

ENVIRONMENTAL AUDIT REPORT

In terms of:
GNR 326, Regulation 34 of the National Environmental Management Act, Act No. 107 of 1998, as amended.

MINING RIGHT HOLDER:	National Portland Cement Company (Pty) Ltd
OPERATION NAME:	Saldanha Quarry
REPORT NUMBER:	AFS-SAL_008-20
DATE:	October 2020
REPORT STATUS:	Final



REPORT COMPILED BY:
UMHLABA ENVIRONMENTAL CONSULTING CC
Andrew Nicholson (EAP Reg 2019-716)




REVIEW RECORD

DRAFTING AND REVIEW OF REPORT

	NAME	ROLE / RESPONSIBILITY	NATURE OF CONTRIBUTION
Author	Andrew Nicholson	Lead auditor	
Client Contribution	Oscar Olen	Environmental Professional	

ACCEPTANCE OF REPORT FOR FINAL DISTRIBUTION

	NAME	DATE	SIGNATURE
Author	Andrew Nicholson	04 December 2020	
Client	Oscar Olen	04 December 2020	

COPYRIGHT

Unless otherwise stated, the copyright in all text and other matter (including the manner of presentation) is the exclusive property of Umhlaba Environmental Consulting CC. It is a criminal offence to reproduce and / or use, any matter, technical procedure and / or technique contained in this document, without written consent, unless it is being reproduced for the purpose in which it was intended.

AUTHOR'S CONTACT DETAILS

UMHLABA ENVIRONMENTAL CONSULTING CC

Tel: (011) 791 3389

E-mail: info@umhlaba.co.za

Fax: (011) 791 3384

Web: www.umhlaba.co.za

P.O. Box 731504 Fairland, 2030



EXECUTIVE SUMMARY

Saldanha Quarry is a simple, small scale, open cast, free dig mining operation that produces, +/- 40 000 tons per annum of feedlime and agricultural lime sold to farmers, mainly in the Western Cape. Small scale mining operations have been ongoing since the 1970's and continue today. Due to the market requirements, mining is seasonal with the majority of mining taking place between the months of January through to April.

Between 2013 and 2016 National Portland Cement (Pty) Ltd (NPC) (the mining right holder of Saldanha Quarry) went through a process to amended their existing mining right (**WC 322 MR**) through a successful Section 102 application, to;

- Amend their mining area to exclude certain historical sections of the mine (sand dune area) and include new areas contained within two adjacent prospecting rights.
- Add the mineral "shale" to the mining right (in addition to limestone).
- Substantially increase the proposed production rate of the mine.
- Amend the Environmental Management Programme report (EMPr) to reflect and assess the impacts associated with the change in area and the intent for the increase in production rates from the mine.

The opportunity to add shale, increase the mining right area and increase the future production rates of the existing mine is coupled to the planned development of a new cement plant, by AfriSam (South Africa) (Pty) Ltd, to be located +/- 11 km to the east of the mine. The Department of Environmental Affairs and Development Planning approved the Environmental Authorisation for the AfriSam Cement Plant in July 2015 (Ref No.: E12/2/4/2-F4/16-3024/11). Unfortunately due to prevailing economic conditions, AfriSam have not yet initiated the planned development of the cement plant. They have recently obtained an extension to their Environmental Authorisation commencement timelines, to July 2025 to start construction activities.

While the intent of the mine was to significantly ramp up mining activities (to close to 1 000 000 tons per annum) by 2020, until such time the cement plant is constructed, the Saldanha Quarry will retain its current status quo as a small scale mine.

The amended Environmental Management Programme report (EMPr), was approved by the Department of Minerals Resources and Energy (DMRE) on the 19th February 2016 and was compiled in accordance with the Minerals and Petroleum Development Resources Act, Act No. 28 of 2002 (MPRDA), as amended. This document was compiled to cover the impacts and management measures of both the small scale mining activities and the intended activities associated with the mine at a significantly increased production rate. Commitments specifically linked to the increased production mine are currently not applicable.

In order to comply with the requirements of Regulation 34 of GN R326 and Regulation 55(4) of GN R827, Umhlaba Environmental Consulting CC was appointed to conduct an Environmental Audit (EA). The assessment was undertaken by Andrew Nicholson on the 14th October 2020.

Framework of the Environmental Performance Assessment

Period:	January 2019 (date of previous audit) to October 2020
Scope:	Activities covered under the approved EMPr, within the area of current disturbance. Important: A number of commitments within the EMPr were specifically included for the larger scale mine. While these commitments have been captured within this audit report, if they are currently not applicable due to the current location and scale of mining activities, it has been highlighted as being valid but currently not applicable.
Purpose:	Compliance with the conditions of the Environmental Authorisation (the EMPr) and Evaluation of the adequacy and implementation of the approved EMPr.
Methodology / Procedure:	<ul style="list-style-type: none">• Review of the approved EMPr and approval letter prior to the site assessment.• Site inspection on foot and by vehicle.• Documentation review of pre-requested documents (based on EMPr commitments).
Evaluation Criteria:	<ul style="list-style-type: none">• The commitments in the 2016 amended EMPr, and• Industry "best practice" with regards to environmental management.

- ✓ Good housekeeping associated with the mine.
- ✓ Despite the small scale of the operation, many of the onerous commitments (written for the intended larger scale operation) have been implemented.

During the audit no critical findings were identified and only two major findings require attention. The majority of the concerns noted are ranked as Minor findings.

Major findings:

- Stripping of topsoil and overburden in one go and not separately. *Rec:* Implement additional training to stress the importance of stripping topsoil separately to overburden. Ensure the “stripping report” is maintained accurately.
- Lack of applying for closure of the historic sand dune mining area. *Rec:* Initiate a closure application process for the sand dune area which now falls outside the mining right area.

Minor findings, include:

- Amended mining right has yet to be registered. *Rec:* Register the amended mining right area.
- The short term mine plan (STP) is not representative of current mining activities and is outdated. *Rec:* Update the STP for the next year and keep on file.
- No faunal sighting or road kill book. *Rec:* Keep a faunal sighting and road kill register at the mine.
- No separate complaints book. *Rec:* Keep a book specifically for recording complaints at the mine.
- Excessive dumping by the community on the mine boundary. *Rec:* Undertake regular follow ups with the Municipality about them providing a solution to the community for waste management requirements.
- No evidence specialists are provided with the STP to determine the need for their input. *Rec:* Provide specialist a copy of the STP and obtain written confirmation that their involvement is not required.
- Future changes to the EMPr are required to introduce necessary flexibility. These include’
 - When mining at very low rates (+/- 40 000 tons per annum) stripping and spreading of topsoil should not be restricted to specific times of the year.
 - The need for dust suppression activities should be dependent on the amount of dust generated by the mining activities (as recorded by monitoring) and possible community complaints. Due to the low rates of current mining, dust suppression is currently not required.
 - The mine has installed a septic tank which is emptied by the Municipality instead of a chemical toilet. This should be allowed in terms of the EMPr
- No evidence of a palaeontological sampling and recording plan. *Rec:* Commission a specialist to complete the required plan.
- Lack of evidence of implementing community awareness campaigns (influenced by Covid-19). *Rec:* When possible (based on the Covid-19 pandemic) implement the planned awareness campaigns to the local schools.
- The current rehabilitation plan does not cover all the requirements documented in the approved EMPr.. *Rec:* When updating the rehabilitation plan cover the requirements as described within the EMPr
- No evidence of discussions of future closure goals in either quarry planning meetings or with I&As. *Rec:* Ensure the closure goals form an agenda item on future discussions to ensure they remain relevant.
- No evidence of implementing emergency drills (impacted by Covid-19). *Rec:* When possible (based on the Covid-19 pandemic) implement emergency drill training.

Audit Report Summary

Based on the site visit and review of documentation, there were no critical findings. From a physical site inspection, the auditor was impressed with the implementation of concurrent rehabilitation and the fact that there was no evidence of any hydrocarbon spills.

There are many commitments within the approved EMPr which become applicable as and when mining rates increase and sensitive areas are subject to mining (when the AfriSam cement plant is constructed). It is for this reason, that the audit has highlighted a lot of findings which are not applicable for the current mining activities.

It is the finding of this audit that no critical short-comings have been identified with the EMPr and as a result, no amendment of the EMPr and / or consultation with I&AP is recommended.

REPORT CONTENTS

1	INTRODUCTION	6
1.1	Personnel Involved in the EPA	6
1.2	Objectives of the Audit Report	7
1.3	Details of The Operation being Audited	7
2	FRAMEWORK OF THE ENVIRONMENTAL AUDIT	12
2.1	Period Applicable to the Audit	12
2.2	Scope and Purpose of the Performance Assessment	12
2.3	Methodology / Procedure used for Assessment	14
2.4	Presentation of EA Findings	15
2.5	Assumptions, Uncertainties or Knowledge Gaps	15
3	CONSULTATION PROCESS.....	15
3.1	Description of the Consultation Process	15
3.2	Comments Received during the Consultation Process	16
4	INFORMATION REQUESTED BY THE COMPETENT AUTHORITY	16
5	THE RESULTS OF THE ASSESSMENT	16
5.1	EMPr Compliance with the Requirements of Appendix 4 of GNR 326 to NEMA	16
5.2	Evaluation of the Implementation of the EMPr	16
6	CONCLUSION	44
6.1	Level of Compliance with Conditions and The Interpreted Information Gained from Monitoring the EMPr	44
6.2	The Relevance and Effectiveness of the EMPr	44
6.3	Audit Report Summary	44
7	APPENDICES	46
7.1	Experience and Expertise of Auditor	46
7.2	Declaration of Independence of Auditor	49
7.3	Acceptance of the Performance Assessment by the Client	49

LIST OF FIGURES

<i>Figure 1: Indication of the outline of the mining right area in relation to Diazville</i>	<i>8</i>
<i>Figure 2: Various mining areas within the mining right boundary</i>	<i>9</i>
<i>Figure 3: Main areas visited during the site visit for the audit</i>	<i>13</i>

LIST OF TABLES

<i>Table 2.1: Classification of findings and symbols used.....</i>	<i>14</i>
<i>Table 2.2: Ranking of findings identified during the Audit.</i>	<i>15</i>
<i>Table 5.1: Assessment/ Evaluation of the achievement and relevance of environmental management commitments in the approved EMPr.</i>	<i>18</i>
<i>Table 6.1: Level of Compliance with Commitments in the EMPr</i>	<i>44</i>

ABBREVIATIONS

C	Concern
DMRE	Department of Mineral Resources Energy
DWA	Department of Water Affairs (former Dept. of Water Affairs and Forestry)
DWS	Department of Water and Sanitation (former Dept. of Water Affairs)
EA	Environmental Audit
EAP	Environmental Awareness Programme
EMPr	Environmental Management Programme report
G&O	Goals and Objectives
MoU	Memorandum of Understanding
MPRDA	Minerals and Petroleum Development Resources Act, Act No. 28 of 2002
MR	Mining right
MTP	Medium Term Plan
NEMA	National Environmental Management Act, Act No. 107 of 1998, as amended
NEM:AQA	National Environmental Management: Air Quality Act, Act No. 39 of 2004
NEM:WA	National Environmental Management: Waste Act, Act No. 59 of 2008
NPC	National Portland Cement (Pty) Ltd
NWA	National Water Act, Act No. 36 of 1998
QPM	Quarry Planning Meeting
<i>Rec</i>	Recommendation
RMS	Raw Material Services
SSC	Shared Service Centre
STP	Short Term Plan
SWMP	Storm Water Management Plan
WUL	Water Use Licence
WULA	Water Use Licence Application

1 INTRODUCTION

Saldanha Quarry is a simple, small scale, open cast, free dig mining operation that produces, +/- 40 000 tons per annum of feedlime and agricultural lime sold to farmers, mainly in the Western Cape. Small scale mining operations have been ongoing since the 1970's and continue today. Due to the market requirements, mining is seasonal with the majority of mining taking place between the months of January through to April.

Between 2013 and 2016 National Portland Cement (Pty) Ltd (NPC) (the mining right holder of Saldanha Quarry) went through a process to amended their existing mining right (**WC 322 MR**) through a successful Section 102 application, to;

- Amend their mining area to exclude certain historical sections of the mine (sand dune area) and include new areas contained within two adjacent prospecting rights.
- Add the mineral "shale" to the mining right (in addition to limestone).
- Substantially increase the proposed production rate of the mine.
- Amend the Environmental Management Programme report (EMPr) to reflect and assess the impacts associated with the change in area and the intent for the increase in production rates from the mine.

The opportunity to add shale, increase the mining right area and increase the future production rates of the existing mine is coupled to the planned development of a new cement plant, by AfriSam (South Africa) (Pty) Ltd, to be located +/- 11 km to the east of the mine. The Department of Environmental Affairs and Development Planning approved the Environmental Authorisation for the AfriSam Cement Plant in July 2015 (Ref No.: E12/2/4/2-F4/16-3024/11). Unfortunately due to prevailing economic conditions, AfriSam have not yet initiated the planned development of the cement plant. They have recently obtained an extension to their Environmental Authorisation commencement timelines, to July 2025 to start construction activities. While the intent of the mine was to significantly ramp up mining activities by 2020, until such time the cement plant is constructed, the Saldanha Quarry will retain its current status quo as a small scale mine.

The amended Environmental Management Programme report (EMPr), was approved by the Department of Minerals Resources and Energy (DMRE) on the 19th February 2016 and was compiled in accordance with the Minerals and Petroleum Development Resources Act, Act No. 28 of 2002 (MPRDA), as amended. This document was compiled to cover the impacts and management measures of both the small scale mining activities and the intended activities associated with the mine at a significantly increased production rate. Commitments specifically linked to the increased production mine are currently not applicable.

In order to comply with the requirements of Regulation 34 of GN R326, Umhlaba Environmental Consulting was appointed to conduct an Environmental Audit (EA) of the approved EMPr. The site assessment for the audit was undertaken by Andrew Nicholson on the 14th October 2020.

1.1 PERSONNEL INVOLVED IN THE EPA

Personnel in attendance of the audit are listed below followed by the details of the lead auditor.

Audit Team	Mine Personnel
<i>Lead Auditor:</i> Andrew Nicholson	Oscar Olen (<i>Environmental Professional</i>) (full day attendance) Johan Swart (<i>VDM supervisor (audit discussion only)</i>) Ernest Albert (<i>VDM safety representative (audit discussion only)</i>) Albe Burger (<i>VDM operations officer (audit discussion only)</i>)

1.1.1 Details and Expertise of the Independent Auditor

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (3)(1)(b)**

Lead Auditor	Name:	Andrew Nicholson
	Qualifications:	BSc Honours in Biological Sciences, 1999 Post Graduate Diploma in Natural Resources Management, 2000
	Registrations:	Registered as an Environmental Assessment Practitioner: <ul style="list-style-type: none">• Registration number - 2019-716
	Work experience:	Eighteen years in the field of environmental consulting. Environmental Audits have been undertaken and completed in each of the past 18 years.

1.1.3 Declaration of Independence

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (3)(1)(b)**

The audit was undertaken by a registered environmental assessment practitioner who is an independent auditor (Andrew Nicholson). See signed Declaration of Independence, attached in Section 7.2.

1.2 OBJECTIVES OF THE AUDIT REPORT

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (2)**

The **objective** of the **audit report** [as per Appendix 7(2)] is to:

- 1) Report on:
 - the level of compliance with the conditions of the approved amended EMPr, and
 - the extent to which the avoidance, management and mitigation measures achieve the objectives and outcomes of the EMPr
- 2) Identify and assess any new impacts and risks.
- 3) Evaluate the effectiveness of the amended EMPr.
- 4) Identify short-comings in the amended EMPr.
- 5) Identify the need for any changes to the avoidance, management and mitigation measures provided in the amended EMPr.

1.3 DETAILS OF THE OPERATION BEING AUDITED

1.3.1 Location of Mine

Saldanha Quarry is located approximately 2 km to the west of the centre of Saldanha in the Western Cape. The entrance to the site is through the Diazville Township. Specifically the mine covers, Portion 7 and 9 of the Farm Jacobs Bay No. 109 and Portion 8 (a portion of portion 4) (Prospecting Hill), Portion 9 (Oranjevlei), Portion 10 (Oranjevlei), Portion 15 (a portion of portion 11) and Portion 23 (formerly a portion of Portion 3) of the farm Kliprug No. 282. The entire extent of the mining right area is approximately 452 hectares. **Figure 1** below provides a visual indication of the outline of the mining right area in relation to Diazville. Also highlighted is the location of the future cement factory site and the current mining contractors (VDM) yard.

1.3.2 Summary of Mining Activities Authorised

The following snippet extracted from the approved EMPr summarises the approved mining activities;

“Simple open cast mining methods will continue to be used for the remaining life of mine. In brief, the following steps area implemented.

- 1) *Vegetation and topsoil is stripped ahead of the mining face (maximum of 50m ahead) and used for concurrent rehabilitation.*
- 2) *The exposed limestone resource below the topsoil is mined, via free dig methods (no blasting is required for normal operations) using either excavators or front end loaders.*
- 3) *The loosened limestone is either placed directly in a haul truck for dispatch or stockpiled behind the mining face. If stockpiled, a front end loader will then place the material onto a haul truck for dispatch.*

Under rare circumstances, it may not be possible to free dig the limestone and hence limited explosive will be utilised to loosen these areas.”

Within the approved EMPr, **3 distinct phases** of mining were documented as indicated in the snippet below, with phase 2 & 3 being dependant on the operation of the AfriSam cement plant;

“The 3 phases to the life of the mine are intrinsically linked to the AfriSam cement plant, namely;

- **Current (existing mining to ~2014):** *The existing market for the limestone mined at the southern quarry is selling the limestone as agricultural and feed lime to the farming market within the Western Cape. This activity is anticipated to continue for the life of the mine.*
- **Phase 1 (~2014 to ~2021):** *During 2014 AfriSam is anticipating to commission a grinding plant which will have the ability to grind clinker (brought from another AfriSam cement operation) with a “limestone extender” provided from the Saldanha quarry. The grinding plant is anticipated to reach full capacity by 2020. All limestone required for this phase will be mined from the southern quarry.*
- **Phase 2 (~2021 onwards):** *During 2021 AfriSam is anticipating to commission a clinker manufacturing facility. This clinker manufacturing facility is anticipated to reach full capacity by 2024. Once constructed, two of the main raw materials for the clinker will be the limestone and shale from the Saldanha quarry. During this phase limestone will be used as a primary material for clinker manufacturing and as an extender. Mining of limestone will take place from both the southern and the northern quarry. A shale pit will be generated in the northern quarry.”*

Refer to **Figure 2** for an indication of the various areas mentioned above.



Figure 1: Indication of the outline of the mining right area in relation to Diazville



Figure 2: Various mining areas within the mining right boundary

1.3.3 Summary of Mining Activities currently taking place

As a result of the delay in construction of the AfriSam cement plant, the past and current mining activities remain associated with the “**current**” phase of mining (as described above).

Current mining activities include:

- Mining activities take place intermittently on the days in which limestone is required and mainly in the months January through to April. Approximately 40 000 tons of limestone is being mined per annum.
- While the expanded mining area is regarded as extremely sensitive in terms of geology, botany, fauna, archaeology, palaeontology and visual impacts, to date, all mining has taken place in the low sensitive section of the southern quarry. No new mining has taken place either on Prospect Hill or the identified northern quarry and no sensitive vegetation or archaeological sites (as identified in specialist studies) have been disturbed by current mining activities.
- Concurrent rehabilitation activities have been implemented over historically mined areas.
- As and when mining takes place, the mining contractor delivers the mining equipment to the site at the beginning of the day and removes all equipment at the end of the day. No equipment is on site when no mining is being implemented.

- Mining includes stripping of topsoil, stripping of overburden (and placing in areas demarcated for concurrent rehabilitation) and then mining directly from the exposed face and placing the limestone into a haul truck. To date there has been no need for any blasting activities.
- Haul trucks drivers cover bin with a tarpaulin prior to departing the mine.

There are 3 security guards continually stationed at the mine. As and when mining is implemented, there is 1 excavator operator stationed on the site for the day and 3 or 4 truck drivers are used to transport the limestone to the mining contractors (VDM) yard for future dispatch to the market (See **Figure 1**).

There is a mobile container within a small fenced area and placed on a small concrete pad which is used for the security control point and as a temporary office for the environmental professional who visits the site approximately every 2 weeks.

The mobile container is serviced with municipal water and electrical connections and has a small septic tank for ablution requirements which is emptied as and when needed.

The photographs below, taken on the day of the audit, provide a visual indication of present day mine.



Photograph 1: Current mining area in the low sensitive area of the southern quarry



Photograph 2: Evidence of both historical and recent concurrent rehabilitation activities



Photograph 3: Full extent of infrastructure within the mining right area.

2 FRAMEWORK OF THE ENVIRONMENTAL AUDIT

2.1 PERIOD APPLICABLE TO THE AUDIT

Legal Requirements of GNR 326 of NEMA:

The last EA was undertaken in January 2019 and submitted to the DMRE on 29 May 2019. Therefore, the period applicable to this audit / EPA is **January 2019 to October 2020**. The physical site visit for the assessment was undertaken on the 14th October 2020.

2.2 SCOPE AND PURPOSE OF THE PERFORMANCE ASSESSMENT

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (2) and Appendix 7 (3)(1)(c)**

The **scope** of the EA included;

1. Confirming **no** ground breaking development has taken place at the site approved for the construction of the AfriSam cement plant.
2. Confirming **no** recent mining activity has taken place in the sand dune area which was excluded from the mining right area as a result of the S102 process.
3. Confirming that **no** mining activities have commenced at the identified shale pit or the northern quarry area.
4. Confirming that **no** mining activities have taken place in any biodiversity hotspots or areas known for archaeological findings.

See **Figure 1** above for a general overview of where the auditor visited as recorded by GPS tracks.

The main focus of the EA was to visit the current mining area (the southern quarry), both the historic and recent concurrent rehabilitation areas and the entrance to the mine and surround. **Figure 3** below provides a visual indication of these areas inclusive of the recorded GPS tracks.

The amended EMPr was compiled to cover the current small scale mining activities (~ 40 000 tons per annum) and the impacts and required management measures for the future mine with the ability to increase its production rate to over 1 million tons per annum.

Important: A number of commitments within the EMPr were specifically included for the larger scale mine. While these commitments have been captured within this audit report, if they are currently not applicable due to the current location and scale of mining activities, it has been highlighted as being valid but currently not relevant.

As this is an environmental assessment, the scope did not include occupational health and safety aspects although reference may be made to these areas / aspects if appropriate.

The **purpose** of the EPA is to:

- 1) Comply with the conditions of the Environmental Authorisation¹.
- 2) Evaluate the approved EMPr to determine if it adequately:
 - Identifies potential environmental impacts associated with the mining operation.
 - Provides for the avoidance, management and mitigation of the identified environmental impacts.
 - Addresses closure requirements for the mine, considering the lifespan of the operation.
- 3) Evaluate the implementation of the management actions within the approved EMPr in terms of achieving the objectives and outcomes.

¹ It is a condition of the EMPr approval letter and a commitment of the EMPr (which serves as the Environmental Authorisation) that the compliance to the Management Programme must be audited biennially.



Figure 3: Main areas visited during the site visit for the audit

2.3 METHODOLOGY / PROCEDURE USED FOR ASSESSMENT

Legal Requirements of GNR 326 of NEMA: Appendix 7 (3)(1)(d)

2.3.1 EA Preparation

Preparation undertaken by the auditor included:

- A review of the approved EMPr, focussing on the environmental management commitments.
- A review of the EMPr approval letter
- Desktop evaluation of the areas being mined over the last 2 years by using the historical image tool on Google Earth Pro.

Prior to the physical site inspection an audit checklist was prepared and sent to the environmental specialist responsible for Saldanha Quarry to provide an indication of the areas to be visited and documentation that would be requested for viewing.

2.3.2 Site Visit

Site Inspection: The site inspection was completed on 14th October 2020 by vehicle and on foot and included an assessment of the areas listed below (presented in the order in which they were visited) (See **Figures 1 & 3**)

1. The location for the future cement plant
2. Prospect Hill and surrounds
3. Rehabilitated sections of the southern quarry
4. Current mining area
5. Old prospecting pit in the south and known location of archaeological findings
6. Security container at the entrance of the mine and the surrounds
7. Current backfill area
8. Recently concurrent rehabilitation area
9. Vehicle area for covering loads with a tarpaulin
10. The 100m demarcated buffer
11. The boundary between Diazville and the mine
12. The old sand dune mining area
13. Conservation areas (owned by NPC but not inside the mining right footprint)
14. The road running along the northern section of the future northern mining area
15. The identified shale pit area.
16. The mining contractors yard

Documentation Review

During the physical site inspection a documentation review was undertaken by the auditor. The majority of documents requested were available in container office dedicated to the environmental professional for Saldanha. Some documentation was requested and provided electronically after completion of the site visit.

2.3.3 The Evaluation Criteria used during the Assessment

Legal Requirements of GNR 326 of NEMA: Appendix 7 (3)(1)(d)

The criteria used in the EPA are:

- The commitments in the approved amended EMPr, and
- Industry “best practice” with regards to environmental management.

Throughout the report, findings/ observations are classified as described in Table 2.1, using the symbols indicated. Findings classified as partial compliance or not in compliance with the evaluation criteria will be ranked as described in Table 2.2.

Table 2.1: Classification of findings and symbols used.

SYMBOL	DEFINITION
✓	Compliance with the evaluation criteria (commitment).
*a (✓)	The evaluation criteria (commitment) are still valid even if it could not be audited at this time and hence it is considered compliant .
✓/x	Partial compliance as there is compliance with some aspects of the evaluation criteria (commitment), while other aspects are lacking.
x	Not in compliance with the evaluation criteria (commitment).
na	The commitment in the EMPr is no longer applicable .
C	A description of the concern identified where there is a partial or non-compliance identified.
Rec	A description of the recommendations to rectify the concerns.

Table 2.2: Ranking of findings identified during the Audit.

Minor	The significance of the resultant impact is LOW to LOW-MEDIUM and / or is against industry best practice.
Major	The significance of the resultant impact is MEDIUM and / or is against industry best practice and / or results in a non-compliance of legislation.
Critical	The significance of the resultant impacts is MEDIUM-HIGH to HIGH and / or results in a non-compliance of legislation, likely to result in a fine.

The evaluation criteria (listed above) have been applied to the implementation of the commitments in the approved EMPr as follows:

- Compliance regarding the implementation of the environmental management measures,
- Compliance with the requirements stipulated in GNR 326, Appendix 7 (2) and (3)(1)(e)
- Relevance to the current activities being undertaken at the operation, and
- The guidance provided to staff utilising the management measures outlined in the EMPr.

2.4 PRESENTATION OF EA FINDINGS

The presentation of EA findings considers the evaluation criteria and legal requirements; viz. the objectives in Appendix 7 of GNR 326. The evaluation of the implementation of commitments in the approved amended EMPr and proposed corrective actions are presented in Section 5.

2.5 ASSUMPTIONS, UNCERTAINTIES OR KNOWLEDGE GAPS

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (3)(1)(f)**

When evaluating the findings of the audit, it must be noted that the following aspects / activities / areas were not evaluated in detail for the reasons provided.

ASPECTS / ACTIVITIES / AREAS NOT EVALUATED IN DETAIL	REASON
Physical mining activities	There were no mining activities taking place on the day of the audit. Verbally the auditor was informed that mining had been performed the day before the audit.
The commitment to search for tortoise	This commitment was not audited.
Topsoil stripping management measures	The auditor did not physically see topsoil being stripped. Hence the feedback given concerning the topsoil commitments is based on a mixture of visual evidence at the mine and verbal feedback from the environmental professional.
Northern quarry and Prospect Hill	To date, mining has been restricted to the low sensitive area associated with the Southern Quarry. There has been no new mining in Prospect Hill or the northern quarry area. Commitments directly linked to these areas have not (could not) been audited.
Air quality / Dust suppression commitments	Due to the fact that no mining was taking place on the day of the audit, the physical auditing of dust suppression measures was not possible. The auditor relies on verbal feedback provided by the environmental professional.

3 CONSULTATION PROCESS

3.1 DESCRIPTION OF THE CONSULTATION PROCESS

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (3)(1)(g)**

In terms of the EIA Regulations, 2014, where the findings of the environmental audit report indicate insufficient management or mitigation of environmental impacts associated with the undertaking of the activity; or insufficient levels of compliance with the EMPr, the holder must when submitting the environmental audit report to the competent authority (i.e. the DMRE), also submit recommendations to amend the EMPr in order to rectify the shortcomings identified in the environmental audit report. When

submitting recommendations, such recommendations must have been subjected to a public participation process.

However, the auditor is not aware of any changes to the current or future mining activities that would change the impacts identified in the submitted EMPr and according to the results of the audit (refer to Section 5), compliance with the EMPr is adequate and thus no consultation process was initiated as part of the EA and the EMPr does not need to be amended at this stage.

In addition within 7 days of the date of submission of the environmental audit report to the DMR, the holder of the authorisation must notify all potential and registered interested and affected parties of the submission of this report and make such report immediately available to anyone on request and on a publicly accessible website. This will be done by NPC– the holder of the Mining Right².

3.2 COMMENTS RECEIVED DURING THE CONSULTATION PROCESS

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (3)(1)(j)**

As no consultation process was undertaken as part of the EA, no information is included in this section. Refer to Section 3.1 for an explanation.

4 INFORMATION REQUESTED BY THE COMPETENT AUTHORITY

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (3)(1)(k)**

The auditor is not aware of any additional information requested by the competent authority.

5 THE RESULTS OF THE ASSESSMENT

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (3)(1)(e)**

5.1 EMPR COMPLIANCE WITH THE REQUIREMENTS OF APPENDIX 4 OF GNR 326 TO NEMA

As the approved EMPr was drafted before the requirements of the 2014 NEMA³ Regulations were promulgated, the structure of the document meets the majority but not all requirements of Appendix 4 of GNR 326.

5.2 EVALUATION OF THE IMPLEMENTATION OF THE EMPR

The presentation of the assessment results considers the objective of the audit report (results presented in Table 5.1), specifically the reporting on;

- the level of compliance with the conditions of the EMPr, and
- the extent to which the avoidance / management / mitigation measures achieve the objectives and outcomes of the EMPr

Utilising the methodology outlined in this EA, the implementation of commitments in the approved EMPr has been evaluated, as well as their relevance to the operation. The results of the assessment are in Table 5.1.

To facilitate evaluation of the achievement of implementation of the EMPr, the Table include a summary of the commitments of the approved EMPr and the result of the evaluation / compliance assessment indicated using the symbols in Table 2.1.

The evidence used to evaluate compliance is indicated in in Table 5.1 and provided as one or a combination of the following:

- **Documentation** reviewed / seen. The auditor either took photographs of the applicable document or obtained digital copies of the documentation.
- **Verbal** confirmation from the environmental professional who accompanied the auditor on the day of the audit.

² The manner of presentation of the audit report on the Mining Right holder's website is their decision and not based on advice from Umhlaba Environmental Consulting CC

³ National Environmental Management Act, Act No. 107 of 1998, as amended

- **Visual observations** made by the auditor on the day of the audit, with photographic evidence of most observations being available if required.

Where concerns (C) are noted, these are described and brief recommendations (Rec) are provided (in Table 5.1).

The evaluation of the remaining objectives (listed below) is presented in Section 6 of this Audit Report;

- Identify and assess any new impacts and risks.
- Evaluate the effectiveness of the EMPr.
- Identify short-comings in the EMPr
- Identify the need for any changes to the avoidance, management and mitigation measures provided in the EMPr.

Important to remember: A number of commitments within the EMPr were specifically included for the larger scale mine. While these commitments have been captured within this audit report, if they are currently not applicable due to the current location and scale of mining activities, it has been highlighted as being valid but currently not relevant.

Table 5.1: Assessment / Evaluation of the achievement and relevance of environmental management commitments in the approved EMPr.

Generic management measures:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Legislation: The mine will comply with all relevant sections of the National, Provincial and Local environmental legislation and the associated regulations.</p> <ul style="list-style-type: none"> To ensure legal compliance the mine will undertake an environmental legal compliance audit. <ul style="list-style-type: none"> Any legal non-conformances determined during the audit will be rectified. Before any new activity is implemented on site, it will be assessed for the need of a legal authorisation, <ul style="list-style-type: none"> If necessary the relevant permission will be obtained. 	<p>✓</p> <p>✘a (✓)</p>	<p>Document</p> <p>Visual</p>	<p>A legal compliance audit was last completed by NNC Environmental Services (Pty) Ltd, dated December 2018.</p> <p>No new activity has been implemented on site which falls outside the scope of the approved EMPr.</p>
<p>2. Permits / Registrations / Licenses:</p> <ul style="list-style-type: none"> Confirm the validity of all permits / registrations / licences and ensure compliance to conditions attached to such permits / licenses: <ul style="list-style-type: none"> Mining Right. EIA approval Waste disposal permits. Permit for removal of red data plants Permit for the destruction of heritage sites. If any are due to expire during the following year, they will be renewed prior to the expiry date. If any of the conditions of the permits cannot be implemented, this needs to be communicated to the relevant authority and the permit conditions should be changed. 	<p>✓</p> <p>✘a (✓)</p> <p>✘a (✓)</p>	<p>Applicable documents seen by auditor</p>	<p>Mining right and S102 approval letter was seen on file. The mining right is valid until 2041. C: No evidence that the amended mining right (based on the S102 application) has been registered. Rec: Finalise the registration of the amended mining right.</p> <p>The EIA approval letter and the approval to the extended commencement timeframe (<u>July 2025</u>) was available.</p> <p>No hazardous waste generated onsite. Minimal amount of domestic waste is removed by the Municipality. No disposal permits required.</p> <p>To date, there has been no mining in areas known for red data plants or identified heritage sites (as determined by a specialist study). Therefore there has been no need of either removal or destruction permits to be applied for.</p>

Financial provision calculations to be reassessed	✓	Document seen	The latest financial provision document was completed in December 2019 and submitted in July 2020.
<ul style="list-style-type: none"> Complete an Environmental Performance Audit. <ul style="list-style-type: none"> Implement recommendations from the audit findings 	✓	Document seen	NCC Environmental Services completed an audit and compiled an audit report dated January 2019. There is evidence on the front page of the document that the report was submitted to the DMRE on 29 th May 2019.
<ul style="list-style-type: none"> Review and if necessary update the Environmental Management Programme. 	*a (✓)	N/A	No need to update the EMPr at this point in time.
<p>4. Contracts:</p> <ul style="list-style-type: none"> Environmental compliance will form part of the contractual arrangements between contractors and NPC. <ul style="list-style-type: none"> All new contracts with on-site sub-contractors will stipulate the environmental commitments that must be adhered to while working on-site. Any specific environmental measures required to mitigate any sub-contractor specific environmental impact must be included in the individual contracts. All contractors who operate on the mine will be required to undergo environmental awareness training. Where contractors are performing a task which requires legal authorisation, copies of the applicable authorisation must be provided prior to any commencement of work. 	<p>✓</p> <p>✓/x</p> <p>*a (✓)</p>	<p>Document seen</p> <p>Verbal</p> <p>N/A</p>	<p>The current mining contractor is between NPC and VDM. The latest contractor includes a commitment for the contractor to adhere to the requirements of the approved EMPr which forms an annexure to the agreement. The current security contract is between NPC and Amapogo.</p> <p>Verbally informed that all contractors undergo environmental awareness training. C: No record of implementing environmental awareness training. Rec: Maintain a record of the induction training on file</p> <p>No additional authorisations are required by the current contractors on site.</p>
<p>5. Land use:</p> <ul style="list-style-type: none"> Ensure that all properties within the mining right area obtain a temporary departure from the Vredenburg Saldanha Scheme Regulations, in terms of Section 15 of LUPO to permit mining activities. This is relevant for: <ul style="list-style-type: none"> Portions 7 and 9 of the farm Jacobs Bay, no 109 ; Portions 9, 10 and 23 of the farm Kliprug, no 282. The Portions of property comprising the mining area (inclusive of Portions 8 and 15 currently zoned for mining) will be subdivided and consolidated into one property for purposes of the LUPO application. 	✓	Document seen	The auditor was shown confirmation from the Engineering & Planning Service of the Municipality that the application for a subdivision, consolidation and temporary land use departure (for the correct portions of land) was approved to permit mining (over 452.7 hectares) for the life span of the mining right.

<p>6. Water use:</p> <ul style="list-style-type: none"> Obtain all water needs (both potable and water for dust suppression and rehabilitation requirements) for phase 1 from the Municipality Apply to the Municipality for the water needs associated with phase 2 If there is a change in the water uses to those described in section 3, prior to implementing the change determine the necessity for a water use license. <ul style="list-style-type: none"> If necessary, apply. 	<p>✓</p> <p>xa (✓)</p> <p>xa (✓)</p>	<p>Verbal</p> <p>N/A</p> <p>N/A</p>	<p>Due to the limited mining activities taking place only potable water has been required which is obtained from the Municipality. Due to low dust fallout (as recorded by monitoring) and water shortages, no dust suppression is currently implemented.</p> <p>The mine has not proceeded to phase 2 mining.</p> <p>There has been no change in water use.</p>
<ul style="list-style-type: none"> Record the volume of process water used for dust suppression and rehabilitation requirements in the form of a simple water balance diagram. Evaluate as follows: <ul style="list-style-type: none"> Compare the water consumption per month. The cause of large fluctuations must be investigated. Corrective action must be implemented where necessary in order to prevent further unnecessary fluctuations. 	<p>xa (✓)</p> <p>xa (✓)</p>	<p>N/A</p> <p>N/A</p>	<p>Due to the scale of mining activities, the only water required is potable water for the 3 security personal on site. No dust suppression activities using water is performed.</p> <p>There is currently no need for a simple water balance. The commitments remain applicable for future mining. Water use (which is minimal) is tracked through the Municipal bills.</p>
<p>7. Waste Management: The following measures will be implemented for the small amounts of waste anticipated;</p> <ul style="list-style-type: none"> A bunded area (large enough to hold 3 drums) will be built adjacent to the security area at the entrance to the site. Three drums (with lids) will be provided within the bunded area for the following: <ul style="list-style-type: none"> Domestic waste Hazardous waste (waste contaminated with hydrocarbons (oily rags, polluted material) Oil collected in drip trays (must be a sealed drum) As and when any of the bins reaches 75% full, it will be taken off site, the content disposed of appropriately and replaced with an empty drum. 	<p>xa (✓)</p> <p>xa (✓)</p> <p>✓</p>	<p>N/A</p> <p>N/A</p> <p>Visual</p>	<p>Due to the scale of the current mining practices, the only waste generated is domestic waste by the three security guards stationed at the onsite container. They have access to one bin (located on a concreted surface) which is emptied by the Municipality.</p> <p>As and when the scale of mining activities increase the adjacent commitments should be implemented.</p> <p>Upon inspection of the bin on site it was less than 75% full.</p>
<ul style="list-style-type: none"> Inspect the mining environment area to ensure good housekeeping is maintained. <ul style="list-style-type: none"> If poor housekeeping is identified, implement corrective action. 	<p>✓/x</p>	<p>Visual</p>	<p>Based on the visual assessment within the active mining areas, good housekeeping has been maintained.</p> <p>C: Excessive amounts of domestic waste from the adjacent community are being dumped on the edge of the mining property. Rec: Regularly communicate the problem of waste disposal by the community to the Municipality.</p>

<p>7. Storm water management:</p> <ul style="list-style-type: none"> • Use localised berms or trenches to prevent storm water from flowing into active mining areas • Maintain a small bunded area for temporary storage of waste. • If over time, concerns arise from excessive erosion or ponding of water (which has not been a concern since the early 1980's), the mine will employ a specialist to draw up a detailed storm water management plan. <ul style="list-style-type: none"> - The plan will be implemented. 	<p>✓</p> <p>✓</p> <p>✘a (✓)</p>	<p>Visual</p> <p>Visual</p> <p>N/A</p>	<p>Trenches and berms are in place around the mine which can act to prevent storm water flow into the active mining area.</p> <p>The single domestic waste container is located on a raised concrete slab which protects it from storm water.</p> <p>No evidence of any erosion or prolonged ponding of water. At this point in time the auditor sees no need for a detailed storm water plan.</p> <p>The commitment remains applicable.</p>
<p>8. Cleaning up minor hydrocarbon spills:</p> <ul style="list-style-type: none"> • If a small oil spill occurs (less than 2m in diameter) the following steps will be implemented: <ul style="list-style-type: none"> - The source of the spill will be stopped. - The spill and any contaminated material will be dug up and disposed of in the hazardous waste container and removal from site to be disposed of by the appropriate waste removal company. - Records of the incident will be kept within a log book. 	<p>✘a (✓)</p>	<p>Visual</p>	<p>No hydrocarbon spill was noted in any of the areas visited by the auditor. See Figure 3 for the areas visited. The commitment remains applicable should a spill occur in future.</p>

Geology:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Mining factors: The mine will comply with the following mining factors:</p> <ul style="list-style-type: none"> • Maximum depth of mining 30m below surface. • Maximum bench height 10m • Batter angle 75° • Haul Road Width 15 – 25m • Final slope for Prospect Hill will be 35° • Implement buffer zones (see botany commitments). 	<p>✓</p>	<p>Visual</p>	<p>Based on visual evidence the mining factors (as described in the adjacent column) are being adhered to.</p>
<p>2. Mine Scheduling:</p> <ul style="list-style-type: none"> • Implement mining activities in the schedule as depicted in Figure 3.3. • Only commence with the northern quarry and the clay pit upon commencement of Phase 2 of the AfriSam cement plant. • Mining to take place simultaneously in various sections of the delineated deposit to ensure proper blending, and thus optimising utilisation of the deposit. Both single and multi-bench mining will be employed in various sections of the south quarry. 	<p>✓/✘</p> <p>✓</p> <p>✓</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p>	<p>Due to the delay in construction of the AfriSam cement plant, production rates at the mine have remained minimal (+/- 40 000 tons per annum).</p> <p>The auditor visually confirmed no mining has commenced in the northern quarry.</p> <p>Remains applicable.</p>

<p>3. Mine planning:</p> <ul style="list-style-type: none"> • Mine in accordance with a short term mine plan which should be aligned to the life of mine schedule depicted in Figure 3.3. • The short term mine plan must be updated annually. • Short term mine plans must depict the following information; <ul style="list-style-type: none"> - Mining Right boundary. - Buffer zones - Area subjected to current mining activities - The indicated direction of mining for the next year - The access route to the property - Internal haul roads. - Topsoil stores if any - Areas subjected to concurrent rehabilitation for the following year (to avoid disturbance of these areas). • Hold quarry planning meeting with qualified mineral resource managers. During the meeting the following environmental issues should be discussed; <ul style="list-style-type: none"> - Implementation of concurrent rehabilitation and alien vegetation control - Ensuring that the final closure proposal is still relevant - Maintenance of required buffer zones - Environmental monitoring results - Environmental complaints - The successful implementation of the commitments within the approved EMP • After determining the mining activities for the next year, the mine will provide a copy of the mine plan and an indication of when mining activities will be implemented to the following mine appointed specialists: <ul style="list-style-type: none"> - Botanical specialist - Archaeological specialist - Paleontological specialist • All specialist will be allowed access to the site to undertake a site inspection prior to the area been mined and during the mining activities. 	<p>✓/x</p> <p>x</p> <p>✓</p> <p>✓</p> <p>✓/x</p> <p>xa (✓)</p>	<p>Visual</p> <p>Document</p> <p>Document</p> <p>Minutes of meeting</p> <p>Document</p> <p>N/A</p>	<p>C: While mining is taking place within the demarcated STP area, it is not aligned to the sequencing as prescribed on the plan Rec: Update the STP.</p> <p>C: The STP on file was dated October 2018. Rec: Update the STP</p> <p>The STP contained all the required information.</p> <p>Evidence of quarry planning meeting was provided (July 2020) and the required environmental topics are covered.</p> <p>C: While the mine provided evidence of an agreement with the relevant specialist, due to the current area being mined (low sensitive southern quarry), they have not undertaken a site visit. Rec: Provide specialist with the short term plan and ask them to determine the necessity of a site visit or not. Keep a record of communication with the specialist on file.</p> <p>While specialist are allowed access to the site, to date there has been no need for a site visit.</p>
<ul style="list-style-type: none"> • Should during mine planning there be a need to alter the mining activities in a manner which will result in a change of impacts to those covered within this document (such as changing the mining activities by including a crusher or by extending mining beyond the current proposed mining footprint), then an EMP amendment will be submitted for approval before commencing with the altered mining activity. 	<p>✓</p>	<p>Visual</p>	<p>There has been no change to the mining activities which have necessitated the need for an EMP amendment. Due to the AfriSam cement plant not being constructed, the mining rate has remained very low for longer than expected.</p>

<p>4. Implementation of mining activities;</p> <ul style="list-style-type: none"> On the flat sections of the mining right area, stripping of soil will take place a maximum of 50m ahead of the advancing face and rehabilitation activities will be initiated 200m behind the mining face. On the sloped sections of the mining right area (Prospect Hill), stripping will take place a maximum of 50m ahead of the advancing face and rehabilitation activities will take place within 400m behind the mining face. 	<p>✓ *a (✓)</p>	<p>Visual Visual</p>	<p>Based on visual observations, the distance commitments for stripping and rehabilitation are being implemented.</p> <p>To date there has been no new mining on Prospect Hill. The commitment remains applicable.</p>
<p>5. Blasting: Under the rare circumstance when blasting is required, the following environmental considerations will be made;</p> <ul style="list-style-type: none"> Community representatives (such as equestrian centres) will be informed of the need to implement a blast at least one week before the blast. Blasts will only be performed under suitable climatic conditions as determined by the certified blaster. (Ideally when the atmosphere is stable with little wind). Blasts will be restricted to Monday to Friday, before 17h00 If a blast is required within close proximity to structures, the size of the blast will be scaled to ensure that no significant impacts are realised All blasts in close proximity to structure will be monitored. 	<p>*a (✓)</p>	<p>Verbal and visual</p>	<p>Verbally informed by the environmental professional that there has been no need to implement any blasting activities to date. This was visually confirmed where it is clear that all mining has been undertaken by free dig methods.</p> <p>The commitment remains applicable in the rare case that blasting may be required in future</p>

Botany:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Buffer Zones: The following buffer zones / mining restrictions will be implemented to reduce the impact on botany (See Figure 3.1, Figure 3.2 and Appendix 2 for a visual indication of the buffer zones):</p> <ul style="list-style-type: none"> In specific sections of the mine, there is a 100m exclusion zone from the edge of the mining right area to the actual area to be mined (area between the red and dotted yellow line in Figure 3.2). This exclusion zone applies to; <ul style="list-style-type: none"> The skyline ridge (western boundary of the northern quarry and eastern boundary of the southern quarry) All public servitudes (such as the Jacobaai road) All residential / industrial areas (Middlepos) 9m Boundary Pillar along the whole mining right area. Where there is 100m buffer zone, the boundary pillar has been applied in addition. Sensitive flora zones to be excluded (Figure 3.1). Transportation corridor of 20m Bio-diversity exclusion zone of 300m between the southern and northern quarry 	<p>✓ ✓ ✓ ✓ ✓</p>	<p>Visual</p>	<p>Based on visual observations during the site visit, no buffer zone has been encroached. In the areas where mining is taking place closest to the community a berm demarcates the 100m required buffer.</p> <p>No mining has been undertaken in any sensitive area, the transportation corridor, the northern quarry area or the biodiversity exclusion zone.</p>
<p>As and when mining is taking place close to a buffer zone the boundary between the mining footprint and the buffer zone will be physically demarcated to prevent encroachment into this zone.</p>	<p>✓</p>	<p>Visual</p>	<p>A berm is in place in the area where mining is occurring which acts as the buffer demarcation.</p>

<ul style="list-style-type: none"> Where possible, the mine will work with adjacent landowners to encourage botanical linkages between the Oranjevlei and Trekoskraal massif through initiatives such as; <ul style="list-style-type: none"> Ceasing agricultural activities in a 300m wide connecting corridor between the two massifs 	✓	Document	NPC have a MoU with both Cape Nature and the WWF (the adjacent landowner) concerning future conservation of land not ear marked for mining.
<p>2. Appointments: The mine will appoint a botanical specialist who is familiar with the local flora species to assist in the guidance and implementation of applicable management measures specifically to minimise the botanical impacts.</p>	✓	Document	The mine has appointed a botanical specialist who is available to assist when required.
<p>2. Permits: When necessary (as guided by the botanical specialist), the mine will apply for the applicable permit to remove Species of Conservation Concern for the following years mining activities.</p>	*a (✓)	Visual	Due to all mining, to date, taking place in the low sensitive southern quarry area, there has been no need to apply for any permit to remove species of conservation concern. The commitment remains valid.
<p>3. Search and Rescue: Prior to commencing mining in a botanically sensitive area (Northern quarry and undisturbed areas of Prospect hill), the botanical specialist will be commissioned to implement a search and rescue to harvest specific plants from the area to be mined. These plants will be relocated into adjacent areas or the onsite nursery for future rehabilitation.</p>	*a (✓)	Visual	No mining has taken place in botanically sensitive areas. The commitment remains valid.
<p>4. Access control: Appointed security for the mine must;</p> <ul style="list-style-type: none"> Prevent access of unauthorised people to the mining area Patrol the mining right area with a specific focus to preventing theft of plants (for medicinal purposes), poaching and removal of firewood from the mining right area as well as trespassing and transgression of the boundary fencing which leads to cattle grazing. All new internal haul road routes should be planned with the input of the botanical specialist to ensure that route limits its impact on locally threatened species of conservation concern. 	<p>✓</p> <p>✓</p> <p>*a (✓)</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p>	<p>Three security guards have been employed to control access to the mine, to prevent poaching and removal of firewood. Due to the proximity of the community, it is impossible to completely stop community members traversing the mine.</p> <p>No new internal haul road has been developed within a botanically sensitive area.</p>

Fauna:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Before site preparation:</p> <ul style="list-style-type: none"> • Two weeks prior to implementing site preparation activities, the area to be stripped should be thoroughly searched for tortoises <ul style="list-style-type: none"> - those found should be released in adjacent unaffected habitat. 	*a (✓)	N/A	These commitments were not audited. Based on the area being mined (close to the community) it is unlikely that any wildlife is present. In addition due to the limited production rate at this point in time very little clearance of new ground is required during the course of the year.
<p>2. During site preparation:</p> <ul style="list-style-type: none"> • During site preparation activities, animals forced out of their underground shelters should be assisted to reach the safety of adjacent unaffected habitat. 	*a (✓)	N/A	The commitments remain valid for phase 2 & 3 of mining.
<p>3. Poaching:</p> <ul style="list-style-type: none"> • Anyone found / caught poaching will be handed over to the authorities. <ul style="list-style-type: none"> - Security will patrol for, and remove snares. 	✓	Visual	No snares were noted during the site inspection. Security is specifically instructed to look out for snares.
<p>4. Faunal recordings / animal bypass:</p> <ul style="list-style-type: none"> • A record of all faunal sightings should be maintained. Once an animal has been noted once, it does not need to be repeated. • A record of road kills on internal haul roads needs to be maintained. <ul style="list-style-type: none"> - If a high number of road kills in one location is recorded, an animal bypass needs to be implemented within this area (guidance from a specialist will be obtained if necessary). • Vehicle operators need to be made aware during environmental awareness training of the sensitivity of fauna within the mining area and the need to be aware of the possibility of faunal species crossing haul roads. 	✓/x	Document	<p>C: The mine has an observation book kept by security, the auditor was verbally informed this is used to record all observations (inclusive of faunal sighting and road kills) Rec: Maintain a separate faunal sightings / road kill book.</p> <p>To date verbally informed that there have been no records of road kill in the current mining area.</p> <p>Verbally informed that the current environmental awareness training course is generic.</p>
	✓/x	Document	
	✓/x	Verbal	

Soil

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Stripping topsoil: General requirements:</p> <ul style="list-style-type: none"> Topsoil shall be removed from all areas where physical disturbance of the natural surface occurs. Stripping of topsoil to take place before the rainy season (April to September). Stripping to take place a maximum of 50m ahead of the active mining face. Topsoil must preferably be used immediately, for concurrent rehabilitation or stockpiled in predetermined location(s) for future concurrent rehabilitation. If stored, topsoil must be used at the first available opportunity. When stored, a topsoil register must be maintained providing information such as date, area and volume of soil stored. <p>Specific requirements:</p> <ul style="list-style-type: none"> Where the soil / overburden is less than or equal to 50cm in thickness, the total soil / overburden depth, must be stripped and either used or stockpiled. Where the soil / overburden is more than 50cm thick, <ul style="list-style-type: none"> The top layer of soil (+/-40cm) must be stripped & either used or stockpiled. Any additional overburden must also be stripped and either used or stockpiled. The top layer of soil must be kept entirely separate from the underlying overburden, during stripping, stockpiling and re-using. Where possible calcrete blocks should be preserved for the re-creation of sheetrock type habitat. Replacement of limestone blocks should be undertaken by hand ensuring the limestone rocks are placed with weathered side up, "Cementing" into place with top material. 	<p>✓</p> <p>✓/x</p> <p>✓</p> <p>✓</p> <p>✓/x</p> <p>*a (✓)</p> <p>x</p> <p>*a (✓)</p>	<p>Visual</p> <p>Verbal</p> <p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Document</p> <p>N/A</p> <p>Visual</p> <p>N/A</p>	<p>Due to the scale of the current mining activities, only minimal stripping of topsoil is taking place. Aglime is seasonal and hence stripping can be avoided during the wet season. Mining for feedlime is constant throughout the year. C: It is not practical (at this scale of mining) to restrict the time of year for when topsoil stripping takes place Rec: Amend the commitment to remove the restriction.</p> <p>The mine has initiated a "Stripping report for Saldanha" this report is intended to capture information concerning striping / mining of topsoil, overburden and lime. C: Based on visual and verbal evidence it appeared that topsoil had been stripped in the days prior to the audit. There was no record of this stripped soil on the register Rec: Ensure that the register developed is used accurately.</p> <p>Not audited, but remains applicable</p> <p>C: Topsoil and overburden were stripped together in the most recently stripped area. Rec: Topsoil and overburden to be stripped separately. Additional awareness training on the requirement should be provided.</p> <p>In the areas currently subject to mining, there has been no calcrete blocks exposed during mining activities. The commitment remains applicable</p>

<p>2. Stockpiling topsoil:</p> <ul style="list-style-type: none"> • There must therefore be separate stockpiles for topsoil and for overburden. • If stockpiled, topsoil must be recorded in a topsoil register which includes; <ul style="list-style-type: none"> - Detail about the date of stripping - Location and habitat from where it was stripped - Location of the stockpile - Monitoring dates. • Stockpile(s) must: <ul style="list-style-type: none"> - Be located in an area where they will not need to be re-located and where the possibility of disturbance is minimal. - Not exceed 2m in height. - Be clearly marked to avoid incorrect use or contamination of the material. - Be protected against loss from water and wind erosion - Vegetated to avoid loss through erosion. - Be in the alien vegetation control programme; i.e. kept free of alien vegetation. - Demarcated on mine plans / labelled • Stockpiles must be monitored for; <ul style="list-style-type: none"> - Erosion and establishment of alien vegetation. - If necessary, actions must be implemented to fix erosion channels and prevent future additional erosion. • Remove alien vegetation and encourage indigenous vegetation. 	<p>xa (✓)</p>	<p>Visual</p>	<p>Other than the small berm pushed ahead of the mining face, there was no stockpile of topsoil seen during the audit. All topsoil removed from ahead of the mining face was being used for concurrent rehabilitation purposes.</p> <p>While the commitments could not be audited, they remain applicable.</p>
<p>3. Using topsoil: Topsoil must be used in the following manner;</p> <ul style="list-style-type: none"> • When mining is completed, appropriate sloping and shaping should be completed to ensure that the final face blends in with the surrounding topography (maximum of 35 degree slope on Prospect Hill) <ul style="list-style-type: none"> - Overburden material (but not topsoil) can be used as fill to reduce slopes. • Any overburden that was sourced from below the topsoil must be backfilled first onto the profiled excavation. • The top 40cm layer must be replaced on top of any additional overburden. • The stockpiled topsoil must then be evenly spread over the entire disturbed surface, except in excavation areas that will hold water. The topsoil depth should be monitored during spreading to ensure that it is even. • Topsoil spreading should only be done at a time of year when vegetation cover can be established as quickly as possible, so that erosion of returned topsoil by both rain and wind, before vegetation is established, is minimised. The best time of year is towards the end of the rainy season (August & September) when there is moisture in the soil for vegetation establishment and the risk of heavy rainfall events is minimal. • The rehabilitated area must be monitored for; <ul style="list-style-type: none"> - erosion, and appropriately stabilised if any erosion occurs. - alien vegetation, on-going control must keep the area free of alien vegetation during and after mining. 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p> <p>✓/x</p> <p>✓</p>	<p>Visual</p> <p>Visual Visual</p> <p>Visual</p> <p>Visual & Document</p>	<p>Concurrent rehabilitation has included sloping (using overburden material) and then covering the sloped area with topsoil.</p> <p>C: It is not practical (at this scale of mining) to restrict the time of year for when topsoil spreading takes place Rec: Amend the commitment to remove the restriction.</p> <p>It appeared that the rehabilitated areas on the mine were generally free of alien vegetation and erosion. This is also assessed by specialist.</p>

Archaeological

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Identified archaeological artefacts:</p> <ul style="list-style-type: none"> The mine will comply with the recommendations contained within the archaeological specialist study and summarised in Table 2.2 of this document. The granite outcrop deemed as sensitive from an archaeological point of view shall be protected from mining (Figure 2.4 – demarcated in green). Before mining proceeds into any of the areas demarcated in purple on Figure 2.4 applicable management measures (as indicated in Table 2.2) will be implemented. 	<p>xa (✓)</p> <p>✓</p> <p>xa (✓)</p>	<p>N/A</p> <p>Visual</p> <p>Visual</p>	<p>To date no mining has taken place in areas identified as having archaeological artefacts.</p> <p>No mining has taken place in this area</p> <p>No mining has proceeded into any of the areas demarcated in purple in Figure 2.4 of the EMPr</p>
<p>2. Appointments:</p> <ul style="list-style-type: none"> The mine will appoint an archaeological specialist who is familiar with the local archaeology to assist in the guidance and implementation of applicable management measures specifically to minimise the archaeological impacts. The specialist will be responsible for; <ul style="list-style-type: none"> Implementing the recommendations in Table 2.2. Monitoring areas stripped in preparation for mining. Educating employees about the possible archaeological findings that could be uncovered during mining. 	<p>✓</p> <p>xa (✓)</p>	<p>Document</p> <p>N/A</p>	<p>The mine has a written agreement with a local environmental consulting company to provide specialist consulting services as and when required.</p> <p>Due to the current small scale of mining and the fact that the mining activities remain in the low sensitive southern quarry area there has been no practical need to have the specialist on site.</p>
<p>3. New Archaeological findings:</p> <ul style="list-style-type: none"> Should an archaeological artefact be uncovered during the mining activities either by the specialist or an employee, the mine will; <ul style="list-style-type: none"> Stop physical activities within the area of the finding. Request the appointed specialist to undertake an assessment of the finding. Implement the recommendations of the specialist. 	<p>xa (✓)</p>	<p>Verbal</p>	<p>Verbally informed no new archaeological artefact has been uncovered. As mining has been restricted to the low sensitive southern quarry it is unlikely, the new findings are identified.</p>
<p>4. Storage space:</p> <ul style="list-style-type: none"> The mine will demarcate an area (possibly within the onsite nursery) for the storage of archaeological artefacts before being removed from site. <ul style="list-style-type: none"> Tools and equipment for the storage of archaeological artefacts will be available on site. A plan / record will be maintained on site of all archaeological artefacts discovered during mining activities. 	<p>xa (✓)</p>	<p>Visual</p>	<p>No storage space is currently necessary or available.</p> <p>As and when production rates increase in future and the likelihood of uncovering archaeological artefact increases a suitable storage space should be made available.</p>

<p>3. New Paleontological findings:</p> <ul style="list-style-type: none"> • Should a paleontological artefact be uncovered during the mining activities either by the specialist or an employee, the mine will; <ul style="list-style-type: none"> - Stop physical activities within the area of the finding. - Photograph the finding. - Peg the finding. - Ensure that the finding is maintained in a similar condition in which it is found. - Inform the appointed specialist within a day of the discovery and request an assessment of the finding. - Implement the recommendations of the specialist, which should include; <p><i>(Fossils discovered will be systematically collected to ensure availability of representative samples of abundant fossils & the attempt to capture rare fossils. This will entail descriptive, diagrammatic & photographic recording of exposures, sediment samples and possibly lacquer peels of both representative and unusual sedimentary or biogenic features. The fossils and contextual samples will be processed (sorted, sub-sampled, labelled, and boxed) and documentation consolidated, to create an archive collection from the excavated sites for future researchers.)</i></p>	<p>xa (✓)</p>	<p>Verbal</p>	<p>Verbally informed no new paleontological artefact has been uncovered.</p> <p>As mining has been restricted to a small section of the low sensitive southern quarry it is unlikely, the new findings will be identified during this phase of mining.</p> <p>The commitment remains applicable for future mining activities.</p>
<p>4. Storage space:</p> <ul style="list-style-type: none"> • The mine will demarcate an area (possibly within the onsite nursery) for the storage of paleontological artefacts before being removed from site. • The mine shall make provision on site for the dry storage of bulk samples and suitable space and facilities (trays, shelving, trestle-tables and chairs) for preliminary sorting, labelling and packing of fossil material before transportation of the selected samples to the South African Museum. • The mine will maintain a documented record of all fossil finds (as guided by the specialist). • A plan / record will be maintained on site of all paleontological artefact discovered during mining activities. 	<p>xa (✓)</p>	<p>Visual</p>	<p>No storage space is currently necessary or available. As and when production rates increase in future and the likelihood of uncovering paleontological artefact increases a suitable storage space should be made available.</p>

Air quality

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Dust suppression: The following measures will be implemented to reduce dust generation as a result of mining activities:</p> <ul style="list-style-type: none"> • All active haul roads will be subjected to appropriate dust suppression measures (such as watering and/or applying dust suppressant chemical stabilisers, which are not harmful to the sensitive vegetation or fauna). <ul style="list-style-type: none"> - Increase the frequency of implementing dust suppression during the drier summer months • Speed limits will be enforced on all haul roads to reduce the generation of dust. • Vehicle operators will be trained on practical ways of; <ul style="list-style-type: none"> - Minimising material handling requirements (instead of stockpiling, where possible material should be placed directly into a truck for dispatch). - Minimising the need for vehicle movement on the mine. - Minimising drop heights when loading haul trucks with limestone. - ensuring that there is no overloading of material which could result in a spill during transportation. • Spot inspections by a responsible person will be implemented to ensure that the above requirements are as best as possible being adhered to. <ul style="list-style-type: none"> - Records of the spot inspections must be maintained. • All trucks leaving the site will have the load bins covered with a tarpaulin. • Prior to leaving the site, trucks will be inspected to ensure; <ul style="list-style-type: none"> - That vehicles are not overloaded. <ul style="list-style-type: none"> - No truck will be allowed to leave the site whereby spillages during transportation are likely. - The vehicles are generally clean - They are appropriately covered (such as using a tarpaulin) to reduce dust during transportation. - That wheels, are clean and will not result in an unacceptable limestone deposition on public roads. • If necessary, vehicle de-dusting and cleansing facilities will be provided at the exit point of the mine. • The tarred road adjacent to the access to the mining site will be kept clean by the mine through implementation of sweeping and cleaning. 	<p>✓/x</p> <p>*a (✓)</p> <p>✓/x</p> <p>x</p> <p>✓</p> <p>✓</p> <p>*a (✓)</p> <p>✓</p>	<p>Verbal</p> <p>N/A</p> <p>Verbal</p> <p>Verbal</p> <p>Verbal & Document</p> <p>Document</p> <p>N/A</p> <p>Visual</p>	<p>C: No dust suppression measures such as watering are implemented on the active roads. Due to the small scale of mining activities, current water restrictions and the feedback from the dust monitoring campaign, none are needed. Rec: The commitment should be amended to be flexible to encourage dust suppression measures when required.</p> <p>No truck was onsite during the audit hence it was not possible to audit speed limits.</p> <p>C: Verbally informed environmental awareness training remains generic. Rec: Ensure future training includes site specific requirements.</p> <p>The environmental professional is on site at least every 2 weeks to ensure compliance to the EMP, however C: No evidence that any spot inspections are been undertaken. Rec: Implement and record spot inspections.</p> <p>While no physical truck was seen during the audit, it was clear from the vehicle checklist book and the verbal feedback provided from multiple sources that trucks are covered with tarpaulins.</p> <p>The security check and record the status of each vehicle prior to departing the mine</p> <p>To date no de-dusting facility has been required.</p> <p>The tarred road was clean. There was no evidence of any fines build up.</p>

<p>2. Vehicle emissions: Reduce vehicle emissions by:</p> <ul style="list-style-type: none"> Ensuring that all vehicles used for mining activities are maintained in a good condition in accordance to a maintenance schedule. Implement a system of a vehicle checklist which must include monitoring for excessive emissions. If excessive emissions are noted during the daily inspections, appropriate maintenance must be implemented. 	<p>xa (✓) ✓ xa (✓)</p>	<p>Verbal Document N/A</p>	<p>No vehicle was noted during the audit so the commitment cannot be fully audited. The auditor was verbally informed that all vehicles accessing the mine are maintained in accordance to a schedule. Security maintains a record of inspecting all vehicles accessing the mine.</p>
<p>3. Maintaining haul roads:</p> <ul style="list-style-type: none"> All haul roads will be maintained in a manner in which they do not result in excessive dust from pothole formations or excessive fines on the roads. <ul style="list-style-type: none"> If necessary potholes will be fixed and fines will be removed from the roads 	<p>✓</p>	<p>Visual</p>	<p>All haul roads noted during the site inspection were in good conditions. No potholes were noted.</p>
<p>4. Monitoring:</p> <ul style="list-style-type: none"> A dust fall out monitoring network will be established (See Section 11.4 for detail) and the results of the monitoring data will be used to determine the success of the dust suppression management measures and provide guidance of the need for additional management measures. A weather station (as described in the Air quality specialist study) will be erected on site to assist in the interpretation of the monitoring results. 	<p>✓ ✓</p>	<p>Visual & Document</p>	<p>Dust fallout monitoring has been established. To date all results have mainly indicated low dust fallout level within the area. Upon reviewing the results for the last year, there appears to be intermittent concerns about the level recorded at the gate sampler. A weather station has been erected on site.</p>

Noise

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Operational hours: The mine will comply with the following operational hours:</p> <ul style="list-style-type: none"> Monday to Saturday (Phase 1&2); <ul style="list-style-type: none"> Daylight hours (unless otherwise agreed in writing with the mining and transport contractor) Sundays and public holidays <ul style="list-style-type: none"> No mining 	<p>✓</p>	<p>Verbal & Document</p>	<p>Environmental specialist verbally confirmed daylight operational hours are being adhered to. When inspecting the vehicle movement book, all vehicle entry records are for daylight hours only.</p>
<p>2. Vehicle noise: Reduce vehicle noise by:</p> <ul style="list-style-type: none"> Ensuring that all vehicles used for mining activities are maintained in a good condition in accordance to a maintenance schedule. Implement a system of having a vehicle checklist which must include monitoring for excessive noise. If excessive noise is noted during the daily inspections, appropriate maintenance must be implemented. 	<p>xa (✓) ✓ xa (✓)</p>	<p>Verbal Document N/A</p>	<p>The mining contractor (VDM) confirmed that all trucks are maintained in a good condition at their off-site workshop. The vehicle inspecting checklist includes monitoring of noise. Could not be audited but remains applicable.</p>

<p>3. Monitoring:</p> <ul style="list-style-type: none"> If complaints are received concerning noise levels, the mine will implement the appropriate monitoring to determine the extent of noise generated. From monitoring, determine the need for additional management measures to be implemented. 	<p>xa (✓)</p>	<p>Verbal and document</p>	<p>Environmental professional verbally confirmed that no noise complaints have been received. No noise complaints were captured within the observation book or on SAP. Commitment remains applicable.</p>
--	---------------	----------------------------	---

Groundwater:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Sanitation: A responsible person must be appointed to check the level of sewage in the chemical toilet.</p> <ul style="list-style-type: none"> If the toilet is more than 75% full, the responsible person must ensure that it is replaced with a cleaned / empty chemical toilet. <ul style="list-style-type: none"> Any spillages from the chemical toilet to be dug up and treated as hazardous waste. 	<p>✓/x</p>	<p>Visual</p>	<p>C: The mine has installed a septic tank which is emptied as and when required rather than use chemical toilets. Rec: When the EMP is updated in future, allow for flexibility concerning sanitation solutions for the mine.</p>
<p>2. Hydrocarbon spills: A responsible person must be appointed to check the active mining areas for small hydrocarbon spills: Any hydrocarbon spills identified must be dug up and removed as hazardous waste.</p>	<p>✓</p>	<p>Visual</p>	<p>Not one hydrocarbon spill was noted during the physical site inspection of the audit.</p>
<p>3. Vehicle maintenance:</p> <ul style="list-style-type: none"> The mine will prevent potential hydrocarbon spill by maintaining all vehicles in good working order. The mine will implement a daily check list of all mining vehicles to ensure that they are in good working order. One of the requirements in the checklist is to evaluate for hydrocarbon spills. Should a spill be noted then the following will occur; <ul style="list-style-type: none"> A drip tray will be placed under the leaking equipment immediately. (This implies that drip trays must be available for use if necessary.) The spill will be cleaned up as per the requirements in the generic management measures. The leak will be fixed. If the equipment cannot be fixed on site, it will be taken to a recognised workshop for repair. Clean up hydrocarbon spills no matter how small, immediately when discovered. All scheduled maintenance to take place at an offsite recognised workshop. If emergency vehicle maintenance is required to take place on site, <ul style="list-style-type: none"> it will be done over a plastic sheet drip trays will be used to capture small oil spills All oil will be recycled and all oily waste will be disposed of as hazardous waste. 	<p>xa (✓) ✓ xa (✓) xa (✓) ✓ xa (✓)</p>	<p>Visual Document Visual Visual Verbal</p>	<p>The mining contractor (VDM) confirmed that all trucks are maintained in a good condition at their off-site workshop. The vehicle inspecting checklist includes monitoring of oil leaks. No record of any spills occurring. Commitment remains applicable. No evidence that spills have occurred. Commitment remains applicable. Verbally informed that no emergency vehicle maintenance has been required. Commitment remains applicable.</p>

Visual:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Good housekeeping: Implement good housekeeping throughout the mining operation, by;</p> <ul style="list-style-type: none"> • The limited supplies required to maintain the operation should be stored within a protected area adjacent to the security house. • ensuring: <ul style="list-style-type: none"> - Adequate waste storage facilities are available for domestic & hazardous waste. - All waste is stored in the designated area (separate hazardous & domestic). - The volumes of waste in storage facilities are monitored. - Dispose waste prior to storage area overflowing. - There is no illegal dumping of waste either at the entrance or anywhere within the mining right area. • Inspect the mining environment area to ensure compliance with the good housekeeping commitments listed above. <ul style="list-style-type: none"> - If poor housekeeping is identified, implement corrective action. 	<p>✓</p> <p>✓</p> <p>✓/x</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p>	<p>All supplies are either stored within the security container or delivered by the environmental professional as required.</p> <p>Adequate waste facilities are available for the current minimal mining activities.</p> <p>C: Excessive amounts of domestic waste from the adjacent community are being dumped on the edge of the mining property. Rec: Maintain a record of communicating the problem of waste disposal by the community to the Municipality.</p>
<p>2. Lighting: Implement a system whereby security lighting is kept to a minimum.</p>	<p>✓</p>	<p>Visual</p>	<p>Spot lights were noted at the entrance of the mine directed towards the security container.</p>
<p>1. Southern quarry:</p> <ul style="list-style-type: none"> • The topographical crest on the eastern section of Prospect Hill must not be mined through. • Where practical use netting to cover over areas of cutting slopes that are not being directly mined to reduce the visual intrusion. • A shallow angled rehabilitated screening berm needs to be created to the east of Middelpos. • The final face of the eastern extent of the quarry should curve on the edges to align more naturally with the topography. 	<p>✓</p> <p>xa (✓)</p> <p>✓</p> <p>xa (✓)</p>	<p>Visual</p> <p>N/A</p> <p>Visual</p> <p>N/A</p>	<p>No new mining has taken place on Prospect Hill.</p> <p>No netting has been provided although it has not been deemed necessary to date.</p> <p>A trench and berm separate the mine and Middelpos.</p> <p>Final faces have yet to be reached. Concurrent rehabilitation aims to align to natural topography.</p>
<p>2. Northern quarry:</p> <ul style="list-style-type: none"> • The topographical crest boundary to the west of the northern quarry should not be breached by mining activities • Before mining commences in the northern section of the northern pit a berm (+/- 2m in height, for a length of 100 – 200m) will be created along the mining boundary to reduce the visual impact of the mining in the northern pit from the road going towards Jacobsbaai. • The berm will be created with overburden and topsoil stripped from the area adjacent to the berm. • The berm should be revegetated with appropriate indigenous vegetation. 	<p>xa (✓)</p>	<p>Visual</p>	<p>No mining has taken place within the Northern Quarry area. Future mining will be aligned to the development of the AfriSam cement plant.</p> <p>As and when required the adjacent commitments remain applicable.</p>

Socio-economic:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Social and labour plan:</p> <ul style="list-style-type: none"> Implement the human resource commitments within the approved social and labour plan. Implement the approved local economic development projects contained within the social and labour plan. Establish and maintain the future forum Report on compliance with the social and labour plan in line with the regulation 45 of the MPRDA 	<p>✓ ✓ ✓ ✓</p>	<p>Verbal Verbal Verbal Document</p>	<p>The environmental professional confirmed that all aspects of the SLP were being implemented by the HR department.</p> <p>A community hall was built as part of the past LED projects. The building of a wall is currently been discussed as a possible future project.</p> <p>The 2019 compliance report (submitted in April 2019) was noted during the site inspection.</p>
<p>2. Complaints register: All complaints received by the mine must be recorded in a complaints register. The information recorded must include, but is not limited to:</p> <ul style="list-style-type: none"> Date of complaint. Name and contact details of complainant. Nature / Description of the complaint. Name of the person who recorded the complaint. A description as to how the complaint will be addressed. A proposed target date for rectifying the complaint. Date when corrective action was implemented (if necessary). Confirmation / Explanation of feedback provided to the complainant. A list of any monitoring or follow-up work that is required, including target dates. The task must be signed off by a responsible person. 	<p>✓</p>	<p>Verbal</p>	<p>Complaints are recorded either by security, in the observation book or directly by the environmental specialist. When a complaint is received it is captured on a digital database (SAP). Verbally indicated that the following recent complaints have been raised;</p> <ul style="list-style-type: none"> Concerns about fences been destroyed between NPC land and adjacent farmers land Concerns about hunting dogs traversing the NPC la nd.
<p>3. Interested and affected parties:</p> <ul style="list-style-type: none"> Maintain a proactive open door policy with all interested and affected parties Liaise with surrounding landowners on an adhoc basis (but at least annually) and maintain a record of all communication. Liaise with local government officials / ward councillors to proactively address any concerns that may arise 	<p>✓ ✓</p>	<p>Verbal Verbal & Document</p>	<p>Based on the feedback from the environmental professional, it appears as if an open door policy is maintained.</p> <p>Based on verbal feedback it is apparent that communication with surrounding landowners, government officials and the community takes place quarterly. The most recent attendance register of the meeting with the community was available.</p>
<p>4. Community awareness campaigns:</p> <ul style="list-style-type: none"> Implement adhoc awareness community campaigns such as; <ul style="list-style-type: none"> Details concerning the mining activities taking place and the danger of entering mining sites the dangers of trucks on the public roads 	<p>✓/x</p>	<p>Verbal</p>	<p>C: There was no evidence of implementing awareness campaigns. Verbally informed that plans were in place to address schools in the area in terms of awareness of the mine. These plans have been delayed by the Covid-19 pandemic. Rec: When possible, implement planned campaigns.</p>

Conservation area:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Declaration of a reserve:</p> <ul style="list-style-type: none"> As part of the mine's (and AfriSam's) commitments to conservation, portions of land owned by NPC will be set aside for conservation usage by proclaiming a protected area. This area will represent a consolidation of the surplus land outside of the mining area (991 Ha) not subject to the consent of land use in terms of Section 15 of LUPO and will be an application in terms of Section 17 of LUPO for special zone (nature reserve) Ensure that there is sufficient funding for its management in perpetuity through funding or other mechanisms. 	<p>*a (✓)</p>	<p>Verbal</p>	<p>To date the reserve has not yet been declared. NPC have annual meetings with Cape Nature concerning the reserve commitment. Cape Nature are apparently comfortable that the reserve is declared as and when mining production rates increase. The commitment remains applicable.</p> <p>In the meantime, efforts are being made to secure the correct area of the different biomes required to be included in the offset. To date all areas have been secured except for around 38 hectares of Granite Strandveld.</p> <p>NPC have a MOU with WWF concerning future collaboration concerns land within the area.</p>
<p>2. Conservation:</p> <ul style="list-style-type: none"> See Appendix 2 for a plan depicting the conservation areas to be set aside by NPC versus the mining footprint Conserve the untouched sections of the ridges Saldanha Limestone Strandveld. Conserve the buffer zones within the mining right area Conserve sensitive areas on land owned by NPC which lies adjacent to the mining right area, such as; <ul style="list-style-type: none"> The area between the northern quarry and Jacobsbaai being treated as a set back area. 	<p>✓</p> <p>✓</p> <p>✓</p> <p>✓</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p>	<p>No areas set aside for conservation has been disturbed by past or present mining activities.</p> <p>Buffer zones are in place.</p> <p>Adjacent land owned by NPC has been conserved and is untouched.</p>

Concurrent rehabilitation:


EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Concurrent rehabilitation commitments: The following concurrent rehabilitation commitments will be implemented;</p> <ul style="list-style-type: none"> On the flat sections of the mining right area, stripping of vegetation and topsoil will take place a maximum of 50m ahead of the advancing face and rehabilitation activities will be initiated 200m behind the mining face. On the sloped sections of the mining right area (Prospect Hill – See Figure 3.3) rehabilitation activities will take place within 400m behind the mining face. When mining in environmental sensitive areas (northern quarry and undisturbed areas of Prospect Hill), due consideration will be given to harvest plant material for future rehabilitation before the area is disturbed. Ensure rehabilitation includes the redistribution of piled up calcrete/limestone rocks in the mining area. These rocks provide shelter opportunities for numerous terrestrial animal species, including RDB species. 	<p>✓</p> <p>xa (✓)</p> <p>xa (✓)</p> <p>xa (✓)</p>	<p>Visual</p> <p>Visual</p> <p>Visual</p> <p>Visual</p>	<p>Concurrent rehabilitation is adhering to the designated distances.</p> <p>No new mining has occurred on Prospect Hill. These commitments remain applicable as and when mining in this area commences.</p> <p>To date no sensitive areas have been disturbed. The commitment remains applicable.</p> <p>No calcrete blocks have been unearthed in the current mining area. The commitment remains applicable for future mining activities.</p>
<p>2. Addressing backlog of existing rehabilitation:</p> <ul style="list-style-type: none"> Where rehabilitation activities (in line with the distances noted above) have not been implemented in the areas affected by the historical mining activities, the mine must catch up on concurrent rehabilitation requirements. <p>(once the above distances are achieved, the mine will be regarded as 100% concurrently rehabilitated).</p>	<p>✓</p>	<p>Visual</p>	<p>Based on visual evidence it appears that the majority of backlog of rehabilitation requirements has been addressed. According to the rehabilitation report compiled by NCC Environmental in March 2020 the success of the rehabilitation activities is “adequate”.</p>
<p>3. Onsite nursery:</p> <ul style="list-style-type: none"> Under the supervision of a botanical specialist the mine will establish and maintain an onsite nursery for the storage of plants harvested ahead of the mining face (to be used in concurrent rehabilitation). Collect & store seed of sensitive, aesthetic & functional plants for restoration use. Keep a record of the habitats where material was obtained and a survival inventory of plants in the nursery. These data are used to manage the re-planting design. Seeds are best sown in late Autumn – early Winter. 	<p>xa (✓)</p>	<p>Visual</p>	<p>Due to the limited scale of mining activities and the location of current mining activities in a low sensitive area of the mine, there has been no need for a nursery to date.</p> <p>NPC have questioned the effectiveness of a nursery in future Rec: Obtain specialist input on the viability of a nursery and possible alternative solutions for the protection sensitive vegetation / use in concurrent rehabilitation.</p> <p>As and when mining production increases and moves into higher sensitive areas, the nursery should be established.</p>

<p>3. Implementation of rehabilitation: The principles of rehabilitation are as follows:</p> <ul style="list-style-type: none"> • The receiving environment must be the same as the procurement area. This implies that; <ul style="list-style-type: none"> - Hill slope plants must be re-established in hilly areas. - Plants growing between rocks, in cracks between rocks or in hollows in rock sheets need to be planted in similar habitats to ensure their survival. - Plants growing in sunny exposed areas need establishment into similar habitats. - Rehabilitate vertical slopes to re-create natural contours and texture. - Rehabilitation to consider the visual implications of the final rehabilitated mine. • Limestone deposits have hard rock crusts with softer material below. The hard crust would require re-establishment in the mined out areas. • Concurrent rehabilitation will be guided by the appointed botanist who will follow the recommendations contained within the Botanical Specialist studies. • A rehabilitation plan will be designed and implemented and include (see botanical specialist study for detail); <ul style="list-style-type: none"> - Details about record keeping requirements (includes annual targets) - Requirements for the handling of topsoil - Requirements for the storage of plant material - Requirements for the preparation of an area for concurrent rehabilitation. - Requirements for planting in the prepared areas (late Autumn to Mid Winter) - Follow up and after care requirements (monitoring for erosion). 	<p style="text-align: center;">✓</p> <p style="text-align: center;">*a (✓)</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓/x</p>	<p style="text-align: center;">Visual and verbal</p> <p style="text-align: center;">Visual</p> <p style="text-align: center;">Document</p> <p style="text-align: center;">N/A</p>	<p>Based on seeing the concurrent rehabilitation and the “rehabilitation report” completed by NCC, rehabilitation activities have been implemented to adequately and in line with the required principles. All rehabilitation has been restricted to mined out areas of the southern quarry. As no mining has been implemented in any other area, there has been no need to implement rehabilitation in these other areas.</p> <p>The commitments remain applicable.</p> <p>The current rehabilitation activities have been assessed by a specialist.</p> <p>C: While there was clearly evidence of implementing rehabilitation, and a rehabilitation plan exists, it does not include the adjacent commitments (due to the scale and location of the current mining activities), Rec: Future updates to the rehabilitation plan should include the adjacent commitments.</p>
<p>4. Alien vegetation:</p> <ul style="list-style-type: none"> • Systematically remove alien vegetation from the property in accordance to an alien vegetation removal plan (See Appendix 3) for an example of the requirements of an alien vegetation removal plan). The plan must include commitments to; <ul style="list-style-type: none"> - Implement continuous annual management action to remove any woody invasive species from the wider area (encourage other landowners to support initiative), particularly in their juvenile development stage - Alien vegetation control will be required through all the fallow ploughed areas. - Woody invasive plant control is required through all NPC controlled land. • Monitor rehabilitated areas every six months for presence of alien vegetation. • Remove any juveniles exotic woody plant. 	<p style="text-align: center;">✓</p>	<p style="text-align: center;">Document</p>	<p>The alien vegetation plan is included in the fire management plan developed by NCC and the rehabilitation plan completed by Shangoni</p> <p>Alien vegetation has been removed and the site is relative free of alien vegetation.</p>


Current closure plans:

G&O: The current final land use intention for the Saldanha quarry is to rehabilitate the land in a manner where-by the rehabilitated land can be used mostly for conservation purposes

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. During the life of the mine:</p> <ul style="list-style-type: none"> • During quarry planning meetings discuss the continued relevant of the site specific mine closure goals and objectives contained within this document. • Every two years, during the environmental performance audits, ensure that mine closure objectives contained within the EMPR are up to date and relevant. <ul style="list-style-type: none"> - If necessary, due to changing circumstance, the mine closure goals and objectives contained within the approved EMPR must be appropriately updated and submitted to the DMR for approval. • Discuss future mine closure with interested and affected parties during the appropriate stakeholder engagement processes. • Obtain and maintain environmental monitoring results in order to be able to quantify risks pertaining to environmental impacts resulting from the mine. 	<p>✓/✗</p> <p>✓</p> <p>✓/✗</p> <p>✓</p>	<p>Verbal</p> <p>Document</p>	<p>C: No evidence that mine closure is discussed in QPM's or with I&AP's. Rec: Ensure the relevance of closure objectives are discussed in QPM's and future I&AP engagements.</p> <p>The mine closure objectives as stated above remain relevant. All concurrent rehabilitation implemented supports the current closure goals.</p> <p>The success of rehabilitation activities is being assessed by a specialist.</p>
<p>2. Five years prior to the end of life of mine: Upon reaching a five year period before the end of the life of the mine (as determined by quarry planning meeting) the mine will:</p> <ul style="list-style-type: none"> • Inform the Minister of Environmental Affairs in terms of Section 33 of the NEM:AQA. • Undertake an assessment to determine additional specific legal requirements. • Review the integrated development plan (IDP) of the Municipality in which the mine is located. Align closure objective to those contained within the IDP. • Implement a structured consultation process to ensure that the closure options are practically aligned with all stakeholders. • Compile a site specific closure management plan (Regulation 62 of the MPRDA). • Amend the SLP to place more emphasis on addressing the implication of mine closure on individuals, economies and regions where closure of the mine is certain; • Residual and possible latent environmental impacts must be identified and quantified through the commissioning of relevant specialist studies. • Ensure that the mine is and remains 100% concurrently rehabilitated. 	<p>*a (✓)</p>	<p>N/A</p>	<p>The mine has many years (greater than 30 years) of resources to support continued mining operations into the foreseeable future. The commitments remain applicable for the five years prior to end of life of mine</p>
<p>3. Two years prior to the end of life of mine:</p> <ul style="list-style-type: none"> • Undertake a final performance audit contemplated in terms of Reg 55(8) of the MPRDA. • Apply for any legal authorisation (NEMA or NEM:WA) as determined by the legal review undertaken in the final performance audit. 	<p>*a (✓)</p>	<p>N/A</p>	<p>See comments above.</p>

<p>4. Upon closure of the mining operation:</p> <ul style="list-style-type: none"> • Inform the Department of Water Affairs of the cessation date of the mining operation. • Complete and submit the following closure documentation to the DMR for approval (within 180 days of ceasing operations); <ul style="list-style-type: none"> - An environmental risk report contemplated in Regulation 60 of the MPRDA - A closure plan contemplated in Regulation 62 of the MPRDA - A final performance audit. • Once the legal authorisations are approved, implement the relevant closure activities. • If the responsibilities for the rehabilitation of the land are to be transferred to another entity then a written application will have to be lodged with the Minister and only on his / her authority can the environmental liabilities and responsibilities as identified in the EMP and any prescribed closure plan be transferred to a suitably qualified person. • Once physical closure activities have been completed, make use of the concurrent rehabilitation monitoring campaign to prove that no latent impacts have resulted. • After completion of the pre-determined post closure monitoring period, as contained within the closure plan, request the DMR to issue the required closure certificate and release the financial provision allocation for mine closure. <p><i>(Note that the mine will remain responsible for, any environmental liability, pollution or ecological degradation, & the management thereof and to prevent injuries, ill-health, loss or life or damage of any kind from occurring until the Minister has issued a closure certificate.)</i></p>		Visual	<p>This commitment is currently not applicable for the main mining section as defined by the S102 area.</p> <p>C: The S102 application effectively excluded the historical sand dune area from the future mining right area. No evidence that any closure certificate has been applied for this area which historically formed part of the mine. Section 43(4) of the MPRDA requires a closure application to be submitted within 180 days of abandoning an area.</p> <p>Rec: Implement a closure process for the sand dune area which no longer forms part of the mine. Maintain a financial provision allocation for this area (as seen in the latest report) until such time a closure certificate has been issued.</p>
---	---	--------	---

Non-conformances:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
<p>1. Non-conformances:</p> <ul style="list-style-type: none"> • Should an environmental impact occur which is outside the normal operating environmental conditions of the mine (and is not considered an environmental emergency), it can be raised as a non-conformance. Non-conformances can be raised by any employee, customer or interested and affected party. If a non-conformance is raised the mine will: <ul style="list-style-type: none"> - Record the non-conformance and undertake the actions described below. • The applicable responsible person will then: <ul style="list-style-type: none"> - Implement corrective action if required. - Identify the root cause of the non-conformance. - Identify and implement preventative actions to ensure that it does not re-occur. - Once all actions and investigations have been completed, it can be documented and signed off. 		Verbal and document	<p>All non-conformances are either recorded by the security in the observation book or recorded directly by the environmental professional.</p> <p>If necessary the non-conformances are digitally recorded on SAP in which the applicable investigations are implemented.</p>

Emergency incidents:

EMP commitments	Comp	Evidence	Comments, Concerns (C) and Recommendations (Rec)
Assembly points must be: <ul style="list-style-type: none"> Clearly labelled. Documented. Communicated to all employees 	✓	Visual	The security container area acts as the assembly point.
Emergency numbers are to be displayed at assembly points. These numbers must also include the number of the environmental specialists appointed by the mine.	✓	Visual	Emergency numbers are displayed at the security container.
Conduct emergency drills / mock exercises of emergency incidents to practice and perfect response. This will minimise the safety and environment impacts of real emergency. If this identifies deficiencies in the management actions, the relevant procedures will be amended.	✓/✗	N/A	C: No evidence of implementing emergency drills during 2020. These drills have been delayed due to Covid-19 pandemic. Rec: As and when possible implement and record emergency drills on site.
Report any emergency incidents to the relevant government / municipal departments within 14 days of the incident.	*a (✓)	Verbal	Verbally informed that there has been no reportable emergency incident over the last 2 years.
General environmental incidents reported to environmental authorities, as required in S 30 NEMA (see Appendix 4 for reporting requirements).	*a (✓)		

The following is applicable when reviewing the commitments for the different types of possible emergencies.

- The prevention measures for large hydrocarbon spills are being implemented.
- The prevention measures for both veldt fires and building fires are in place. Fire breaks have been cut and fire extinguishers are in place at the container.
- There have been no incidents of excessive dust. Due to the current scale of mining, it is unlikely excessive dust will be encountered.

6 CONCLUSION

6.1 LEVEL OF COMPLIANCE WITH CONDITIONS AND THE INTERPRETED INFORMATION GAINED FROM MONITORING THE EMPR

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (2)(a)(i)**
 GNR 527 of MPRDA: **Regulation 55 (3)(d)**

Based on the review of the achievement in terms of the implementation of the commitments of the approved EMPr, the percentage of compliance to the commitments is high (Table 6.1). In combination compliance and commitments which could not be audited by are still applicable, represented 83.3 percent of the findings.

Environment management at the mine is considered effective and as a result, there are no critical findings and only two major findings which require rectification.

The environmental professional responsible for the implementation of environmental management at the mine should be commended.

Table 6.1: Level of Compliance with Commitments in the EMPr

	<i>Number of commitments</i>	<i>Overall compliance</i>
Compliance (✓) and Commitments which are valid but currently not applicable (✗a✓)*	95 & 61	83.8%
Partial compliance (✓/✗)	26	14.0%
Not in compliance (✗)	4	2.2%
Not applicable (n/a)	0	0%

* As commitments that could not be audited are still applicable, they have been grouped with "compliance" in the assessment. There were 61 commitments which represented 32.8% of commitments, which could not be audited and have been grouped with compliant.

6.2 THE RELEVANCE AND EFFECTIVENESS OF THE EMPR

Legal Requirements of GNR 326 of NEMA: **Appendix 7 (2)**
 GNR 527 of MPRDA:

After review of the content of the approved EMPr, it is the auditors' opinion that;

- The EMPr has an excessive number of irrelevant commitments for the current small scale mining activities taking place. As and when mining is scaled up the commitments will be relevant.
- Many of the significant impacts identified within the approved EMPr are only relevant to the increased production rate mine (as and when mining is required in the northern quarry and Prospect Hill).
- As and when production rates increase to feed the proposed cement plant, then the document will be better suited.

All activities undertaken on-site are covered in the EMPr and the auditor was not informed of any new activities (that are outside the scope of the EMPr) that are proposed for the next audit period.

It is the auditor's opinion that the EMPr has identified all impacts and Management Actions are provided for all impacts. Considering the life of the mine (more than 30 years), the closure aspects (as described in the EMPr) are still applicable and will not be compromised by the current mine plans.

While it is acknowledged that a number of commitments and recommendations are not currently applicable as they will become applicable as and when cement operations commence (before July 2025) **it is not recommended** that the EMPr is revised.

6.3 AUDIT REPORT SUMMARY

Based on the site visit and review of documentation, there were no critical findings. Only 2 major findings were noted which can be rectified. From a physical site inspection, the auditor was impressed with the implementation of concurrent rehabilitation and the fact that there was no evidence of any hydrocarbon spills.

There are many commitments within the approved EMPr which become applicable as and when mining rates increase (when the AfriSam cement plant is constructed). It is for this reason, that the audit has highlighted a lot of findings which are not applicable for the current mining activities.

It is the finding of this audit that no critical short-comings have been identified with the EMPr and as a result, no amendment of the EMPr and / or consultation with I&AP is recommended.

7 APPENDICES

7.1 EXPERIENCE AND EXPERTISE OF AUDITOR

PERSONAL DETAILS:

First names	Andrew Charles
Surname	Nicholson
ID number	740103 5108 086
Contact details:	
Business telephone	(011) 791 3389
Business cell	084 840 6316
E-mail	andrew@umhlaba.co.za
Home language	English

EDUCATION:

Degrees:

BSc Honours Biological Sciences (1992-1995).

Leicester University, Leicester, England. Grade: Upper Second

Post Graduate Diploma Natural Resources Management (1996-1997)

Leicester University, Leicester, England. *Research post / Environmental consulting:*
Scandioconsult, Box 5343, Gotenburg 40227, Sweden.

Registration:

Registered Environmental Assessment Practitioner Reg No: 2019 -716

Recent Courses and Workshops Attended:

Carbon tax workshop

June 2019 – Presented by Imbewu Sustainability Legal Specialists (Pty) Ltd, Johannesburg

Mine closure and recent case law workshop

June 2019 – Presented by Imbewu Sustainability Legal Specialists (Pty) Ltd, Johannesburg

Compliance with and enforcement of the Waste Act workshop

April 2018 – Presented by Imbewu Sustainability Legal Specialists (Pty) Ltd, Johannesburg

Environmental law update workshop

August 2017 – Presented by Imbewu Sustainability Legal Specialists (Pty) Ltd, Johannesburg

Technical orientation on IFC's Performance

October 2014 – Johannesburg

GRI Course and workshop on sustainability reporting

September 2013 – Presented by Environmental & Sustainability Solutions, Johannesburg

Mining law workshop

May 2013 – Presented by Imbewu Sustainability Legal Specialists (Pty) Ltd, Johannesburg

Contaminated land workshop

October 2012 – Presented by Imbewu Sustainability Legal Specialists (Pty) Ltd, Johannesburg

Air Quality Training

July 2010 – Presented by Imbewu Sustainability Legal Specialists (Pty) Ltd, Johannesburg

Mine project planning and control

September 2009 – University of Witwatersrand, Johannesburg

Waste Laws workshop

August 2009 – C.S Environmental Services

Third International Seminar on Mine Closure

October 2008 - Johannesburg

Writing and Reviewing Environmental Impact Assessments and Environmental Management Programmes

August 2006 – IAIAsa Conference, Pilanesberg, North West Province

ISO 14001 Bridging Course from 1996 to 2004 version. SABS Training

June 2006.

Environmental Law for Environmental Managers. Overall score: 86%

August 2005 - North West University

Five-day Institute of Environmental Management and Assessment (IEMA) Approved Environmental Management System (ISO14001) Implementation & Internal Auditor course.

May 2002 - Walmsley, Johannesburg.

Example of recent Environmental Impact Assessments I have worked on:

Bundu Mining (Pty) Ltd – Expansion of mining right footprint

Brief project description: Undertaking a full scoping and environmental impact assessment process in order to expand an existing mine into an area which was not part of the original mining right or covered in the approved environmental authorisation. The project included commissioning a number of specialist studies, implementing a public participation process and compiling a Scoping report followed by an Environmental Impact Assessment report (EIAR).

Status of project: Final Environmental Impact Assessment Report submitted to the DMR for a decision in November 2018. Still awaiting the decision on the submitted application.

Role: Leading environmental assessment practitioner.

Prime Spot Trading – Mining Right Application

Brief project description: Undertaking a full scoping and environmental impact assessment process in order to apply for a new mining right for a small open cast quarrying operation. The project included commissioning a number of specialist studies, implementing a public participation process and compiling a Scoping report followed by an EIAR.

Status of project: Final environmental impact assessment report submitted to the DMR for a decision in July 2017. Positive decision received in July 2019 and notification process of the decision to the registered I&AP's has occurred.

Role: Leading environmental assessment practitioner.

Far East Gold (SPV) – Expansion of mining right footprint

Brief project description: Undertaking a full scoping and environmental impact assessment process in order to expand an existing mine to incorporate 4 adjacent prospecting rights. The project included commissioning a number of specialist studies, implementing a public participation process and compiling a Scoping report followed by an EIAR.

Status of project: Final environmental impact assessment report submitted to the DMR for a decision in October 2016. Positive decision received in May 2019 and notification process of the decision to the registered I&AP's has occurred.

Role: Leading environmental assessment practitioner.

AfriSam Properties (Pty) Ltd – Jukskei Quarry EMPr amendment

Brief project description: Amending the mining right area through a combination of a S102 application through the Mineral Petroleum Resources Development Act, Act 28 of 2002 as amended (MPRDA), an EMPr amendment in accordance with part 2 amendments of Section 32 of the 2014 EIA regulations and a closure application in line with Regulation 43 of the MPRDA.

Status of project: All final submissions for the various application lodged with the DMR by May 2017. Awaiting the decision on the applications.

Role: Leading environmental assessment practitioner.

West Wits mining right application

Brief project description: Assisting a land owner on ensuring their concerns are raised with regards to the West Wits mining right application. This involved understanding the landowners concerns followed by evaluating then commenting on the draft Scoping report, a number of specialist studies and the draft EIAR.

Status of project: Final comments on the draft EIAR submitted in July 2019. Notification of the decision yet to be received.

Role: Environmental consultant advising a landowner.

Aquila Thabazimbi Mining Right application

Brief project description: Assisting a community (Rooiberg Bewaria) on ensuring their concerns and comments are raised with regards to the Aquila mining right application to mine iron ore from the Meletse Mountain. This involved understanding the communities concerns followed by evaluating then commenting on the draft Scoping report, a number of specialist studies and the draft EIAR.

Status of project: No longer involved in the project, but believe the application was refused.

Role: Environmental consultant advising a community.

Raumix Aggregates (Pty) Ltd

Various: Assisting six quarries with completing environmental audits, compiling financial provision calculations and implementing environmental monitoring (dust, noise and water). Providing general environmental advice to their operations.

Status of project: Most recent environmental audits were completed in June 2019

Role: Consultant advising Raumix Aggregates.

EMPLOYMENT HISTORY:

Environmental Consultant

Umhlaba Environmental Consulting CC

January 2004 to present (15+ years)

I am one of the Founding Members of Umhlaba and my responsibilities include work such as:

- Managing the company and ensuring its continued success.
- Environmental authorisation applications (both Basic Assessments and Full EIA's) for mines.
- Amending existing Environmental Management Programme Reports to compile with the 2014 EIA Regulations.
- Environmental auditing of Environmental Management Programme Reports and water use licenses.
- Environmental compliance audits
- Closure applications
- Liaison with various Government Departments, on behalf of the clients.
- Liaising with and facilitating various specialist studies on behalf of our clients
- Compiling mining permit, mining rights and prospecting right applications and renewals thereof
- Section 102 applications
- Advising on all aspects of the environmental law applicable to mining houses
- Closure Plan, Environmental Risk Report and Final Risk Assessment.
- Calculating Financial Provision for Environmental Rehabilitation.
- Implementing and compiling monthly environmental monitoring reports
- Due diligences
- Feasibility reports

Environmental Consultant

Blue Swallow Environmental Services (Pty) Ltd.

July 2002 to December 2003

Initially I was appointed as a Projects Manager to run various projects undertaken by the company. From June 2003 to December 2003, I was appointed the General Manager of the company which in addition to my allocation of various projects, I was responsible for the day to day running of the company. The majority of my work focussed around mining activities, including:

- Environmental Management Programme Reports (in terms of the Minerals Act, 1991).
- Pre-ISO Auditing.
- Environmental Impact Assessment Checklists.
- Liaison with Government departments, on behalf of the clients.
- Financial Provision documents.
- Rehabilitation plans and projects.
- Closure Reports.
- Tourism Marketing.

Camp Manager / Senior Game Ranger / Game Ranger

Londolozi Safari Lodge, CCAfrica

January 2001 to May 2002

My responsibilities outside of being senior game ranger include helping with the day to day running of the lodge.

Ngala Game Reserve, CCAfrica

January 1999 to January 2001

As well as being a game ranger, I was also involved in the community development aspects of the lodge, organizing conservation lessons and taking an interest in the African Foundation Rural Investment funds work in the Welverdiend community adjacent to Ngala. For the month October 2000, I worked as a game ranger / assistant camp manager at Sandibe lodge, Okavango Delta, Botswana.

7.2 DECLARATION OF INDEPENDENCE OF AUDITOR

I, Andrew Nicholson on behalf of Umhlaba Environmental Consulting CC declare that Umhlaba is an independent company and I am an independent Environmental Assessment Practitioner and do not have and will not have any vested interest (either business, financial, personal or other) in the mining operation other than remuneration for work performed in terms of the Regulations being implemented here.

Signed on this 04 day of December, 2020 at Randparkridge

Signature: A.L. Nicholson

Designation: Lead Auditor

7.3 ACCEPTANCE OF THE PERFORMANCE ASSESSMENT BY THE CLIENT

I, Oscar Olën on behalf of NPC Saldanha Quarry confirm that I have read and understood the contents of this report and recommended corrective action. Furthermore, I confirm the evidence as proof of implementation of commitments as presented by the auditor in the Report is correct. I accept this Report to be the final version and offer signature of agreement.

Signed on this 4th day of December, 2020 at Peninsula Quarry Contemansikbof

Signature: 

Designation: Environmental Professional