



AfriSam (South Africa) Properties (Pty) Ltd

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**EIKENHOF QUARRY ENVIRONMENTAL  
MANAGEMENT PROGRAMME - GP  
30/5/1/2/2(225)MRC**

Environmental Compliance Audit

**VOLUME 1**





AfriSam (South Africa) Properties (Pty) Ltd

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MANAGEMENT PROGRAMME - GP  
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Environmental Compliance Audit

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**EIKENHOF QUARRY ENVIRONMENTAL  
MANAGEMENT PROGRAMME - GP  
30/5/1/2/2(225)MRC**

Environmental Compliance Audit

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# QUALITY CONTROL

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Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Final Eikenhof Quarry Compliance Audit <b>Volume 1</b>			
Date	March 2023			
Prepared by	Tiffany Seema			
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# 1 INTRODUCTION

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## 1.1 TERMS OF REFERENCE

WSP Group Africa (Pty) Ltd (WSP) was appointed by AfriSam (South Africa) Properties (Pty) Ltd (AfriSam) to undertake an external environmental audit of the commitments contained in the Eikenhof Quarry Environmental Management Programme (EMPr). The external audit was undertaken in accordance with Regulation 34 of the Environmental Impact Assessment (EIA) Regulations, 2014 published in terms of the National Environmental Management Act 107 of 1998 (NEMA).

The last Environmental Performance Assessment (EPA) was undertaken in December 2020 on the previous EMPr which was approved in 2001. This audit is the first audit for the EMPr submitted in 2011, and it presents the findings of the compliance audit for the period between January 2021 to December 2022.

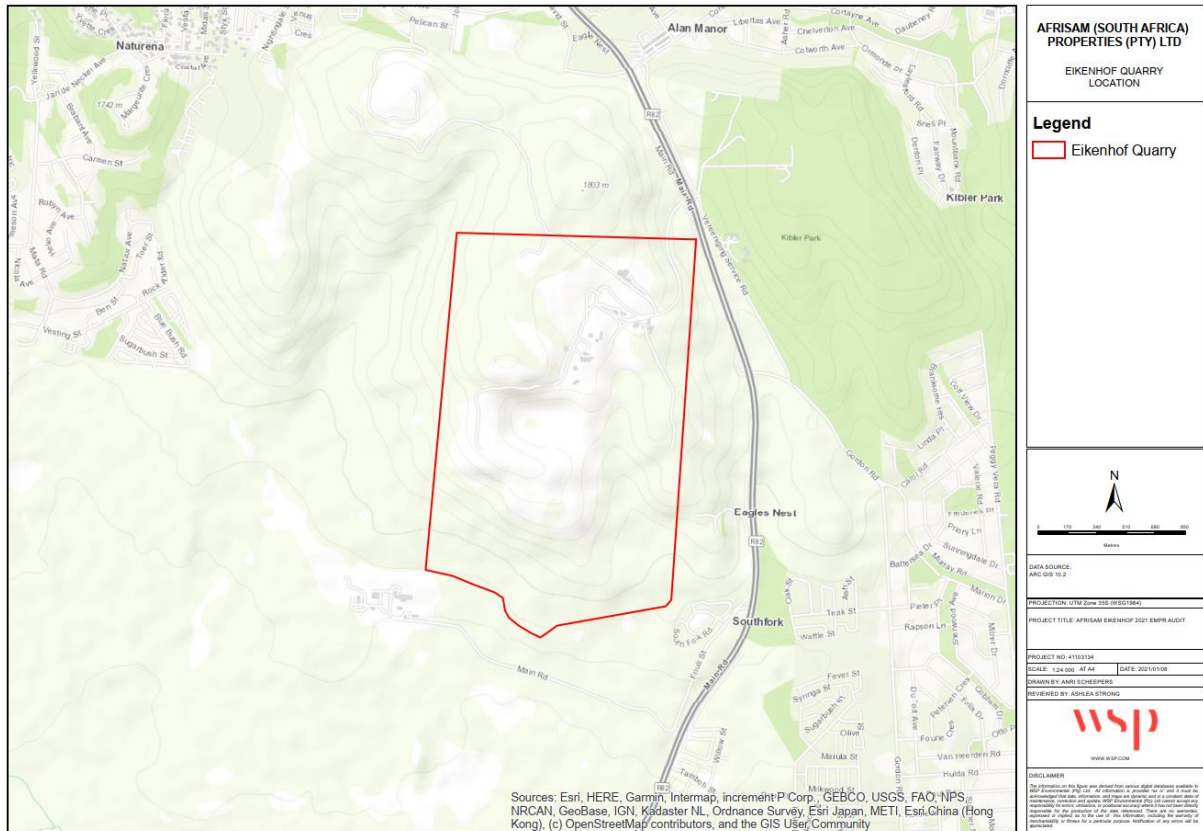
## 1.2 AFRISAM EIKENHOF QUARRY

Eikenhof Quarry is located within the Gauteng province within the City of Johannesburg Metropolitan Municipality on the remainder of Portion 79 of the farm Eikenhof 323 IQ. The quarry is located approximately 3 km south of Southgate Shopping Centre (**Figure 1-1**). The operation is an opencast mine, where andesite is mined for aggregate by conventional drilling and blasting.

Once topsoil and overburden are removed, the aggregate is mined by conventional drilling and blasting methods. Blasted rock is loaded to haul trucks by excavator and removed from the pit for dry processing, i.e. crushing, screening and stockpiling (products are not washed).

Currently mining is taking place in the floor and south-east corner to straighten up the quarry. It is anticipated that the quarry pit will be sunk down a further two benches. The converted mining right covers an area of 305.35 ha. Future mining will take place towards the west (medium-term) and south (long-term) of the current pit although no day-lighting is predicted.

Eikenhof Quarry currently operates under an approved mining right (225 MR), obtained in June 2010. The mining right will expire in May 2040. Eikenhof Quarry has an approved EMPr, approved on 05 March 2001. The EMPr was amended in 2011 and submitted to the Department of Mineral Resources and Energy (DMRE), however it has not yet been approved. This audit was undertaken against the 2011 EMPr, as the management measures outlined in the 2001 approved EMPr are no longer applicable to the site.



**Figure 1-1 - Site Location**

## 1.3 SITE AUDIT DETAILS

### 1.3.1 WSP PROJECT TEAM

The WSP project team is summarised in **Table 1-1** and Curricula Vitae are included as Appendix A of Volume 3.

**Table 1-1 – Details of the Audit Team**

Audit Team	Role	Experience
Tiffany Seema	Auditor	Bachelor of Science (Honours), Geology
		6 years' experience
		Tiffany holds a BSc. Honours in Geology, as well as BSc. Degree in Geography and Geology from the University of the Witwatersrand. She has over 6 years of experience as an environmental management professional with a strong background in environmental consulting and advisory services for multiple mining and industrial operations in South Africa. Her knowledge spans across several pollution, waste, water, and air quality scenarios in line with the relevant South African environmental legislation, with strengths in environmental authorisation processes,

Audit Team	Role	Experience
		compliance auditing, implementation of environmental management systems and technical report writing.
Anri Scheepers	Quality Assurance	Bachelor of Arts (Honours), Geography
		13 Years' Experience
		Anri graduated from the University of Johannesburg with a BA honours in Geography in 2007, and has eleven years work experience. Anri is a principal environmental consultant. Anri is qualified as a Lead Auditor and has undertaken legal compliance auditing, including environmental authorisations, waste management licences, water use licences and EMPs. In addition, she has undertaken general site assessments to determine compliance against local, provincial and national environmental legislation

### 1.3.2 SITE INSPECTION

Tiffany Seema from WSP conducted the site visit on 06 December 2022. The findings and observations of the site visit are recorded and summarised in Section 4. Key personnel interviewed included:

- Yedwa Christopher Mgxekwa - Works Manager.



## 2 AUDIT SCOPE

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### 2.1 REGULATION 34 REQUIREMENTS

Section 12(4) of the National Environmental Management Amendment Act, 62 of 2008 (gazetted on 9 January 2009 under Government Notice 22) provides that EMPRs approved in terms of the MPRDA, immediately before the 2008 Amendment Act came into operation (effectively 8 December 2014), must be regarded as having been approved in terms of the National Environmental Management Act (No. 107 of 1998), as amended (NEMA).

As a result, the NEMA 2014 Regulations are considered applicable to the AfriSam Roodekrans Quarry. Regulation 34, of the EIA Regulations, provides for the auditing of an environmental authorisation, EMPR and closure plan. Furthermore, Appendix 7 of Government Notice Regulation (GNR) 982 outlines the required audit report content. The 2014 Regulations refer to a minimum frequency of five years however, the EMPR refers to a more frequent auditing requirement, of an annual basis, which supersedes the 2014 Regulations.

The 7 April 2017 amendment to the Environmental Impact Assessment (EIA) regulations introduced the requirement for the auditing for all EAs and EMPRs in effect on 8 December 2014, and submission of audit reports to the relevant authority (i.e. GDARD) by 7 December 2019 and every five years thereafter. This audit is designed to meet the requirements of Regulation 34 of the EIA Regulations, 2014.

On 29 May 2020 the Minister of Environmental Affairs published an Amendment (No.599) to the EIA Regulations. Regulation 54A of the Regulations was amended:

- a. **by the substitution in subregulation (2), for the words "no later than 7 December 2019 and at least every 5 years thereafter for the period during which such right, permit, Environmental Management Programme or Environmental Management Plan is still in effect" of the words "by a date to be published by Notice in the Government Gazette"; and**
- b. **by the substitution in subregulation (3), for the words "no later than 7 December 2019 and at least every 5 years thereafter for the period during which such environmental authorisation is still in effect" of the words "by a date to be published by Notice in the Government Gazette";**

The objective of the audit was to:

- Assess the level of compliance with the commitments of the EMPR;
- Assess the extent to which the avoidance, management and mitigation measures provided for in the EMPR achieve the objectives and outcomes laid out in these documents;
- Identify and assess any new impacts and risks that result from undertaking the activity;
- Critically evaluate the effectiveness of the EMPR;
- Identify shortcomings in the EMPR;
- Identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPR; and
- Make recommendations in order to achieve compliance in terms of the EMPR.

## 2.2 AUDIT REPORT CONTENTS

Regulation 34, of the EIA Regulations, stipulates the requirements for the auditing of EAs, EMPRs and closure plans. Furthermore, Appendix 7 of Government Notice Regulation (GNR) 982 outlines the required audit report content. The 2014 Regulations refer to a minimum frequency of five years. **Table 2-1** outlines the Appendix 7 requirements in relation to this report.

**Table 2-1 – Appendix 7, Section 3(1) of GNR 982 of the NEMA**

Sub-Section	Requirement	Report Section Reference
a	Details of- (i) the independent person who prepared the environmental audit report; and (ii) the expertise of independent person that compiled the environmental audit report.	Section 1.3 of this Report (Volume 1) Appendix A of Volume 3 of the Report
b	A declaration that the independent auditor is independent in a form as may be specified by the competent authority.	Section 1 of Volume 3 of the Report
c	An indication of the scope of, and the purpose for which, the environmental audit report was prepared.	Section 1 of this Report (Volume 1) Section 2 of this Report (Volume 1)
d	A description of the methodology adopted in preparing the environmental audit report.	Section 3 of this Report (Volume 1)
e	An indication of the ability of the EMPR, and where applicable, the closure plan to- (i) sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an on-going basis; (ii) sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and (iii) ensure compliance with the provisions of environmental authorisation, EMPR, and where applicable, the closure plan.	Section 2 and 4 of Volume 2 of the Report
f	A description of any assumptions made, and any uncertainties or gaps in knowledge.	Section 3.3 of this Report (Volume 1)
g	A description of any consultation process that was undertaken during the course of carrying out the environmental audit report.	Section 2.3 of this Report (Volume 1)
j	A summary and copies of any comments that were received during any consultation process.	N/A
k	Any other information requested by the competent authority.	None requested

## **2.3 PUBLIC PARTICIPATION**

The EIA Regulations, 2014 (as amended), requires the holder of the authorisation to notify Interested and Affected Parties (I&APs) of the submission of the Environmental Compliance Audit Report to the authorities, as specified in Regulation 34(6).

Public participation, to fulfil this requirement, will be undertaken by AfriSam, and does not form part of WSP's scope of work.

### 3 AUDIT METHODOLOGY

In order to verify site commitments and the implementation of the EMPr, WSP undertook a compliance audit comprising documentation verification, employee interviews and a site inspection. The audit process encompassed the following:

- Confirmation of the audit checklist;
- Pre-audit communication (with the client) to allow the client to prepare for the audit;
- A one-day site inspection;
- Review of documentation relevant to the commitments of the EMPr (e.g. records, permits/certificates/maintenance logs/monitoring results/previous reports etc.); and
- Compilation of an audit report.

#### 3.1 AUDIT COMPLIANCE ASSESSMENT

WSP utilised a pre-prepared audit checklist to assist with the audit execution (see Volume 2). The checklist included the commitments and associated requirements as specified in the EMPr. Each commitment was rated in accordance with **Table 3-1** below, and recommendations with associated target completion dates are included.

It should be noted that some of the EMPr commitments have sub-elements. Although some elements of the commitment may have been compliant, if one of the elements was determined to be non-compliant, the entire commitment has been reported as such (and counted as such during percentage compliance calculation). No partial compliances are awarded.

Refer to Volume 2 for the detailed audit findings (including evidence, recommendations, and target completion dates).

**Table 3-1 – Levels of Compliance**

Compliance Level	Definition
<b>Compliant (C)</b>	Condition/mitigation measure/commitment has been achieved, with evidence provided in the form of a document or site verification.  Opportunities for improvement (OFI) may be listed against compliant commitments.
<b>Non-compliant (NC)</b>	Specified commitments, conditions and documents were not in place or implemented according to the requirements of the EMPr. Non-compliant commitments are given target completion dates, as follows: <ul style="list-style-type: none"> <li>■ Short term: 0 – 6 months;</li> <li>■ Medium term: 6 – 12 months;</li> <li>■ Long term: 12 – 18 months.</li> </ul>
<b>Not applicable (N/A)</b>	The condition, commitment and/or mitigation measure is not presently applicable (operational phase).  In addition: <ul style="list-style-type: none"> <li>■ Commitments marked as “Noted” are considered information points only.</li> </ul>

Compliance Level	Definition
	<ul style="list-style-type: none"> <li>Commitments marked “not auditable” are considered not practical to assess within the scope of this assessment. Where this is stated an explanation is included within the commitment commentary.</li> </ul>

## 3.2 DOCUMENTATION CONSIDERED

The following documentation was provided and considered:

- Long Term Plan 2016
- Mining Plan\_2019
- Proof of submission of the Mine Plans to the DMR, 13 October 2022
- Final rehabilitation, decommissioning and mine closure plan, compiled by Shangoni Management Services (Pty) Ltd, November 2016
- Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022
- Eikenhof Quarry Planning Meeting September 2022
- Pre-use inspection form
- Stormwater Management Plan, compiled by M2ENCO, September 2016
- Incidents Register on SAPP
- 41103775 AfriSam National Acoustic Monitoring Eikenhof Quarry\_July 2022
- Continuous Transport Permit – 2014/03/18
- Resource consumption 2021-2022
- Preventive maintenance order
- Water dam inspection 2022
- Integrated Water and Waste Management Plans (IWWMP) Including the Rehabilitation Strategy and Implementation Programme (RSIP) – 2021
- Financial Provision Report, December 2021
- Social and Labour Plan, 2018-2022
- Contractor induction and training register
- AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022
- Water Use Licence
- Mining Right
- Drilling video viewed during audit
- Construction Materials Explosives and Blasting Procedure, CM P15 Eikenhof Quarry
- Blast Return Report, 10/11/2022
- Dust Management Plan

## 3.3 ASSUMPTIONS AND LIMITATIONS

This Report has been prepared by WSP on behalf and at the request of the Client, to provide the Client an understanding of the Relevant Documents.

Unless otherwise agreed by us in writing, we do not accept responsibility or legal liability to any person other than the Client for the contents of, or any omissions from, this Report.



To prepare this Report, we have reviewed only the documents and information provided to us by the Client or any third parties directed to provide information and documents to us by the Client. We have not reviewed any other documents in relation to this Report and except where otherwise indicated in the Report.

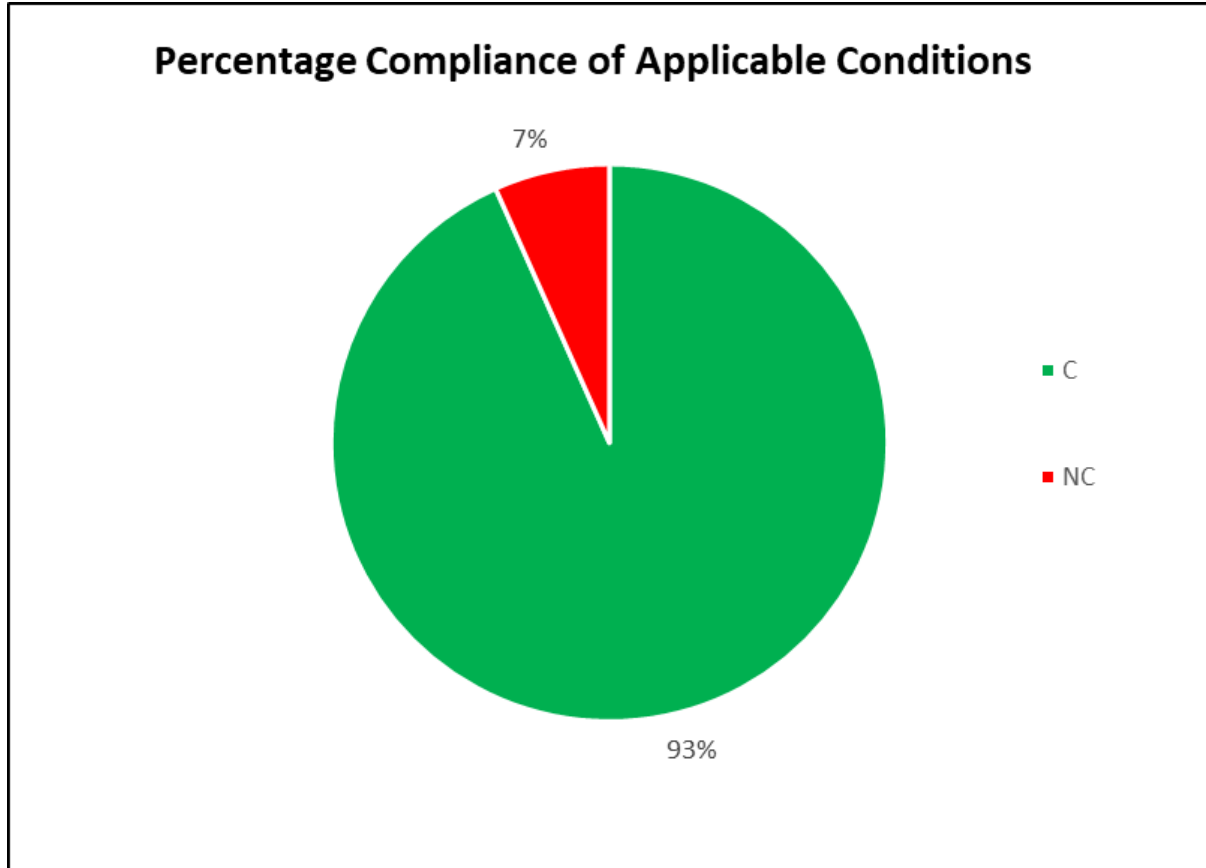
The findings, recommendations and conclusions given in this report are based on the author's best scientific and professional knowledge, as well as available information. This report is based on survey and assessment techniques which are limited by time constraints relevant to the type and level of investigation undertaken; WSP and its staff reserve the right to modify aspects of the report including the recommendations if and when new information may become available from on-going research or further work in this field, or pertaining to this investigation.

Although WSP exercises due care and diligence in rendering services and preparing documents, WSP accepts no liability, and AfriSam, by receiving this document, indemnifies WSP and its directors, managers, agents and employees against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with the services rendered, directly or indirectly by the use of the information contained in this document.

This report shall not be altered or added to without the prior written consent of the author. This also refers to electronic copies of this report which are supplied for the purposes of inclusion as part of other reports. Similarly, any recommendations, statements or conclusions drawn from or based on this report must make reference to this report. If this report is used as part of a main report, the report in its entirety must be included as an appendix or separate section to the main report.

## 4 COMPLIANCE SUMMARY

During the overall review of the management commitments of the EMPR, the percentage of compliance achievement of the commitments is provided in **Figure 4-1**.



**Figure 4-1 - Overall percentage findings on applicable conditions only**



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# **EIKENHOF QUARRY ENVIRONMENTAL MANAGEMENT PROGRAMME - GP**

**30/5/1/2/2(225)MRC**

Environmental Compliance Audit

**VOLUME 2**





AfriSam (South Africa) Properties (Pty) Ltd

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**EIKENHOF QUARRY ENVIRONMENTAL  
MANAGEMENT PROGRAMME - GP**

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# QUALITY CONTROL

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Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	Final Eikenhof Quarry Compliance Audit Volume 2			
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# 1 INTRODUCTION

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WSP Group Africa (Pty) Ltd (WSP) was appointed by AfriSam (South Africa) Properties (Pty) Ltd (AfriSam) to undertake an external environmental audit of the commitments contained in the Eikenhof Quarry Environmental Management Programme (EMPr). The external audit was undertaken in accordance with Regulation 34 of the Environmental Impact Assessment (EIA) Regulations, 2014 published in terms of the National Environmental Management Act 107 of 1998 (NEMA).

The last Environmental Performance Assessment (EPA) was undertaken in December 2020 on the previous EMPr which was approved in 2001. This audit is the first audit for the EMPr submitted in 2011, and it presents the findings of the compliance audit completed for the EMPr for the period between January 2021 and December 2022.


Eikenhof Quarry currently operates under an approved mining right (225 MR), obtained in June 2010. The mining right will expire in May 2040. Eikenhof Quarry has an approved EMPr, approved on 05 March 2001. The EMPr was amended in 2011 and submitted to the Department of Mineral Resources and Energy (DMRE), however it has not yet been approved. This audit was undertaken against the 2011 EMPr, as the management measures outlined in the 2001 approved EMPr are no longer applicable to the site.

## 2 COMPLIANCE ASSESSMENT




These commitments have been reviewed and assessed according to the assessment methodology as described in Section 3 of Volume 1.

Note: All commitments relevant only to the pre-construction, construction, closure and/or post-closure project phases are deemed 'not applicable' to this audit event.

**Table 2-1 – Audit Findings: 2011 Submitted EMPr**

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
<b>11.1 ENVIRONMENTAL MANAGEMENT OF ENTIRE OPERATION IMPACTS / ENVIRONMENTAL EVALUATION</b>										
<b>11.1.1 Topography and Visual</b>										
	Topography and visual	Mine in accordance with a short term, medium term, and long term mine plans.	LoM	<b>C</b>	<p>The short-,medium-, and long-term plans (STP, MTP and LTP) were made available to the auditor for review. The STP for the next period is presented in the Quarry Planning Meeting (QPM) meeting, and adherence to the previous STP is also presented.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Long Term Plan 2016</li> <li>Mining Plan_2019</li> <li>Eikenhof Quarry Planning Meeting Minutes September 2022</li> </ul>	Y	None	N		
	Topography and visual	<p>Implement good housekeeping through ensuring:</p> <ul style="list-style-type: none"> <li>All salvageable material is stored in the designated area (salvage yard).</li> <li>Raw material for the workshops must be stored in their designated areas.</li> </ul>	Daily	<b>C</b>	<p>It was observed during the site inspection that all raw materials are stored accordingly in the designated areas. Salvageable material was also observed to be stored in the designated salvage yard. However, the salvage yard was mostly empty at the time of the audit, due to the risk of theft.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-1 - Salvage yard</b></p>	Y	None	N		





EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					 <p><b>Figure 2-2 - Raw material storage at processing plant</b></p>					
	Topography and visual	Implement the Waste Management Plan as per Section 11.3.8, i.e.: <ul style="list-style-type: none"> <li>Adequate waste storage facilities are available.</li> <li>All waste is stored in the designated areas.</li> <li>The volumes of waste is monitored and disposed of prior to exceeding the storage facility capacity.</li> <li>Disposed prior to exceedance of storage capacity.</li> </ul>	LoM	NC	Adequate waste storage facilities in the form of bins in strategic locations were observed throughout the site. However, overflowing waste skips were observed at the time of the audit.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-3 - Overflowing waste bin</b></p> 	Y	It is recommended that all waste is disposed of before the waste in/skips overflow. A record of collection by a registered waste management facility must also be kept.	N	Short term	YC Mgxekwa

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					<b>Figure 2-4 - Improper waste storage</b>					
	Topography and visual	Implement the Alien Vegetation Control Programme as per Sec 11.5.	LoM	C	<p>Evidence of implementation of an alien vegetation control programme is provided through the Alien Vegetation Control and Concurrent Rehabilitation Progress Report. The report outlines the alien species identification and control activities undertaken for each quarter. It also outlines the activities planned for the next quarter.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022</li> </ul>	Y	None	N		
	Topography and visual	Inspect the mining right area to ensure compliance with the good housekeeping commitments listed above.		NC	<p>The good housekeeping commitments have not been fully adhered to as multiple overflowing waste skips were observed at the time of the audit.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation: <b>Figure 2-3</b> and <b>Figure 2-4</b></li> </ul>	Y	It is recommended that all waste is disposed of before the waste skips overflow. A record of collection by a registered waste management facility must also be kept.	N	Short term	YC Mgxekwa
	Topography and visual	If poor housekeeping is identified, corrective action must be taken.		C	<p>The good housekeeping commitments have not been fully adhered to as multiple overflowing waste skips were observed at the time of the audit.</p> <p>The auditor was verbally informed that corrective action, removal of the waste, was undertaken subsequent to the audit.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation: <b>Figure 2-3</b> and <b>Figure 2-4</b></li> </ul>	Y	None	N		
	Topography and visual	Implement concurrent rehabilitation, as per Section 11.5.		C	<p>The Rehabilitation Progress Report outlines the ongoing rehabilitation measures being undertaken.</p> <p>Monitoring is undertaken on a quarterly basis to determine further rehabilitation measures and the success of existing measures.</p> <p>A copy of the Alien Vegetation Control and Concurrent Rehabilitation Progress Report was provided which outlines the ongoing rehabilitation measures being undertaken. However, the report states that no concurrent rehabilitation was undertaken for the reporting period. The work is focussed on alien species identification and control.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022</li> <li>Final rehabilitation, decommissioning and mine closure plan, compiled by Shangoni Management Services (Pty) Ltd, November 2016</li> </ul>	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
<b>11.1.2 Dust / Air Quality</b>										
1	Materials Handling	When visible clouds of dust (generated during materials handling activities) are being transported across the mine boundary, the material must be watered before being handled.  <ul style="list-style-type: none"> <li>Stripping overburden;</li> <li>Stockpiling overburden;</li> <li>Loading run of mine (ROM) to haul vehicles and stockpiling;</li> <li>Loading ROM to primary crusher;</li> <li>Moving products from the conveyor stockpiles to the stockpile yard; and</li> <li>Loading products to dispatch / cartage vehicles.</li> </ul>	Daily	C	During the site investigation it was visually confirmed that dust suppression by means of water spraying on the road is undertaken continuously throughout the day on all internal roads. In addition, water sprays has been installed at the stockpile areas.  Stockpiles were reported to not cause any significant dust fallout. No clouds of dust were observed at the stockpiles.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>Onsite observation</li> </ul>	Y	None	N		
2	Haulage	Suppress dust resulting from vehicle entrainment on all haul roads that are being used.	Daily	C	During the site investigation it was visually confirmed that dust suppression by means of water spraying on the road is undertaken continuously throughout the day on all internal roads. In addition, water sprays has been installed at the stockpile areas.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None.	N		
3.	Monitoring	Implement dust fallout monitoring (details provided in S 11.8.1).		C	Monthly air quality monitoring is being undertaken. Dust fallout monitoring is in place as per the section 11.8.1. The last report provided was for November 2022.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
<b>11.1.3 Noise</b>										
1.	Hours of operation	1. Hours of operation: Restricted to: Quarry: Monday to Thursday: 06:30 to 16:30 Friday to Saturday: 06:30 to 14:00 Sunday: Only maintenance activities. Plant: Monday to Thursday: 06:30 to 16:30 & 18:00 to 06:00 Friday to Saturday: 06:30 to 14:00 Sunday: Only maintenance activities.	LoM	C	No operations have been carried out outside of these permitted windows during the audit period.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
2.	Vehicles	Keep earthmoving equipment in good working order.	Daily	C	A pre-use checklist confirming whether equipment is in good working condition is completed before use.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Pre-use inspection form</li> </ul>	Y	None	N		


EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
3.	Monitoring	Implement noise monitoring (details provided in S 11.8.2).	Biannually	C	Noise monitoring is undertaken once every 6 months. The report for July 2022 was provided to the auditor for review.  The monitoring report concludes that AfriSam Eikenhof operations are compliant with the SANS guidelines. Where exceedances were identified, these were attributed to vehicle movement along the R82 main road, people talking and birds/insects.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>41103775 AfriSam National Acoustic Monitoring Eikenhof Quarry_July 2022</li> </ul>	Y	None	N		
11.1.4 Surface Water run-off										
1.	Volume and patterns:	In order to limit the area affected, mine in accordance with a short term, medium term and long term mine plans (Sec 11.2.).		C	The short-, medium-, and long-term plans (STP, MTP and LTP) were made available to the auditor for review. The STP for the next period is presented in the Quarry Planning Meeting (QPM) meeting, and adherence to the previous STP is also presented.  It was reported that changes to topography are limited to the quarry area.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Long Term Plan 2016</li> <li>Mining Plan_2019</li> <li>Eikenhof Quarry Planning Meeting Minutes September 2022</li> </ul>	Y	MTP should be readily available for review.  <i>Completion timeframe:</i> Short term	N		
		Develop and implement a Storm Water Management Plan (details provided in Section 16.4.3)		C	Based on the Stormwater Management Plan the site is separated into clean and dirty water catchments/areas.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Stormwater Management Plan, compiled by M2ENCO, September 2016</li> </ul>	Y	None	N		
11.1.5 Surface Water Quality										
1.	Water Pollution	Develop and implement a SWMP – details provided in Sec 11.3.2		C	Based on the Stormwater Management Plan the site is separated into clean and dirty water catchments/areas.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Stormwater Management Plan, compiled by M2ENCO, September 2016</li> </ul>	Y	None	N		
		The SWMP must ensure the following: <ul style="list-style-type: none"> <li>“Clean” water is kept away from mining activities - directed around operations to prevent contamination [Reg4(a) GN704];</li> <li>“Dirty” water is collected [S 19(2)(c) NWA &amp; Reg4(c) GN704] for use on-site {Reg 7(a) GN704};</li> </ul>		C	A berm made from reject aggregate has been erected at the stockpile area to ensure that “dirty” water is not discharged.  There is also a storm water control trench to direct clean water away from the plant area.  The topsoil stockpiles are vegetated and based on visual observation there was no erosion at the topsoil stockpiles.  <i>Evidence:</i>	Y	None	N		



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<ul style="list-style-type: none"> <li>Minimise erosion or leaching of materials from any residue deposit or stockpile [Reg7(e) GN704]; and</li> <li>Prevent uncontrolled discharge of “dirty” water from the mining site [S 19(2)(c) NWA &amp; Reg4(d) &amp; Reg7(e) GN704].</li> </ul>			<ul style="list-style-type: none"> <li>Stormwater Management Plan, compiled by M2ENCO, September 2016</li> <li>Onsite observation:</li> </ul>  <p>Figure 2-5 - Stormwater berm at stockpile area</p>  <p>Figure 2-6 - Storm water trench</p>					
		Where pollution incidents are identified, the mine must “remedy the effects of the pollution” [S 19(2)(e) NWA]. See Section 16.5 for the response procedure in the event of emergency incidents.		N/A	<p>No environmental incidents were reported for the audit period</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Incidents Register on SAPP</li> <li>Verbal confirmation</li> </ul>	Y	None	N		
		<p>In general, management of water across the site must ensure the measures referred to in S 19(2) of the NWA are adhered to:</p> <p>a) Process causing the pollution must cease, be modify or controlled;</p> <p>b) Compliance with any prescribed waste standard or management practice;</p> <p>c) Pollutants are contained or their movement prevented;</p>		C	<p>An external compliance audit to the conditions of the Water Use Licence (WUL) was undertaken is October 2021 by ECO Resource Managers.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>External Waster Use Licence Audit, October 2021</li> </ul>	Y	None	N		


EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		d) Sources of the pollution are eliminated; and e) Effects of the pollution are remedied.								
		When constructing dams, embankments, roads, etc., ensure the materials used will not pollute water resource [Reg5 GN704].		N/A	No construction was undertaken during the audit period.	Y	None	N		
2.	Monitoring	Implement water quality monitoring (details provided in S 11.8.3).		C	Surface Water monitoring is conducted monthly, whereas Groundwater monitoring is conducted quarterly.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
<b>11.2 ENVIRONMENTAL MANAGEMENT DURING THE OPERATIONAL PHASE</b>										
<b>11.2.1 Mine planning</b>										
1.	Mine plans	1. Mine plans: Generate and maintain long term mine plans that consider the final closure requirements, i.e. ensure long term plans do not hinder or prevent the implementation of the closure plans.	LoM	C	The AfriSam Eikenhof Long Term Plan (2016) was provided to the Auditor. However, there is no reference to final closure requirements in the document.  However, based on the Rehabilitation Progress Report mining is not hindering final closure requirements .  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Long Term Plan – 2016</li> <li>by Shangoni Management Services (Pty) Ltd, November 2016</li> </ul>	Y	None.	N		
		Generate and maintain medium and short term mine plans in order to achieve the long term mine plan.		C	The short-,medium-, and long-term plans (STP, MTP and LTP) were made available to the auditor for review. The STP for the next period is presented in the Quarry Planning Meeting (QPM) meeting, and adherence to the previous STP is also presented.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Long Term Plan 2016</li> <li>Mining Plan_2019</li> <li>Eikenhof Quarry Planning Meeting Minutes September 2022</li> </ul>	Y	MTP should be readily available for review.	N	Short term	
		Mine in accordance with the short term mine plan.		C	The STP for the next period is presented in the QPM minutes, and adherence to the previous STP is also presented.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Eikenhof Quarry Planning Meeting Minutes September 2022</li> </ul>	Y	None	N		
		Mine plans must show the following information (not an exhaustive list): <ul style="list-style-type: none"> <li>Demarcation of mine property;</li> <li>Location of topsoil stockpile (if any is available);</li> </ul>		C	The mine plans are displayed on the noticeboard of the meeting room and it was noted to annotate the information listed in this commitment.  <i>Evidence:</i>	Y	None	N		


EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<ul style="list-style-type: none"> <li>Location of all overburden dumps;</li> <li>Storm water control structures; and</li> <li>Rehabilitated areas (to avoid disturbance of these areas).</li> </ul>			<ul style="list-style-type: none"> <li>Mine plans viewed onsite</li> </ul>					
2.	Quarry planning meetings	<p>The following will be discussed during the quarry planning meetings, with actions being determine if necessary:</p> <ul style="list-style-type: none"> <li>Overburden dumping – ensure volumes of overburden to be stored have been calculated (and re-calculated as mining progresses) and that adequate space is available for storage;</li> <li>Environmental monitoring results – the cause of exceedances of guidelines / standards must be determined and corrective action decided;</li> <li>Storm water management;</li> <li>Alien vegetation removal;</li> <li>Concurrent rehabilitation activities;</li> <li>Final closure requirements; and</li> <li>Environmental complaints.</li> </ul>	LoM	C	<p>The minutes from the Quarry Planning Meeting held in September 2022 and from the Environmental Planning Meeting held on 20 June 2022 were provided for review.</p> <p>The minutes confirmed that all items outlined in this condition are discussed.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Eikenhof Quarry Planning Meeting Minutes September 2022</li> <li>Eikenhof Environmental Planning Meeting Minutes, June 2022 September 2022</li> </ul>	Y	None	N		
3.	Annual mine plans:	The mine will update and submit to the DMR the mine plans developed by a qualified surveyor as per regulation 17(28) of Mines Health and Safety Amendment Act, Act No. 72 of 1997.	Annual	C	<p>The short-,medium-, and long-term plans (STP, MTP and LTP) were made available to the auditor for review.</p> <p>The Mine Plans were submitted to the DMR on 13 October 2022.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Long Term Plan 2016</li> <li>Mining Plan_2019</li> <li>Eikenhof Quarry Planning Meeting Minutes September 2022</li> <li>Proof of submission of the Mine Plans to the DMR, 13 october 2022</li> </ul>	Y	None	N		
<b>11.2.2 Stripping, Hauling and Stockpiling of Overburden</b>										
1.	General	Overburden may only be stored / dumped in accordance with the mine plans (S 11.2.1 Mine plans).	LoM	C	No evidence to the contrary was noted during the site inspection.	Y	None	N		
		<p>Develop an Overburden Management Plan that includes the following information:</p> <ul style="list-style-type: none"> <li>Volume of overburden to be dumped / stored during the LoM.</li> <li>This information must be re-calculated as mining progresses;</li> <li>The location of dumps which must not be located in future mining areas, unless they will be removed for rehabilitation prior to mining that area;</li> <li>A description of the purpose of the dump(s);</li> </ul>	Amend Annually	NC	<p>A formal overburden management plan with the required information is not currently in place.</p> <p>The mine plans show the overburden dump locations, however there is no limit on height and slope of these dumps.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	An overburden management plan detailing the required information must be developed and reviewed annually.	N	Medium term	YC Mgxekwa

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<ul style="list-style-type: none"> <li>A description of the construction of the dumps in such a way as to facilitate vegetation of the surfaces (i.e. step the dumps at reasonable intervals);</li> <li>Height and slope of the dump(s);</li> <li>A description of the concurrent rehabilitation activities including: <ul style="list-style-type: none"> <li>Time frames;</li> <li>Methods;</li> <li>Species to be used;</li> <li>Results of vegetation trials;</li> <li>Monitoring; and</li> <li>Follow up activities to ensure adequate vegetation cover.</li> </ul> </li> <li>Storm water management and erosion control and</li> <li>Alien vegetation control.</li> </ul>								
2.	Dust	Stripping and stockpiling of overburden will be avoided during windy conditions when clouds of dust are seen to be blowing over the property boundary. Alternatively, see Section 11.1.2 Materials handling.	Daily	C	<p>Dust suppression activities were confirmed to be undertaken when required.</p> <p>The environmental monitoring reports, that include dust monitoring results, were also reviewed. The reports conclude that dust fallout limits were not exceeded during the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
		Once a section or lift of an overburden dump is completed, it will be rehabilitated in accordance with the Overburden Management Plan.		C	<p>The completed overburden dumps that were identified during the site inspection, were observed to be vegetated.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-7 - Vegetated overburden dump</b></p>	Y	None	N		
3.	Noise	See Section 11.1.3 Hours of Operation and Vehicles.		C	As per 11.1.3 above.	Y	None	N		




EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
4.	Visual	Once a section or lift of an overburden dump is completed, it will be rehabilitated in accordance with the Overburden Management Plan.  Section 11.2.2		C	The completed overburden dumps that were identified during the site inspection, were observed to be vegetated.  Evidence: ▪ Onsite observation: <b>Figure 2-7</b>	Y	None	N		
<b>11.2.3 Drilling, Blasting and Secondary Breaking</b>										
1.1	General: Explosive Magazine:	Maintain permits required to legalise the explosive magazines –  Section 12 of the Explosive Act, 2003.	LoM	N/A	AfriSam does not store any explosives on site.  AfriSam uses bulk explosives for which a continuous transport permit (CTP) from the South African Police Service has been acquired  Evidence: ▪ Continuous Transport Permit – 2014/03/18	N	OFI:  The EMPr should be amended to accurately reflect the explosives delivery and storage system that AfriSam uses	Y		
		Implement permit requirements, i.e. magazine area must be free of vegetation.	LoM	N/A	AfriSam does not store any explosives on site.  Evidence: ▪ Verbal confirmation ▪ Onsite observation	N	OFI:  The EMPr should be amended to accurately reflect the explosives delivery system that AfriSam uses.	Y		
1.2	General (Flyrock): Drilling and Blasting:	Drilling must be undertaken in accordance with the short-term mine plans.	LoM	C	As per the QPM minutes where STP implementation is discussed, drilling was conducted in accordance with the STP.  Evidence: ▪ Eikenhof Quarry Planning Meeting Minutes September 2022	Y	None	N		
		Appropriately drilling and charging of blast holes such that blast intensity is only as great as necessary to achieve blast tonnage objectives without causing significant impact (noise, air blast, ground vibration and fly rock) on receptors and / or structures.	For every blast	C	Drilling is conducted in accordance with the STP. This includes putting measures that ensure that there is minimal vibration, noise and fly rock as required in this condition.  Evidence: ▪ Eikenhof Quarry Planning Meeting Minutes September 2022	Y	None	N		
		Blasting must be undertaken in accordance with a Blasting Procedure which outlines (among other aspects) the safety procedures.	When blasting	C	All blasting at Eikenhof is undertaken in accordance with the Construction Materials Explosives and Blasting Procedure.  Evidence: ▪ Construction Materials Explosives and Blasting Procedure, CM P15 Eikenhof Quarry	Y	None	N		
		Blasting monitoring must be implemented as described in Section 11.8.4.		C	Blasting monitoring is undertaken for all blasting events and records are maintained. A sample record was provided to the Auditor for the blast undertaken on 10 November 2022.  Evidence: ▪ Blast Return Report, 10/11/2022	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		Eikenhof Quarry will maintain a complaint register		C	<p>A complaints register is kept at the entrance to the main offices. No complaints were received during the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-8 - Complaints register kept at entrance to site offices</b></p>	Y	None	N		
2.1.	Dust during drilling	Fit all drill-rigs with dust suppression / extraction equipment.	LoM	C	<p>It was reported that all drill rigs are fitted with extraction equipment. No drilling was taking place at the time of the.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Drilling video viewed during audit</li> </ul>	Y	None	N		
		Maintain drill rigs, particularly the dust suppression / extraction equipment, in accordance with a maintenance schedule.		C	<p>A maintenance schedule is available for the drill rigs and preventative maintenance undertaken.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Preventative Maintenance Schedule</li> <li>Service Sheets</li> </ul>	Y	None	N		
2.2.	Dust during blasting:	Preparations for blasting will not be initiated if it is very windy i.e. dust from the blast would be transported over the mine boundary to settle on receptors.		C	<p>It was reported that blasting is not initiated during windy conditions.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
4.	Vibration	Implement the Drilling and Blasting Procedure.		C	<p>All blasting at Eikenhof is undertaken in accordance with the Construction Materials Explosives and Blasting Procedure.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Construction Materials Explosives and Blasting Procedure, CM P15 Eikenhof Quarry</li> </ul>	Y	None	N	Short term	
4.	Water pollution	<p>Do not allow dirty water from the quarry to leave the mining area.</p> <p>See Storm Water Management Plan, Section 11.3.2</p>		C	<p>In the Monthly Monitoring Report it is noted that there is no discharge from the quarry and as such it is unlikely that the quarry impacts water quality offsite.</p> <p><i>Evidence:</i></p>	Y	<p>OFl:</p> <p>Amend the EMPr to reflect the correct condition reference</p>	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					<ul style="list-style-type: none"><li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li></ul>		number as it is supposed to be 5.			
		Test the quality of the water in the quarry as described in Section S 11.8.3.		C	Surface Water (including quarry water) monitoring is conducted monthly, and the results of each monitoring campaign are detailed in the monthly Environmental Monitoring Report.  <i>Evidence:</i> <ul style="list-style-type: none"><li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li></ul>	Y	None	N		
11.2.4 Loading, Hauling and Stockpiling of Blasted Material										
1	Dust	See Section 11.1.2 Materials handling and Haulage.		C	As per item 11.1.2 above	Y	None	N		
		Maintain haul roads as described in Section 11.3.5 Haul road maintenance.	LoM	C	All haul roads were observed to be well kept as per the requirements under condition 11.3.5.  <i>Evidence:</i> <ul style="list-style-type: none"><li>Onsite observation:</li></ul> <div></div> <b>Figure 2-9 - Haul roads within quarry pit</b>	Y	None	N		
2	Noise	See Section 11.1.3 Hours of Operation and Vehicles.		C	As per item 11.1.3 above.	Y	None	N		
		See Section 11.3.5 Vehicle and plant maintenance.		C	As per item 11.3.5 below.	Y	None	N		
		Where possible, vehicles must be fitted with noise abatement technology. The effectiveness of this must be confirmed during occupational health and safety monitoring.		C	It was verbally confirmed that all equipment, including vehicles are fitted with silencers. During the site investigation no excessively noisy vehicles were encountered.  <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal communication</li><li>Onsite observation – Vehicles</li></ul>	Y	None	N		
11.2.5 Crushing and Screening										
1.	Dust	Establish emissions inventory for the plant, identify the sources of dust from the	LoM	C	An emissions inventory is included in the Dust Management Plan.	Y	None	N		

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		plant and listing these in order of significance;			<i>Evidence:</i> <ul style="list-style-type: none"> <li>Dust Management Plan</li> </ul>					
		Dust from stockpiling activities will be reduced from implementing any of the following management measures: <ul style="list-style-type: none"> <li>Enclose the transfer points where possible; and</li> <li>Restrict stockpiling activities during high winds.</li> </ul>		C	Dust suppression activities were confirmed to be undertaken when required.  The environmental monitoring reports, that include dust monitoring results, were also reviewed. The reports conclude that dust fallout limits were not exceeded during the audit period.  Stockpiles were reported to not cause any significant dust fallout. No clouds of dust were observed at the stockpiles. Dust plumes were observed at the fines stockpile during tipping, however wetting of these is limited as wet product may block and damage the screens.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
		Monitor the success of these management measures (Sec 11.8.1): <ul style="list-style-type: none"> <li>Dust fallout rates on the mine boundary must not exceed 1 200mg/m<sup>2</sup>/day as per SANS 1929</li> </ul>		C	The environmental monitoring reports, that include dust monitoring results, conclude that dust fallout limits were not exceeded during the audit period (falling below the residential and non-residential standards).  <i>Evidence:</i> <ul style="list-style-type: none"> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
2.	Noise	See Section 11.1.3 Hours of Operation and Vehicles.		C	As per item 11.1.3 above.	Y	None	N		
		If a noise source inventory has not already been compiled, identify the sources of noise within the plant, listing these in order of significance.		C	A noise source inventory is outlined in the Monthly Occupational Hygiene Assessment.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Report on Monthly Occupational Hygiene Assessment, February 2022</li> </ul>	Y	None	N		
		Implement management measures (or a plan of implementation) for those sources considered to be the most significant.		C	It was verbally confirmed that all equipment, including vehicles are fitted with silencers. During the site investigation no excessively noisy vehicles were encountered.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal communication</li> <li>Onsite observation – Vehicles</li> </ul>	Y	None	N		
		Monitor the success of these management measures (see Section 11.1.3):		C	The noise monitoring report concludes that AfriSam Eikenhof operations are compliant with the SANS guidelines. Where exceedances were identified, these were attributed to vehicle movement along the R82 main road, people talking and birds/insects  <i>Evidence:</i>	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<ul style="list-style-type: none"> <li>Noise levels on the mine boundary must not exceed 70dB(A) as per SANS 10103.</li> </ul>			<ul style="list-style-type: none"> <li>41103775 AfriSam National Acoustic Monitoring Eikenhof Quarry_July 2022</li> </ul>					
<b>Mobile Plant</b> – <i>There is no mobile plant operational onsite, therefore the conditions under this section were not audited.</i>										
<b>11.2.6 Stockpiling of Products</b>										
1.	Dust	For each product, identify the most significant source of dust during stockpiling, i.e. as the material leaves the belt, or as the material falls to the stockpile, or from the stockpile.	Within 2 months	C	<p>The most significant sources of dust were reported to be from stockpiling the fine product at the crushing plant.</p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-10 - Dust plumes at the crushing plant</b></p>	Y	OFI: Dust sources must be recorded in a comprehensive emissions inventory and reviewed at regular intervals.	N		
		Implement management measures (or a plan of implementation) to reduce the volume of dust available from this source.	Within 6 months	C	<p>Dust suppression activities were confirmed to be undertaken when required.</p> <p>The environmental monitoring reports, that include dust monitoring results, were also reviewed. The reports conclude that dust fallout limits were not exceeded during the audit period.</p> <p>Stockpiles were reported to not cause any significant dust fallout. No clouds of dust were observed at the stockpiles. Dust plumes were observed at the fines stockpile during tipping, however wetting of these is limited as wet product may block and damage the screens.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
		Monitor the success of these management measures (see Section 11.8.1): <ul style="list-style-type: none"> <li>Dust fallout rates on the mine boundary must not exceed 1 200mg/m<sup>2</sup>/day as per SANS 1929.</li> </ul>		C	<p>The environmental monitoring reports, that include dust monitoring results, were reviewed. The reports conclude that dust fallout limits were not exceeded during the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		

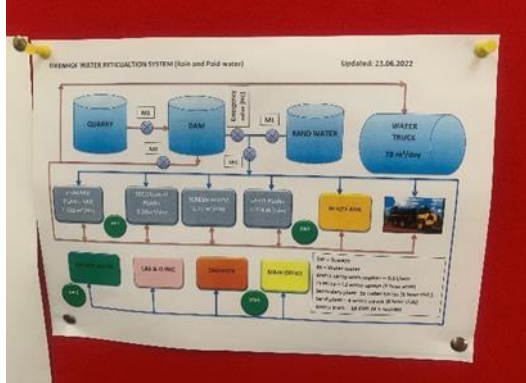
EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					<ul style="list-style-type: none"> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>					
2.	Water pollution	Storm water management around the product stockpiles will be described in the Storm Water Management (S 11.3.2). <ul style="list-style-type: none"> <li>The purpose of the management measures is to ensure that clean surface water run-off is diverted away from the stockpile area and storm water run-off from the stockpile area (dirty water) is trapped to allow sediment to settle out of suspension, before clean water filters out of the area.</li> </ul>	LoM	C	A berm made from reject aggregate has been erected at the stockpile area to ensure that “dirty” water is not discharged.  There is also a storm water control trench to direct clean water away from the plant area.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
		If there is no storm water management around the stockpile area, this must be implemented retrospectively. The Storm Water Management Plan must outline the time frames for implementation. See S 11.3.2		N/A	Stormwater management around the stockpile area in the form of a berm has been implemented.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
		The effectiveness of the storm water management measures will be monitored during the rainy season.		C	The minutes from the Environmental Planning Meeting held on 20 June 2022 were provided for review.  The minutes confirmed that the effectiveness of the SWMP is reviewed during these meetings.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Eikenhof Environmental Planning Meeting Minutes, June 2022 September 2022</li> </ul>	Y	None	N		
		Any inadequacies will be rectified.		C	The minutes from the Environmental Planning Meeting held on 20 June 2022 were provided for review.  During the June 2022 meeting the below was discussed:  <i>“The only outstanding item on the SWMP is the construction of the sediment traps at the stockpile area, which has been completed. The site has created a berm at the edge of the stockpile area to prevent any contaminated water from leaving the site, and to add in filtration.”</i>  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Eikenhof Environmental Planning Meeting Minutes, June 2022 September 2022</li> </ul>	Y	None	N		
		Maintenance of storm water management measures must be implemented as described in the Storm Water Management Plan (S 11.3.2).		C	Based on the Stormwater Management Plan the site is separated into clean and dirty water catchments/areas.  Stormwater Management Plan, compiled by M2ENCO, September 2016	Y	None	N		
11.2.7 Dispatch of Products from Site										



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
1.	Dust	See Section 11.1.3 Vehicles – applicable for vehicles operating under the mine’s authority.		C	During the site investigation it was visually confirmed that dust suppression by means of water spraying on the road is undertaken continuously throughout the day on all internal roads. In addition, water sprays has been installed at the stockpile areas.  <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li></ul>	Y	None.	N		
2.	Social impacts	Weigh all haul vehicles leaving the site and stop any overloaded vehicle from leaving the property.		C	The weighbridge is used for all vehicles leaving the site, it was reported that the weighbridge ensures that vehicles do not leave the site when overloaded  <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li></ul>	Y	None.	N		
		Visually check that haul cartage vehicles are not obviously unroadworthy. This includes, but is not limited to: <ul style="list-style-type: none"><li>Ensure the vehicles are not leaking oil and / fuel;</li><li>Ensure the exhaust emissions are not excessive and</li><li>The bucket of the vehicle can contain the products being collected.</li></ul>		C	A pre-use checklist confirming whether vehicles are in good working condition is completed before use.  <i>Evidence:</i> <ul style="list-style-type: none"><li>Pre-use inspection form</li></ul>	Y	None	N		
		If vehicles appear not to be roadworthy: <ul style="list-style-type: none"><li>Report incident to cartage vehicle owner; and</li><li>Prevent un-repaired vehicles from re-entering the mining area.</li></ul>		N/A	Unroadworthy vehicles were not reported for the audit period.  <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>Pre-use inspection form</li></ul>	Y	None	N		
		Ensure haul roads are in good conditions		C	All haul roads were observed to be well kept as per the requirements under condition 11.3.5.  Dust suppression activities were confirmed to be undertaken when required and no potholes were observed.  <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>Onsite observation</li></ul>	Y	None	N		
		Carry out spot checks on haul vehicles: <ul style="list-style-type: none"><li>Check whether the haul vehicles travel along agreed routes.</li><li>Take disciplinary action on vehicle driver if necessary.</li></ul>	Quarterly	C	It was noted that haul vehicles travel on the demarcated routes and are inspected.  <i>Evidence:</i> <ul style="list-style-type: none"><li>Onsite observation</li><li>Verbal confirmation</li></ul>	Y	None	N		
11.3 ENVIRONMENTAL MANAGEMENT ASSOCIATED WITH THE SUPPORTING SERVICES AND ACTIVITIES										
11.3.1 Water Supply and Use										
1.	Authorisation / “Water use” licences:	Ensure that all “water use” [defined in S 21 NWA] are licensed as required in S		C	The Water Use Licence for the site was provided for review. AfriSam has been authorised for a 21(g) water use for the disposal of water containing waste and	Y	OFI:	N		


EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		22(b) of the NWA. "Water use" (requiring a licence) applicable to the mine include: <ul style="list-style-type: none"> <li>"taking water from a water resource; and</li> <li>storing water".</li> </ul>			waste materials. Not all water uses listed in this condition have been authorised as these are not applicable to the operations. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Water Use Licence</li> <li>Onsite observation</li> </ul>		This EMPr condition must be amended to quote the correct water uses applicable to the site.			
		Once licence(s) are issued, assess compliance to specified conditions.	Annually/as per licence	C	An external compliance audit to the conditions of the WUL was undertaken in October 2021 by ECO Resource Managers. <i>Evidence:</i> <ul style="list-style-type: none"> <li>External Waster Use Licence Audit, October 2021</li> </ul>	Y	None	N		
		If there is a change in "water use", determine whether changes to existing / additional license(s) are required, in terms of the NWA.	When required	N/A	The Water Use Licence for the site was provided for review. AfriSam has been authorised for a 21(g) water use for the disposal of water containing waste and waste materials. Not all water uses listed in this condition have been authorised as these are not applicable to the operations. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Water Use Licence</li> <li>Onsite observation</li> </ul>	Y	OFl: This EMPr condition must be amended to quote the correct water uses applicable to the site.	N		
2.	Water quality / Monitoring:	Implement water monitoring to prevent unnecessary pollution of surface water – see Section 11.8.4		C	Surface Water monitoring is conducted monthly, whereas Groundwater monitoring is conducted quarterly. <i>Evidence:</i> <ul style="list-style-type: none"> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
3.	Drawdown:	The effects of drawdown can be reduced through management of potable water use in the following way: <ul style="list-style-type: none"> <li>Record the volume of process water used and evaluate the results as follows: <ul style="list-style-type: none"> <li>Compare the water consumption figures from month to month (considering the number of days worked);</li> <li>The cause of large fluctuation must be investigated; and</li> <li>Corrective action must be implemented where necessary in order to prevent further unnecessary fluctuations.</li> </ul> </li> </ul>	Monthly	C	Water consumption rates are recorded monthly. The annual reports were presented to the auditor for review. No significant fluctuations in consumption requiring investigation were noted <i>Evidence:</i> <ul style="list-style-type: none"> <li>Resource consumption 2021-2022</li> </ul>	Y	None	N		
		Use these figures to update and maintain the water balance diagram.	Biannually	C	The water balance is updated biannually. An updated copy of the water balance was seen on the office notice board. It was last update on 23 June 2023.	Y	None	N		



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					<p>Evidence:</p> <ul style="list-style-type: none"><li>Onsite observation:</li></ul>  <p>Figure 2-11 - Updated water balance</p>					
		<ul style="list-style-type: none"><li>Inspected taps, water pipelines and pumps for leaks.</li><li>- Any leaks must be fixed within a day.</li></ul>	Weekly	C	<p>Water pump inspection and maintenance records were available for review. Based on these records, faults are fixed within a day.</p> <p>Evidence:</p> <ul style="list-style-type: none"><li>Preventive maintenance order</li><li>Water Dam inspection 2022</li></ul>	Y	None	N		
4.	Water use:	<p>Control / Manage the volume of water extracted from the quarry (control volume available for recharge) by implementing the following management measures:</p> <p>Reduce the need for water extraction by using “dirty” water collected on-site for process water [Reg 7(a) GN704].</p> <ul style="list-style-type: none"><li>- This is currently being achieved by collecting Sediment rich water from the dust suppression and washing areas of the plant to produce a product – “builders blend”.</li></ul>	Daily	C	<p>It was reported that there is no water extraction from the pit and the environmental monitoring report reports the same. None of the quarry water is used on site. Dirty water is used for dust suppression activities.</p> <p>Water is not needed for the actual processes operating on site.</p> <p>Evidence:</p> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li></ul>	Y	None	N		
		Recycle process water as far as practically possible [Reg 7(f) GN704] (see above).		C	<p>Water is not needed for the actual processes operating on site. Dirty water is used for dust suppression activities.</p> <p>Evidence:</p> <ul style="list-style-type: none"><li>Verbal confirmation</li></ul>	N	None	Y		
		Record the volume of process water used and evaluate the results as follows:	Monthly	C	<p>Exceedances of the water use limits were recorded. An amendment of the WUL has been applied for, however there has been no progress with the</p>	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<ul style="list-style-type: none"> <li>Legal compliance:</li> <li>Compare consumption rates with permitted water use volumes.</li> <li>Notify DWA if exceedances have occurred.</li> <li>Notify DWA if the mine is not complying with the conditions of the permit.</li> <li>Consumption:</li> <li>Compare the water consumption with the production rates, i.e. water consumption per tons produced;</li> <li>The cause of large fluctuation must be investigated; and.</li> <li>Corrective action must be implemented where necessary in order to prevent further unnecessary fluctuations.</li> </ul>			<p>Department. The Department was notified of Eikenhof not being able to comply with the limits as part of the amendment.</p> <p>The cause of the exceedances were investigated and were reported to be due to equipment demands (water sprays) as well as increased dust suppression points throughout the plant.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>					
		Use these figures to update and maintain the water balance diagram.		C	<p>It was reported that the water balance is updated annually. An updated copy of the water balance was seen on the office notice board. It was last update on the 23<sup>rd</sup> of June 2023.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
		<p>Inspected water pipelines and pumps for leaks.</p> <ul style="list-style-type: none"> <li>Any leaks must be fixed within a day.</li> </ul>		C	<p>Water pump inspection and maintenance records were available for review. Based on these records, faults are fixed within a day.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Preventive maintenance order</li> <li>Water Dam inspection 2022</li> </ul>	Y	None	N		
<b>11.3.2 Storm Water Management</b>										
1.	Legal requirements and Water pollution	<p>Comply with all legal requirements in terms of storm water management:</p> <ul style="list-style-type: none"> <li>Reg 6 GN704 which requires and describes the separation, containment and management of “clean” and “dirty” water.</li> <li>Reg 7 GN704 which requires the protection of water resources.</li> <li>S 22(2)(e) NWA which requires that seepage and run-off are returned to the water resource.</li> </ul>	LoM	C	<p>AfriSam proactively developed and implements a Stormwater Management Plan that is aligned to the requirements of GNR704. The Stormwater Management Plan reduces the impact to the environment and promotes the reuse and recycling of dirty water onsite. Therefore, this condition is considered compliant.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Stormwater Management Plan, compiled by M2ENCO, September 201</li> </ul>	Y	None	N		
2.	Water pollution and Surface water run-off:	<p>Development and Planning: Develop and implement a SWMP considering:</p> <ul style="list-style-type: none"> <li>The DWA 2006, Best Practice Guideline G1 Storm Water Management (Section 16.4.5); and</li> <li>Legal requirements (listed above).</li> </ul>		C	<p>AfriSam proactively developed and implements a Stormwater Management Plan that is aligned to the requirements of GNR704. The Stormwater Management Plan reduces the impact to the environment and promotes the reuse and recycling of dirty water onsite. Therefore, this condition is considered compliant.</p>	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<p>Site-specific aspects: In order to support other management measures in this document, the SWMP must include:</p> <ul style="list-style-type: none"> <li>Structures / measures to reduce the flow of “clean” water into or around areas where: <ul style="list-style-type: none"> <li>Topsoil and overburden are being removed;</li> <li>There are exposed surfaces; and</li> <li>Products are stored.</li> </ul> </li> <li>These structures / measures must be: <ul style="list-style-type: none"> <li>Constructed prior to clearing of an area;</li> <li>Constructed prior to the establishment of a dump; and</li> <li>If they do not exist around existing areas / dumps, they must be implemented retrospectively.</li> </ul> </li> <li>Structures / measures to minimise erosion of the topsoil stockpile(s) and overburden dump(s).</li> </ul>		C	<p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Stormwater Management Plan, compiled by M2ENCO, September 201</li> </ul>					
	Monitoring and Management	Physical structures of the SWMP must be inspected and maintained so as to ensure effectiveness and prevent pollution of water resources [Reg 8(d) GN704].	Monthly	C	<p>A berm made from reject aggregate has been erected at the stockpile area to ensure that “dirty” water is not discharged.</p> <p>There is also a storm water control trench to direct clean water away from the plant area.</p> <p>During the audit it was observed that storm water infrastructure is well maintained.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation. <b>Figure 2-5</b> and <b>Figure 2-6</b></li> </ul>	Y	None	N		
		The SWMP must undergo performance checks.	Annually	C	<p>The minutes from the Environmental Planning Meeting held on 20 June 2022 were provided for review.</p> <p>The minutes confirmed that the effectiveness of the SWMP is reviewed during these meetings.</p> <p><i>Evidence:</i></p>	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					<ul style="list-style-type: none"> <li>Eikenhof Environmental Planning Meeting Minutes, June 2022 September 2022</li> </ul>					
		Any concerns identified must be rectified.	Within a month	C	<p>The minutes from the Environmental Planning Meeting held on 20 June 2022 were provided for review.</p> <p>During the June 2022 meeting the below was discussed:</p> <p><i>"The only outstanding item on the SWMP is the construction of the sediment traps at the stockpile area, which has been completed. The site has created a berm at the edge of the stockpile area to prevent any contaminated water from leaving the site, and to add in filtration."</i></p> <p>Evidence:</p> <ul style="list-style-type: none"> <li>Eikenhof Environmental Planning Meeting Minutes, June 2022 September 2022</li> </ul>	Y	None	N		
		If no concerns are noted, this must be recorded on the SWMP as proof of the review having been undertaken.		C	<p>The minutes from the Environmental Planning Meeting held on 20 June 2022 were provided for review.</p> <p>The minutes confirmed that the effectiveness of the SWMP is reviewed during these meetings.</p> <p>Evidence:</p> <ul style="list-style-type: none"> <li>Eikenhof Environmental Planning Meeting Minutes, June 2022 September 2022</li> </ul>	Y	None	N		
<b>11.3.3 Power / Electricity</b>										
1.	Transformers:	All transformers and / or gensets are to be kept in concrete lined, preferably bunded, areas.		C	<p>The sub-station was observed to be kept in a bunded area, that is concrete lined.</p> <p>Evidence:</p> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-12 - Sub-station bunded area</b></p>	Y	None	N		
		Any hydrocarbon spills are to be cleaned as described in Sec 11.4.1.		N/A	<p>No hydrocarbon spill incidents were reported for the audit period.</p> <p>Evidence:</p>	Y	None	N		

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					<ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>					
2.	Monitoring use:	<p>Record the quantity of electricity used (can use electricity bills) and evaluate the results as follows:</p> <ul style="list-style-type: none"> <li>Compare electricity consumption / use with the production rates, i.e. kW/h used per tons produced;</li> <li>The cause of large fluctuation must be investigated; and</li> <li>Corrective action must be implemented where necessary in order to prevent further unnecessary fluctuations.</li> </ul>	Monthly	C	<p>Annual electricity consumption records were provided for review. Large fluctuations were noted between 2021 and 2022. The cause was not to be as a result in increase in production</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Resource consumption 2021-2022</li> </ul>	Y	None	N		
3.	General	<p>Basic electricity reduction measures must be implemented within the administration offices, such as (this is not an exhaustive list):</p> <ul style="list-style-type: none"> <li>Turn off lights when no one is in the office; and</li> <li>Ensure all monitors (computer screens) are switched off / go into sleep mode at night.</li> </ul>		C	<p>It was reported that these electricity reduction are in place.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
<b>11.3.4 Administration:</b>										
1.	Legislation	<p>Eikenhof will comply with all relevant sections of the South African environmental legislation and the associated regulations.</p> <p>These include, but are not limited to:</p> <ul style="list-style-type: none"> <li>MPRDA;</li> <li>NWA;</li> <li>ECA;</li> <li>CARA</li> <li>NEMA;</li> <li>NEM:AQA;</li> <li>NEM:WA; and</li> <li>NEM:BA.</li> <li>Gauteng Provincial ordinances.</li> <li>City of Johannesburg Municipality By-laws.</li> </ul>		N/A	Noted. This audit does not form part of a legal review.	Y	None	N		
2.	Permits / Registrations / Licenses:	<p>Confirm the validity of all permits / registrations / licences which include, but are not limited to:</p> <ul style="list-style-type: none"> <li>Mining Right;</li> <li>Water use licence;</li> <li>Water storage licence (if applicable);</li> <li>Waste water discharge licence (if applicable); and</li> <li>Waste disposal permits.</li> </ul> <p>If any are due to expire during the following year, they will be renewed prior to the expiry date.</p>		C	<p>All permits and licences that were audited were noted to be valid. The CTP however, does not expire.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Continuous Transport Permit – 2014/03/18</li> <li>Water Use Licence</li> <li>Mining Right</li> </ul>	Y	None	N		

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3.	Documentation control:	Generate the information required and update the documentation listed below: Water Balance Diagram.		C	The water balance is updated biannually. An updated copy of the water balance was seen on the office notice board. It was last updated on 23 June 2023.  <i>Evidence:</i> ▪ Onsite observation	Y	None	N		
		Mining Work Plan. - LTP Financial Provision. Aspect and Impact Register. Management Plans: Industry Waste Management Plan; Overburden Management Plan; Storm Water Management Plan; and Alien Vegetation Control/Removal Plan.	Annually	NC	A SWMP was developed in 2016.  There is no overburden management plan in place.  The Integrated Water and Waste Management Plan (IWWMP) that was provided for review was updated on the 6 <sup>th</sup> of December 2021.  The financial provision report provided for review was updated in December 2022 for 2021.  Alien vegetation control is reported in a quarterly Alien Vegetation Control and Concurrent Rehabilitation Progress Report.  The LTP has been generated and was due for review in 2022.  <i>Evidence:</i> ▪ Long Term Plan 2016 ▪ Stormwater Management Plan, compiled by M2ENCO, September 2016 ▪ Integrated Water and Waste Management Plans (IWWMP) Including the Rehabilitation Strategy and Implementation Programme (RSIP) - 2021 ▪ Financial Provision Report, December 2021 ▪ Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022	Y	An overburden management plan detailing the required information must be developed and reviewed annually.	N	Medium term	YC Mgxeke
		Environmental Performance Auditing.	Biennially.	C	This is the first audit against the 2011 EMPr. It represents the January 2021 – November 2022 period.  Audit were previously undertaken against the 2001 approved EMPr.  <i>Evidence:</i> ▪ Eikenhof Environmental Compliance Audit, 2020	Y	None	N		
		▪ Environmental Management Programme;	Every 5 yrs.	C	This audit is against the 2011 EMPr.	Y	None	N		
		▪ Social and Labour Plan;		C	The Social and Labour Plan (SLP) is in place.  <i>Evidence:</i> ▪ Social and Labour Plan, 2018-2022	Y	None	N		
		▪ Closure plan	5 years prior to closure.	C	A closure plan has been developed.  <i>Evidence:</i>	Y	None	N		





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					<ul style="list-style-type: none"> <li>Final rehabilitation, decommissioning and mine closure plan, compiled by Shangoni Management Services (Pty) Ltd, November 2016</li> </ul>					
		<ul style="list-style-type: none"> <li>Results from all monitoring campaigns.</li> </ul>		C	<p>The reports from all the monitoring campaigns, namely dust, surface and groundwater and noise, were provided for review and are up to date.</p>	Y	None	N		
4.	Contracts:	All new contracts between the mine and sub-contractors will stipulate the environmental commitments that must be adhered to while working on the mine. Any specific environmental measures required to mitigate any sub-contractor specific environmental impact must be included in the individual contracts.		C	<p>A generic commercial contract is provided to all sub-contractors.</p> <p>The contract stipulates that contractors must comply with AfriSam's rules and management procedures, as well as the relevant legislation.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	n		
5.	Sub-contractors	All sub-contractor who carry out work at the mine will be required to undergo induction training. Attendance must be recorded and an attendance register must be signed.		C	<p>It was reported that all contractors attend an induction prior to commencing work on the site. Contractors sign an attendance register as proof of attendance.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Contractor induction and training register</li> </ul>	Y	None	N		
6.	Complaints register:	<p>All complaints received by the mining operation must be recorded in a complaints register. The information recorded must include, but is not limited to:</p> <ul style="list-style-type: none"> <li>Date of complaint;</li> <li>Name and contact details of complainant;</li> <li>Nature / Description of the complaint;</li> <li>Name of the person who recorded the complaint;</li> <li>A description as to how the complaint will be addressed;</li> <li>A proposed target date for rectifying the complaint;</li> <li>Date when corrective action was implemented (if necessary);</li> <li>Confirmation / Explanation of feedback provided to the complainant;</li> <li>A list of any monitoring or follow-up work that is required, including target dates;</li> <li>The task must be signed off by a responsible person.</li> </ul>		C	<p>A complaints register is kept at the entrance to the main offices. However, no complaints requiring corrective action were received during the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
<b>11.3.5 Maintenance / Workshop: Vehicle and Plant Maintenance</b>										
1.	Vehicles:	<p>Prior to the start of a shift, undertake vehicle checks (to minimise pollution potential) which includes but is not limited to:</p> <ul style="list-style-type: none"> <li>Inspect the ground under the vehicle to determine if there are any hydrocarbon</li> </ul>		C	<p>A pre-use checklist confirming whether vehicles are in good working condition is completed before use.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Pre-use inspection form</li> </ul>	Y	None	N		



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		leaks. If so, the leak must be stopped immediately • Observe gaseous emissions at high revs. If excessive, vehicle must be serviced immediately.								
		All vehicles, earth moving equipment and the plant to be maintained in accordance with the maintenance schedule.		C	A maintenance schedule is available for all vehicles and equipment and preventative maintenance undertaken. <i>Evidence:</i> ▪ Preventative Maintenance Schedule ▪ Service Sheets	Y	None	N		
		Keep maintenance records for all vehicles.		C	A maintenance schedule is available for all vehicles and equipment and preventative maintenance undertaken. <i>Evidence:</i> ▪ Preventative Maintenance Schedule ▪ Service Sheets	Y	None	N		
2.	Servicing	Vehicle maintenance to be conducted within the designated concreted area. ▪ If this area is not under cover there must be effective storm water control that leads to an oil separation system / trap; and ▪ If servicing has to take place outside of the area (i.e. within the pit), it must be undertaken over a drip tray.		N/A	Vehicle washing and service bays on site are closed and vehicle maintenance on site is no longer permitted. <i>Evidence:</i> ▪ Verbal confirmation ▪ Onsite observation	N	OFI: The EMPr must be amended to remove this condition as vehicles maintenance is no longer permitted on site.	Y		
3.	Oil trap	Dirty water from the service area and wash bay (containing oils and greases) must be channelled into an oil trap.		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed and vehicle maintenance on site is no longer permitted. <i>Evidence:</i> ▪ Verbal confirmation ▪ Onsite observation	N	OFI: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		
		All drains leading to the oil trap must be inspected.		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed. <i>Evidence:</i> ▪ Verbal confirmation ▪ Onsite observation	N	OFI: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		
		If the drains contain debris this must be cleaned out.		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed. Where required, AfriSam makes use of drip trays <i>Evidence:</i> ▪ Verbal confirmation ▪ Onsite observation	N	OFI: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		




EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		Drains should be cleaned routinely.		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed. <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>Onsite observation</li></ul>	N	OFl: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		
		The oil trap will be maintained as follows: The level of sludge in the first chamber will be monitored.		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed. <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>Onsite observation</li></ul>	N	OFl: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		
		When the capacity reaches a pre-determined level, the responsible person must ensure that the tank is emptied and the contents disposed as hazardous waste.		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed. <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>Onsite observation</li></ul>	N	OFl: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		
		Water from the last chamber of the oil separator system will be tested to prove effectiveness.		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed. <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>Onsite observation</li></ul>	N	OFl: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		
		If the results indicate the system is not effective (elevated oil levels in the last chamber), all chambers will be emptied (contents disposed as hazardous waste) and cleaned		N/A	Vehicle washing and service bays on site, including the oil separator system, were closed. <i>Evidence:</i> <ul style="list-style-type: none"><li>Verbal confirmation</li><li>Onsite observation</li></ul>	N	OFl: The EMPr must be amended to remove this condition as activities requiring an oil trap no longer take place.	Y		
		All lubricants to be stored in a bunded area that has the capacity to contain 110% of the volume stored as per SANS 10089-1.		C	Lubricants were observed to be stored correctly in a bunded area. <i>Evidence:</i> <ul style="list-style-type: none"><li>Onsite observation:</li></ul>	Y	None	N		

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					 <p><b>Figure 2-13 - Lubricant storage in bunded area</b></p>					
		Any hydrocarbon spills to be cleaned up as described in Sec 11.4.		N/A	<p>No hydrocarbon spill incidents were reported for the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
4.	Waste	All waste to be stored and disposed as described in Section 11.3.8.		NC	<p>Waste storage facilities in the form of bins in strategic locations were observed throughout the site. However, overflowing waste skips were observed at the time of the audit.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	It is recommended that all waste is disposed of before the waste in/skips overflow. A record of collection by a registered waste management facility must also be kept.	N	Short term	YC MgxeKwa
Haul Roads Maintenance										
1.	General:	<p>All haul roads in use will be maintained in good condition. Haul road maintenance will ensure (but is not limited to):</p> <ul style="list-style-type: none"> <li>Free drainage while minimising the potential for erosion.</li> <li>Reduce the build-up of fines.</li> <li>No potholes.</li> </ul>	LoM	C	<p>All haul roads were observed to be well kept as per the requirements under condition 11.3.5.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
11.3.6 Diesel										
1.	Water and Soil pollution (hydrocarbon spills)	<p>The following management measures must be implemented to reduce the potential for fuel spillages.</p> <p>Storage</p> <p>Ensure that the diesel tanks are located within a bunded area that can contain 110% of the capacity of the tank as per SANS 10089-1.</p>	LoM	N/A	<p>Diesel tanks are stored underground and this condition is thus not applicable.</p> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>					

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					 <p><b>Figure 2-14 - Diesel tank storage and refuelling points</b></p>					
		Monitoring volumes: Take dipstick readings to determine volume of fuel in the tank.	Daily	C	<p>Diesel tank volumes are measured daily and captured in a comparison spreadsheet.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Dip Stick Readings</li> </ul>	Y	None	N		
		Results will be compared with the previous day's readings and volumes of fuel pumped out (actual use).		C	<p>Diesel tank volumes are measured daily and captured in a comparison spreadsheet.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Dip Stick Readings</li> </ul>	Y	None	N		
		If discrepancies are identified, the structural integrity of the tank must be tested (i.e. vacusonic testing).	Within a week	C	<p>Diesel tank volumes are measured daily and captured in a comparison spreadsheet. No concerns regarding the structural integrity was identified.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Dip Stick Readings</li> </ul>	Y	None	N		
		If the tank is proved to be leaking, clean up procedures must be implemented, as described in Section 11.4.2.	Within a week	N/A	<p>No diesel spill incidents were reported for the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
		<p>Dispensing of fuels:</p> <ul style="list-style-type: none"> <li>A responsible person must be present when fuel is being delivered. Any spillages that occur during this time must be cleaned up immediately (as described in Section 11.4.1).</li> </ul>	During delivery	C	<p>Fuel was being delivered at the time of the audit. A responsible person was observed to be present during the process. No hydrocarbon spill incidents were reported for the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>	Y	None	N		


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					 <p><b>Figure 2-15 - Staff presence during diesel delivery</b></p>					
		Inspections: <ul style="list-style-type: none"> <li>The structural integrity of the bund must be inspected and any cracks must be repaired immediately.</li> </ul>	Monthly	C	No major cracks requiring corrective action were seen on the bunds observed during the site inspection. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
		<ul style="list-style-type: none"> <li>Ensure the outlet valve of the bund is closed at all times.</li> </ul>		C	The outlet valve was observed to be closed during the site inspection. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-16 - Locked bund valve</b></p>	Y	None	N		
		<ul style="list-style-type: none"> <li>The bunded area must be kept clear of excessive fines and vegetation.</li> </ul>		C	The bunded area was observed to be clear of excessive fines and vegetation. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
		The refuelling area must be visually inspected:	Weekly	C	The refuelling area was observed to be kept in good condition.	Y	None	N		
		All contaminated soils associated with spills will be dug up.		N/A	No spills or contaminated soils were reported for the audit period. <i>Evidence:</i>	Y	None	N		



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					<ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>					
		Contaminated soils to be disposed as hazardous waste (see Section 11.3.8).		N/A	<p>Noted. No spills or contaminated soils were reported for the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
		<p>Spills / Clean up:</p> <ul style="list-style-type: none"> <li>Environmentally acceptable absorbent must be available at locations where potential spills may occur.</li> </ul>		NC	<p>A spill kit was seen at the workshop, however it was not sealed and did not have all the required material.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Onsite observation:</li> </ul>  <p><b>Figure 2-17 - Spill kit contents</b></p>	Y	It is recommended that spill kits are inspected regularly to ensure that all the required material is available.	N	Short term	YC Mgxeke
		<ul style="list-style-type: none"> <li>All spills to be cleaned up as described in Section 11.4.1.</li> </ul>		N/A	<p>No spills were reported for the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
		<p>Training:</p> <p>All staff members who dispense fuel must be trained to ensure that they are know:</p> <ul style="list-style-type: none"> <li>How to dispense fuel without spilling.</li> <li>How to clean up a spill (as described in Section 11.4.1).</li> </ul>		C	<p>It was reported that all relevant personnel are trained accordingly through toolbox talks.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
<b>11.3.7 Sanitation Facilities Goals and Objectives</b>										
1.	Groundwater & Odours	A responsible person must be appointed to check the level of sewage in the septic tank	Monthly	NC	There was no evidence of an appointment being made for a person to check the septic tank and there was also no evidence available that the septic tank has been checked.	Y	A responsible person must be appointed to check the level of sewage in the septic tank	N	Short term	YC Mgxeke
		<ul style="list-style-type: none"> <li>If the tank is more than 75% full, the responsible person must ensure that it is emptied.</li> </ul>		NC	A record of sewage levels was not available and it could not be determined at what level it is emptied.	Y	The sewage level must be checked and records kept	N	Short term	YC Mgxeke
		Any strong odours to be report to the responsible person.		N/A	<p>No odour complaints were reported for the audit period.</p> <p><i>Evidence:</i></p>	Y	None	N		

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					<ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>					
		The cause of the odour to be identified and the necessary repairs to be undertaken.		N/A	No odour complaints were reported for the audit period. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
<b>11.3.8 Waste</b>										
1.	Industry Waste Management Plan	Develop an Industry Waste Management Plan (IWMP) in order to be pre-emptive of S 28(1) or (2) NEM:WA.	Within 6 months	C	An IWWMP has been developed and it is reviewed annually. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Integrated Water and Waste Management Plans (IWWMP) Including the Rehabilitation Strategy and Implementation Programme (RSIP) – 2021</li> </ul>	Y	None	N		
		The content of the plan must comply with the specifications of the Minister or MEC [S 30(1) NEM:WA], but can take guidance from S 30(2) NEM:WA.		C	The IWWMP mostly complies with S30(2) of NEM:WA. <i>Evidence:</i> <ul style="list-style-type: none"> <li>Integrated Water and Waste Management Plans (IWWMP) Including the Rehabilitation Strategy and Implementation Programme (RSIP) – 2021</li> </ul>	Y	None	N		
		Recommended content of the IWMP [based on S 30(2) NEM:WA]: <ul style="list-style-type: none"> <li>A waste inventory, including:               <ul style="list-style-type: none"> <li>A list of all waste products generated by the mine;</li> <li>Classification of the waste into general or hazardous;</li> <li>Indicate what waste can be recycled;</li> <li>The on-site temporary storage facilities (i.e. type and colour coding of bins);</li> <li>Specification of temporary storage facilities (ensure compliance with [S 21 NEM:WA]);</li> <li>Location of on-site disposal facilities / storage receptacles / areas;</li> <li>Timeframes for storage facility inspection and removal (based on volumes of waste generated and capacity of storage facilities); and</li> <li>The off-site method of disposal, including contact details of the company contracted to remove the waste.</li> </ul> </li> </ul>		C	The IWWMP provides a list of all anticipated waste streams and their classification, and details the waste collection points as well as the off-site methods of disposal. It also indicates that where possible, waste is to be recycled <i>Evidence:</i> <ul style="list-style-type: none"> <li>Integrated Water and Waste Management Plans (IWWMP) Including the Rehabilitation Strategy and Implementation Programme (RSIP) – 2021</li> </ul>	Y	None	N		
		<ul style="list-style-type: none"> <li>Amount of waste that is generated [S 30(2)(a)];</li> <li>Measure to prevent pollution or ecological degradation [S 30(2)(b)];</li> </ul>		C	Monthly sustainability monitoring and reporting is undertaken for Eikenhof and waste is included therein.	Y	None	N		


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		<ul style="list-style-type: none"> <li>Targets for waste minimisation through waste reduction, re-use, recycling and recovery [S 30(2)(c)];</li> <li>Measures or programmes to minimise the generation of waste and the final disposal of waste [S 30(2)(d)];</li> <li>Measures of actions taken to manage waste [S 30(2)(e)];</li> <li>Phasing out of the use of specified substances [S 30(2)(f)];</li> <li>Opportunities for the reduction of waste generation through changes to production processes [S 30(2)(g)];</li> <li>Period that is required for implementation of the plan [S 30(2)(j)];</li> <li>Methods for monitoring and reporting [S 30(2)(k)]; and</li> <li>Any other matter that may be necessary to give effect to the objectives of NEM:WA [S 30(2)(l)].</li> </ul>			<i>Evidence:</i> <ul style="list-style-type: none"> <li>Eikenhof Monthly Sustainability Reporting</li> </ul>					
		Implement the IWMP.	As per IWMP	C	<p>The requirements of the IWWMP have been implemented accordingly.</p> <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> <li>Integrated Water and Waste Management Plans (IWWMP) Including the Rehabilitation Strategy and Implementation Programme (RSIP) – 2021</li> </ul>	Y	None	N		
2.	Removal and Disposal of Waste	<p>The mine must ensure that they receive proof of the following:</p> <ul style="list-style-type: none"> <li>The company contracted to collect and dispose of waste is authorised to do so [S 24 NEM:WA]</li> <li>That the transporters of waste have registered with the “relevant waste management officer” [S 25(1)(a) NEM:WA].</li> <li>Disposal and / or recycling of all waste removed from their premises (with the exception of waste being returned to the suppliers).</li> <li>Authorisation (license) of the disposal and / or recycling facility [if the activity is listed in GN718 as per S 20(b) NEM:WA].</li> <li>If the sub-contractor / disposal company cannot produce proof of the above, contracts with this company must be terminated.</li> </ul>		C	<p>Eikenhof provided proof that the waste collectors and disposal facilities are authorised to do so in terms of the NEM:WA.</p> <i>Evidence:</i> <ul style="list-style-type: none"> <li>Clean Dot Waste Transported Registration</li> <li>EnviroServ Transporter Compliance Certification</li> </ul>	Y	None	N		
3.	Water and soil pollution (hydrocarbon spills)	Waste generated on-site will be stored and disposed of as outlined in Table 11.1 (a summary from the IWMP).	Daily	C	<p>All waste disposal/storage was observed to be conducted as required in table 11.1.</p> <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		

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4.	Visual	Ensure that any waste that can be re-used or recycled is.	LoM	C	Opportunities to re-use and recycle waste are identified and taken where possible. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
5.	Reuse / Recycle	Ensure that any waste that can be re-used or recycled is.	LoM	C	Opportunities to re-use and recycle waste are identified and taken where possible. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
<b>11.4 ENVIRONMENTAL MANAGEMENT ASSOCIATED WITH THE EMERGENCY INCIDENTS AND / OR ACCIDENTS</b>										
<b>Overall management</b>										
	Emergency incidents	Assembly points must be: ▪ Clearly labelled. ▪ Documented. ▪ Communicated to all employees	LoM  LoM  Annually	NC	The labelling at the assembly points was not clear as the signage had faded.  The assembly points were also not documented and proof of communication with employees was not provided. <i>Evidence:</i> ▪ Onsite observation: 	Y	The assembly points must be clearly labelled and signage replaced when required.	N	Short term	YC Mgxeke
		Emergency numbers and to be displayed at assembly points.	LoM	NC	Although there are emergency numbers displayed in different places at the site, none were observed at the assembly point during the site inspection. <i>Evidence:</i> ▪ Onsite observation	Y	Emergency numbers must be displayed up at the assembly points.	N	Short term	YC Mgxeke
		Conduct emergency drills / mock exercises of emergency incidents to practice and perfect response. This will minimise the safety and environment impacts of real emergency.	Annually	C	According to the QPM minutes, 1 emergency drill had been conducted in 2022 at the time of the audit. <i>Evidence:</i> ▪ Eikenhof Quarry Planning Meeting September 2022 ▪ Verbal confirmation	Y	OFl: A record of emergency drills in the form of a report and/or attendance register must be kept for review	N		



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		If this identified deficiencies in the management actions, the relevant procedures will be amended.	Within a week	N/A	No amendment of the relevant procedures was required for the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		Report any emergency incidents to the relevant government / municipal departments within 14 days of the incident.	When an incident occurs	N/A	No emergency incidents were reported for the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		General environmental incidents reported to environmental authorities, as required in S 30 NEMA (see Section 11.4.4, with full legal text provided in Section 16.5).		N/A	No emergency incidents were reported for the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		Water pollution incidents reported to DWA as required in S 20 NWA (see full legal text provided in Section 11.4.5)		N/A	No water pollution incidents were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
11.4.1 Hydrocarbon Spills										
1.	Clean up steps	The source of the spill must be stopped and the spill contained.	In the event of a spill	N/A	No spills were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
2.		All contaminated material must be lifted and stored in containers that do not leak (the type of container will be determine by the volume of contaminated material to be stored).		N/A	No spills were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
3.		Dispose of contaminated material by one of the following methods:  Transportation to a bioremediation site. OR  Disposed as hazardous waste:		N/A	No spills were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		Keep a record of the collection and ensure the following documentation is obtained  (also see Section 11.3; 2. Removal and Disposal of Waste):  - The bioremediation facility provides proof of acceptance and treatment.  - The hazardous waste disposal company provides proof of disposal at a suitably licensed facility.		N/A	No spills were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
5.	Reporting:	Report the incident as per S 30 NEMA (see Section 11.4.4) or S 20 NWA (see		N/A	No spills were reported during the audit period.	Y	None	N		

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		Section 11.4.5) if the incident resulted in pollution of water resources.			<i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>					
<b>11.4.2 Bursting or Leaking of the Diesel Tank</b>										
1.	Clean up steps	The source of the spill must be stopped and the spill contained.	In the event of a spill	N/A	No spills from the diesel tanks were reported during the audit period.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
2.		Organise for the remaining fuel in the tank to be pumped out.		N/A	No spills from the diesel tanks were reported during the audit period.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
3.		If the maintenance of the tank is responsibility of the supplier, contact the emergency number they provide and facilitate the clean-up operation.	Immediately	N/A	No spills from the diesel tanks were reported during the audit period.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
4.		If the maintenance of the tank is responsibility of the mine, contact a reputable company to undertake the clean-up operation.	Immediately	N/A	No spills from the diesel tanks were reported during the audit period.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
5.	Reporting	Report the incident as per S 30 NEMA (see Section 11.4.4) or S 20 NWA (see Section 11.4.5) if the incident resulted in pollution of water resources.	Within 14 days	N/A	No spills from the diesel tanks were reported during the audit period.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
<b>11.4.3 Fire</b>										
1.	General	All employees will undergo fire drill training.		C	According to the QPM minutes, 1 emergency drill had been conducted in 2022 at the time of the audit.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Eikenhof Quarry Planning Meeting September 2022</li> <li>Verbal confirmation</li> </ul>	Y	OFI:  A record of emergency drills in the form of a report and/or attendance register must be kept for review	N		
2.	Veld fires	The potential for the spread of veld fires will be reduced by: <ul style="list-style-type: none"> <li>Burning fire breaks around the perimeter of the mining area.</li> <li>Cutting vegetation from around buildings.</li> <li>Removing vegetation from the explosive magazine area.</li> </ul>		C	No fire incidents within the mining right area were reported during the audit period.  No overgrown vegetation was observed around buildings during the site investigation.  There is no magazine area at the site.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> <li>Verbal confirmation</li> </ul>	Y	OFI:  It is recommended that the EMP be amended to remove all references to magazines as these are not applicable to the site.  <i>Completion timeframe:</i> Long term			

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		All veld fires must be reported to the emergency services.	Immediately	N/A	No fire incidents were reported within the mining right area during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
3.	Building fires	Fire extinguishers to be available in all buildings:	LoM	C	Several fire extinguishers were observed at different points throughout the site. <i>Evidence:</i> ▪ Onsite observation: 	Y	None	N		
		Fire extinguishers to be checked by a qualified person.	Annually	C	The fire extinguishers are serviced monthly and signed. <i>Evidence:</i> ▪ Onsite observation	Y	None	N		
		If the fire cannot be controlled by the person who discovers the fire, it will be reported to the emergency services.		N/A	There were no fires reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
<b>11.4.4 Incident reporting</b>										
		In the event of an incident as defined in the NEMA19, the following steps must be taken (as per S 30 NEMA):  Step 1: S 30(3) "The responsible person <sup>20</sup> or, where the incident occurred in the course of that person's employment, his or her employer must forthwith after knowledge of the incident, report through the most effective means reasonably available —  a) the nature of the incident;  b) any risks posed by the incident to public health, safety and property;		N/A	No environmental incidents were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<p>c) the toxicity of substances or by-products released by the incident; and</p> <p>d) any steps that should be taken in order to avoid or minimise the effects of the incident on public health and the environment to —</p> <p>i) the Director General;</p> <p>ii) the South African Police Services and the relevant fire prevention service;</p> <p>iii) the relevant provincial head of department or municipality; and</p> <p>iv) all persons whose health may be affected by the incident.”</p>								
		<p>Step 2: S 30(4) “The responsible person or, where the incident occurred in the course of that person’s employment, his or her employer, must, as soon as reasonably practicable after knowledge of the incident —</p> <p>a) take all reasonable measures to contain and minimise the effects of the incident, including its effects on the environment and any risks posed by the incident to the health, safety and property of persons;</p> <p>b) undertake clean-up procedures;</p> <p>c) remedy the effects of the incident; and</p> <p>d) assess the immediate and long-term effects of the incident on the environment and public health.”</p>		N/A	<p>No environmental incidents were reported during the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		
		<p>Step 3: S 30(5) “The responsible person or, where the incident occurred in the course of that person’s employment, his or her employer, must, within 14 days of the incident, report to the Director General, provincial head of department and municipality such information as is available to enable an initial evaluation of the incident, including—</p> <p>a) the nature of the incident;</p> <p>b) the substances involved and an estimation of the quantity released and their possible acute effect on persons and the environment and data needed to assess these effects;</p> <p>c) initial measures taken to minimise impacts;</p> <p>d) causes of the incident, whether direct or indirect, including equipment,</p>		N/A	<p>No environmental incidents were reported during the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		technology, system, or management failure; and  e) measures taken and to be taken to avoid a recurrence of such incident.								
<b>11.4.5 Reporting Water Pollution Incident in terms of the NWA</b>										
		In the event of an incident as defined in the NWA21, the following steps must be taken (as per S 20 NWA and Reg 2 of GN704).  Step 1: S 20(3) "The responsible person <sup>22</sup> , any other person involved in the incident or any other person with knowledge of the incident must, as soon as reasonably practicable after obtaining knowledge of the incident, report to a) the Department <sup>23</sup> ; b) the South African Police Service or the relevant fire department; or c) the relevant catchment management agency".		N/A	No water pollution incidents were reported during the audit period.  <i>Evidence:</i> ■ Verbal confirmation	Y	None	N		
		Step 2: The Department must be notified [Reg 2(c) of GN704] "by the fastest possible means of any emergency incident or potential emergency incident involving a water resource at or incidental to the operation of a mine or the conducting of any activity, furnishing information regarding- i. the date and time of the incident; ii. a description of the incident; iii. the source of the pollution or potential pollution; iv. the impact or potential impact on the water resource and the relevant water users; v. remedial action taken or to be taken by the person in control of the mine or activity to remedy the effects of the incident".		N/A	No water pollution incidents were reported during the audit period.  <i>Evidence:</i> ■ Verbal confirmation	Y	None	N		
		Step 3: S 20(4) "A responsible person must - a) take all reasonable measures to contain and minimise the effects of the incident; b) undertake clean-up procedures; c) remedy the effects of the incident; and d) take such measures as the catchment management agency may either verbally		N/A	No water pollution incidents were reported during the audit period.  <i>Evidence:</i> ■ Verbal confirmation	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		or in writing direct within the time specified by such institution".								
		Step 4: S 20(5) "A verbal directive must be confirmed in writing within 14 days, failing which it will be deemed to have been withdrawn".		N/A	No water pollution incidents were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		Step 5: Reg 2(d) of GN704] "within 14 days after the date of an incident" the mine must "inform the Department in writing of measures taken to correct and prevent a recurrence of such incident."		N/A	No water pollution incidents were reported during the audit period. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
<b>11.5 ENVIRONMENTAL MANAGEMENT FOR CONCURRENT REHABILITATION AND ALIEN VEGETATION REMOVAL</b>										
		Develop and implement a Concurrent Rehabilitation Plan (CRP) that must (at a minimum) include the following information:  Map of: ▪ Areas already rehabilitated. ▪ Areas proposed for rehabilitation. ▪ Rehabilitation activities proposed, such as: <ul style="list-style-type: none"><li>Slope preparation.</li><li>Contour intervals and depths.</li><li>Species to be used.</li><li>Time frames for activities.</li><li>Monitoring of re-vegetated areas (including map and time frames).</li></ul>	June 2011	C	The Rehabilitation Progress Report outlines the ongoing rehabilitation measures being undertaken.  Monitoring is undertaken on a quarterly basis to determine further rehabilitation measures and the success of existing measures.  A copy of the Alien Vegetation Control and Concurrent Rehabilitation Progress Report was provided which outlines the ongoing rehabilitation measures being undertaken. However, the report states that no concurrent rehabilitation was undertaken for the reporting period. The work is focussed on alien species identification and control.  <i>Evidence:</i> ▪ Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022 ▪ Final rehabilitation, decommissioning and mine closure plan, compiled ▪ by Shangani Management Services (Pty) Ltd, November 2016	Y	None	N		
		Report back on success of rehabilitation activities implemented – "Lessons Learned".		C	The Rehabilitation Progress Report outlines the ongoing rehabilitation measures being undertaken.  Monitoring is undertaken on a quarterly basis to determine further rehabilitation measures and the success of existing measures.  A copy of the Alien Vegetation Control and Concurrent Rehabilitation Progress Report was provided which outlines the ongoing rehabilitation measures being undertaken. However, the report states that no concurrent rehabilitation was undertaken for the reporting period. The work is focussed on alien species identification and control.  <i>Evidence:</i> ▪ Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022 ▪ Final rehabilitation, decommissioning and mine closure plan, compiled	Y	None	N		



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
					<ul style="list-style-type: none"> <li>by Shangoni Management Services (Pty) Ltd, November 2016</li> </ul>					
		<ul style="list-style-type: none"> <li>Alien vegetation removal – refer to the Alien Vegetation Control Programme (AVCP).</li> <li>Implement an Alien Vegetation Control Programme (AVCP) available at the quarry. The mine must keep a record of what has been done</li> </ul>	LoM	C	Alien vegetation control is reported in a quarterly Alien Vegetation Control and Concurrent Rehabilitation Progress Report. It reports on the alien species control undertaken to date, as well as the activities planned for the next quarter.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022</li> </ul>	Y	None	N		
		Update maps in the AVCP	Before end of 2011	C	Maps relating to alien vegetation control are included in the progress reports and are updated quarterly.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Alien Vegetation Control and Concurrent Rehab Jul-Sep 2022</li> </ul>	Y	None	N		
<b>11.6 ENVIRONMENTAL MANAGEMENT ASSOCIATED WITH THE SOCIO-ECONOMIC ASPECTS</b>										
1.	General	Implement the Social and Labour Plan		C	The Social and Labour Plan (SLP) is in place and was due for review in 2022 for the period 2023-2027.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Social and Labour Plan, 2018-2022</li> </ul>	Y	None	N		
		Maintain complaints register		C	A complaints register is kept at the entrance to the main offices.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Onsite observation</li> </ul>	Y	None	N		
2.	Jobs	First preference should be given to members of the community around the mining area, provided the required skills are available		C	It is reported that preference is given to members of the surrounding community.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	OFI: It is recommended that a record of where employees reside be kept.	N		
3.	Mine Procurement	First preference should be given to service providers within Johannesburg Metropolitan Municipality, provided the required skills or services are available and a suitable service is provided.		C	It was reported that preference is given to service providers within the Johannesburg Metropolitan Municipality depending on company needs.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Verbal confirmation</li> </ul>	Y	OFI: It is recommended that a record of where service providers are based is kept.	N		
4.	Social Responsibility	Eikenhof Quarry support LED projects that will focus on revival and upgrading of Bekkersdal Agriculture Centre as a poverty alleviation initiative in the poverty stricken area of Bekkersdal.		C	Noted. This is detailed in the SLP.  <i>Evidence:</i> <ul style="list-style-type: none"> <li>Social and Labour Plan, 2018-2022</li> </ul>	Y	None	N		
<b>11.7 ENVIRONMENTAL MANAGEMENT DURING DECOMMISSIONING AND CLOSURE</b>										
<b>11.7.1 Decommissioning</b>										
1.	Planning	The mine will start to address closure requirements in details, five years prior to		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.	Y	None	N		



EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		the predicted time of closure of the mine (based on availability of reserves). These will be detailed in a closure plan that will contain:  A description of the closure objectives and how these relate to the mine operation and its environmental and social setting;	Five years prior to closure.		<i>Evidence:</i> ▪ Verbal confirmation					
		A description of the closure objectives and how these relate to the mine operation and its environmental and social setting		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		A summary of the current regulatory requirements and conditions for closure		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		A summary of studies that address the details of any potential residual or latent impacts resulting from the operation such as groundwater		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		A summary of the progressive rehabilitation already undertaken by the mine		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		A description of the methods to decommission each mining component and the mitigation or management strategy proposed to avoid, minimize and manage residual or latent impacts		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		Details of any long term management and maintenance expected		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		Details of the financial provision for monitoring, maintenance and post closure management		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		A plan describing the final land use proposal and arrangement for the site		N/A	The quarry is operational and there are no plans to close the site within the next 5 years.  <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		The feasibility of moving overburden into the pit, considering the cost versus the environmental and socio-economic benefits. If this proposal is still a preferred option, determine (this is not a complete list): - The volume of material that will be required; - The source of this material; - The management measures required to move this material; and - Rehabilitation of the area from which the material is taken		N/A	The quarry is operational and there are no plans to close the site within the next 5 years. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		A record of interested and affected persons consulted and how the views raised will be considered when finalising closure plans; and		N/A	The quarry is operational and there are no plans to close the site within the next 5 years. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
		Technical appendices, if any.		N/A	The quarry is operational and there are no plans to close the site within the next 5 years. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
2.	Notification	In accordance with S 33 NEM:AQA, “the owner of that mine must promptly notify the Minister <sup>24</sup> in writing — of the likely cessation of those mining operations; and of any plans that are in place or in contemplation for— i) the rehabilitation of the area where the mining operations were conducted after mining operations have stopped; and the prevention of pollution of the atmosphere by dust after those operations have stopped.”	Five years prior to closure.	N/A	The quarry is operational and there are no plans to close the site within the next 5 years. <i>Evidence:</i> ▪ Verbal confirmation	Y	None	N		
<b>11.8 ENVIRONMENTAL MONITORING AND EMP PERFORMANCE ASSESSMENTS</b>										
<b>General Requirements:</b>										
		For each monitoring campaign implemented the service providers must provide a monitoring procedure which includes: ▪ Provide a reason for using the standards or guidelines against which they compare the results. This is particularly important for water sample		C	The monitoring reports that were reviewed presented all the required information needed to ensure good environmental performance and compliance to legal requirements. <i>Evidence:</i> ▪ 41103775 AfriSam National Acoustic Monitoring Eikenhof Quarry_July 2022	Y	None	N		

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		<p>analysis as the guidelines used as indicators will vary depending on a number of site-specific factors;</p> <ul style="list-style-type: none"> <li>Details concerning how the results will be presented. The presentation of the results must be in a manner that easily indicates when guidelines have been exceeded. The results must be presented in such a way that trends can be established and monitored. Historic results should be presented at the same time as presenting new results;</li> <li>When guidelines are exceeded details concerning how this exceedance will be highlighted and the probable cause for the exceedance; and</li> <li>Present guidance regarding what action to be taken in the event of the appropriate guidelines and / or standards being exceeded.</li> <li>Ensure monitoring service provides the following information about the monitoring activities: <ul style="list-style-type: none"> <li>Method of monitoring;</li> <li>Location of monitoring points (GPS) and provided on a plan.</li> <li>Frequency of monitoring;</li> <li>Minimum list of parameters to monitor for;</li> <li>Analysis of results (what guidelines and / or standards to use as performance indicators); and</li> <li>Storage and use of results.</li> </ul> </li> </ul>			<ul style="list-style-type: none"> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>					
		<p>In the event of a major breach of environmental legislation and permit conditions as determined by the monitoring results, a report will be submitted to the relevant authorities in writing within 14 days:</p> <ul style="list-style-type: none"> <li>details of the incident;</li> <li>corrective action plan; and</li> <li>timeframe/schedule for implementation of corrective action.</li> </ul>		N/A	During the audit period no major breach of environmental legislation or permit conditions were identified.	Y	None	N		
<b>11.8.1 Air Quality Monitoring (Dust Fallout / Dust Deposition)</b>										
		Undertake air quality monitoring in accordance with the Monitoring Protocol – See S 11.8.1	Monthly	C	<p>Dust monitoring is undertaken monthly in accordance with S 11.8.1. No exceedances were noted for the audit period.</p> <p><i>Evidence:</i></p> <ul style="list-style-type: none"> <li>AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022</li> </ul>	Y	None	N		
<b>11.8.2 Noise Monitoring</b>										

EMPR Ref:	Activity	Commitment	Timeframe	Compliance	Finding	Is the Commitment relevant to the Site? (Y/N)	Recommendations	Amendment Required (Y/N)	CLOSE OUT TIMEFRAME	RESPONSIBILITY (INCLUDING CLOSE-OUT DATE)
		Undertake noise monitoring in accordance with the Monitoring Protocol – See S 11.8.2	Once every 6 months. Then every 2 years	C	Noise monitoring is undertaken in accordance with S 11.8.2. No exceedances were noted for the audit period. Where exceedances were identified, these were attributed to vehicle movement along the R82 main road, people talking and birds/insects  <i>Evidence:</i> ▪ 41103775 AfriSam National Acoustic Monitoring Eikenhof Quarry_July 2022	Y	None	N		
<b>11.8.3 Surface Water Quality Monitoring</b>										
		Undertake Surface Water quality monitoring in accordance with the Monitoring Protocol – See S 11.8.3	Every 6 months	C	Surface Water quality monitoring is undertaken monthly in accordance with S 11.8.3.  <i>Evidence:</i> ▪ AfriSam Eikenhof Env. Monitoring Reports January 2022 – October 2022	Y	None	N		
<b>11.8.4 Blasting Vibrations and Noise Monitoring</b>										
		Undertake Blasting Vibrations and Noise monitoring in accordance with the Monitoring Protocol – See S 11.8.4		C	Blasting monitoring is undertaken for all blasting events and records are maintained. A sample record was provided to the Auditor for the blast undertaken on 10 November 2022.  <i>Evidence:</i> ▪ Blast Return Report, 10/11/2022	Y	None	N		
<b>11.8.5 Consumption Monitoring</b>										
		Water (process and potable water) consumption monitoring must be undertaken in accordance with the Monitoring Protocol – See S 11.8.5		C	Consumption monitoring is undertaken monthly in accordance with S 11.8.5. The annual results were provided for review.  <i>Evidence:</i> ▪ Resource consumption 2021-2022	Y	None	N		
		Electricity consumption monitoring must be undertaken in accordance with the Monitoring Protocol – See S 11.8.5		C	Consumption monitoring is undertaken monthly in accordance with S 11.8.5. The annual results were provided for review.  <i>Evidence:</i> ▪ Resource consumption 2021-2022	Y	None	N		
		Waste generation monitoring must be undertaken in accordance with the Monitoring Protocol – See S 11.8.5		C	Waste generation and disposal volumes are recorded monthly.  <i>Evidence:</i> ▪ Waste Management Recording	Y	None	N		

### **3      PROGRESS AGAINST PREVIOUS AUDIT FINDINGS**

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This is the first compliance audit against the 2011 EMPr. Progress against this audit's findings will be determined during the next audit.

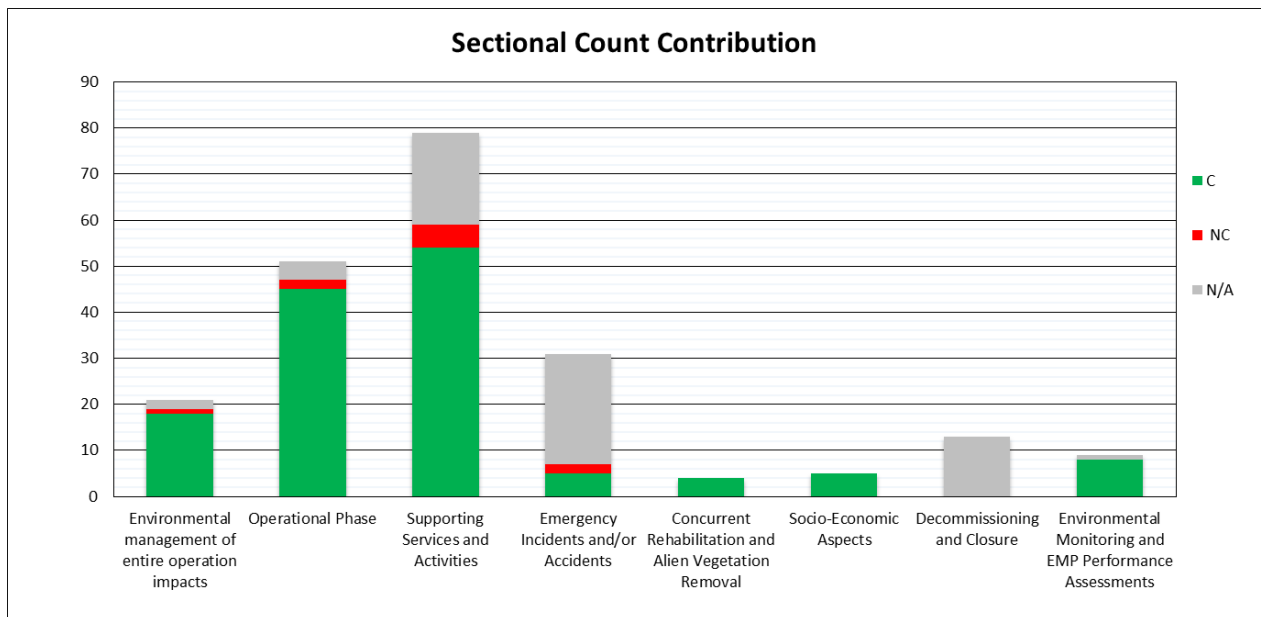
## 4 AUDIT FINDINGS

The audit findings have been summarised into the following categories: compliance, non-compliance and not applicable. The overall audit findings concerning compliance to the EMPR commitments are as listed in **Table 4-1** below.

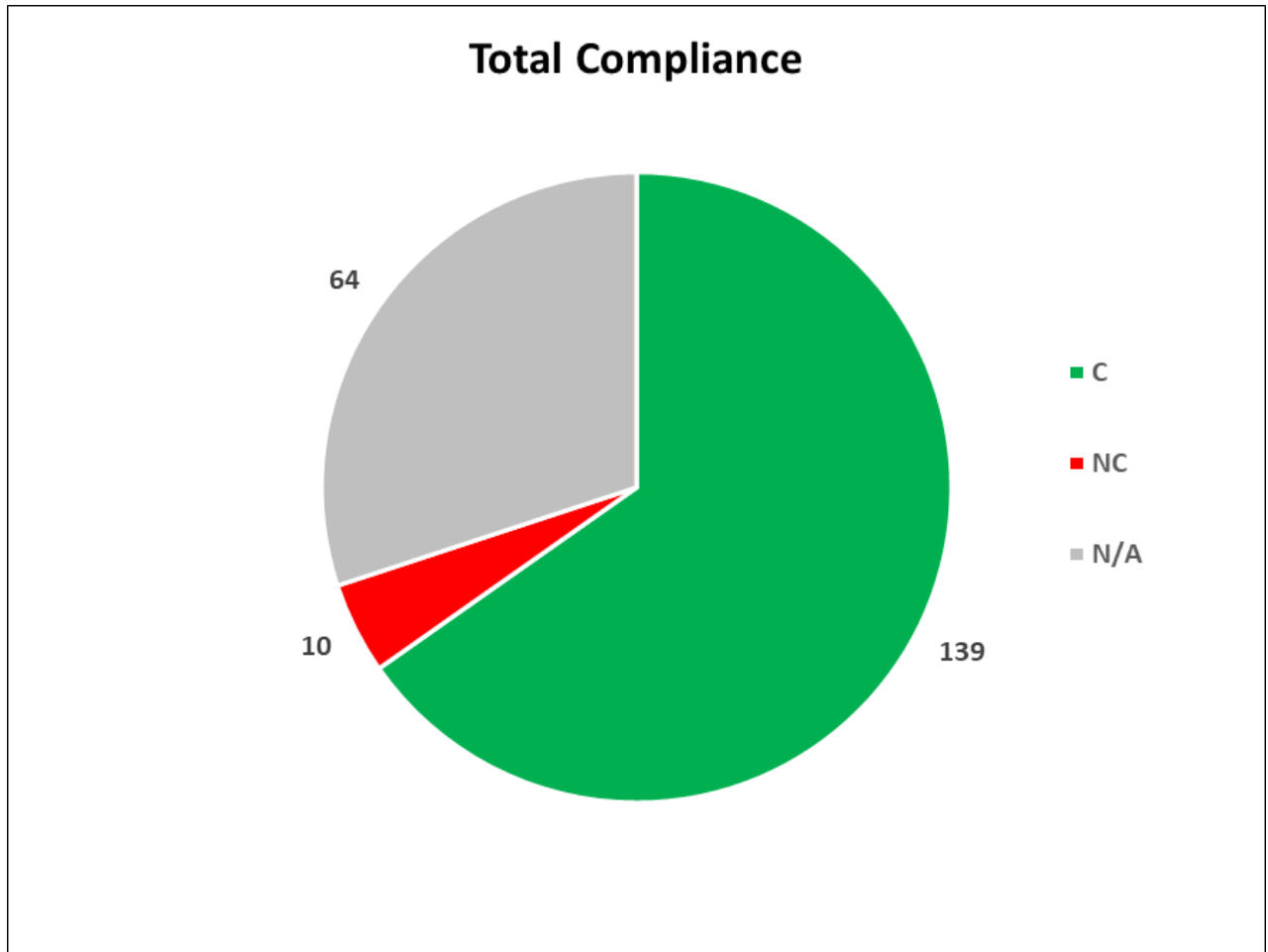
**Table 4-1 – Summary of EMPr compliance findings**

Section of the EMPr	No. of commitments	C	NC	N/A
Environmental management of entire operation impacts	21	18	1	2
Operational Phase	51	45	2	4
Supporting Services and Activities	79	54	5	20
Emergency Incidents and/or Accidents	31	5	2	24
Concurrent Rehabilitation and Alien Vegetation Removal	4	4	0	0
Socio-Economic Aspects	5	5	0	0
Decommissioning and Closure	13	0	0	13
Environmental Monitoring and EMP Performance Assessments	9	8	0	1
<b>Total Count</b>	<b>213</b>	<b>139</b>	<b>10</b>	<b>64</b>
<b>Total Percentage</b>		<b>65%</b>	<b>5%</b>	<b>30%</b>
<b>Compliance with Applicable Commitments Only</b>	<b>93%</b>			

**Figure 4-1** illustrates the number/count contribution of the findings of the EMPr per section while **Figure 4-2** presents the total proportion of compliance for the facility.



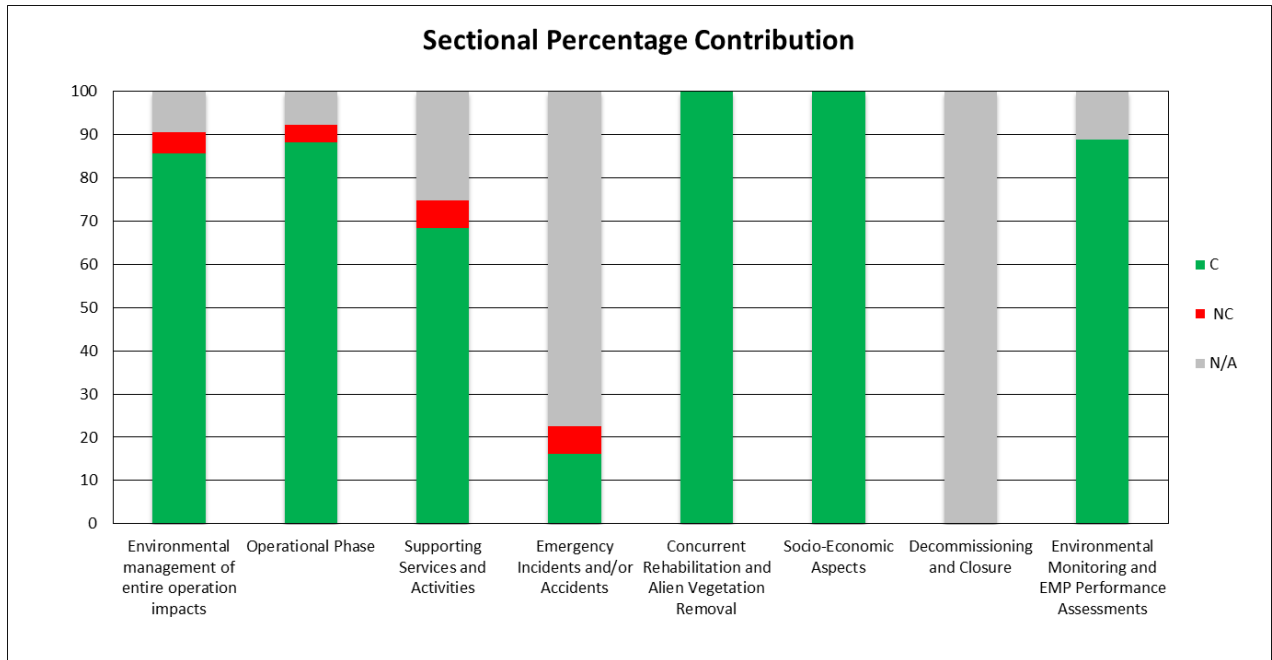
**Figure 4-1 - Number/Count contribution of findings made to the EMPr Commitments per Section**



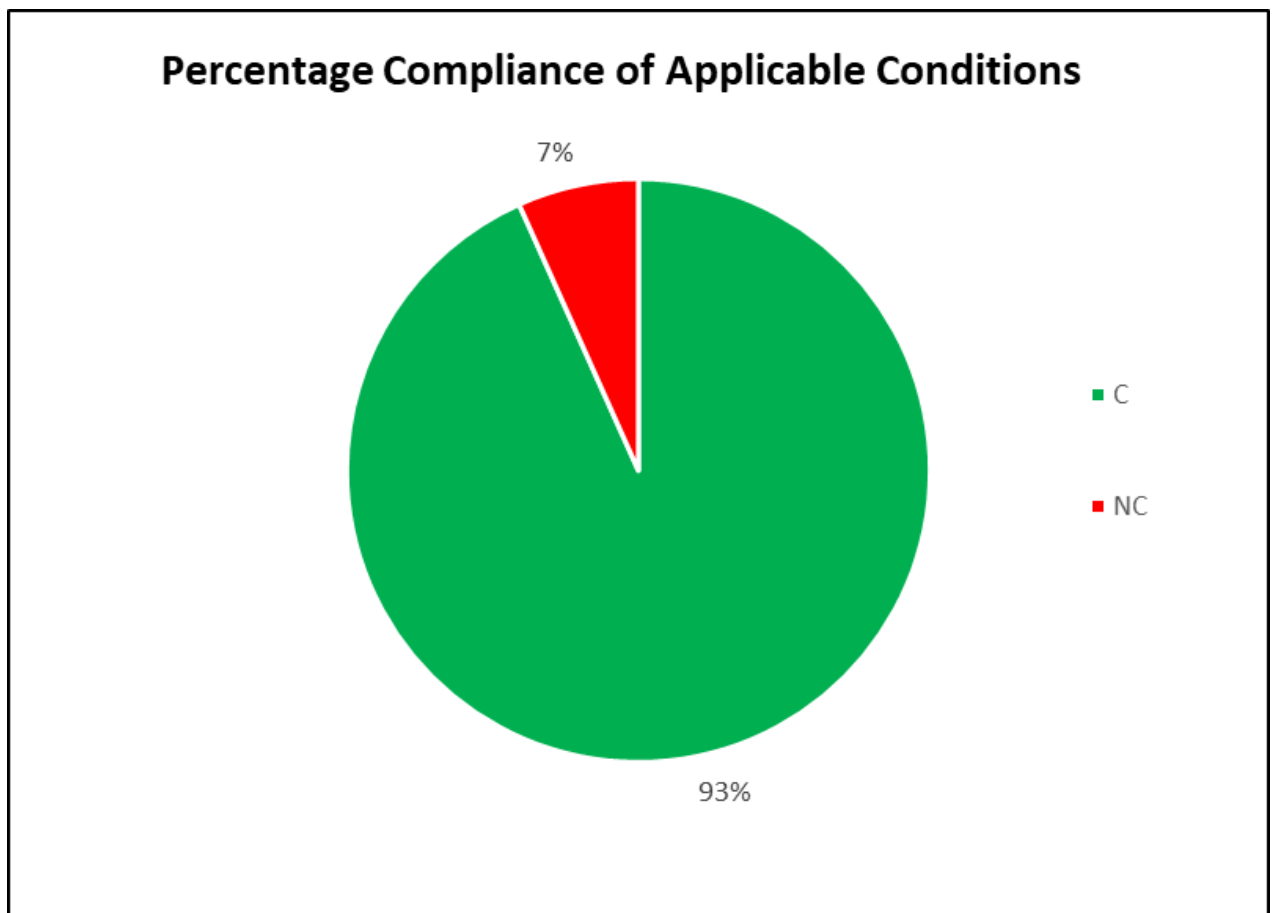
**Figure 4-2 - Overall count findings on compliance to the EMPr Commitments**

**Figure 4-3** illustrates the percentage contribution of the findings of the EMPr commitments. **Figure 4-4** presents the total percentage compliance for the facility for the applicable conditions only.





**Figure 4-3 - Percentage contribution of findings made to the EMPr Commitments per Section**



**Figure 4-4 - Overall percentage findings on applicable conditions only**

## 4.1 EFFECTIVENESS OF THE EMPR

An EMPR is defined as “an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented or mitigated, and that the positive benefits of the projects are enhanced.” The overall objective of the Eikenhof Quarry EMPR is to manage the facility in an environmentally responsible manner.

The key to a successful EMPr is appropriate monitoring and review to ensure effective functioning of the EMPR and to identify and implement corrective measures in a timely manner. Due to the nature of the continual improvement process, the EMPR is seen as a working document and is therefore subject to change.

The EMPr which was compiled and submitted to the DMRE in 2011 is due for review. AfriSam should regularly (monthly) follow up with the DMR regarding the submitted revised EMPR.

The EMPr compliance audit has identified that the majority of the revised (2011) EMPr commitments remain applicable to the site, and the EMPr is considered effective. Based on the audit findings the following recommendations are made in order to ensure compliance to the existing EMPr commitments:

- Waste management practices should be upgraded and training provided to employees;
- An overburden management plan must be developed and implemented;
- AfriSam must follow up on the amendment of the WUL;
- Spill kits must be maintained;
- A responsible person must be appointed to check the level of sewage in the septic tank;
- Emergency assembly points must be clearly labelled and emergency contact details must be displayed;
- AfriSam should consider amending any commitments in the EMPr that do not reflect the current operational activities.

The recommendations as outlined in **Table 2-1** should be implemented as soon as practicable, and in line with the stated timeframes.

WSP do acknowledge that AfriSam has systems in place which are considered to be more robust for monitoring compliance and implementing changes than through the EMPr audits.

New impacts and risks are continually identified and assessed by AfriSam by its Environmental Department; which assesses environmental risks and drives improvement implementation. This Department facilitates Environmental Risk Assessments per business entity to ensure that gaps are addressed through implementation of mitigation measures via the Integrated Management System.



**Building 1, Maxwell Office Park  
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Midrand, 1685  
South Africa**

**[wsp.com](http://wsp.com)**



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South Africa

**wsp.com**

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Afrisam (South Africa) Properties (Pty) Ltd

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**EIKENHOF QUARRY  
ENVIRONMENTAL MANAGEMENT  
PROGRAMME - GP  
30/5/1/2/2(225)MRC**

Environmental Compliance Audit

VOLUME 3





Afrisam (South Africa) Properties (Pty) Ltd

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**EIKENHOF QUARRY ENVIRONMENTAL  
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# QUALITY CONTROL

Issue/revision	First issue			
Remarks	Final Eikenhof Quarry Compliance Audit Volume 3			
Date	March 2023			
Prepared by	Tiffany Seema			
Signature	 <small>Digitally signed by Nadar, Thirushan (ZA7N64958), DN: cn=Nadar, Thirushan (ZA7N64958), ou=Active, email=Thirushan.Nadar@wsp.com, Date: 2023.03.20 12:39:05 +02'00'</small> p.p			
Checked by	Anri Scheepers			
Signature				
Authorised by	Anri Scheepers			
Signature				
Project number	41104713			
Report number	01			
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## ***APPENDICES***

APPENDIX 1: CURRICULA VITAE



# 1 INTRODUCTION

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WSP Group Africa (Pty) Ltd (WSP) was appointed by AfriSam (South Africa) Properties (Pty) Ltd (AfriSam) to undertake an external environmental audit of the commitments contained in the Eikenhof Quarry Environmental Management Programme (EMPr). The external audit was undertaken in accordance with Regulation 34 of the Environmental Impact Assessment (EIA) Regulations, 2014 published in terms of the National Environmental Management Act 107 of 1998 (NEMA).

The last Environmental Performance Assessment (EPA) was undertaken in December 2020 on the previous EMPr which was approved in 2001. This audit is the first audit for the EMPr submitted in 2011, and it presents the findings of the compliance audit completed for the EMPr for the period between January 2021 and December 2022.

Eikenhof Quarry currently operates under an approved mining right (225 MR), obtained in June 2010. The mining right will expire in May 2040. Eikenhof Quarry has an approved EMPr, approved on 05 March 2001. The EMPr was amended in 2011 and submitted to the Department of Mineral Resources and Energy (DMRE), however it has not yet been approved. This audit was undertaken against the 2011 EMPr, as the management measures outlined in the 2001 approved EMPr are no longer applicable to the site.

## 2 DECLARATIONS

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### 2.1 INDEPENDENT AUDITOR DECLARATION

Appendix 7 of GNR 982 refers to the need for the independent auditor to declare his/her independence of the holder of the EMPR.

NAME OF INDEPENDENT AUDITOR: **Tiffany Seema**

#### UNDERTAKING

I, Tiffany Seema, the undersigned act as an independent environmental auditor. I have attended site, studied the AfriSam Eikenhof Quarry EMPR, and compiled this report to the best of my knowledge. This section should be read with Section 3.3 of Volume 1 of the Report.

Signed at Midrand on this the 20th day of March 2023

p.p.    
Digitally signed by Nadar, Thirushan (ZATND4956)  
DN: cn=Nadar, Thirushan (ZATND4956),  
ou=Active, email=Thirushan.Nadar@wsp.com  
Date: 2023.03.20 12:39:55 +02'00'

SIGNATURE OF INDEPENDENT AUDITOR

SIGNED IN LINE WITH THE REQUIREMENTS OF NEMA, GNR 982, APPENDIX 7, AS PUBLISHED UNDER THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (NO. 107 OF 1998), AS AMENDED.

### 2.2 EMPR HOLDER DECLARATION

As a best practice, the Holder of the EMPR has been requested to sign off on the authenticity of this report.

NAME OF RESPONSIBLE PERSON: **Yedwa Christopher Mgxekwa**

#### UNDERTAKING

I, Yedwa Christopher Mgxekwa, the undersigned and duly authorized thereto, by \_\_\_\_\_, have studied the contents of this report and confirm that to the best of my knowledge, the contents are correct and accurate.

Signed at \_\_\_\_\_ on this the \_\_\_\_\_ day of \_\_\_\_\_ 2023.

\_\_\_\_\_  
SIGNATURE OF RESPONSIBLE PERSON



# **APPENDIX 1: CURRICULA VITAE**

## Anri Scheepers

Environmental Planning & Advisory, Principal Associate

### CAREER SUMMARY

Anri graduated from the University of Johannesburg with a BA honours in Geography in 2007 and has fifteen years work experience. Anri is a principal associate and assistant team coordinator for the Planning and Advisory Services unit.

Anri has been involved in numerous mining and industrial projects in South Africa. Anri has experience with diamond, gold, platinum, chrome, coal and manganese mining and processing operations. The projects include Environmental and Social Impact Assessments, Amendment processes and Environmental Management Programme consolidation and alignment processes. She has project managed numerous multi-disciplinary projects in various sectors in South Africa and has experience with the International Finance Corporation Performance Standards and African Development Bank Guidelines.

Anri is qualified as a Lead Auditor and has undertaken legal compliance auditing, including environmental authorisations, waste management licences, water use licences and environmental performance assessments. In addition, she has undertaken general site assessments to determine compliance against, local, provincial and national environmental legislation. Anri has also been involved in environmental due diligence and liability assessments.

Anri's roles and responsibilities include the management of Environmental Authorisation and Waste Management Licence Processes (Basic Assessments and Scoping and Environmental Impact Reporting), Water Use Licence Application Processes and Auditing.



#### 10 years with WSP

##### Area of expertise

Stakeholder Engagement  
Environmental Authorisation Processes  
Environmental Management Plans  
Legal Compliance Assessments  
Environmental Due Diligence and Liability Assessments  
Environmental Management Systems  
Water Use License Applications

#### 15 years of experience

##### Language

English – Fluent  
Afrikaans – Fluent

### EDUCATION

Bachelor of Arts (Honours), Geography, University of Johannesburg, Gauteng, South Africa	2007
Bachelor of Arts, Geography, University of Johannesburg, Gauteng, South Africa	2006



## Anri Scheepers

Environmental Planning & Advisory, Principal Associate

### ADDITIONAL TRAINING

	year
Environmental-Law Mine Closure	2019
Snake Awareness, Scorpion Awareness and First Aid for Snakebite and Scorpion Sting	2016
Environmental Management Systems ISO 14001 Audit: Lead Auditor	2014
IWRM, Water Use Authorisations, and Water Use Licence Applications – Procedures, Guidelines, IWWMPs and Pitfalls	2012
ISO 14001 Environmental Management Systems (EMS), Implementation and Auditing	2011
IEMA Approved Foundation Course in Environmental Auditing	2009

### PROFESSIONAL MEMBERSHIPS

None

### PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd	April 2013 – present
Terra Pacis Environmental	February 2009 – March 2013
Cymbian Environmental	February 2008 – January 2009

### PROFESSIONAL EXPERIENCE

#### Environmental Authorisation Processes

##### **Sable Place Properties Jet Park Warehouse Development, Gauteng 2020 – 2021**

###### **Project Manager**

Basic Assessment Process for the development of a commercial park within a 30m from a wetland and within a critical biodiversity area.

##### **Richbay Chemicals, Vosloorus Filling Plant, Vosloorus, Gauteng 2019 – 2022**

###### **Project Manager**

Environmental authorisation process for the proposed dangerous goods filling plant.

##### **Government of the Kingdom of Eswatini, Ministry of Natural Resources and Energy, Department of Water Affairs Mbabane – Manzini Corridor Dam (Nondvo Dam), Hhohho Region, Eswatini 2018 – 2021**

###### **Project Manager**

An Environmental and Social Impact Assessment for the proposed Nondvo Dam in Eswatini (previously Swaziland).

##### **Sappi Southern Africa, Sappi Ngodwana Reservoir, Mpumalanga 2020**

###### **Project Manager**

Basic Assessment Process for the construction of a reservoir within a critical biodiversity area.





## **Anri Scheepers**

Environmental Planning & Advisory, Principal Associate

**AngloGold Ashanti, Demolition and Rehabilitation of Infrastructure at West Wits Business Operations, Carletonville, Gauteng  
2019**

**Project Manager**

A contaminated land assessment and environmental authorisation process for the decommissioning and rehabilitation of selected infrastructure West Wits Operations.

**Department of Rural Development and Land Reform Kranspoort Cattle Feedlot, Basic Assessment Process, Kranspoort, Mpumalanga, South Africa  
2018**

**Project Director**

A Basic Assessment Process and Waste Management Plan for the proposed development of a cattle feedlot.

**Anglo American Platinum Limited, Amandelbult Section Dangerous Goods and Railway Extension Final Basic Assessment Report, Thabazimbi, Limpopo  
2017 – 2018**

**Project Director**

The Basic Assessment Process for the proposed installation of diesel tanks and the extension of a railway line at the Amandelbult Section, Tumela Mine.

**Anglo American Platinum Limited, Anglo Platinum Water Separation Project, Rustenburg, Northwest, 2016 – 2017**

**Project Manager**

The Basic Assessment process for the proposed refurbishment of an existing pipeline and installation of new pipelines as part of the Water Infrastructure Upgrade Project.

**Sasol Energy Technology, Blending Facility Upgrade Project, Sasolburg, Free State, South Africa  
2017**

**Project Manager**

Basic Assessment Process for the installation of dangerous goods tanks at the Sasol One Site.

**Sasol Energy Technology, Blending Facility Upgrade Project, Sasolburg, Free State, South Africa  
2017 – 2018**

**Project Manager**

Basic Assessment process for the construction of a fuel drum storage warehouse adjacent to the existing underground fuel storage tanks at the Fuel Blending Facility on the Sasol One site.

**Rappa Holdings (Pty) Ltd, Section 24G Application Process for Rappa Holdings, Germiston, Gauteng  
2017 – 2018**

**Project Manager**

Undertaking the rectification process for six historic rectification applications.

**Anglo American Platinum Limited, Environmental Authorisation Process for the SO<sub>2</sub> Abatement Plant at Mortimer Smelter, Swartklip, Northwest, South Africa  
2016 – 2017**

**Project Manager**

Undertaking a Scoping and Environmental Impact Reporting Process to ensure compliance with the National Environmental Management Air Quality Act (No. 39 of 2004).

**Anglo American Platinum Limited, Environmental Authorisation Process for the SO<sub>2</sub> Abatement Plant at Polokwane Smelter, Polokwane, Limpopo, South Africa  
2016 – 2017**

**Project Manager**

Undertaking a Scoping and Environmental Impact Reporting Process to ensure compliance with the National Environmental Management Air Quality Act (No. 39 of 2004).



## **Anri Scheepers**

Environmental Planning & Advisory, Principal Associate

**Confidential, GmbH Environmental Authorisation for a Private Vehicle Proving Ground Development, Northern Cape, South Africa  
2016**

**Project Manager**

A Scoping and Environmental Impact Reporting Process for a private vehicle proving ground.

**Rietvlei Mining Company, Establishment of the Proposed Rietvlei Opencast Coal Mine, Mpumalanga, South Africa  
2016 – 2018**

**Project Manager**

This project involved repeating the environmental authorisation process with the DMR as the competent authority, for the establishment of an opencast coal mine north of Middelburg.

**Blue Sphere Investments and Trading 103 (Pty) Ltd, Environmental Authorisation for Blue Sphere, Nigel, Gauteng, South Africa  
2014**

**Consultant**

This project includes an environmental impact assessment, environmental management programme report, water use license application, waste management license application and an atmospheric emissions licence application as well as the public participation process.

**Transalloys (Pty) Ltd, Environmental Authorisation for the Proposed Construction and Operation of Two Furnaces and Associated Infrastructure at Transalloys, eMalahleni, Mpumalanga, South Africa  
2014**

**Consultant**

The project entailed undertaking an environmental authorisation (by way of a scoping and environmental impact reporting process), including an atmospheric emissions licence application and waste management licence application process for the construction of two new 75MVA submerged arc furnaces that will primarily produce silicomanganese.

**Much Asphalt (Pty Ltd, Section 24G Rectification Process for the Storage of Dangerous Goods for Much Asphalt, Gauteng, South Africa  
2014**

**Project Manager**

Much Asphalt was required to undertake a Section 24G Rectification Process for the unlawful storage of dangerous goods on a number of their sites. Zaffar was involved in the compilation of the Section 24G application forms.

**Samancor Manganese (Pty) Ltd, M14 Furnace Environmental Authorisation, Meyerton, Gauteng, South Africa  
2012**

**Consultant**

The project entailed undertaking an environmental authorisation, including an atmospheric emissions licence application process, in terms of the National Environmental Management Act (No. 107 of 1998) for the construction of an 81MVA furnace that will produce Ferromanganese and Silicomanganese.

**Samancor Manganese (Pty) Ltd, Basic Assessment Process for the Proposed Expansion and Upgrading of the Raw Materials Stockyard at Metalloys, Meyerton, Gauteng, South Africa  
2011**

**Consultant**

The project included the undertaking of an environmental authorisation process, by way of a basic assessment process, and the amendment application of an atmospheric emissions licence. The project involved the expansion and The project entailed undertaking an environmental authorisation, including an atmospheric emissions licence application process, in terms of the National Environmental Management Act (No. 107 of 1998) for the construction of an 81MVA furnace that will produce Ferromanganese and



## **Anri Scheepers**

### **Environmental Planning & Advisory, Principal Associate**

Silicomanganese upgrading of the existing Raw Materials Stockyard at the Samancor Meyerton Works (Metalloys site).

#### **Hotazel Manganese, Proposed new Sinter Plant: Mamatwan Mine, Hotazel, Northern Cape, South Africa 2010**

##### **Consultant**

This project included an environmental impact assessment, environmental management programme report addendum and water use license application as well as the public participation process for a proposed sinter plant at the Mamatwan Mine in the Northern Cape.

#### **Environmental Management Plans**

#### **Goldman Sachs Refurbishment (Fit-Out) of the 8th Floor in 140 West Building, South Africa 2020**

##### **Project Manager**

Compilation of the Environmental Management Plan for the refurbishment of an office space in order to acquire a Green Star SA – Office v1 certification by the Green Building Council of South Africa.

#### **United Nations Office for Project Services (UNOPS), Environmental Management Plan for the South Sudan Feeder Roads, South Sudan 2019**

##### **Project Director**

Compilation of an Environmental Management Plan for the construction of the Kayango Market to A43 Road in South Sudan.

#### **Emira Property Fund, Environmental Programme for the Proposed Knightsbridge Development, Bryanston, Gauteng, South Africa 2015**

##### **Project Manager**

Compilation of a Green Star Rating Environmental Programme for the Proposed Knightsbridge Development.

#### **J.P Morgan Chase & Company, 1 Fricker Road EMP ECO, Illovo, Gauteng, South Africa 2017**

##### **Project Manager**

An EMP was compiled for the proposed refurbishment of the office building to attain a Green Star rating and is also responsible for conducting the first EMP compliance audit and training of the DEO to carry out subsequent audits.

#### **Samancor Manganese (Pty) Ltd Metalloys, Compilation of Environmental Management Plans - West Plant Metalloys, Meyerton, Gauteng, South Africa 2011**

##### **Consultant**

The project included the undertaking of an environmental risk assessment for all facilities and activities at West Plant. Environmental management plans were compiled from the results of the risk assessments.

#### **Environmental Management Programme Reports**

#### **Anglo Platinum Limited - Rustenburg Platinum Mines Limited Separation of the Union Section Operational Environmental Management Programme (and Addendums) into 'Carved Out' versus 'Retained' categories, Swartklip, Northwest Province, South Africa 2017**

##### **Project Manager**

The Section is in possession of an approved Environmental Management Programme as well as numerous addendums for mining, concentrating and smelting, operations. The Section is in a restructuring process which involves the selling and/or disenfranchising of certain of the operations. WSP/PB restructured the Sections' consolidated Environmental Management Programme to align with the future goals/strategies of the Mine.



## **Anri Scheepers**

Environmental Planning & Advisory, Principal Associate

**AngloGold Ashanti (Pty) Ltd EMPR Updates – Vaal River and West Wits Operations, Gauteng and Northwest, South Africa  
2014 – 2016**

**Project Manager**

The alignment of the West Wits (WW) and Vaal River (VR) Operations Environmental Management Programme Reports (EMPR) in accordance with the requirements of the Mineral and Petroleum Resources Development Act (No. 28 Of 2002) (MPRDA).

**Anglo American Platinum Ltd Environmental Management Programme Report Consolidation and Alignment of Union Mine: Rustenburg Platinum Mines, North-West, South Africa  
2014**

**Project Manager**

The EMPR consolidation and alignment process combined the original EMPR and authorised EMPR amendments into a complete and comprehensive document, which will become the overarching EMPR for the mine lease area and will be used as a concise management tool for all employees operating within mine lease area.

**Waste Management**

**Samancor Manganese (Pty) Ltd, Applications for Samancor Manganese (Pty) Ltd Metalloys in terms of section 20 of the Environment Conservation Act 73 of 1989, Meyerton, Gauteng, South Africa  
2014**

**Consultant**

The project entailed applications, by way of risk assessments, in terms of section 20 of the Environmental Conservation Act, for the North Plant Sludge Dam, West Plant Sludge Dam, Bag Filter Material Storage Facilities and Slag Stockpiles at Metalloys. Subsequent to the receipt of the waste management licences in terms of the National Environmental management: Waste Act (No. 59 of 2009) an amendment process was also undertaken.

**AfriSam South Africa (Pty) Ltd, Applications for Afrisam, Vanderbijlpark, in terms of section 20 of the Environment Conservation Act 73 of 1989. Vanderbijlpark, Gauteng, South Africa  
2014**

**Consultant**

The project entailed applications in terms of section 20 of the Environmental Conservation Act, for the slag stockpiles at Afrisam, Vanderbijlpark. Subsequent to the receipt of the waste management licences in terms of the National Environmental management: Waste Act (No. 59 of 2009) an amendment process was also undertaken.

**Columbus Stainless (Pty) Ltd, Waste Management Licence Application for The Existing and New Waste Management Facilities At Columbus Stainless Complex In Middleburg, Mpumalanga Province, South Africa  
2014**

**Project Manager**

Columbus Stainless (Pty) Ltd (Columbus) proposes to license existing waste management facilities and a new hazardous waste store within the footprint of the Columbus Complex. The Environmental Authorisation process by way of Scoping and Environmental Impact Reporting is required in order to license the said facilities. The facilities requiring licensing involve, but is not limited to: storage, recovery, bailing and treatment. WSP is responsible for obtaining a Waste Management License for the said activities via the Department of Environmental Affairs in line with relevant legislation.

**Samancor Manganese (Pty) Ltd, Establishment of a Waste Monitoring Committee, Meyerton, Gauteng, South Africa  
2011**

**Consultant**



## **Anri Scheepers**

### **Environmental Planning & Advisory, Principal Associate**

The project included the identification of potential members for the monitoring committee and the establishment of the committee. The establishment of the committee included the compilation of the constitution and committee meetings.

#### **Water Use Licence Applications**

**Anglo American Platinum Ltd, Polokwane Metallurgical Complex Water Use Licence Application Process for the SO<sub>2</sub> Abatement Plant at Anglo American Platinum Limited: Polokwane Smelter, Polokwane, Limpopo, South Africa**

**2017 – 2018**

##### **Project Manager**

The project involved the management of specialist along with the compilation and submission of the technical documentation.

**Rietvlei Mining Company (Pty) Ltd, Rietvlei Coal Mine Water Use Licence Application and Integrated Water and Waste Management Plan, Middelburg, Mpumalanga, South Africa**

**2016 – 2017**

##### **Project Manager**

The project involved the compilation of the Integrated Water and Waste Management plan for all water uses proposed at the Greenfields Rietvlei Opencast Coal Mining Operation.

**Samancor Manganese (Pty) Ltd, Metalloys Water Use Licence Application, Meyerton, Gauteng, South Africa**

**2009**

##### **Assistant**

This project involved compiling and submitting water use licence applications for all water use licence activities being undertaken at Metalloys. Subsequently a water use licence amendment process was also undertaken.

#### **Environmental Authorisation Amendments / Renewals**

**Vodacom South Africa, Amendment of the Vodacom Dangerous Good Environmental Authorisations, Midrand, Gauteng**

**2021**

##### **Project Manager**

The amendment process of the environmental authorisations to amend auditing and monitoring conditions.

**AngloGold Ashanti Limited, Transfer of the West Wits Operations EMPR to Harmony Gold**

**2020**

##### **Project Manager**

The amendment of the EMPR to transfer the West Wits Operations EMPR to Harmony Gold.

**Rustenburg Platinum Mines, Amandelbult Section Bus and Taxi Terminal Part 2 Amendment Process, Thabazimbi, Limpopo**

**2020 – 2021**

##### **Project Manager**

The amendment process of the existing Environmental Management Programme Report to formalise the bus and taxi terminal.

**Sibanye-Stillwater Sibanye Rustenburg Platinum Mine, Part 2 Amendment Process, Rustenburg, North West**

**2018**

##### **Project Manager**

The proposed amendment of the Environmental Management Programme Report to excluded activities which will not take place and to ensure alignment of the management measures.

**Anglo American Inyosi Coal Zibulo Colliery, Part 2 Amendment Process, Mpumalanga**

**2018 – 2019**



## **Anri Scheepers**

Environmental Planning & Advisory, Principal Associate

### **Project Manager**

The amendment of the Zibulo Colliery Environmental Management programmes for the inclusion of a new coal stockpile.

### **Scaw South Africa Scaw Metal Waste Treatment and Disposal Facility, Part 2 Amendment 2018 – 2019**

#### **Project Manager**

The amendment of the Scaw Waste Management Licence to include different waste types.

### **Anglo American Platinum Limited, The transfer of Authorisations for Union Mine 2018**

#### **Project Manager**

The transfer a Waste Management Licence and ECA Permit in terms of the Part 1 Amendment Process.

### **Anglo American Platinum Limited, The transfer of Authorisations for Anglo American Platinum Rustenburg Section 2018**

#### **Project Manager**

The transfer a two Waste Management Licences in terms of the Part 1 Amendment Process.

### **Sibanye-Stillwater, Amendment of the Sibanye Rustenburg Platinum Mines Environmental Management Programme, Rustenburg, Northwest 2018**

#### **Project Manager**

A Part 2 Amendment Process was undertaken to limit the EMPR to activities have commenced or will be undertaken.

### **Rappa Resources (Pty) Ltd, Amendment Process for the Copper Smelting and Casting Plant at Rappa Resources, Germiston, Gauteng 2017 – 2018**

#### **Project Manager**

A Part 2 Amendment Process for the installed Copper Smelting and Casting Plant at Rappa Resources.

### **Technopack Eastern Cape (Pty) Ltd, Renewal of the Technopack Eastern Cape Waste Management Licence, Springs, Gauteng 2017**

#### **Project Manager**

The Waste Management Licence was renewed to ensure the continuation of the plant operations at Enstra.

### **Impala Platinum Refineries, The Impala Platinum Springs Waste Management Licence Amendment, Springs, Gauteng 2018**

#### **Project Manager**

A Part 1 Amendment Process was undertaken in order to amend some of the conditions of the Waste Management Licence.

### **Rustenburg Platinum Mines Limited, Environmental Authorisation Amendment Process for the Ventilation Shaft at Siphumelele 1 Mine, Rustenburg, North-West, South Africa 2016**

#### **Project Manager**

Part 2 Amendment Process for the proposed establishment of the Ventilation Shaft at Siphumelele 1 Mine.

### **Stakeholder Engagement**

### **Nulandis, Minimum Emissions Standard Postponement Application for Nulandis Lilianton and Modderfontein 2018 – 2019**





## **Anri Scheepers**

Environmental Planning & Advisory, Principal Associate

### **Project Manager**

Undertaking the stakeholder engagement process in support of the Nulandis Lilianton and Modderfontein Minimum Emissions Standard Postponement Application.

### **Sappi Southern Africa, Minimum Emissions Standard Postponement Application for Sappi Ngodwana 2019**

#### **Project Manager**

Undertaking the stakeholder engagement process in support of the Sappi Ngodwana Minimum Emissions Standard Postponement Application.

### **AEL, Intelligent Blasting Minimum Emissions Standard Postponement Application for AEL Intelligent Blasting Modderfontein 2018 – 2019**

#### **Project Manager**

Undertaking the stakeholder engagement process in support of the Modderfontein Site Minimum Emissions Standard Postponement Application.

### **Omnia Fertilizer a Division of Omnia Group (Pty) Ltd, Identification of Interested and Affected Parties for Omnia Sasolburg, Sasolburg, Free State, South Africa 2018**

#### **Project Manager**

The identification of interested and affected parties in terms of Clause 4.1 and 4.2 of ISO 14001:2015.

### **BHP Billiton Metalloys (Pty) Ltd, Re-establishment of a Monitoring Committee for Metalloys, Meyerton, Gauteng, South Africa 2015 – 2016**

#### **Project Manager**

The re-establishment of a Monitoring Committee for four of the Waste Management Facilities at Samancor Manganese, Metalloys.

### **Department of Water Affairs and Forestry (DWAf), Stakeholder Engagement for Mooi-Mgeni Transfer Scheme Phase 2, Rosetta Village, Kwazulu- Natal, South Africa 2009**

#### **Assistant**

This project involved undertaking the public participation process for the Mooi-Mgeni Transfer Scheme Phase 2, which will primarily encompass the construction of the proposed Spring Grove Dam and an associated transfer pipeline from the proposed dam to the Mpofana River.

### **Legal Compliance**

### **AfriSam, Regulation 34 Audits (Eikenhof, Roodekrans, Ladysmith, Umlaas, Pietermaritzburg, Rooikraal), South Africa 2020 – 2022**

#### **Lead Auditor and Project Director**

Undertaken the Regulation 34 Compliance Audits for various AfriSam Operations

### **Rustenburg Platinum Mines, EMPR Regulation 34 Audits at Mogalakwena Section, Limpopo, South Africa 2020 and 2021**

#### **Lead Auditor and Project Director**

Undertaking nine compliance audits in accordance with Regulation 34 of the EIA Regulations and compilation of seven statements of confirmation that the activities have not yet commenced.

### **Impala Platinum, Desktop Review of the Impala EMPR 2019 Audit, South Africa 2020**

#### **Lead Auditor**





## **Anri Scheepers**

### **Environmental Planning & Advisory, Principal Associate**

A desktop review was undertaken to determine whether any changes has been made to the operations at Impala that could influence compliance.

#### **Impala Platinum Refiners, External Waste Management Licence Audit at Impala Platinum, Gauteng, South Africa**

**2016, 2018 and 2020**

##### **Lead Auditor**

External compliance audit of the WML for the Salvage Yard at Impala Springs.

#### **Rustenburg Platinum Mines, External Water Use Licence Audit of the Rustenburg Operations, Northwest, South Africa**

**2020**

##### **Lead Auditor**

Undertaking the Water Use Licence for the Waterval Smelter and Anglo Convertor Plant, Rustenburg Base Metal Refinery and Precious Metals Refinery.

Impala Platinum, Regulation 34 and Waste Management Licence Audits, Rustenburg  
2019

##### **Lead Auditor**

Undertaking seven compliance audits in accordance with Regulation 34 of the EIA Regulations.

AngloGold Ashanti Limited, Surface Operations Regulation 34 Audits  
2019

##### **Lead Auditor**

Undertaking the Regulation 34 audits for the Vaal River, Mine Waste Solution and West Wits Operations.

#### **OSE Foundation, Used Oil Industry Audits, Countrywide, South Africa**

**2014 – 2019**

##### **Lead Auditor**

Country-wide environmental compliance auditing of the South African recycled oil industry, comprising sixteen oil refinery operations, and twenty-nine drum re-conditioning plants. The audits are primarily focussed on compliance to legislation and ensuring that each site follows international best practice. The audits include a review of the refineries ISO14000 auditor's findings and tracking of compliance in regard to corrective actions.

#### **Sasol Gas, Third Party Audits, Johannesburg, Gauteng, South Africa**

**2017**

##### **Project Manager**

Undertaken compliance assessments of three environmental authorisations and two water use licence for Sasol Gas.

#### **Transnet Pipelines (GOC) Ltd, External Environmental Compliance Audit - Tarlton Intermixture Fractionator Plant, Gauteng, South Africa**

**2014 and 2016**

##### **Lead Auditor.**

An external environmental compliance audit of the record of decision for the Transnet Pipelines Tarlton Intermixture Fractionator Plant was undertaken in order to establish whether Transnet Pipelines are compliant with the conditions specified therein. The audit was undertaken by means of site observations, interviews and verification of available information.

#### **Anglo Platinum Limited - Rustenburg Platinum Mines Limited, Waste Management Licence for the Remediation and Decommissioning of Tar Residue Pits, Rustenburg, North-West, South Africa**

**2015**

##### **Lead Auditor**

A closer-out audit was undertaken to compile compliance with the Waste Management Licence conditions during remediation and decommissioning.



## **Anri Scheepers**

Environmental Planning & Advisory, Principal Associate

**Anglo American Thermal Coal, Water Use Licence Audit for the Landau Colliery, Mpumalanga, South Africa  
2014**

**Auditor**

The audit of the Water Use Licence was conducted in accordance with the relevant requirements of the National Water Act and conditions stipulated therein. The audit report included a summary of findings and compliance criteria, as well as recommendations for future corrective and preventative actions if required.

**AfriSam South Africa (Pty) Ltd, Waste Management License Audit for the Slagment Operation, Vanderbijlpark, Gauteng, South Africa  
2014**

**Lead Auditor**

This project involved the annual environmental compliance auditing for AfriSam's Slagment Operation in Vanderbijlpark in Gauteng Province. The audit included AfriSam's compliance to the conditions of their waste management license.

**A-Thermal retort Technologies (Pty) Ltd, Legal Compliance Audit, Olifantsfontein, Province, South Africa  
2012**

**Lead Auditor**

The project included undertaking a legal compliance audit of the atmospheric emissions licence and waste management licence.

**Samancor Manganese (Pty) Ltd Metalloys, Water Use Licence Audit, Meyerton, Gauteng, South Africa  
2012**

**Auditor**

The project entailed undertaking a compliance verification audit of the water use licence conditions of Metalloys. Recommendations were also provided in the audit report for non-compliance or potential concerns.

**Samancor Manganese (Pty) Ltd, M14 Furnace Legal Compliance Audit, Meyerton, Gauteng, South Africa  
2010 & 2012**

**Auditor**

The project included undertaking a legal compliance audit at Samancor Manganese (Pty) Ltd (Metalloys) to verify their compliance to the conditions of the record of decision issued for the M14 Furnace and the associated atmospheric emissions licence.

**Samancor Manganese (Pty) Ltd, Annual Audit of the Record of Decision and Environmental Management Plan for the Fouriespruit Stream diversion and Old Slag Area, Meyerton, Gauteng, South Africa  
2009 & 2010**

**Lead Auditor**

A legal compliance audit on the record of decision and the associated environmental management plan was undertaken to establish whether the upgrading of the existing stream diversion and the closure and rehabilitation of the old slag disposal area comply with the conditions contained therein.

**Xtrata Coal South Africa, Goedgevonden Mine Water Use Licence Audit, Ogies, Mpumalanga, South Africa  
2009**

**Auditor**

The project entailed undertaking a compliance verification audit of the water use licence conditions of Goedgevonden Mine. Recommendations were also provided in the audit report for non-compliance or potential concerns.

### **Environmental Due Diligence & Liability Assessments**



## Anri Scheepers

Environmental Planning & Advisory, Principal Associate

**Client Confidential. Environmental, Health and Safety and Social for a client with coal mining operations.**  
**2022**

**Lead Auditor**

Environmental, Health and Safety and Social Due Diligence as part of a process associated with a funding package and to demonstrate progress towards rectifying non-conformances detailed in an Environmental and Social Action Plan.

**Client Confidential. Environmental and Social Due Diligence Assessment for a client within the paints manufacturing industry**  
**2022**

**Lead Auditor**

Project scope included site visits and desktop studies of the environmental, social and health and safety data to ensure compliance with local regulatory standards as well as industry best practices. The client sites were located across Africa at 19 sites. Country assessments included: South Africa and Uganda.

**Client Confidential. Environmental Due Diligence for Rolles Chemicals, Germiston, Gauteng, South Africa**  
**2014**

**Auditor**

Environmental Due Diligence for the acquisition of a Processing Plant and associated facilities.

**Client Confidential. Environmental and Social Due Diligence of 22 FMCG facilities, Country-wide, South Africa**  
**2014**

**Lead Auditor**

Transactional Environmental and Social Due Diligence for the acquisition of 22 FMCG facilities mainly in the food manufacturing and consumer formulated chemical sectors situated across South Africa for an international private equity and real estate investor.

**Client Confidential. Environmental and Social Due Diligence of Medrock, Johannesburg, South Africa**  
**2014**

**Lead Auditor**

Transactional Environmental and Social Due Diligence for the acquisition of three medical supplies facilities situated in Johannesburg.

### Site Assessments

**Two Rivers Platinum Mine, The development and expansion at Two Rives Platinum Mine**  
**2021**

**Project Manager**

Environmental Screening for the proposed expansions at the existing Two Rivers Platinum Mine.

**Richbay Chemicals, The Development of a Filling Plant, Vosloorus, Gauteng**  
**2019**

**Project Manager**

Environmental screening for the proposed chemical filling plant.

**Glubay Coal, Springfield Coal Mine, Meyerton, Gauteng**  
**2019**

**Project Manager**

Site and Legal Review for the Proposed Springfield Coal Mine.

**Client Confidential, The Development of Thermal Power Plant and Solar PV Plant, Nacala, Mozambique**  
**2018**

**Project Manager**



## **Anri Scheepers**

Environmental Planning & Advisory, Principal Associate

Environmental and social screening for the alternative sites in terms of the International Finance Corporation Performance Standards on Environmental and Social Sustainability.

**Anglo American Inyosi Coal (Pty) Ltd, Gap Analysis for the Northern Pit Development at Zibulo Colliery, Mpumalanga**  
**2018**

**Project Manager**

Undertaking a gap analysis of the proposed development of an opencast pit in the northern section of the approved mining right area for Zibulo Colliery, Mpumalanga.

**Vodacom Group Limited, Screening Assessment of Proposed Waste Management Facility at Vodacom Campus, Midrand, Gauteng, South Africa**  
**2017**

**Project Manager**

Screening assessment to prepare a business case based on the facts so that the options for Vodacom's development vs. the potential requirement to identify an alternative site can be objectively evaluated by Vodacom.

**Sappi Southern Africa Limited, Site Assessment of a culvert on Sappi Forest Property, plantation Nooitgedacht – Camelot South, Ngodwana, Mpumalanga, South Africa**  
**2015**

**Project Manager**

A site assessment of a recently completed culvert development on Sappi Forest property, plantation Nooitgedacht – Camelot South, Mpumalanga. The purpose of the site assessment is to evaluate the works undertaken on site in respect of the National Environmental Management Act (107 of 1998) as amended and National Water Act (36 of 1998) and relevant regulations promulgated under these acts.

**South African Breweries (Pty) Ltd, Legal Assessment for a Proposed Development of a barley Malting Process in Alrode, Germiston, Gauteng, South Africa**  
**2013**

**Senior Consultant**

Undertaking of legal assessment to identify and assess potential scenarios based on environmental assessment triggers for the proposed development at erven 283, 289 and 1607 in Alrode Extension 2.



## Tiffany Seema

Environmental Consultant



### CAREER SUMMARY

An Environmental Management professional that has worked on several projects within the mining and industrial sectors of South Africa. Knowledge spans across several waste, water and air quality scenarios in line with the relevant South African environmental legislation, with strengths in environmental authorisation processes, compliance auditing, implementation of environmental management systems and technical report writing.

Industry Experience:

- Mining, Quarries and Processing plants
- Waste Recycling/Recovery/Treatment/Disposal
- Storage and Transportation of Dangerous Goods
- Waste to Energy
- Smelters
- Cement Manufacturing
- Power Generation
- Consumer Goods
- Abattoirs
- New Constructions, Expansions, Decommissioning

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**6 months with WSP**

**7 years of experience**

#### **Area of expertise**

Environmental legal compliance advisory services

#### **Language**

English

Sepedi

IsiZulu

### EDUCATION

Bachelor of Science with Honours (BSc. Hons): Geology

1 year

Bachelor of Science (BSc.): Geography and Geology

3 years

### PROFESSIONAL HISTORY

WSP Group Africa (Pty) Ltd

2022 – present

The MSA Group

2022 – 2022

EScience Associates (Pty) Ltd

2016 – 2022

## Tiffany Seema

Environmental Consultant



### PROFESSIONAL EXPERIENCE

#### **Environmental Impact Assessment (EIA's and BA's), Reporting and Due Diligence:**

##### **Port Durnford Mining Right Application, South Africa**

**2022-Current**

##### **Environmental Consultant**

Environmental Impact Assessment process to support an application for a consolidated Mining Right.

##### **Sylvania Proposed Open Cast PGE Mine, South Africa**

**2020-2022**

##### **Environmental Consultant**

Environmental Impact Assessment process to assess the environmental impact of the possible establishment of a new open cast Platinum Group Metals (PGMs) mine near Mokopane in the Limpopo Province.

##### **Assmang Black Rock Mine Operations expansions, South Africa**

**2020-2022**

##### **Environmental Consultant**

Basic Assessment for the proposed construction of a centralised Waste Water Treatment Plant, various expansions of administrative and service facilities and associated infrastructure.

##### **Sustineri Energy proposed waste pyrolysis facility, South Africa**

**2022**

##### **Environmental Consultant**

Basic Assessment for the proposed establishment of a waste to energy facility at the Icon Industrial Park, Centurion

##### **Oilflow oil blending facility, South Africa**

**2022**

##### **Environmental Consultant**

Basic Assessment for the expansion of activities (Handling and strigae of dangerous goods)

##### **Assmang Black Rock Mine Operations mining right, South Africa**

**2021-2022**

##### **Environmental Consultant**

Environmental Impact Assessment for the establishment of a new Open Cast Mine north of the existing Gloria mine underground complex

##### **Weir Minerals Isando plant expansion, South Africa**

**2020-2022**

##### **Environmental Consultant**

Basic Assessment for the proposed installation of additional furnaces and a Replicast Moulding process. Including Atmospheric Emissions Licence application.

##### **The Smart Company Copper melting facility expansion, South Africa**

**2021-2022**

##### **Environmental Consultant**

## Tiffany Seema

Environmental Consultant



Basic Assessment for the proposed installation and operation of increased furnace capacity. Including Atmospheric Emissions Licence application.

### **Avon Pipelines, Proposed gas pipeline and compressed natural gas facility, South Africa 2017-2019**

#### **Environmental Consultant**

Environmental Impact Assessment and related processes for a proposed development of a Compressed Natural Gas facility and gas pipeline that will connect the Lily gas pipeline, which runs from Secunda to Durban, to the Avon peaking power station in KwaZulu-Natal.

### **Idwala Lime proposed asbestos waste disposal site, South Africa 2017-2019**

#### **Environmental Consultant**

Environmental Impact Assessment and related processes for Idwala's application for Waste Management Licensing for their asbestos cement roof sheeting disposal site.

### **Sephaku Cement - Aganang proposed use of AFR's in cement manufacturing, South Africa 2017-2018**

#### **Environmental Consultant**

Environmental Impact Assessment for the proposed use of Alternative Fuels and Resources (AFRs) at their Aganang plant in the North West which is trading as Sephaku Cement. Including Atmospheric Emissions Licence application.

### **Assmang Black Rock Mine Operations decommissioning of dangerous goods storage, South Africa 2018**

#### **Environmental Consultant**

Environmental permitting application and Basic Assessment for the decommissioning of their existing above ground storage for fuel, lubricants and other dangerous goods.

### **City of Johannesburg Metropolitan Municipality proposed anaerobic digestion facility 2018-2019**

#### **Environmental Consultant**

Basic Assessment in support of an application for a Waste Management Licence for the proposed establishment of an Anaerobic Digestion Facility with Biomethane storage at the Robinson Deep Landfill in Johannesburg.

### **Industrial Green Energy Solutions proposed waste pyrolysis facility, South Africa 2017-2018**

#### **Environmental Consultant**

Environmental Impact Assessment in support of an application for a Waste Management Licence for the proposed establishment of a waste pyrolysis facility at the Limeroc Business Park, Knoppieslaagte 385-Jr, Centurion, Gauteng.

### **The Smart Company Copper melting facility 2017-2018**

#### **Environmental Consultant**

Environmental Impact Assessment for an application for rectification in terms of S24G and 24F of NEMA for the unlawful commencement of activities that require an Atmospheric Emissions Licence in terms of NEM:AQA. Including Atmospheric Emissions Licence application.



## **Tiffany Seema**

Environmental Consultant



**SA Dorper Leather Tannery proposed chemicals store, South Africa  
2018-2019**

**Environmental Consultant**

Basic Assessment for the storage of dangerous goods. Also included a chemical compatibility assessment to identify and manage the potential hazards that may result from the storage of dangerous goods.

**Wispeco Aluminium plant expansion, South Africa  
2018-2019**

**Environmental Consultant**

Basic Assessment for the proposed installation and operation of increased furnace capacity. Including Atmospheric Emissions Licence application.

**Reckitt Benckiser Pharmaceuticals dangerous goods storage  
2017-2018**

**Environmental Consultant**

Environmental Impact Assessment for an application for rectification in terms of S24G and 24F of NEMA for the unlawful commencement of activities that required an Environmental Authorisation in terms of the NEMA EIA Regulations.

**Oilflow, Oil blending facility, South Africa  
2016-2017**

**Environmental Consultant**

Environmental Impact Assessment for an application for rectification in terms of S24G and 24F of NEMA for the unlawful commencement of activities that required an Environmental Authorisation in terms of the NEMA EIA Regulations.

**New Horizons Energy proposed refuse derived fuel energy recovery facility, South Africa  
2016-2017**

**Environmental Consultant**

Environmental Impact Assessment for the proposed establishment of a Refuse Derived Fuel Energy Recovery Facility, Cape Town

**Environmental Legal Compliance Auditing & Rectification Planning:**

**Afrisam Eikenhof and Roodekrans Quarries, South Africa  
2022-2023**

**Lead Auditor**

Environmental Management Programme audit

**Calodex H:H Landfill, South Africa  
2023**

**Lead Auditor**

Waste Management Licence Audit

**Impala Platinum Rustenburg Operations, South Africa  
2022**

**Lead Auditor**

Audit against the Regulations to phase-out the use of Polychlorinated Biphenyls (PCB) materials and PCB contaminated materials

## **Tiffany Seema**

Environmental Consultant



### **Eskom PCB Phase-Out Plan, South Africa**

**2022**

#### **Auditor**

Assessment of progress on Eskom's PCB phase-out plan for generation, distribution and transmission divisions in accordance with the Regulations to phase-out the use of Polychlorinated Biphenyls (PCB) materials and PCB contaminated materials, as well as the SANS 290.

### **Assmang Black Rock Mining Operations, South Africa**

**2017-2022**

#### **Lead Auditor**

Audit against the following authorisations:  
Mine expansions environmental authorisation (contractor audit)  
Waste Management Licence  
Water Use Licence

### **Mandini Wealth tyre pyrolysis, South Africa**

**2017-2022**

#### **Lead Auditor**

Environmental Authorisation Audit

### **Wispeco Aluminium secondary aluminium production, South Africa**

**2017-2022**

#### **Lead Auditor**

Waste Management Licence Audit

### **Canyon Coal Hakhano Colliery, South Africa**

**2017-2022**

#### **Auditor**

Water Use Licence audit

### **Lafarge Industries – Lichtenburg plant, South Africa**

**2017**

#### **Auditor**

Pollution Prevention Plan audit

### **ClinX Medical Waste Management, South Africa**

**2016-2022**

#### **Auditor**

Waste Management Licence audit

### **Extrupet PET and HDEP recycling plants, South Africa**

**2016**

#### **Auditor**

Waste Management Licence audit

### **Leader Rubber Company, South Africa**

**2016**

#### **Auditor**



**Tiffany Seema**

Environmental Consultant



Environmental Authorisation audit

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South Africa

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