QUEENSTOWN QUARRY A PORTION OF THE FARM LESSEYTON NO 81, QUEENSTOWN/KOMANI, EASTERN CAPE PROVINCE

ENVIRONMENTAL PERFORMANCE ASSESSMENT / ENVIRONMENTAL AUDIT REPORT

DMR REFERENCE NUMBER:	179/2015 & EC 30/5/1/2/2/009 MR	
AUDIT PERIOD:	August 2022 – May 2024	

PREPARED FOR: PREPARED BY:

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1. PROJECT SPECIFIC DETAIL

ITEM	MINING RIGHT HOLDER			
Company Name	Queenstown Quarries (Pty) Ltd			
Contact Person	Mr Malan Zerwick			
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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	Queenstown Quarry			
Property Description	Lesseyton No 81			
Location	The Queenstown quarry is located 6 km to the west of Queenstown/Komani, adjacent to the N6. The site is situated on a portion of the farm Lesseyton 81.			
Size of Mining Area	153.4741 ha			





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2. ENVIRONMENTAL AUDIT REPORT

PROJECT DETAIL

Right Number:	179/2015 & EC 30/5/1/2/2/009 MR	Date of commencement:	±2007
Site name:	Queenstown Quarry	Inspection date:	21 May 2024
Right Holder:	Queenstown Quarry (Pty) Ltd	Other	Water Use Certificate No:
Report number:	01	authorisations:	28087926

<u>DETAIL OF AUDITOR</u> (APPENDIX 7 SUB-REGULATION 3(A) & (B)):

ECO:	Christine Fouché	
Expertise:	Ms Fouche has a Diploma in Nature Conservation and a BSc in Bowith nineteen years experience in environmental impact assessment monitoring in South Africa. Ms Fouché is a registered Environmental Practitioner (registration no: 2019/1003) with EAPASA (Environmental impact assessmental i	ts and compliance ental Assessment
Declaration of independence:	 I, Christine Fouche, in my capacity as environmental control officer I act as independent environmental control officer in this compli I will perform the work relating to the audit in an objective maresults and findings are not favourable to the holder of the auth I have expertise in conducting environmental compliance knowledge of the Act and regulations that have relevance to the I will adhere to and comply with all responsibilities as indicate Environmental Management Act and Environmental Impresquations. I do not have and will not have any vested interest in the aremuneration for work performed in terms of the Environmental Regulations, 2014 (as amended). 	iance audit; anner, even if the orisation; audits, including e activity; ed in the National oact Assessment activity other than
	Christine Fouché Date: 05 Jun	ne 2024





SCOPE & PURPOSE OF ENVIRONMENTAL AUDIT

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

This environmental audit report was compiled in terms of the requirements of the NEMA EIA Regulations, 2014 (as amended). The EAR focussed on Part 11 Environmental Management and Monitoring of the 2011 EMPR.

OBJECTIVE:

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

INSPECTED AREAS:

The inspection included an assessment of the following areas:

- Dolerite Quarry;
- Old processing infrastructure;
- Old settling pond;
- Overburden stockpiles;
- Processing plant;
- Quartzite Quarry;
- Salvage yard;
- Stockpile areas;
- Weigh bridge and administration buildings;
- · Workshop.

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

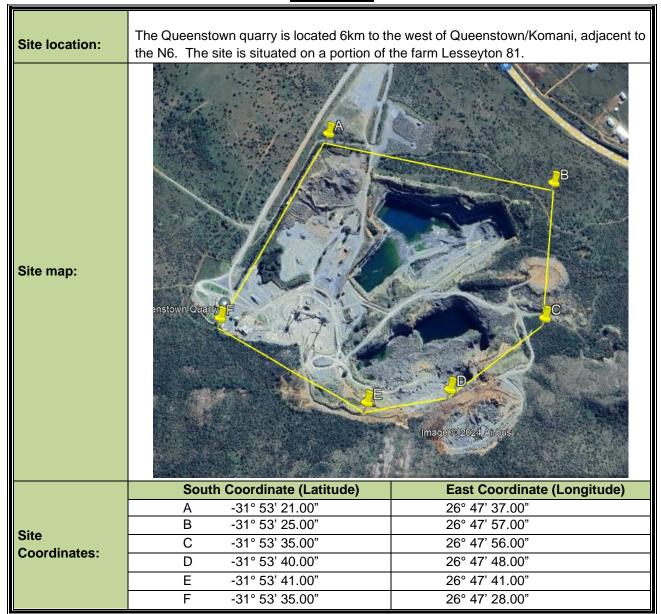
ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE (APPENDIX 7 SUB-REGULATION 3(F)):

The assumptions made in this document, stem from specific information gathered during the site audit and background information provided by site management. The findings of the previous environmental performance assessment (2022) were also considered. This audit did not consider health and safety aspects, was not intended as a legal assessment, nor was the aspects of the Social and Labour Plan and/or Mine Works Programme reviewed.





LOCATION



PROJECT DESCRIPTION

Queenstown Quarry is an existing open cast quartzite and dolerite mining operation (active since the 1970's) with a converted Mining Right EC 009 MR for 36.25 ha over the Farm Lesseyton 81 valid until 24 March 2045. The operation also has a mining permit EC 10498 MP for 4.9 ha associated with it directly adjacent to the MR that was granted on 27 November 2020 for an initial period of two years.

Queenstown Quarry (Pty) Ltd is the mining right holder whilst Komani Quarry (Pty) Ltd is the mining permit holder. Both holders have entered into a mining offtake agreement with Raumix Aggregates (Pty) Ltd who are the entity responsible for the financial and technical aspects including the use of the existing equipment, infrastructure, labour force, and services at Queenstown Quarry.

Mining is through conventional drilling and blasting methods, with loosened material removed from the pit by excavators and haul vehicles. The material is then processed through existing crushing plants (both fixed





and mobile) to produce aggregates. The mine is a major supplier of aggregate material for the construction industry in the Queenstown region. Supporting infrastructure includes a workshop, administration areas, security access point, weigh bridge and diesel tank bund. (Coates 2022)

SITE CONDITIONS

Sunny windless day with dry soil conditions.

REPORTABLE ENVIRONMENTAL INCIDENTS

Incident date:	
Incident no:	The quarry has an online system where all accidents and incidents are logged.
Incident:	No major incidents occurred during the audit period that had to be reported to
How addressed:	the DMRE.
When addressed:	

<u>ADOPTED METHODOLOGY</u> (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	
	LEGISL	ATION COMPLIA	NCE:		
National Environmental Management Act, 1998 (Act No 107 of 1998) and the Environmental Impact Assessment Regulations, 2014 (as amended)	5	<u>-</u>	Compliant	The competent authority deems the approved 2011 EMPR and MR of the quarry compatible with an Environmental Authorisation in terms of NEMA, 1998 and the EIA	
Copy of the EA available on site	N/A		-	Regulations, 2014 (as amended).	
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 reviewed in April 2024 and a copy is available on site.	
National Environmental Management: Air Quality Act, 2004 (Act No 39 of 2004)	5	-	Compliant	Although the activities at the mine does not require an air emissions licence, the requirements of the NEM:AQA are considered on site.	
National Environmental Management: Waste Act, 2008 (Act No 59 of 2008)	5	-	Compliant	The waste of the quarry is managed in accordance with the requirements of the NEM:WA.	
National Water Act, 1998 (Act 36 of 1998)	5	-	Compliant	-	
Copy of Water Use Authorisation available on site.	5	-	Compliant	-	
National Environmental Management: Biodiversity Act, 2004 (Act No 10 of 2004) (NEM:BA)	3	3	Ongoing	Queenstown Quarry has an Alien Invasive Species Management Plan (2023) as well as an Alien Invasive Species Removal Plan. The action plan divides the mine into 27 locations that must be progressively cleaned. During the audit period problem plants were cleared from locations 1-3.	
MINE PLANNING (2011 EMPR PG 11.6)					
Long-term mine plans generated and maintained that consider final closure requirements.	1	3	To be implemented	The site does not have a long term plan as required in the EMPR.	
Short-term mine plan (annual) in place that are aligned to achieve long-term mine plan.	5	-	Compliant	The rock engineers report discuss the short term planning of the quarry.	





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS			
Mining coordinated in accordance with short-term mine plan.	5	-	Compliant	-			
 Short term mine plan showing at least the following: Boundary and 9 m boundary pillar, Disturbed area subjected to current mining, Indicated future mining areas, Topsoil stockpiles, Overburden dumps, 	4	3	To be implemented	The mine plan does not show the 9 m boundary pillar, or stormwater berms. The topsoil stockpile is shown, and a separate plan shows the future mining areas.			
Storm water control structures. Agenda of quarry planning meetings include environmental issues as prescribed in the EMPR (topsoil, overburden, visual, dust, noise, monitoring, storm water, closure requirements, complaints).	4	3	To be implemented	Although environmental matters are discussed when needed, there are no formal minutes of the meetings. This needs to be addressed.			
	STRIPPING OF VEGETATION AND TOPSOIL (2011 EMPR PG 11.7):						
Reduce area of impact by only striping areas demarcated for mining.	N/A	-	-	No topsoil was stripped nor was new areas disturbed during the audit period.			
Unnecessary stripping of vegetation along the ridge avoided	N/A	-	-				
Vegetation and topsoil stripping only 30 m ahead of working face, or 3 months prior to mining.	N/A	-	-	No vegetation and/or topsoil was stripped in the mining footprint during the audit period.			
Concurrent rehabilitation implemented.	1	3	To be addressed	No concurrent rehabilitation was implemented during the audit period.			
Employees educated on poaching and snares	5	-	Compliant	Toolbox talks address this matter.			
Security inspecting the mining area weekly and removing snares.	5	-	Compliant	Site management inspect the mining area for snares.			
Fauna sightings book maintained	1	3	To be implemented	A fauna sightings book must be started on site.			
Top 50 cm of material treated as topsoil, and below as overburden. Topsoil and overburden stripped separately.	N/A	-	-	No topsoil was stripped nor was new areas disturbed in the mining area during the audit period.			
Topsoil and overburden stripped separately.	N/A	-	-				
No soil stripped when windy/wet (if practical).	N/A	-	-				

MAY 2024





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Topsoil and overburden stockpiled separately.	5	-	Compliant	-
Topsoil/overburden stockpiles not stored in future mining area or area where it will be compacted by vehicles	5	-	Compliant	-
Topsoil storage (heaps not exceeding 3 m)	5	-	Compliant	-
Topsoil and overburden stockpiles clearly labelled	1	3	To be implemented	The topsoil and overburden heaps must be signposted.
Soil stockpiles protected from compaction by vehicles and storm water run-off.	5	-	Compliant	-
Stockpiles indicated on all mine plans.	5	-	Compliant	The topsoil and other stockpiles are shown on the mine plan.
Stockpiles monitored for correct use, erosion, alien vegetation, foreign matter. Corrections implemented when necessary.	4	3	Ongoing	The mine progressively clean the problem plants from the stockpile, but problem plants are still present on site.
Erosion identified and addressed.	N/A	-	-	No erosion were noted on site.
Alien vegetation removed by hand pull methods.	4	3	Ongoing	The mine progressively clean the problem plants from the stockpiles, but problem plants are still present on site.
Foreign matter removed and disposed in accordance with the waste management plan.	5	-	Compliant	-
	AND STOCKPILIN	NG OF OVERBUR	RDEN (2011 EM	PR PG 11.8):
Overburden handled separately to topsoil.	5	-	Compliant	-
Overburden used for concurrent rehabilitation under topsoil.	N/A	-	-	No progressive rehabilitation was applicable in the audit period.
Overburden dumps located outside future mining areas, or areas prone to excessive surface water runoff. Stormwater control implemented and dumps captured on mine plans.	5	-	Compliant	-
Earthmoving equipment kept in good working order.	5	-	Compliant	This appeared true during the audit.
Structures/measures/filters in place to filter "dirty" water from overburden dumps.	5	-	Compliant	Stormwater berms direct clean runoff water away from the work areas.
Overburden dumps monitored (stormwater, revegetation, alien vegetation, erosion). Inadequacies rectified.	4	3	To be implemented	All alien invader plants must be removed from the overburden dumps.





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS		
Overburden dump restricted to a max of 30 m	5	-	Compliant	-		
	ASTING AND SE	CONDARY BREA	KING (2011 EM	IPR PG 11.9):		
Drilling and blasting undertaken in compliance with the short-term mine plans.	5	-	Compliant	-		
Blasting conducted by a certified blaster i.t.o the Blasting Procedure.	5	-	Compliant	B&E International (Pty) Ltd is appointed as the responsible blasters of the quarry.		
Blast monitoring implemented.	5	-	Compliant	-		
Concerns regarding blasting addressed.	N/A		-	No complaints were received during the audit period.		
Explosive magazine permit on-site and requirements implemented.	N/A	-	-	The magazine was removed from site.		
Drill rigs fitted with dust suppression / extraction equipment and maintained according to a schedule.	5	-	Compliant	-		
Blasting postponed when windy.	5	-	Compliant	If needed.		
Secondary breaking taking place in the quarry.	N/A	-	-	No secondary breaking takes place at the quarry.		
Drilling and secondary breaking undertaken during normal operational hours and within the quarry.	5	-	Compliant	-		
Blasting conducted between 12:00 and 16:00	5		Compliant	-		
Water monitoring conducted on water in the quarry sump for levels of nitrate	4	3	To be addressed	The previous water samples (from the pit) were collected in March 2023. The results indicated elevated nitrate levels that must be addressed. See General Report.		
Large oil spills from drilling operations cleaned up.	N/A	-	-	No large oil spills occurred because of the drilling operations.		
LOADING AND HAULING (2011 EMPR PG 11.11):						
Vehicle and earth moving equipment checks undertaken prior to a shift.	5	-	Compliant	Proof of pre-start registers are available on site.		
Dust resulting from vehicle entrainment on all haul roads suppressed.	5	-	Compliant	Water sprayers are present along the road ways and other areas are sprayed by a water truck.		
Earthmoving equipment kept in good working and if possible, fitted with noise abatement technology.	5	-	Compliant	-		





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
CON	CURRENT REHA	ABILITATION (201	1 EMPR PG 11	
Concurrent rehabilitation implemented.	1	3	To be implemented	No concurrent rehabilitation occurred during the audit period.
Annual concurrent rehabilitation guideline developed and reported on.	1	3	To be implemented	To be developed.
Alien vegetation control plan (AVCP) implemented on site.	3	3	Ongoing	Although the AVCP was compiled the implementation of the plan must be intensified.
AVCP reviewed and if necessary updated annually	4	3	To be implemented	The plan is due for the annual update.
Inspection programme for all buildings implemented (maintenance, redundancy)	5	-	Compliant	Although no formal inspection programmme exist, maintenance is constantly done and repairs when needed. Old buildings and processing related infrastructure were removed during the audit period.
	REENING, WASH	ING AND STOCK	PILING (2011 E	MPR PG 11.13):
Plant kept in good working order through scheduled maintenance.	5	-	Compliant	-
Build-up of fines reduced around the plants.	5	-	Compliant	-
Enclosures at the existing crushers/screens maintained.	5	-	Compliant	-
Exposed transfer points fitted with dust suppression systems and working effectively.	5	-	Compliant	The plant is fitted with water sprayers.
Drop height from crushing plants onto the plant stockpiles reduced by maintaining a stockpile	5	-	Compliant	-
Vehicles speed restricted to 20 km/h and roads watered around the plant.	5	-	Compliant	-
Dust management measures monitored.	5	-	Compliant	-
Pre-shift inspection of the plant implemented to identify potential oil leaks.	5	-	Compliant	Pre-start registers are available on site.
	DISPATC	H (2011 EMPR PC	3 11.14):	
Dust suppression implemented	5	-	Compliant	-





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Sales and dispatch during normal operational hours.	5	-	Compliant	-
Vehicles not leaking oil/fuel.	5	-	Compliant	The trucks of clients entering the mine to load material are inspected for oil leaks. If a leak is detected a flash report is done and the truck must leave the mine until repaired.
No excessive exhaust emissions.	5	-	Compliant	-
Bucket of the vehicle suitable for the products being collected.	5	-	Compliant	-
Unroadworthy vehicles reported to the owner and entry to the mine prevented.	5	-	Compliant	The site has a system where the roadworthiness of all vehicles that enter is checked.
Vehicle parking area clear of oil/hydrocarbon spills.	5	-	Compliant	The parking area was clear of spills on the day of the audit.
Overloading prevented.	5	-	Compliant	All trucks leaving the site must pass over the weighbridge and no overloading is allowed.
Use of tarpaulins on haulage vehicles requested and encouraged by mine	5	-	Compliant	Although this is not implemented by the clients, the quarry does encourage the use of covers on the trucks.
Potholes in the N6 reported to the relevant traffic department	N/A	-	-	The road is maintained by SANRAL.
The junction of the mine and the N6 kept clean	5	-	Compliant	-
V	VATER SUPPLY	AND USE (2011 E	MPR PG 11.15)):
All water uses licenced by DWS and a copy available on site.	5	-	Compliant	-
Operation in accordance with the WUL conditions and audited every 2 years.	1	3	To be implemented	The conditions of the WUL needs to be audited to ensure compliance.
Changes in water uses affecting the current authorisation.	N/A	-	-	Not application as the water uses of the Quarry did not change during the audit period. However, the site is still in the process of re-evaluating the water uses and will align this with the latest legislative requirements if applicable.
Monthly water balance diagram maintained.	1	3	To be implemented	The mine must develop a water balance diagram.
Biannual water management inspections conducted of all areas stipulated in the EMPR and rectifications implemented.	3	3	To be implemented	The previous water samples were collected in March 2023 and the next samples were according to management due





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
				for collection in May 2024. The site must increase sampling to biannual as stipulated in the EMPR.
Potable water obtained from the boreholes and available on site for use of workers	5	-	Compliant	Potable water is available to all employees. The water is bought and transported to site and no longer come from the borehole.
Monthly water consumption monitoring implemented and used to update the water balance diagram.	4	3	To be implemented	The monthly water consumption of the mine is captured in the ESG spreadsheet however, this information must be used to update the water balance diagram.
Taps, water pipelines and pumps inspected for leaks (weekly)	5	-	Compliant	-
Water captured in the quarry used for process water.	5	-	Compliant	-
Process water recycled (settling dam).	5	-	Compliant	The process water flows in a closed system between the processing plant and the quarry sump.
Freeboard level (0.8m) indicated on the settlement dam and training sessions done to prevent exceedance.	N/A	-	-	As the water is recycled between the plant and the quarry pit, no settling ponds are presently in use on site.
Regular maintenance of the settlement dam side wall carried out to detect erosion/leakages.	N/A	-	-	
"Clean" water separated from "dirty" water and directed around the site	4	3	To be addressed	The diesel bowser parking area must be fitted with bund walls/berms to prevent clean water flowing over the area.
Uncontrolled discharge of "dirty water" from mining site prevented.	5	-	Compliant	-
Stormwater control structures evaluated biannually.	5	-	Compliant	Sediment drains were added to the stormwater berms to
Regular maintenance of berms/trenches carried out to keep clean and dirty water separate.	5	-	Compliant	filter sediment rich water before leaving the mining area.
Responsible person appointed to monitor the level and integrity of septic tanks. Strong odours reported to a responsible person.	5	-	Compliant	-
Septic tanks emptied when more than 75% full	5	-	Compliant	A contractor of the municipality empties the tank when needed and proof is available on site.





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Biannual surface and ground water monitoring implemented.	3	3	To be implemented	Water testing must be done biannually.
ELECTRICITY S	SUPPLY AND ASS	SOCIATED WORK	KSHOP (2011 E	MPR PG 11.17):
All spares and parts stored in a workshop.	5	-	Compliant	-
Workshop neat and tidy.	5	-	Compliant	-
Potentially oily electrical equipment stored in a concreted area.	5	-	Compliant	-
Sealed drum for the disposal of fluorescence tubes maintained in the workshop.	5	-	Compliant	Enviroserve removed the fluorescent tubes of the mine.
Technology to reduce energy consumption investigated.	5	-	Compliant	Management confirmed that the new motors installed at the quarry is more energy efficient and LED light bulbs were installed.
Transformers/gensets kept in a concrete lined bunded area.	5	-	Compliant	-
Transformers maintained by a qualified electrician.	5	-	Compliant	-
Transformer areas kept free of vegetation.	5	-	Compliant	-
Transformers tested for PCB contamination and if necessary polluted oil replaced with virgin oil.	5	-	Compliant	-
Monthly electricity consumption recorded.	5	-	Compliant	Part of the ESG spreadsheet.
M.A	INTENANCE / W	ORKSHOP (2011	EMPR PG 11.1	8):
General housekeeping within the workshop maintained.	5	-	Compliant	The workshop was very neat at the time of the audit.
Polluting chemicals stored within a protected area.	5	-	Compliant	-
New oils moved/stored in a designated oil store.	5	-	Compliant	-
Old oil captured and recycled.	5	-	Compliant	Rec Oil (Pty) Ltd collects the used oil of the site.
Old oil stored within a sealed container prior to recycling.	5	-	Compliant	-
Drip trays available in the workshop and parking area to capture old oil.	5	-	Compliant	Care should be taken that the water sprayer near the bowser parking area do not fill the drip tray.
All lubrication containers stored in a concreted protected area in line with the MSDS.	5	-	Compliant	-
MSDS sheets reviewed and audited (annually).	5	-	Compliant	-





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Hydrocarbon spills cleaned up.	5	-	Compliant	No spills were noted on the day of the audit.
All vehicle washing take place at the designated wash bay with appropriate oil separator.	5	-	Complaint	-
Parking area inspected for signs of pollution.	5	-	Compliant	Hydrocarbon spills are cleaned upon occurrence.
Vehicle checks done prior to start of a shift.	5	-	Compliant	-
Vehicle parking area allocated for vehicles not in use and kept clear of spills.	5	-	Compliant	-
Drip trays placed under vehicles.	5	-	Compliant	-
Vehicles and earthmoving equipment maintained in accordance with a maintenance schedule and records kept.	5	-	Compliant	-
Maintenance conducted within covered concreted workshop.	5	-	Compliant	-
Drains leading to the oil trap inspected weekly and cleaned routinely.	5	-	Compliant	The drains and first chamber of the oil trap is continuously cleaned. The design of the wash bay was altered to allow
Level of sludge in the first chamber of the oil trap monitored and cleaned when full.	5	-	Compliant	easy removal of the sludge trapped in the drain before it enters the oil sump.
Water from last chamber of oil separator system tested to prove effectiveness. Corrective measures taken if necessary.	4	3	To be addressed	Although water samples of the last chamber of the oil sump is tested, the samples must also be tested for hydrocarbons.
	DIESEL	(2011 EMPR PG	11.20):	
Above ground diesel tank located within a bunded area that can contain 110% of the capacity of the tank.	4	3	To be addressed	The bund of the diesel tank must be sealed.
Responsible person present when fuel is delivered or dispensed.	5	-	Compliant	-
Structural integrity of the bund inspected monthly and corrected if needed.	4	3	To be addressed	As mentioned earlier, the bund of the diesel tank must be sealed.
Outlet valve of the bund always kept closed.	N/A	-		The bund does not have an outlet valve.
Bund wall clear of excessive fines and vegetation.	5	-	Compliant	-
Area around the refuelling stations inspected.	5	-	Compliant	The area around the refuelling station was neat on the day of the audit.





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Environmentally acceptable absorbent available at locations where potential spills may occur.	5	-	Compliant	The site has an Envirotech oil spill kit.
Staff members who dispense fuel trained in spill handling	5	-	Compliant	Emergency drills are done on site where the responsible employees are trained.
Diesel bowser inspected for leaks and stored on a concreted area when not in use.	4	3	To be addressed	As discussed, the parking area of the bowser must be fitted with walls or berms to prevent clean water running over the area.
Fuel consumption monitoring implemented.	5	-	Compliant	This forms part of the ESG spreadsheet.
	SALVAGE Y	ARD (2011 EMPR	PG 11.21):	
Equipment that may result in small oil leaks stored in a plastic lining or drip tray.	N/A	-	-	No longer applicable, as the old equipment that may result in oil leaks were removed from site.
No stormwater flows through salvage yard.	5	-	Compliant	Berms direct stormwater from the salvage yard.
Salvage yard neat and stored in orderly fashion.	5	-	Compliant	-
Usefulness of materials at the salvage yard evaluated annually.	5	-	Compliant	Unwanted scrap metal was sold since the last audit.
	WASTE	(2011 EMPR PG	11.21):	
 Waste management inventory developed and maintained: List of waste produces generated, Classification of waste (gen/haz), Disposal records, Off-site disposal records, with contact details of contractor. Authorisation/licence of contractor, Record of amount. 	5	-	Compliant	-
Employees trained in need to separate general/hazardous waste.	5	-	Compliant	-
Small salvage yard for non-polluting salvage material (screens) maintained.	5	-	Compliant	-
Mine patrolled to remove litter.	5	-	Compliant	-
Temporary waste storage facilities signposted for different types of waste	5	-	Compliant	See photographic proof below.





DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Suitable number of waste receptacles available.	5	-	Compliant	-
Bunded tanks for recycling of old oil drained from vehicles and equipment available.	5	-	Compliant	-
Skip for scrap metal in waste processing area.	5	-	Compliant	-
Recycling area for glass, cans, and paper	N/A		-	No recycling companies have been identified in the vicinity of the Quarry where glass/cans/paper can be disposed of separately. Oil, scrap metal, and filters are recycled, and the security guard collects the cans of the site.
Bunded, concreted, covered storage area for hazardous waste. No hazardous waste stored >90 days.	5	-	Compliant	-
Store for old tyres and conveyor belts.	5	-	Compliant	A specific area was designated for the storage of these materials.
Capacity of the waste processing area of sufficient size.	5	-	Compliant	-
Appropriate storm water management system at the waste processing areas.	5	-	Compliant	-
Proof that the company contracted to collect and dispose waste is authorised available.	5	-	Compliant	-
Proof of disposal and/or recycling of waste available.	5	-	Compliant	-
Authorisation of the disposal and/or recycling facility.	5	-	Compliant	-
	ADMINISTRA	TION (2011 EMPI	R PG 11.23)	
Adherence and validity of permits/registrations/licences confirmed annually: • Mining Right, • WUL, • Waste disposal permits, • Explosive magazine permit,	5	-	Compliant	The mine no longer has a magazine.
Contracts between the mine and sub-contractors stipulate environmental commitments.	5	-	Compliant	-
Induction training done with all sub-contractors.	5	-	Compliant	-





		Nov		
DESCRIPTION	COMPLIANCE SCORE	NON- COMPLIANCE SCORE	STATUS	COMMENTS
Proof of annual liaison with surrounding landowners.	5	-	Compliant	The surrounding landowners are informed of each blast.
Complaints registered maintained on site.	5	-	Compliant	The mine has a complaints box and register.
ENVIRONMENTAL MANAGE	MENT DURING I	DECOMMISSION	NG AND CLOS	SURE (2011 EMPR PG 11.25):
This section was not audited as the decommissioning phase h				
	CHEMICAL / HY	DROCARBON SP	•	PR PG 11.27):
Source of the spill stopped, and the spill contained	5	-	Compliant	<u></u>
Contaminated area cleaned as prescribed in the EMPR	5		Compliant	
Contaminated material disposed of as hazardous waste or	5		Compliant	EnviroTech removes the contaminated soil from the mine
transported to a bioremediation site.	J	'	Compliant	and proof is available on site.
Record kept of safe disposal.	5		Compliant	-
	FIRE (2	2011 EMPR PG 11	1.27):	
Potential for spread of veld fires reduced	5	-	Compliant	-
Fires reported to emergency services	5	-	Compliant	When needed.
Fire extinguishers available on site	5	-	Compliant	-
Employees trained in firefighting	5	-	Compliant	-
Waste handling/storage areas restricted to a designated			Compliant	
waste handling area.	5	- '	Compliant	
Waste bins weather and scavenger proof and securely			1	
placed to avoid waste overflows.	5	- '	Compliant	





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.

<u>AUDITING OF EA, EMPR AND REPORTING THEREOF</u> (REGULATION 34):

Date of previous EAR/EPA:	August 2022
Proof of submission to DMR available:	Proof of submission of the EAR is available at the site.
EAR/EPA compiled	
by independent	This EAR was compiled by Ms Christine Fouché from Greenmined Environmental
person with	(Pty) Ltd.
environmental	
auditing expertise:	
Potential and	
registered I&AP's	The holder of the mining right (Queenstown Quarry (Pty) Ltd) must, within 7 days
notified within 7 days	of submission, notify all potential and registered I&AP's of the submission of the
of the submission	report. The report will also be placed on the publicly accessible Greenmined
date, and report	website.
available on publicly	
accessible website	

GENERAL REPORT

Compliance of the mining site with the 2011 EMPR as reviewed during the site assessment. The mining area recorded a compliance score of 93% for the audit period.

The overall appearance of the mining area was neat on the day of the audit with various improvements made during the audit period. Mine management confirmed that the work hours of the mine complies with the hours specified in the EMPR.

2022 EPA Findings:

The 2022 EPA findings include the following: "No critical findings were noted with five major findings being identified relating to stockpiling outside the authorised area, improvement to water management, lack of implementation of alien vegetation control, and lack of water quality monitoring. A number of minor findings were identified however these can mostly be attended to during regular operational activities. The focus for the next audit period should be to complete the submission of the S102 application and to implement the recommendations from the action plan developed from the results of this audit."

Since the 2022 audit the following matters (amongst others) have been addressed:

1. Stockpiling ceased outside the mining area and there is presently no need to increase the mining footprint. Therefore no Section 102 amendment application in terms of the MPRDA was submitted.





- 2. An Alien Vegetation Control Plan was developed, and problem plants are eradicated in a phased manner. Although the plants are being removed, the efforts must be increased and cleaned areas must continuously be monitored for reoccurrence/regrowth.
- 3. A Stormwater and Erosion Management Plan was developed, and berms were added at strategic points to direct stormwater. As mentioned earlier, gravel was used to create sediment traps in the berms. The berms seem to be effective, and no erosion of concern was noted on the day of the audit.
- 4. Water quality testing commenced, and the results are available on site. The EMPR requires biannual water testing, and on the day of the audit the most recent test results were from March 2023. Water quality testing must therefore be increased to biannual testing. The water from the oil sump must also be tested for traces of hydrocarbons before it is irrigated on site. Site management must also request the lab to include a discussion on the findings of the tests. The elevated nitrate levels of the quarry water must be addressed and rectified.
- 5. A water meter was added to the pump and the mine now keeps track of the water quantity used on site. The water use results form part of the monthly ESG spreadsheet.
- Since the previous audit, various unwanted material and equipment was removed from the salvage yard and the area was organised and cleaned. Most equipment containing hydrocarbons were removed from the salvage yard to prevent spillages.
- Site management is in the process of removing the old buildings and infrastructure from the processing area
- 8. The settling pond is no longer in use as the processing water now runs in a closed loop between the plant and the quarry sump.
- 9. The layout and operation of the used oil storage and hazardous waste area, wash bay and oil sump was improved during the audit period.

Waste- and Water Management:

As mentioned earlier, the dust suppression water sprayers do fill up the drip tray of the diesel bowser, that may lead to secondary spills. This must be rectified by directing the sprayers away from the drip tray, and the tray must be emptied regularly should water collect in it. The water must be treated as waste water and must be poured into the oil sump of the wash bay. The parking area of the diesel bowser must also be fitted with walls/berms to prevent clean water entering the area, and/or dirty water/spills escaping from the platform.

The bund of the diesel tank must be sealed.

The mine no longer users water from the borehole as all process water is obtained from the sump in the pit. The water use is recorded in the ESG spreadsheet. As discussed, it is proposed that a column be added showing the water allowance in terms of the water use authorisation. Jojo tanks were added to some of the buildings to collect rainwater from the roofs.





DOCUMENT CHECKLIST:

Alien vegetation control plan & action plan
 Present – to be updated

Blasting Notifications
 Blasting Procedure
 Present
 Present

Complaints Register
 Complaints box and register

Concurrent rehabilitation plan
 To be developed

Dust Monitoring Report
 EMPR 2011
 Environmental Awareness Plan
 Environmental Performance Assessment (2022)
 Present

Fauna Sighting Book
 To be developed

Financial Provision (2023)
 Incident Reports / Flash Reports
 Present
 Present

Long Term Mine Plan
 To be developed

Mine Plan (2024)
 Mine Works Programme
 Mining Right
 MSDS's
 Noise Monitoring Report
 Plant/Vehicle Inspection Records

Proof of Environmental Awareness Training
 Proof of Waste Removal
 Present

Short Term Mine Plan
 Social and Labour Plan
 Present
 Present

Waste Service Providers Registration/Certification - Present
 Water Use Authorisation - Present

Water Use Balance
 Monitoring results
 Present to be developed
 Dust Monitoring (Present)

Water monitoring (Present)
Fuel Consumption (Present)
Electricity Consumption (Present)

Waste Generation (Present)

MATTERS TO BE ADDRESSED:

- Continue the clearing of invader plant species and monitor the cleared sections for reoccurrence and update the AVCP;
- 2. A long term mine plan must be developed that considers final closure;
- 3. Add the 9 m boundary pillars and stormwater berms to the mine plan;
- 4. Add environmental matters to the formal minutes of the meetings;
- 5. Implement concurrent rehabilitation;
- 6. Open a fauna sightings book;
- 7. Signpost the topsoil and overburden stockpiles;
- 8. Take biannual water quality samples;
- 9. Rectify the elevated nitrate levels of the guarry water;
- 10. Test the water from the oil sump for hydrocarbons;
- 11. Arrange an audit of the WUL conditions;
- 12. Develop a water balance diagram;
- 13. Fit the parking area of the diesel bowser with berms and empty the drip tray;





14. Seal the bund of the diesel tank.

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

It is believed that the EMPR (2011) currently adequately manage and/or mitigate environmental impacts at the mining area.

NEED FOR AMENDMENT OF THE EMPR:

No need was identified for the amendment of the EMPR's of the site.

FINANCIAL PROVISION:

This report is accompanied by a reassessment of the financial provision calculation for the year 2024 that amounts to R 6 595 936.93. The 2024 financial provision does not exceed the value of financial guarantee in place at the DMRE and the Right Holder does therefore not have to provide a shortfall amount.

ECO SIGNATURE

NAME:	SIGNATURE:	DATE:
Christine Fouche	Janal	08 July 2024

PHOTOGRAPHS





Problem plants to be removed from the berms









Parking areas neatly managed





Skip used for the storage of general waste



Generator



Gas storage

Used oil and hazardous waste storage area









Wash bay and oil sump





Msds documents on site



Wash bay



Oil spill kit

Diesel bowser parking area to be bunded







BUND WALL CAPACITY
3 TOOLL

Last chamber of the oil sump

Bund of the diesel tank to be sealed





Rainwater tank added

Stormwater berm





Processing plant



















Old building to be removed

Problem plants to be removed from site





Old equipment yard









Destruction bay area

Salvage yard





Salvage yard with some equipment that can still be removed (right pane)





Problem plants to be removed from the old stockpile area

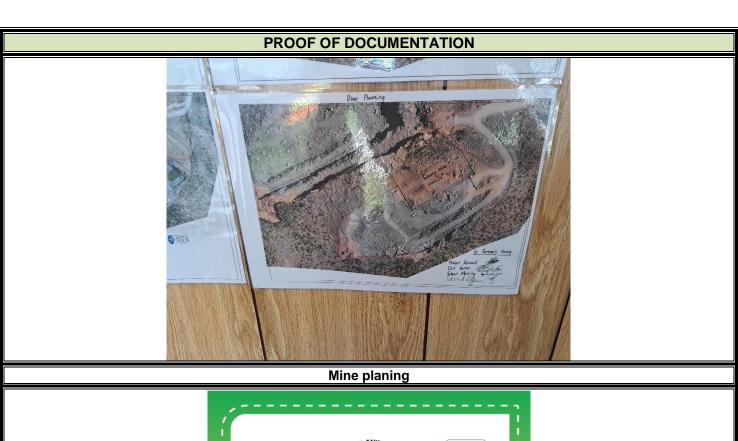














MAY 2024 31

Registration document of Rec Oil that removes the used oil from site











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CERTIFICATE OF REGISTRATION

This is to certify that

Enviro-Tech SA

Has been registered as a

Waste Transporter Hazardous

With the Gauteng Department of Agriculture and Rural Development and has been issued with the following registration number for use when reporting to the Gauteng Waste Information System.

GPT-04-864

Date of Registration: 07 March 2022

Date of Expiry: 07 March 2024

his certificate is issued for the purposes of the Gauteng Weste Information System and does not constitute an authorisation

Registration certificate of Enviro-Tech





CONSIDERATION.	WASTE DETAILS						Manifest No	ENV00002118	_
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.,,,,,		ste Descrip							Three Signetures Constitutes a sofe disposal
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Tel: (045) 839 2370 Physical Address (No Postal Delivery): Cell: 055 230 4794 19 Factory Road E-Mail: admin⊗opbire.co.za Industrial Sites, Komani	4787
Name of Client: KGWW X	
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(Select Appropriete) Visual Inspection: Serie Unsafe	
Orange Plant Hire:	
Driver Name: Sine: Signature: Signature:	
Time In: 1. 1. 2. 3.	
Name of Authorized: Signature:	
Terms and Conditions: 1. Do not move the skip from where it is/was placed. 2. Nothing can protrude from skip. 3. The skip may not be filled above rim. 4. If it is building material, up to 50mm below rim. 6. If skip is too heavy, we reserve the right to remove some of the waste. 7. If the skip is off-loaded behind the boundary well, we do not accept any costs of dama may or could occur in the etternot of execution of aff-loading or collecting the skip. 8. Only waste accepted by Artington waste facility can be loaded into the skip. 9. The following items are specifically NOT PERMITTED: 9.1 Human remains 9.2 Veinible tyres 9.3 Asbestos	ges that
Comments:	
General waste removal by Orange Plant Hir	
General waste removal by Orange Plant Hir	-











PO Box 5458, Greenfields East London, 5208 Lower Chester Road SunnyRidge, 5201 East London, South Africa

ELIDZ Environmental Microbiology

Name: Khayakazi Nonkonyana 043 702 8209/087 373 0953 Tel:

Email: khayakazi@elidz.co.za www.elidz.co.za

Certificate Of Analysis

Report NO: EM-2023-00313 Sample Description: Raumix No. of Samples 03 Queenstown Sample Condition: Cold Queenstown Quarry Sample Identification:

Contact: Emadia Beukes

045-857 0092 Phone: Date Received: 14-Mar-2023 Test Date: 14-Mar-2023

Order No: Date Completed: 17-Mar-2023							
					SAMPLE IDENTIFICATION		
			Lab No Sample ID	EM-2023-00313-01 Drink	EM-2023-00313-02 Sump	EM-2023-00313-03 Quarry	
Analysis	Unit	Method	UoM				
Heterotrophic Plate Count	CFU/mL	MM-MIC001	0.062	5 500	>30000	110	
Faecal coliforms	CFU/100mL	MM-MIC003	0.045	<1	710	6	
E. coll	MPN/100mL	MM-MIC002	0.059	<1	249	<1	
Total Coliforms	MPN/100mL	MM-MIC002	0.064	<1	>2420	613	







PO Box 5458, Greenfields East London, 5208 Lower Chester Road SunnyRidge, 5201 East London, South Africa

Name: Khayakazi Nonkonyana 043 702 8209/ 087 373 0953 Tel: khayakazi@elidz.co.za www.elidz.co.za

ELIDZ Environmental Chemistry Laboratory

Certificate Of Analysis

Sample Description: Report NO: EE-2023-00236 Raumix No. of Samples 03 Address: Queenstown Sample Condition: Cold Sample Identification: Potable Water

Contact: Emadia Beukes Phone: 045-857 0092

Date Received: 14-Mar-2023 Test Date: 14-Mar-2023 Order No:

Order No:				ate Completed: 04	4-Apr-2023		
				SAMPLE IDENTIFICATION			
			Lab No Sample ID	EE-2023-00236-01 Drink	EE-2023-00236-02 Sump	EE-2023-00236-03 Quarry	
Analysis	Unit	Method	UoM				
Chloride "		MM-CH026		0.204	1.78	5.79	
Colour *		MM-CH029		1.38	30.0	22.0	
Fluoride "		MM-CH028		0.041	0.131	0.574	
Nitrate (dissolved)	mg/L	MM-CHE024	0.012	3.17	<0.205	12.1	
Nitrite (dissolved)	mg/L	MM-CHE023	0.037	<0.195	<0.195	<0.195	
Total Alkalinity	mg/l	MM-CHE001	6.21	14.1	46.8	79.3	
Calcium (dissolved)	mg/l as Ca	Sub	5.6	<1	7.7	19.0	
Electrical conductivity	mS/M	MM-CHE002	0.009	6.04	13.2	35.3	
Iron (dissolved)	µg/I	Sub	4.9	<20	<20	<20	
Magnesium	mg/l	Sub	5.1	<1	1.3	3.6	
Turbidity	NTU	MM-CHE008	5.80	0.20	41.0	2.63	
Sodium (dissolved)	mg/l	Sub	5.1	8.50	10.4	32.1	
Nitrate and Nitrite (dissolved) *	mg/l as N			3.16	<1.00	12.1	
рН	pH units	MM-CHE005	0.145	6.28	7.21	8.14	
Sulphate (dissolved) *	mg/l as SO□	MM-CHE014	5.22	<4.00	5.06	36.3	
Total Hardness "	mg/l	Sub		6.6	24.6	62.3	
Temperature	*C			24.3	24.3	24.2	

Water quality tests

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