Kraal No 231
Location	The De Klerks Kraal Sand Mine is ±35 km north of Theunissen and ±25 km south of Welkom in the Free State Province
Size of Mining Area	238.5426 ha
Site Coordinates:	A. 28°08'30.08" S; 26°39'05.39" E
	B. 28°08'15.33" S; 26°39'28.64" E
	C. 28°08'22.60" S; 26°39'42.58" E
	D. 28°08'14.18" S; 26°39'52.30" E

**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

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	F. 28°08'03.78" S; 26°40'19.05" E
	G. 28°08'20.02" S; 26°40'43.87" E
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**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

TABLE OF CONTENTS

1. PROJECT SPECIFIC DETAIL	2
2. ENVIRONMENTAL AUDIT REPORT	5
PROJECT DETAIL	5
DETAIL OF AUDITOR	5
SCOPE & PURPOSE OF ENVIRONMENTAL AUDIT	6
ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE	6
LOCATION:	7
PROJECT DESCRIPTION:	8
SITE CONDITIONS:	8
REPORTABLE ENVIRONMENTAL INCIDENTS:	8
ADOPTED METHODOLOGY	8
INSPECTION ASPECTS:	9
COMMENTS OR COMPLAINTS RECEIVED FROM I&AP'S	25
AUDITING OF EMP AND REPORTING THEREOF	25
GENERAL REPORT:	25
ECO SIGNATURE:	27
PHOTOGRAPHS:	28


2. ENVIRONMENTAL AUDIT REPORT

PROJECT DETAIL

Right Number:	FS 30/5/1/2/2/10071 MR	Date of Commencement:	June 2023
Site Name:	De Klerks Kraal Sand Mine	Inspection Date:	28 May 2024
Right Holder:	Vengablox (Pty) Ltd	Other Authorisations:	Water Use Licence: 27/2/1C1142/101; WU22656
Report Number:	EPA 01		

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 Fouche declare that –</p> <ul style="list-style-type: none"> • I act as independent environmental control officer in this compliance audit; • I will perform the work relating to the audit in an objective manner, even if the results and findings are not favourable to the holder of the authorisation; • I have expertise in conducting environmental compliance audits, including knowledge of the Act and regulations that have relevance to the activity; • I will adhere to and comply with all responsibilities as indicated in the National Environmental Management Act and Environmental Impact Assessment Regulations. • I do not have and will not have any vested interest in the activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014 (as amended). <p align="center">  Signature of ECO Date: 20 June 2024 </p>



ENVIRONMENTAL PERFORMANCE ASSESSMENT DE KLERKSKRAAL SAND MINE

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 audit is to evaluate compliance of the operational activities with the environmental management programme (EMPR) and Environmental Authorisation (EA) issued by the DMRE for the site.

INSPECTED AREAS:

The inspection included an assessment of the following areas:

- » Excavations;
- » Generator and diesel store;
- » Office and storage areas;
- » Parking area;
- » Settling pond / historic excavation;
- » Stockpile area;
- » Washing and screening plant area; and
- » Waste storage area.

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 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.

LOCATION:

Site Location:	The De Klerks Kraal Sand Mine is ±35 km north of Theunissen and ±25 km south of Welkom in the Free State Province																						
Site Map:																							
Site Coordinates:	<table border="1"> <tr><td>A. 28°08'30.08" S; 26°39'05.39" E</td></tr> <tr><td>B. 28°08'15.33" S; 26°39'28.64" E</td></tr> <tr><td>C. 28°08'22.60" S; 26°39'42.58" E</td></tr> <tr><td>D. 28°08'14.18" S; 26°39'52.30" E</td></tr> <tr><td>E. 28°08'13.90" S; 26°40'05.35" E</td></tr> <tr><td>F. 28°08'03.78" S; 26°40'19.05" E</td></tr> <tr><td>G. 28°08'20.02" S; 26°40'43.87" E</td></tr> <tr><td>H. 28°08'03.36" S; 26°40'46.99" E</td></tr> <tr><td>J. 28°07'57.21" S; 26°41'17.71" E</td></tr> <tr><td>K. 28°07'39.27" S; 26°41'44.66" E</td></tr> <tr><td>L. 28°07'56.16" S; 26°41'46.76" E</td></tr> <tr><td>M. 28°08'00.53" S; 26°41'37.49" E</td></tr> <tr><td>N. 28°08'11.85" S; 26°41'28.46" E</td></tr> <tr><td>P. 28°08'15.33" S; 26°40'59.56" E</td></tr> <tr><td>Q. 28°08'28.76" S; 26°40'59.15" E</td></tr> <tr><td>R. 28°08'38.27" S; 26°40'46.86" E</td></tr> <tr><td>S. 28°08'20.29" S; 26°40'19.55" E</td></tr> <tr><td>T. 28°08'27.50" S; 26°40'11.92" E</td></tr> <tr><td>U. 28°08'27.19" S; 26°39'58.16" E</td></tr> <tr><td>V. 28°08'36.86" S; 26°39'42.70" E</td></tr> <tr><td>W. 28°08'30.96" S; 26°39'30.11" E</td></tr> <tr><td>X. 28°08'48.06" S; 26°39'01.46" E</td></tr> </table>	A. 28°08'30.08" S; 26°39'05.39" E	B. 28°08'15.33" S; 26°39'28.64" E	C. 28°08'22.60" S; 26°39'42.58" E	D. 28°08'14.18" S; 26°39'52.30" E	E. 28°08'13.90" S; 26°40'05.35" E	F. 28°08'03.78" S; 26°40'19.05" E	G. 28°08'20.02" S; 26°40'43.87" E	H. 28°08'03.36" S; 26°40'46.99" E	J. 28°07'57.21" S; 26°41'17.71" E	K. 28°07'39.27" S; 26°41'44.66" E	L. 28°07'56.16" S; 26°41'46.76" E	M. 28°08'00.53" S; 26°41'37.49" E	N. 28°08'11.85" S; 26°41'28.46" E	P. 28°08'15.33" S; 26°40'59.56" E	Q. 28°08'28.76" S; 26°40'59.15" E	R. 28°08'38.27" S; 26°40'46.86" E	S. 28°08'20.29" S; 26°40'19.55" E	T. 28°08'27.50" S; 26°40'11.92" E	U. 28°08'27.19" S; 26°39'58.16" E	V. 28°08'36.86" S; 26°39'42.70" E	W. 28°08'30.96" S; 26°39'30.11" E	X. 28°08'48.06" S; 26°39'01.46" E
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PROJECT DESCRIPTION:

Vengablox (Pty) Ltd holds a mining right over ±239 ha of Portion 0, and Portion 1 (Remaining Extent) of the farm De Klerks Kraal No 231 where sand is mined from the banks of the Sand River. The authorisation also allows the right holder to mine sand from the riverbed although this has not yet commenced. Presently the impact footprint is ±4.6 ha (<6.5 ha as proposed in the EIAR and EMPR) and the sand is mined by direct excavation. The sand is loaded by excavator onto trucks that transport it to the screening- and washing plant, after which it is stockpiled until sold and transported to clients.

SITE CONDITIONS:

Clear sunny, windless day with dry soil conditions.

REPORTABLE ENVIRONMENTAL INCIDENTS:

Incident Date:	N/A
Incident No:	N/A
Incident:	The mine has an incident register that keeps track of incidents. No major incidents occurred during the audit period that had to be reported to the DMRE.
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

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	The Mine Plan was renewed in April 2024.
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)	5	-	Compliant	-
National Water Act, 1998 (Act 36 of 1998)	5	-	Compliant	The mining operations are audited separately to determine compliance with the WUL conditions.
Water Use Licence on site	5	-	Compliant	-
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	3	3	Ongoing	The problem plants are constantly removed from the work areas.
Hazardous Substances Act, 1973 (Act 15 of 1973)	5	-	Compliant	All chemicals are stored in bunded areas.
National Heritage Resources Act, 1999 (Act No 25 of 1999)	N/A	-	-	Not applicable as no heritage artefacts/remains were discovered to date.
Mine Works Programme	5	-	Compliant	-
Social Labour Plan	5	-	Compliant	-
Copies of Financial Provision Calculation (FP) and Annual Performance Audit (EPA) present	N/A	-	-	2024 marks the first year that the FP needs to be reviewed and the EPA to be submitted since the granting of the mining right.
Waste register and permits for waste removal	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Complaints Register Present	5	-	Compliant	-
Environmental Awareness training	5	-	Compliant	Proof of environmental training is available on site.
ASPECTS OF THE AFFECTED ENVIRONMENT				
Topography				
Implement progressive rehabilitation as prescribed in the closure plan, appended to the EMPR, through-out the operational- and decommissioning phases of the project.	5	-	Compliant	Progressive rehabilitation is implemented as mining continues.
Visual Characteristics				
Do not exceed the proposed 6.5 ha (two 2.5 ha minor areas, and 1.5 ha for processing) operational areas at any given time.	5	-	Compliant	Presently the impact footprint is ±4.7 ha.
Ensure that the site have a neat appearance and is always kept in good condition.	5	-	Compliant	-
Store mining equipment neatly in a dedicated area with a sealed drip tray underneath when not in use.	5	-	Compliant	The parking area of the mine is neat and drip trays are in use.
Implement concurrent rehabilitation as mining progress to limit the visual impact on the aesthetic value of the area.	5	-	Compliant	-
Limit vegetation removal, and only strip topsoil immediately prior to the mining/use of a specific area.	5	-	Compliant	-
Rehabilitate and level the site upon closure to ensure that the visual impact on the aesthetic value of the area is kept to a minimum.	N/A	-	-	Not yet applicable.



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Air Quality and Noise Ambiance: Dust				
Control the liberation of dust into the surrounding environment using; inter alia, water spraying and/or other dust-allaying agents.	5	-	Compliant	-
Ensure continuous assessment of all dust suppression equipment to confirm its effectiveness in addressing dust suppression.	5	-	Compliant	-
Limit speed on the access roads to 40 km/h to prevent the generation of excess dust.	5	-	Compliant	-
Minimise areas devoid of vegetation, and only remove vegetation immediately prior to mining.	5	-	Compliant	-
Flatten loads to prevent spillage and windblown dust during transportation.	5	-	Compliant	-
Consider weather conditions upon commencement of daily operations. Limit operations during very windy periods.	5	-	Compliant	-
Ensure dust-generating activities comply with the National Dust Control Regulations, GN No R827 promulgated in terms of NEM:AQA, 2004 and ASTM D1739 (SANS 1137:2012).	5	-	Compliant	Greenmined monthly monitors the dustfall of the operations.
Implement best practice measures during the stripping of topsoil, loading, and transporting of the mineral from the site to minimize potential dust impacts.	5	-	Compliant	-
Air Quality and Noise Ambiance: Noise				
Ensure that employee and visitors to the site conduct themselves in an acceptable manner while on site.	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Do not permit loud music at the mining area.	5	-	Compliant	-
Ensure that all project related vehicles are equipped with silencers and maintained in a road worthy condition in terms of the National Road Traffic Act, 1996.	5	-	Compliant	-
Implement best practice measures to minimise potential noise impacts.	5	-	Compliant	-
Appoint a qualified occupational hygienist to quarterly monitor and report on the personal noise exposure of the employees working at the mine. Monitoring must be done in accordance with the SANS10083:2004 (Edition 5) sampling method as well as NEM:AQA, 2004, SANS 10103:2008.	5	-	Compliant	EEC is responsible for the hygienic requirements of the mine.
Geology and Soil				
Strip and stockpile the upper 300 mm of the soil before mining.	5	-	Compliant	Topsoil is stripped from all new mining areas.
Carefully manage and conserve the topsoil throughout the stockpiling and rehabilitation process.	5	-	Compliant	The topsoil is stockpiled separately and conserved from rehabilitation.
Ensure topsoil stripping, stockpiling, and re-spreading is done in a systematic way. Plan mining in such a way that topsoil is stockpiled for the minimum possible time.	5	-	Compliant	Stockpiled topsoil is re-spread over rehabilitated areas.
Place the topsoil heaps on a levelled area within the mining footprint area. Do not stockpile topsoil in undisturbed areas.	5	-	Compliant	-
Protect topsoil stockpiles against losses by water- and wind erosion. Position stockpiles so as not to be vulnerable to erosion by wind and water.	5	-	Compliant	-



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DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Establish plants (weeds or a cover crop) on the stockpiles to prevent erosion.				
Ensure that topsoil heaps do not exceed 2 m to preserve micro-organisms within the topsoil, which can be lost due to compaction and lack of oxygen.	5	-	Compliant	-
Keep temporary topsoil stockpiles free of invasive plant species.	3	3	Ongoing	The problem plants are constantly cleared from all stockpiles.
Divert storm- and runoff water around the stockpile area to prevent erosion.	5	-	Compliant	-
Spread the topsoil evenly, to a depth of 300 m, over the rehabilitated area upon closure of the site.	N/A	-	-	The mine is not yet in final closure.
Strive to re-instate topsoil at a time of the year when vegetation cover can be established as quickly as possible afterwards, to that erosion of returned topsoil is minimized. The best time of year is at the end of the rainy season.	N/A	-	-	
Plant a cover crop immediately after spreading topsoil to stabilise the soil and protect it from erosion. Fertilise the cover crop for optimum production. Rehabilitation extends until the first cover crop is well established.	N/A	-	-	
Monitor the rehabilitated area for erosion, and appropriately stabilize if erosion do occur, for at least 12 months after reinstatement	N/A	-	-	
Hydrology, Geohydrology and Groundcover (including wetlands): Mitigating the impact on the Sand River, Riparian Areas, and Downstream Users				
Do not change, dam, or divert the flow of the river without prior authorisation from the Department of Water and Sanitation (DWS).	5	-	Compliant	No damming or altering the flow of the river took place during the audit period.



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Do not allow activities to take place, without the necessary authorisation from the DWS, within a horizontal distance of 100 m from any watercourse or estuary or within a 500 m radius from a delineated boundary of any wetland or pan.	5	-	Compliant	The WUL (water use licence) was approved, and a copy of the document is available on site.
Always adhere to the requirements of the water use authorisations to be obtained prior to the commencement of the mining activities.	5	-	Compliant	As mentioned earlier, the operations are audited separately to determine compliance with the WUL conditions. That audit report is then submitted to the DWS.
Do not store any equipment within the riverbed.	5	-	Compliant	-
Establish a 38 m buffer and maintain as no-go area around the river channel, wetland conditions (marginal- and lower zones), lateral streams, and backwater wetlands. Floodplain/riparian area mining, and processing must be established outside the 38 m buffer area.	5	-	Compliant	Mining remains >38 m from the river and or drainage lines.
Limit excavations to the mining of a maximum of two minor areas, supported by one processing area at any given time.	5	-	Compliant	-
Once an area is mined, rehabilitate it prior to the opening of a consecutive minor area.	5	-	Compliant	Mined areas are rehabilitated prior to the opening of new area.
Only use one sand pump, including infrastructure and access road, at any time and rehabilitate the area immediately after moving the pump to another location along the site.	N/A	-	-	Not yet applicable.
Carefully select the entrance point into the river to minimise disturbance of the marginal zone and avoid the steep banks of the river. Clearly demarcate the entrance to prevent sprawling.	N/A	-	-	



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DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Adequately rehabilitate, including re-instatement of the natural topography, replacement of topsoil, prevention of erosion and monitoring and eradication of problematic weeds and invasives, any disturbance of the riverbank.	N/A	-	-	
Keep the removal of vegetation to a minimum where disturbance of the banks or floodplain takes place.	5	-	Compliant	-
Arrange that an appropriately qualified specialist conduct a walk-through inspection to identify any sensitive and/or protected plants that may have to be relocated before any vegetation is removed. Special focus must be placed on species such as <i>Ammocharis coranica</i> , <i>Crinum bulbispermum</i> , <i>Kniphofia ensifolia</i> . If needed, apply for plant relocation/destruction permits, and filed on site for auditing purposes.	5	-	Compliant	An ecologist cleared the areas to be mined in February 2024 prior to expansion. The plants identified by the specialist were demarcated and the area was declared a no-go zone.
Implement adequate storm water management measures including diverting storm- and floodwater around the stockpile and excavation areas and preventing sediment and silt from entering the river.	4	3	To be addressed	The river broke through the berm separating the mining area and the riverbed and this allowed water from the settling pond (historic excavation) to drain into the river that affects the sediment load. This needs to be addressed.
Take necessary precautions to ensure that floodwaters are diverted around the processing/stockpile- and excavation areas by means of berms.	4	3	To be addressed	
Endeavour to re-instate a geomorphology which will form part of a functional system and refrain from leaving open excavations or pits upon rehabilitation.	N/A	-	-	Not yet applicable.



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DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Follow a comprehensive monitoring programme to quantify impacts and recommend mitigation. Such monitoring must include quarterly water quality sampling, sediment release (turbidity), Index of Habitat Integrity and SASS5 or a combination thereof.	5	-	Compliant	The mine follows a comprehensive water monitoring programme that is compliant with the WUL requirements.
Implement continued bi-annual monitoring of the habitat, macro-invertebrate, and fish communities at the reference sites, which vary seasonally.	5	-	Compliant	
Hydrology, Geohydrology and Groundcover (including wetlands): Erosion Control and Stormwater Management				
Implement the Stormwater Management Plan.	5	-	Compliant	-
Divert storm water around the topsoil heaps and mining areas to prevent erosion.	5	-	Compliant	-
Control all drainage from the project area to prevent off-site pollution, flooding, or damage to infrastructure downstream of any storm water discharge points.	5	-	Compliant	-
Use silt traps where there is a danger of topsoil or material stockpiles eroding and entering the river and other sensitive areas.	4	3	To be addressed	Refer to the earlier comment regarding the breach in the perimeter berm.
Conduct activity in terms of the Best Practice Guidelines for small-scale mining.	5	-	Compliant	-
Mining, Biodiversity and Groundcover: Impacts on ESA and Broad-Scale Ecological Processes				
Clearly demarcate the mining boundaries and contain all operations to the approved mining area.	3	3	To be addressed	The mining area must be demarcated with visible beacons even though all mining is still within the boundaries.
Declare the area outside the mining boundaries a no-go area and educate all employees accordingly.	5	-	Compliant	-



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DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Implement an invasive plant species management plan on site to control weeds and invasive plants on denuded areas, topsoil heaps and reinstated areas.	5	-	Ongoing	As mentioned earlier, the problem plants are continuously removed as stipulated in the invasive plant species management plan.
Ensure the protection of the riverine ecology as far as possible. If not possible, transplant the endangered and/or protected species (if present) in compliance with the legislation and permits for the translocation of species.	5	-	Compliant	No protected species were identified that had to be transplanted. The ground lilies identified by the specialist were flagged and the area declared a no-go zone.
Mining, Biodiversity and Groundcover: Invasive Plant Species				
Implement an invasive plant species management plan at the site to ensure the management and control of all species regarded as Category 1a and 1b invasive species in terms of NEM:BA, 2004. Do weed/alien clearing on an ongoing basis throughout the life of the mining activities.	5	-	Ongoing	-
Keep all stockpiles free of invasive plant species.	3	3	Ongoing	All problem plants must be removed from the stockpiles.
Control declared invader or exotic species on the rehabilitated areas.	3	3	Ongoing	
Terrestrial Fauna				
Ensure no fauna is caught, killed, harmed, sold, or played with.	5	-	Compliant	-
Remove any fauna directly threatened by the operational activities to a safe location.	N/A	-	-	Not yet applicable.
Provide environmental induction to all personnel regarding fauna management and in particular awareness about not harming or collecting species such as snakes, tortoises and owls which are often	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
persecuted out of superstition. Instruct workers to report any animals that may be trapped in the working area.				
Prevent the setting of snares or raiding of nests for eggs or young.	5	-	Compliant	-
Restrict the speed of all vehicles (40 km/h is recommended) to avoid collisions with susceptible species such as snakes and tortoises.	5	-	Compliant	-
Prevent activity at the site between sunset and sunrise, except for security personnel guarding the operation (if needed).	5	-	Compliant	-
Do not handle or antagonise any dangerous fauna (snakes, scorpions, etc.) that are encountered during construction. Contact a suitably qualified person(s) to remove the animals to safety.	N/A	-	-	Not yet applicable.
Do not throw or leave litter, food, or other foreign material around the site. Place this in demarcated rubbish and litter areas that are animal proof.	5	-	Compliant	-
Obtain the opinion and guidance of a suitably qualified person should any bats be noted in any of the mining areas.	N/A	-	-	Not yet applicable.
Demarcate the mining activities with beacons rather fences to allow free movement of roaming species.	4	3	To be addressed	Although the fauna can freely move around the site, the area must still be demarcated with beacons.
Restrict all mining operations to daylight hours.	5	-	Compliant	-
Cultural and Heritage Environment				
Confine all mining to the development footprint area.	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Implement change find procedure when discoveries are made on site	N/A	-	-	Not yet applicable.
Implement Fossil Chance Find Procedure should fossils be uncovered.	N/A	-	-	
Socio-economic Environmental / Land Use				
If needed, sign mined/rehabilitated areas back to agricultural use once the cover crop stabilised.	N/A	-	-	Not yet needed.
Existing Infrastructure				
Divert storm water around the access road to prevent erosion.	5	-	Compliant	-
Restrict vehicular movement to the existing access road to prevent crisscrossing of tracks through undisturbed areas.	5	-	Compliant	-
Repair rutting and erosion of the access road caused as a direct result of the mining activities.	5	-	Compliant	-
Prevent the overloading of the truck and file proof of load weights for auditing purposes.	5	-	Compliant	-
General: Waste Management				
Ensure regular vehicle maintenance, repairs and services only take place at the workshop and service area. Ensure drip trays are present if emergency repairs are needed on equipment not able to move to the workshop. Dispose all waste products in a closed container/bin to be removed from the emergency service area (same day) to the workshop to ensure proper disposal.	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
Provide all employees with ablution facilities. Ensure that the toilet is placed outside the 1:100-year floodline of the river.	5	-	Compliant	-
Ensure that ablution facilities drain into a septic tank with closed system. Do not install french drains on site.	5	-	Compliant	-
Ensure that the use of any temporary, chemical toilet facilities does not cause pollution to water sources or pose a health hazard. In addition, prevent any form of secondary pollution from the disposal of refuse or sewage from the temporary, chemical toilets. Address any pollution problems arising from the above immediately.	N/A	-	-	No temporary/chemical toilets are used on site.
If a diesel bowser is used on site, always equip it with a drip tray. Ensure that drip trays are used during each refuelling event. The nozzle of the bowser needs to rest in a sleeve to prevent dripping after refuelling.	5	-	Compliant	-
Clean drip trays after use. Do not use dirty drip trays.	5	-	Compliant	-
Collect any effluents containing oil, grease or other industrial substances in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility.	5	-	Compliant	HazQuip collects the hazardous waste of the mine that is transported to Blazecor Quarry.
Should spillage occur, such as oil or diesel leaking from a burst pipe, collect the contaminated soil, within the first hour of occurrence, in a suitable receptacle and remove it from the site, either for	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
resale or for appropriate disposal at a recognized facility. File proof.				
Compile a waste management plan that focus on the waste hierarchy of the NEM:WA and implement it on site.	5	-	Compliant	-
Contain all general waste in marked, sealable, refuse bins placed at a designated area, to be removed when filled to a recognised general waste landfill site.	5	-	Compliant	-
Prevent the burning or burying of waste on site.	5	-	Compliant	-
Report any significant spillage of chemicals, fuels etc. during the lifespan of the mining activities to the DWS and other relevant authorities.	N/A	-	-	No spills occurred that had to be reported.
General: Health and Safety Risks				
Ensure adequate ablution facilities and water for human consumption is daily available on site.	5	-	Compliant	-
Ensure that workers have access to the correct PPE as required by law.	5	-	Compliant	-
Manage all operations in compliance with the Mine Health and Safety Act, 1996 (Act No 29 of 1996).	5	-	Compliant	-
Environmental Authorisation Site Specific Conditions				
Mining activities conducted in accordance with the approved EMPR and the layout plans attached on page 19 of the EIAR & EMPR.	5	-	Compliant	-
The entire mining area must be fenced off, and a lockable gate must be installed. Access to the mine must be strictly controlled and measures must be	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
put in place to ensure the safety of animals/wildlife and the public.				
Visible semi-permanent markers must be placed on the mining boundary before mining activities commences and must be kept for the duration of mining. Mining activities must strictly be conducted within the demarcated area.	1	3	To be addressed	The mining area must be demarcated with beacons.
Mining area must be visibly subdivided into strips and mining must be confined to a strip at a time. Mining must proceed to the next strip once the previous mined strip has been successfully rehabilitated.	5	-	Compliant	-
Sand mining activities including excavations must be conducted or commence exactly 9 m away from the mining area boundary. The 9 m buffer must be demarcated with visible beacons, and it must be treated as a no-go area for the duration of the mining activities.	4	3	To be addressed	The 9 m buffer must be demarcated.
Mining activities must be conducted concurrently with rehabilitation and measures such as mulching and/or immediate cover with vegetation must be taken to make sure that the rehabilitated surface is protected from forces of erosion.	5	-	Compliant	-
At least 350 mm of topsoil must be stripped from each strip before mining activities commences. The topsoil must be stockpiled within the mining area and be replaced onto the mined area during rehabilitation.	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
The stockpiled topsoil must be protected from and/or against losses by water and wind erosion. Driving over topsoil stockpile is prohibited	5	-	Compliant	-
The installation of diesel tanks onsite must comply with the approved EMPr. Diesel tanks must be placed in a bunded or impermeable area to avoid soil and or water pollution. Diesel tanks storage area must be designed in such a way that they do not come into contact with stormwater during and also to cater for accidental damage or leakage of the tanks. Refuelling area must be bunded and during refuelling, drip trays must be placed below the pumps to prevent soil contamination and water pollution.	5	-	Compliant	Although no new diesel tanks were installed since the commencement of the mining right, the existing tank complies with these requirements.
After mining, steep slopes at the edges of excavations must be reduced to a slope of 1:3 and profiled to blend in with the surrounding topography.	5	-	Compliant	The mined areas are benched and sloped.
Sand leaving the site must be covered with a tarpaulin cloth during transportation to prevent sand from begin blown away by wind and causing pollution nuisance to other road users and the public.	1	3	To be implemented	-
Construction of access roads within the mining area must strictly comply with the approved EMPR and this EA.	N/A	-	-	No new roads were constructed yet.
Alien vegetation must be cleared on an ongoing basis during mining activities and after rehabilitation.	3	3	Ongoing	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

DESCRIPTION	COMPLIANCE SCORE	NON-COMPLIANCE SCORE	STATUS	COMMENTS
A surface slope must be maintained across the mining area in the drainage direction, so that excavation is freely drained.	N/A	-	-	The excavations are not free draining. See General Report.
Dust suppression measures must be implemented during mining activities, and this may include spraying the mining area and access road with water and/or an environmentally friendly dust-allaying agent. Dust prevention measures such as sprayers must be incorporated onto the screening plants to limit the generation of dust.	5	-	Compliant	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

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

No written comments or complaints has been received from any of the surrounding I&AP's.

AUDITING OF EMP AND REPORTING THEREOF
(REGULATION 34):

Date of previous EAR/EPA:	This is the first EPA since the granting of the mining right in 2023.
Proof of submission of previous EAR/EPA to DMRE available:	
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	The EPA will be available on the Greenmined website that is a publicly accessible website.

GENERAL REPORT:

Compliance of the mining area with the approved EMPR and EA was reviewed during the site assessment. The mining area recorded a compliance score of 95% for the audit period.

The DMRE approved the mining right for this operation on 06 April 2023 for a period of 30 years (05 April 2053). Blazecor 226 CC held a mining permit (MP) to mine sand from the banks of the Sand River over a portion of Portion 0 of the farm De Klerks Kraal No 231. The Venagblox mining right followed the lapse of the said Blazecor mining permit.

Upon approval of the MR, mining continued in the historic mining permit area until ±July 2023 when a new excavation was opened, following the shaping of the previous excavation. The new (July 2023) excavation initially extended into the 38 m buffer of the adjacent drainage line, but was subsequently moved away from the drainage line, and the 38 m buffer was instated and maintained on site.

In November 2023, management directed the wash water from the plant into the old excavation to use it as settling pond. The excavation was divided into three parts and the wash water is directed into the top section where the sediment is allowed to settle. As the top section is filled, the water overflows into the second and eventually third



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

sections. This is a highly effective manner to reduce the sediment load of the wash water before it is redirected to the wash plant. The settling sediment (in the excavation) contributes to rehabilitation as the excavation is slowly filled with the sandy sediment.

In April 2024, the Sand River flooded and breached the perimeter berm that opened a gap through which the water in the excavation flows into the river. The high sediment load of the water from the excavation reflected in the water monitoring results and the specialist advised that the breach must be closed, and the water cleaned (sediment reduced) before it is released into the river.

As required in terms of the EA and WUL the mine implements bi-annual biomonitoring and quarterly water quality monitoring. The results of the monitoring forms part of the annual DWS WUL audit.

The July 2023 excavation was rehabilitated in ±February 2024 and following a screening walkthrough by an ecologist a new area was opened south of this excavation. The ecologist only identified Ground Lillies (*Ammocharis coronica*) at the mining area, which were demarcated, and the area was declared a no-go zone.

During the audit period, the truck parking area was neatly demarcated and management of it improved. A concrete apron was added below the diesel tank with a berm to prevent dirty water running into the surroundings. A small concrete bermed area was made for the temporarily placement of drip trays, and water sprayers were added to the roadways to alleviate dust.

As mentioned earlier, the problem plants are continuously removed from the berms and topsoil is used to rehabilitate reinstated areas. Swallows moved into the northern bank of the July 2023 excavation and management confirmed that this area will not be disturbed again.

As mentioned earlier, the excavations are not free draining but rather used as settling ponds where the wash water is allowed to settle before it is redirected to the wash plant.

DOCUMENT CHECKLIST:

RELEVANT DOCUMENTATION	PRESENT ON SITE	COMMENTS
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	Yes	Part of the MR application documents.
EPA	N/A	Not yet applicable as this is the first EPA of the site.
Water Use Licence	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	-
Emergency Preparedness Plan	Yes	-
Invasive plant species plan (part of the EIAR and EMPr – Appendix L)	Yes	-
Stormwater Management Plan (part of the EIAR and EMPr – Appendix I)	Yes	-



**ENVIRONMENTAL PERFORMANCE ASSESSMENT
DE KLERKSKRAAL SAND MINE**

MATTERS TO BE ADDRESSED ON SITE:

- Continue with the removal of all problem plants;
- Reinststate the berm between the excavation and the river to prevent sediment rich water flowing into the river;
- Demarcate the mining area with visible beacons;
- Demarcate the 9 m buffer as required in the EA; and
- Cover trucks with tarpaulins as required in the EA.

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:

The annual review of the financial provision amount for the rehabilitation of the mining area accompanies this document. The right holder has a rehabilitation amount of R 615 000.00 lodged with the DMRE. The 2024 financial provision required to rehabilitate the mining area in accordance with the Guideline Document for the Evaluation of the Quantum of Closure-related Financial Provision by a Mine and as prescribed in terms of Regulation 54 (1) is R 548 796.36. The 2024 financial provision does not exceed the value of rehabilitation amount in place at the DMRE, and the right holder therefore did not have to provide a shortfall.

ECO SIGNATURE:

NAME:	SIGNATURE:	DATE:
Christine Fouche		20 June 2024

PHOTOGRAPHS:

PHOTOS OF THE MINING AREA	
	
Stockpile area	Problem plants removed from the mining area
	
Wash plant	Sprayers added to mining to alleviate dust
	
Problem plants removed	Swallows nesting in the rehabilitated benches

PHOTOS OF THE MINING AREA



Recently rehabilitated excavation



Berm breached by the river and water flowing into the river



Rehabilitated slope adjacent to screening plant



PHOTOS OF THE MINING AREA



Drip tray storage area



Ablutions of site

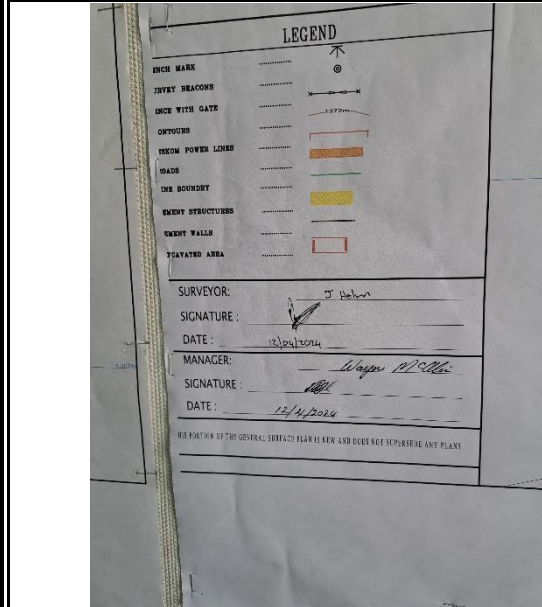
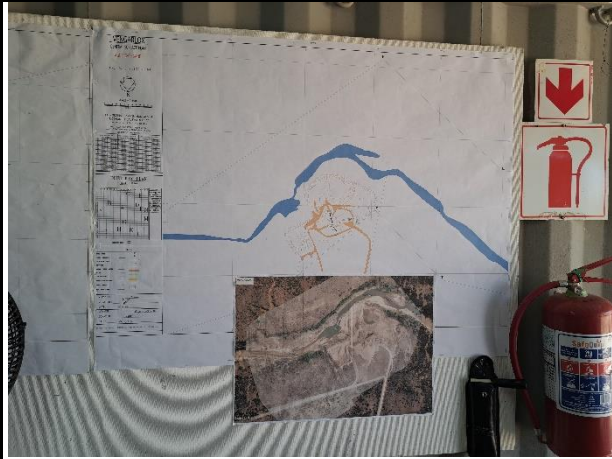


Waste storage area



Diesel tank and refuelling area

PROOF OF DOCUMENTATION



Mine plan

MONO Environmental
28 Potgieter Street, Tzaneen
Tel: 0833 434 040, Fax: 057 752 2892, Email: info@monoenv.com

28 Potgieter Street, Tzaneen
Tel: 0833 434 040, Fax: 057 752 2892, Email: info@monoenv.com

Water Usage Register
Month: May
Source: River Water

DATE	APPROXIMATE	TIME START	TIME END	HOW USED	BY WHOM	REMARKS	QUANTITY USED
2024-05-01	08:00	08:00	09:00	Washing	...	...	...
2024-05-02	08:00	08:00	09:00	Washing	...	...	...
2024-05-03	08:00	08:00	09:00	Washing	...	...	...
2024-05-04	08:00	08:00	09:00	Washing	...	...	...
2024-05-05	08:00	08:00	09:00	Washing	...	...	...
2024-05-06	08:00	08:00	09:00	Washing	...	...	...
2024-05-07	08:00	08:00	09:00	Washing	...	...	...
2024-05-08	08:00	08:00	09:00	Washing	...	...	...
2024-05-09	08:00	08:00	09:00	Washing	...	...	...
2024-05-10	08:00	08:00	09:00	Washing	...	...	...
2024-05-11	08:00	08:00	09:00	Washing	...	...	...
2024-05-12	08:00	08:00	09:00	Washing	...	...	...
2024-05-13	08:00	08:00	09:00	Washing	...	...	...
2024-05-14	08:00	08:00	09:00	Washing	...	...	...
2024-05-15	08:00	08:00	09:00	Washing	...	...	...
2024-05-16	08:00	08:00	09:00	Washing	...	...	...
2024-05-17	08:00	08:00	09:00	Washing	...	...	...
2024-05-18	08:00	08:00	09:00	Washing	...	...	...
2024-05-19	08:00	08:00	09:00	Washing	...	...	...
2024-05-20	08:00	08:00	09:00	Washing	...	...	...
2024-05-21	08:00	08:00	09:00	Washing	...	...	...
2024-05-22	08:00	08:00	09:00	Washing	...	...	...
2024-05-23	08:00	08:00	09:00	Washing	...	...	...
2024-05-24	08:00	08:00	09:00	Washing	...	...	...
2024-05-25	08:00	08:00	09:00	Washing	...	...	...
2024-05-26	08:00	08:00	09:00	Washing	...	...	...
2024-05-27	08:00	08:00	09:00	Washing	...	...	...
2024-05-28	08:00	08:00	09:00	Washing	...	...	...
2024-05-29	08:00	08:00	09:00	Washing
2024-05-30	08:00	08:00	09:00	Washing
2024-05-31	08:00	08:00	09:00	Washing

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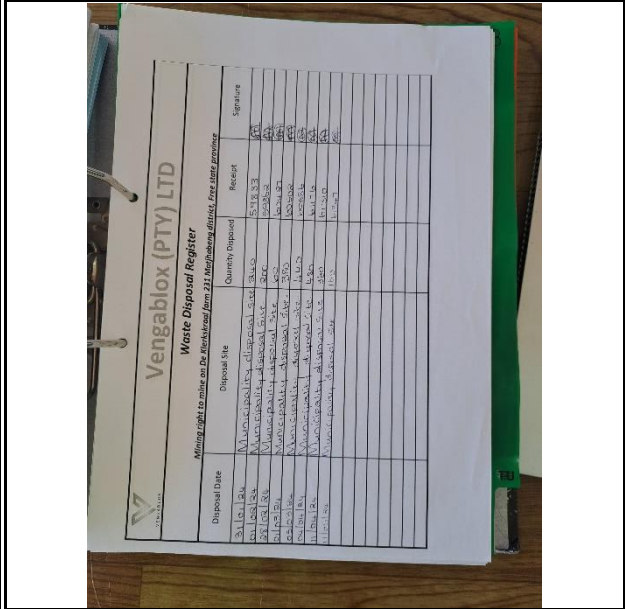
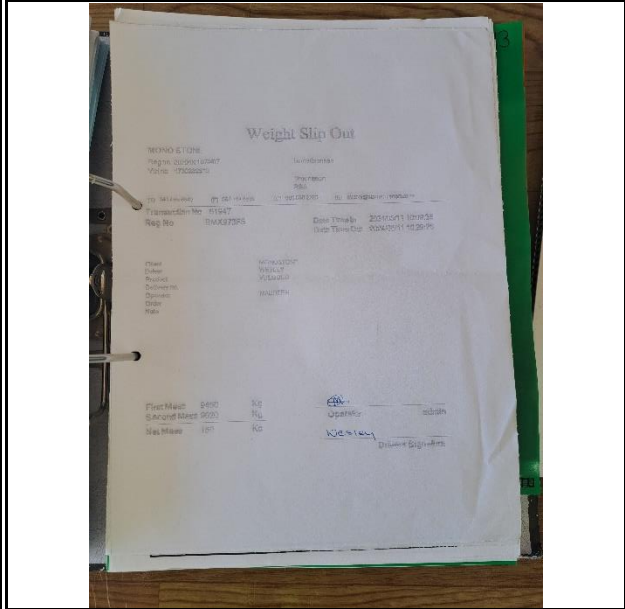
Water Usage Register
Month: May
Source: Borehole Water

DATE	APPROXIMATE	TIME START	TIME END	HOW USED	BY WHOM	REMARKS	QUANTITY USED
2024-05-01	08:00	08:00	09:00	Washing	...	...	...
2024-05-02	08:00	08:00	09:00	Washing	...	...	...
2024-05-03	08:00	08:00	09:00	Washing	...	...	...
2024-05-04	08:00	08:00	09:00	Washing	...	...	...
2024-05-05	08:00	08:00	09:00	Washing	...	...	...
2024-05-06	08:00	08:00	09:00	Washing	...	...	...
2024-05-07	08:00	08:00	09:00	Washing	...	...	...
2024-05-08	08:00	08:00	09:00	Washing	...	...	...
2024-05-09	08:00	08:00	09:00	Washing	...	...	...
2024-05-10	08:00	08:00	09:00	Washing	...	...	...
2024-05-11	08:00	08:00	09:00	Washing	...	...	...
2024-05-12	08:00	08:00	09:00	Washing	...	...	...
2024-05-13	08:00	08:00	09:00	Washing	...	...	...
2024-05-14	08:00	08:00	09:00	Washing	...	...	...
2024-05-15	08:00	08:00	09:00	Washing	...	...	...
2024-05-16	08:00	08:00	09:00	Washing	...	...	...
2024-05-17	08:00	08:00	09:00	Washing
2024-05-18	08:00	08:00	09:00	Washing
2024-05-19	08:00	08:00	09:00	Washing
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2024-05-21	08:00	08:00	09:00	Washing
2024-05-22	08:00	08:00	09:00	Washing
2024-05-23	08:00	08:00	09:00	Washing
2024-05-24	08:00	08:00	09:00	Washing	...	...	...
2024-05-25	08:00	08:00	09:00	Washing	...	...	...
2024-05-26	08:00	08:00	09:00	Washing	...	...	...
2024-05-27	08:00	08:00	09:00	Washing	...	...	...
2024-05-28	08:00	08:00	09:00	Washing	...	...	...
2024-05-29	08:00	08:00	09:00	Washing	...	...	...
2024-05-30	08:00	08:00	09:00	Washing	...	...	...
2024-05-31	08:00	08:00	09:00	Washing	...	...	...

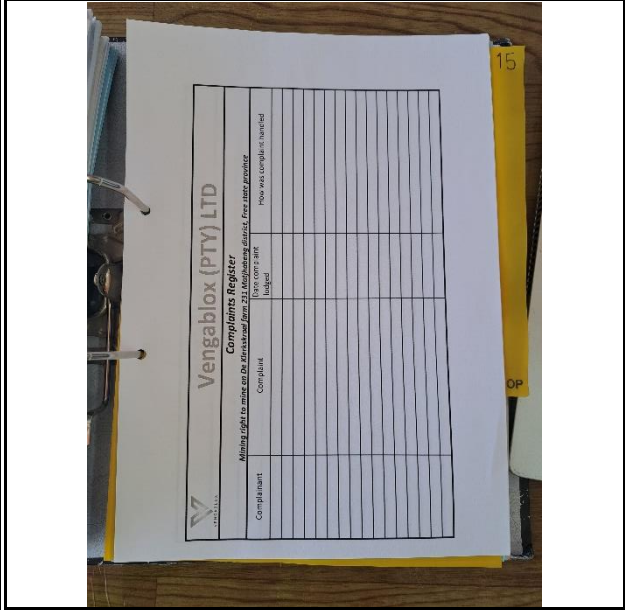
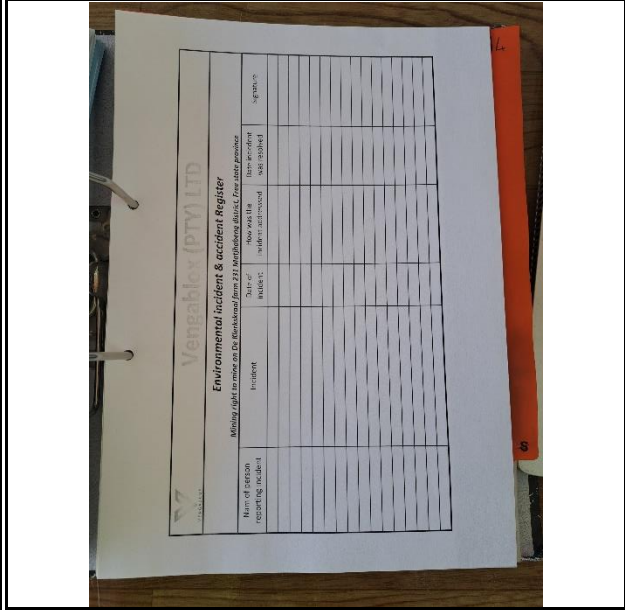
River water use register

Borehole water use register

PROOF OF DOCUMENTATION



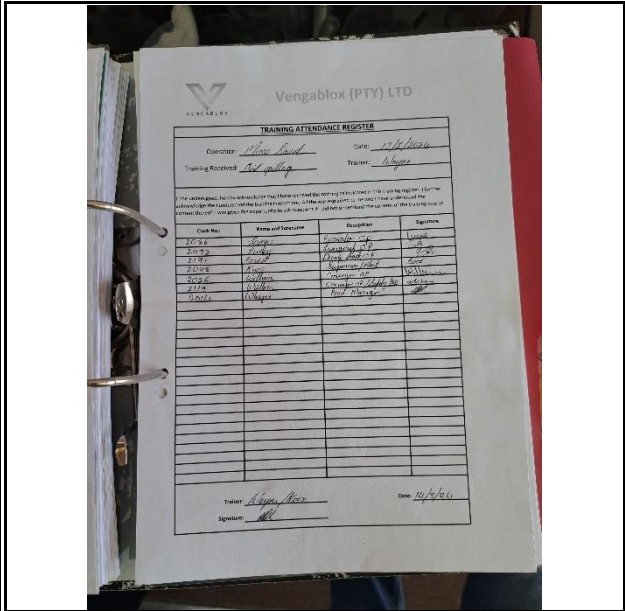
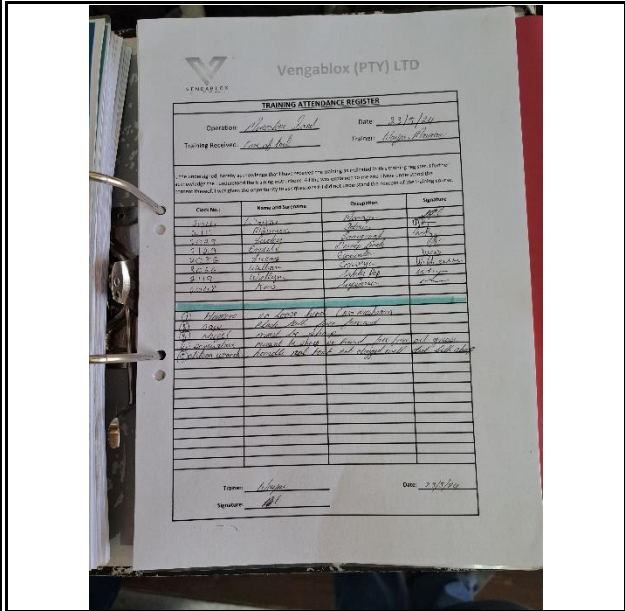
Proof of general waste removal and -register



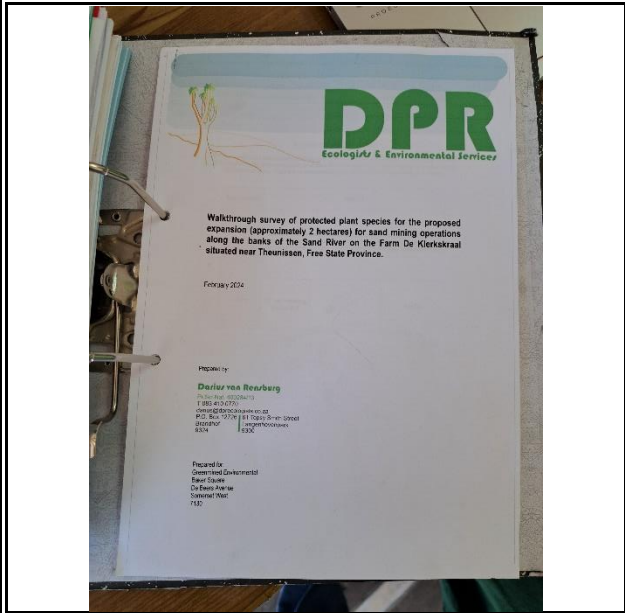
Incident register

Complaints register

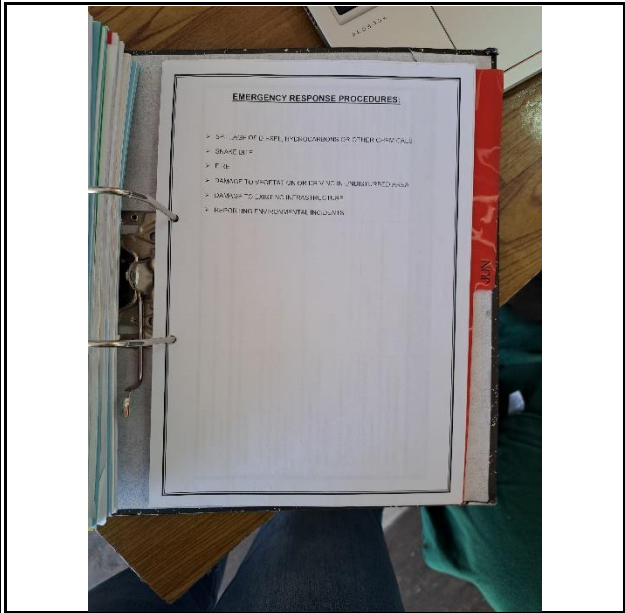
PROOF OF DOCUMENTATION



Environmental training register



Ecologist walkthrough report



Emergency response plan

PROOF OF DOCUMENTATION

Alien invasive species plan

MSDS of chemicals used on site