



# **GROOTVLEI PROSPECTING PROJECT**

**Final**

## **Environmental Audit Report**

**Submitted as contemplated in Regulation 34 under Part 3 of Chapter 5 of the amended National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) Environmental Impact Assessment Regulations, 2014 (Government Notice No. 326) (EIA Regulations, 2014)**

**DMRE Reference No.: MP 30/5/1/1/3/2/1/70 EM**

**NOVEMBER 2021**

As of 7 June 2021, following the completion of the demerger of high-quality export thermal coal operations from Anglo American, Thungela has successfully listed on the Johannesburg and London stock exchanges. As such, we will now legally change our name from Anglo Operations Proprietary Limited ("AOPL") to Thungela Operations Proprietary Limited ("TOPL")

Thungela offers investors access to a high-quality thermal coal business with low cash cost and high-margin assets, as well as a strong balance sheet, underpinned by a robust environmental, social and governance ("ESG") framework

Thungela owns interests in and produces thermal coal predominantly from six collieries located in Mpumalanga, South Africa. The business address has changed to **25 Bath Avenue; Rosebank; 2196; South Africa** however, the specific mines addresses remain unchanged. It is important to note that the legal name change from Anglo Operations (Pty) Ltd to Thungela Resources (Pty) Limited will officially be effective early 2022.

## CONTENTS PAGE

1.	INTRODUCTION .....	1
2.	LEGAL FRAMEWORK .....	3
2.1.	National Environmental Management Act, 1998 (act 107 of 1998), as amended (“NEMA”) ...	3
3.	SCOPE AND PURPOSE OF THE ENVIRONMENTAL AUDIT.....	3
4.	METHODOLOGY ADOPTED IN PREPARING THE ENVIRONMENTAL AUDIT REPORT ...	4
4.1.	Audit team and statement of independence .....	4
4.2.	Frequency of reporting.....	5
4.3.	Period that applies to this compliance assessment.....	6
4.4.	Procedure used during the compliance assessment.....	6
4.5.	Evaluation criteria used during the compliance assessment.....	6
4.6.	Rating of findings .....	7
5	ASSUMPTIONS, UNCERTAINTIES AND GAPS IN KNOWLEDGE.....	7
6	EMPr RECOMMENDATION REPORT.....	7
7	RESULTS OF THE ENVIRONMENTAL AUDIT .....	8
7.1.	Grootvlei Prospecting Environmental Management Programme .....	9
8	DELIBERATIONS .....	24
8.1.	Adequacy and Compliance with the Grootvlei Prospecting Project EMPr .....	24
8.1.1	Adequacy of the Grootvlei Prospecting Project EMPr .....	24
8.1.2	Compliance with the Grootvlei Prospecting Project EMPr Commitments .....	24
9	CONCLUSION.....	24
10	DISCLAIMER.....	24
11	DECLARATION .....	25

---

## 1. INTRODUCTION

---

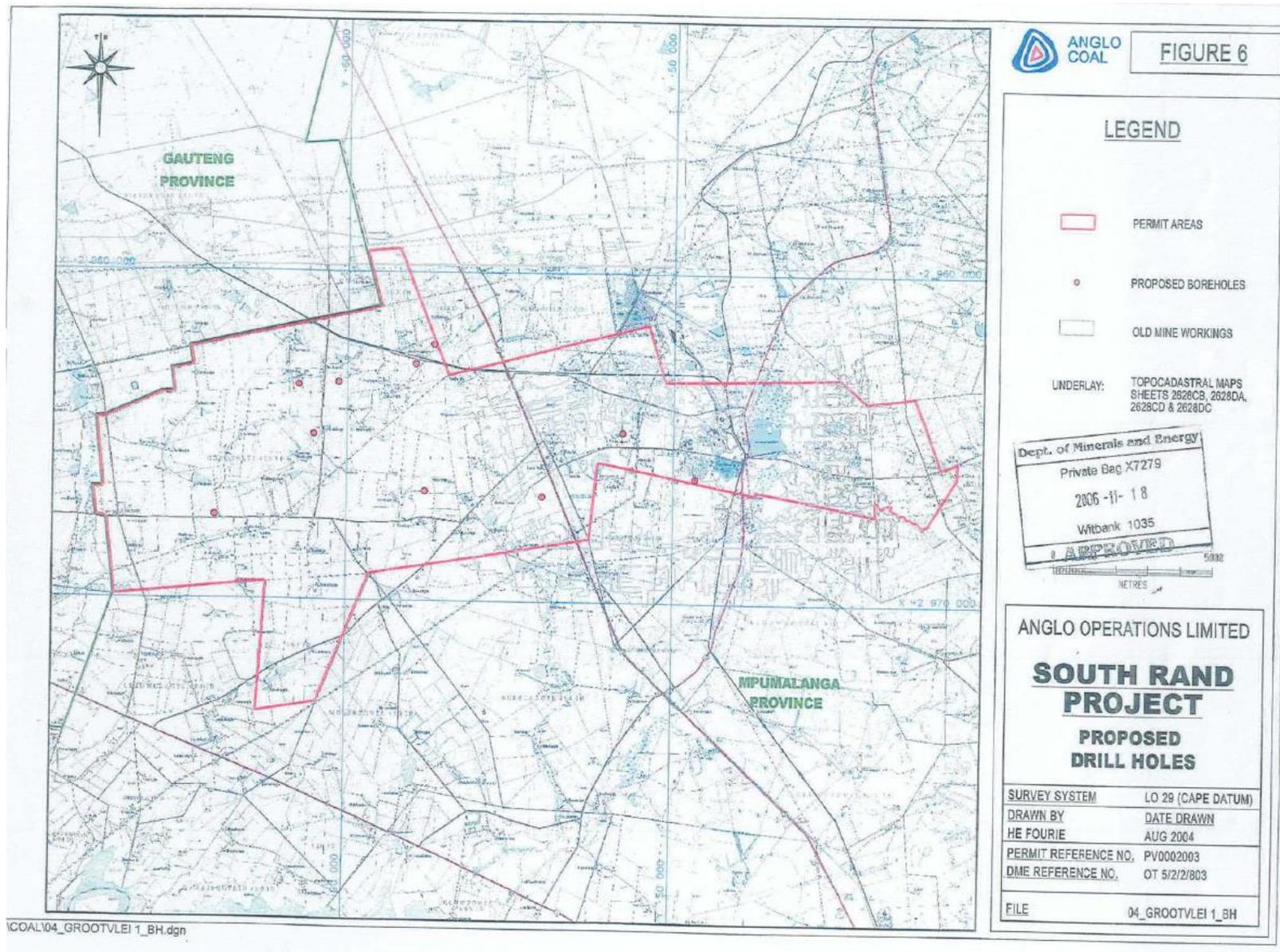
Anglo Operations (Pty) Ltd (AOL) holds a prospecting right for the exploration for coal over several farms situated within the Dipaleseng Local Municipality in the Mpumalanga Province, namely Grootvlei Prospecting Right area. Grootvlei Prospecting Right area is situated approximately 23.3 kilometres southwest of the town Balfour.

The Environmental Management Programme (“EMPr”), dated 1 November 2004 was signed on 18 November 2006. Grootvlei is located on the properties depicted in Figure 1 below.

Subsequent to the issuance of the prospecting right, AOL conducted a regional scale exploration activity throughout the prospecting right area. No drilling activities were however conducted for the review period at Grootvlei Prospecting Right area.

In terms of the NEMA, the EMPr approval letter and the amended NEMA Environmental Impact Assessment Regulations, 2014, AOL must assess its compliance with the conditions of the EA and commitments in the approved EMPr for its prospecting and associated activities at Grootvlei Prospecting area.

AOL appointed Geovicon Environmental (Pty) Limited to assess the compliance of Grootvlei’s prospecting activities against conditions/commitments of the EMPr issued and approved in terms of the NEMA and the MPRDA (for further details on the scope and purpose of the environmental audit, please see section 3 of this report). This report was compiled after completion of the site inspection, conducted on the 28<sup>th</sup> of September 2021 and is hereby submitted for review by the client.



---

## 2. LEGAL FRAMEWORK

---

### 2.1. NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998), AS AMENDED (“NEMA”)

Regulation 34 of the EIA Regulations, 2014 states that the holder of an environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that compliance with the conditions of the environmental authorisation and the approved EMPr is audited and that an environmental audit report, prepared by an independent person, is submitted to the relevant competent authority, which in the case of Grootvlei Prospecting area is the Department of Mineral Resources and Energy, Mpumalanga Regional Office. The above-mentioned environmental audit report must determine the ability of the approved EMPr to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the prospecting operation on an ongoing basis, and the level of compliance of the prospecting operation with the provisions of the approved EMPr.

With the amendment of the EIA Regulations, 2014, on 7 April 2014, regulation 54A was introduced. Regulation 54A (2) of the EIA Regulations, 2014 which has also been amended<sup>1</sup>, further states that “Where a right or permit issued in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) for –

- (a) prospecting or exploration of a mineral or petroleum resource; or
- (b) extraction and primary processing of a mineral or petroleum resource;

*and the associated Environmental Management Programme or Environmental Management Plan approved in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) is still in effect after 8 December 2014, the requirements contained in Part 3 of Chapter 5 of these Regulations apply to such Environmental Management Programmes or Environmental Management Plans and the first environmental audit report must be submitted to the competent authority by a date to be published by Notice in the Government Gazette”.*

Grootvlei’s approved EMPR was valid after 8 December 2014. Therefore, the requirements of regulation 54A(2) read with regulation 34(1) of the amended EIA Regulations, 2014 are relevant to the operation.

In view of the above, and in complying with the above approval conditions of the EMPR and relevant regulations of the NEMA EIA Regulations, a compliance assessment for Grootvlei’s approved EMPR is undertaken every second year.

---

## 3. SCOPE AND PURPOSE OF THE ENVIRONMENTAL AUDIT

---

The purpose of this assessment is to undertake an audit in terms of Regulation 34 of the NEMA EIA Regulations, 2014 in order to verify the operation’s compliance with and adequacy of the following EMPR –

### **Environmental Management Programme:**

- Environmental Management Programme for Grootvlei,

---

<sup>1</sup> Government Notice R599 in Government Gazette 43358 of 29 May 2020

A copy of the above report is available on request.

The environmental audit was conducted to determine the level of performance against, and compliance of the prospecting operation with the provisions of the approved EMPR. The audit was conducted to further determine the ability of the measures contained in the EMPR to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with Grootvlei's exploration operation and associated surface infrastructure and activities.

In view of the above, the scope of this compliance assessment is as follows:

- To report on the compliance of the operation with the conditions, commitments and/or mitigation measures in the EMP and the extent to which the avoidance, management and mitigation measures provided for in the EMPr, achieve the objectives and outcomes of the EMPr.
- To identify and assess any new impacts and risks arising from Grootvlei's prospecting activities;
- To evaluate the effectiveness of the EMPr,
- To identify any inadequacies in the EMPr, and
- To identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPr.

---

## 4. METHODOLOGY ADOPTED IN PREPARING THE ENVIRONMENTAL AUDIT REPORT

---

### 4.1. AUDIT TEAM AND STATEMENT OF INDEPENDENCE

**Auditor 1:** Mr. Ornassis Tshepo Shakwane (Pr.Sci.Nat. & Registered EAP)

**Professional Registration Numbers:**

SACNASP Registration: 117080

EAPASA Registration: 2019/1763

IAIA Membership No.: 3847

**Company:** Geovicon Environmental (Pty) Limited

Postal Address:

P.O. Box 4050

MIDDELBURG, 1050

Tel: (013) 243 0542

Fax: (086) 632 4936

Cell No.: 082 498 1847

**Experience of the Auditor**

Mr. O.T. Shakwane obtained his BSc (Microbiology and Biochemistry) from the University of Durban Westville in 1994 and completed his honours degree in Microbiology in 1995. Mr O.T. Shakwane has

also completed short courses on environmental law, environmental impact assessment, environmental risk assessment and environmental management systems with a number of tertiary institutions. He has worked within the three state departments tasked with mining and environmental management i.e. Department of Water and Sanitation (Gauteng and Mpumalanga Region), Department of Mineral Resources (Mpumalanga Region) and Department of Agriculture, Conservation and Environment (Gauteng Region). Mr. Shakwane has been in the consulting field since 2004 and has undertaken environmental audits for prospecting operations similar to Grootvlei Prospecting Project. Mr. Shakwane has been involved in the field of environmental auditing for the past sixteen years.

He is registered with the Environmental Assessment Practitioners Association of South Africa and South African Council for Natural Scientific Professions as an Environmental Assessment Practitioner and a Professional Natural Scientist in terms of section 24H of the National Environmental Management Act, (Act 107 of 1998) and section 20(3) of the Natural Scientific Professions Act, 2003 (Act 27 of 2003), respectively. He is also a member of the International Association for Impact Assessment, South Africa.

**Auditor 2:** Miss P. P Mthimunye

**Professional Registration Numbers:**

IAIA Membership No.: 6233

**Company:** Geovicon Environmental (Pty) Limited

Postal Address:

P.O. Box 4050

MIDDELBURG, 1050

Tel: (013) 243 0542

Fax: (086) 632 4936

Cell No.: 063 007 6350

**Experience of the Auditor**

Ms. Phangisile Mthimunye is a member of the International Association for Impact Assessment South Africa (IAIASa). She obtained her degree of Bachelor of Earth Sciences in Mining and Environmental Geology from University of Venda. Her responsibilities include but limited to: compilation of mining rights, mining permits and prospecting right applications, environmental reports (EMPr, Scoping Reports, BARs, EIRs, and Public Participation Reports), Water Use Licence applications with Integrated Water and Waste Management Plans, environmental assessment audits, Integrated Water Use Licence audits, environmental inspections and Water Quality Reports.

#### **4.1 FREQUENCY OF REPORTING**

In terms of regulation 34(2)(d) of the NEMA EIA Regulations *“the environmental audit report contemplated in sub-regulation (1) must be conducted and submitted to the competent authority at intervals as indicated in the environmental authorisation”*.

Grootvlei is operated under one EMPr approved in terms of the MPRDA.

Grootvlei's approval letter (with reference No.: MP 30/5/1/1/3/2/1/ (70) EM specify that the auditing frequency required for the approved EMPr is annually.

Anglo Operations (Pty) Limited must therefore conduct the environmental audit for the approved EMPR for Grootvlei Prospecting Project for the period 2020.

#### **4.1 PERIOD THAT APPLIES TO THIS COMPLIANCE ASSESSMENT**

The audit review period for this environmental audit report is January 2020 to December 2021.

#### **4.2 PROCEDURE USED DURING THE COMPLIANCE ASSESSMENT**

The following was used as a procedure for the compliance assessment i.e.:

- Desktop assessment of the approved Grootvlei EMPR. The desktop assessment was used to list all commitments and conditions indicated in the EMPr.
- Reviewing and abstracting the commitments (management and mitigation measures) from the approved EMPr. In cases where the commitments had not yet been fulfilled, either because the applicable phase is not reached or for some other reason, such has been indicated in this report.
- To assess the compliance with the commitments of the EMPr and to reach our findings, we conducted extensive interview with prospecting right site personnel. We also reviewed comprehensive documentation, which was provided by the prospecting right holder on a collaboration platform.
- A site visit was scheduled and undertaken on the 28<sup>th</sup> of September 2021 to confirm the state of compliance at the prospecting right site with the approved EMPr.
- In addition to assessing the compliance to EMPr commitments, the adequacy of the information was also assessed through evaluating activities and verifying such against the descriptions and risk assessments provided in the EMPr, and whether location specific risks and the necessary specialist assessments had been considered.

#### **4.3 EVALUATION CRITERIA USED DURING THE COMPLIANCE ASSESSMENT**

Evaluation criteria used during the compliance assessment include the following:

- Are the measures and structures as indicated in the environmental management programme in place?
- Are the measures adequate and structures maintained, and at what frequency?
- Has the monitoring as indicated in the environmental management programme been conducted? (Data, reports).
- Is the reported frequency of the monitoring in accordance with the environmental management programme? (Reports)
- Determining whether any new measures are required to prevent or mitigate the existing environmental impacts and/or other potential impacts.

Evaluation of the appropriateness and adequacy of the environmental management programme included the following:

- Compliance with relevant laws pertaining to the environment.
- Compliance of prospecting right operation and associated activities with the EMPr. (Is the mine conducting activities that are not indicated in the EMPr?)

#### 4 RATING OF FINDINGS

The compliance category was rated as indicated in the table below:

Compliance category	Findings
Condition/mitigation measure/commitment has been achieved with evidence provided in the form of a document.	Compliant
The failure to comply with, or satisfy the requirements of an applicable condition, commitment and/or mitigation measure. When site visits are finally conducted, non-compliances will include instances where although the current condition or mitigation measure has been achieved, there have been new impacts and risks arising from the activity; whether the current measures are effective and whether there are any shortcomings which need to be addressed through changes in the systems or amendment of the EMPr.	Non-Compliant
The condition, commitment and/or mitigation measure is Not Applicable. A "Not Applicable" finding is also noted in events where such condition, commitment and/or mitigation measure is either obsolete, an alternative effective measure is utilised or commitment and/or mitigation measure is not yet relevant but is still relevant for future activities;	Not Applicable
The condition, commitment and/or mitigation measure that does not require any specific action.	Noted

## 5 ASSUMPTIONS, UNCERTAINTIES AND GAPS IN KNOWLEDGE

Although all reasonable attempts were made to verify comments made during interviews held with relevant Grootvlei personnel as well as the review of documentation, it is assumed that such comments and documents provided are a true and accurate reflection of the audit.

In an event where insufficient information was provided to support the verification of compliance status, the auditors' general approach was to indicate that such commitments/conditions could not be verified, and as such, the findings were noted as non-compliant.

## 6 EMPr RECOMMENDATION REPORT

Regulation 34(4) of the EIA regulation, 2014 state the following i.e.:

Where findings of the Environmental Audit Report indicate:

- insufficient mitigation of environmental impacts associated with the undertaking of activity;

- insufficient levels of compliance with the environmental authorisations or EMPr and where applicable the closure plan;

The holder must, when submitting the environmental audit report to the competent authority in terms of sub regulation (1), submit recommendations to amend the EMPr or closure plan in order to rectify shortcomings identified in the environmental audit report and such recommendations must have been subjected to a public participation process as agreed to by the competent authority.

No amendment of the EMPr is recommended.

---

## **7 RESULTS OF THE ENVIRONMENTAL AUDIT**

---

The results of the Environmental Audit are given in the Tables below. The tables below outline the EMPr for each of the authorised activities at Balfour Grootvlei Prospecting Project.

## 7 GROOTVLEI PROSPECTING ENVIRONMENTAL MANAGEMENT PROGRAMME

NO.	COMMITMENT	FINDING	AUDIT REVIEW AND OBSERVATION
<b>F 1.</b>	<b>GENERAL REQUIREMENTS</b>		
<b>F 1.1</b>	<b>MAPPING AND SETTING OUT</b>		
<b>F1.1.1.</b>	<b>LAYOUT PLAN</b>		
	A copy of the layout plan as provided for in Regulation 2.2 must be available at the prospecting site for scrutiny when required.	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.
	The plan must be updated on a regular basis with regard to the actual progress of the establishment of surface infrastructure, mining operations and rehabilitation (a copy of the updated plan shall be forwarded to the Regional Manager on a regular basis).	Not-applicable	No surface infrastructure, mining operations and rehabilitation were established by Anglo Operations Limited for Grootvlei prospecting right area, hence the commitment is not applicable.
	A final layout plan must be submitted at closure of the mine or when operations have ceased.	Not-applicable	No mining operation was conducted over the Grootvlei Prospecting area; hence the commitment is not applicable.
<b>F 1.1.2</b>	<b>THE PROSPECTING AREA</b>		
	Prospecting and resultant operations shall only take place within the boundaries of the prospecting area as illustrated in Annexure A.	Compliant	Boreholes provided show all boreholes to be within the boundaries of the prospecting area.
<b>F 1.1.3</b>	<b>DEMARCATING THE RIVER CHANNEL AND RIVERINE ENVIRONMENT</b>		
	No prospecting activities will be conducted in a riverine environment in this prospecting area	Not-applicable	No prospecting was conducted during the audit period. However, based on the site observation it was evident that borehole No.SRC0789 was conducted within a wetland. However, the area has been cultivated.

				
<b>F 1.2</b>	<b>RESTRICTIONS ON PROSPECTING</b>			
	On assessment of the application, the Regional Manager may prohibit the conducting of mining or prospecting operations in vegetated areas or over portions of these areas.	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.	
	In the case of areas that are excluded from mining or prospecting, no operations shall be conducted within 5 m of these areas.	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.	
<b>F 1.3</b>	<b>RESPONSIBILITY</b>			
	The environment affected by the prospecting operations shall be rehabilitated by the holder, as far as is practicable, to its natural state or to a predetermined and agreed to standard or land use which conforms with the concept of sustainable development. The affected environment shall be maintained in a stable condition that will not be detrimental to the safety and health of humans and animals and that will not pollute the environment or lead to the degradation thereof.	Non-compliant	Borehole No. SRC0740 was not fully rehabilitated to its natural state. This borehole is utilized for drinking water purposes of the livestock on the farm.	

			
	<p>It is the responsibility of the holder of the mining permit/prospecting right to ensure that the manager on the site and the employees are capable of complying with all the statutory requirements which must be met in order to mine, which includes the implementation of this EMP.</p>	<p>Not-applicable</p>	<p>No prospecting was conducted during the audit period and hence no prospecting site was established.</p>
	<p>If operations are to be conducted in an area that has already been disturbed, the holder must reach specific agreement with the Regional Manager concerning the responsibilities imposed upon himself/herself pertaining to the rehabilitation of the area and the pollution control measures to be implemented.</p>	<p>Non-compliant</p>	<p>Not all boreholes were rehabilitated. Borehole No. SRC0740 was not fully rehabilitated to its natural state. This borehole is utilized for drinking water purposes of the livestock on the farm.</p>

			
<b>F 2.</b>	<b>INFRASTRUCTURAL REQUIREMENTS</b>		
<b>F 2.1</b>	<b>TOPSOIL</b>		
	Topsoil shall be removed from all areas where physical disturbance of the surface will occur.	Not-applicable	No prospecting was conducted during the audit period and hence no topsoil removal activities were undertaken.
	All available topsoil shall be removed after consultation with the Regional Manager prior to the commencement of any operations.	Not-applicable	
	The topsoil removed, shall be stored on the high ground side of the prospecting area outside the 1:50 flood level within the boundaries of the prospecting area.	Not-applicable	
	Topsoil shall be kept separate from overburden and shall not be used for building or maintenance of access roads.	Not-applicable	
	The topsoil stored in the bund wall shall be adequately protected from being blown away or being eroded.	Not-applicable	
<b>F 2.2.</b>	<b>ACCESS TO THE SITE</b>		
<b>F 2.2.1.</b>	<b>Establishing access roads on the site</b>		
	The access road to the prospecting area and the camp-site/site office must be established in consultation with the landowner/tenant and existing roads shall be used as far as practicable.	Compliant	Existing roads were used. Where necessary, temporary "tracks" to the borehole are made and rehabilitated on departure. Based onsite observation there were no latent impacts caused by roads on the environment.

	<p>Should a portion of the access road be newly constructed the following must be adhered to:</p> <ul style="list-style-type: none"> <li>• The route shall be selected that a minimum number of bushes or trees are felled and existing fence lines shall be followed as far as possible.</li> <li>• Water courses and steep gradients shall be avoided as far as is practicable.</li> <li>• Adequate drainage and erosion protection in the form of cut-off berms or trenches shall be provided where necessary.</li> </ul>	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.
	If imported material is used in the construction or upgrading of the access road this must be listed in C 2.17	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.
	The erection of gates in fence lines and the open or closed status of gates in new and existing positions shall be clarified in consultation with the landowner/tenant and maintained throughout the operational period.	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.
	No other routes will be used by vehicles or personnel for the purpose of gaining access to the site.	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.
<b>F 2.2.2</b>	<b>Maintenance of access roads</b>		
	In the case of dual or multiple use of access roads by other users, arrangements for multiple responsibility must be made with the other users. If not, the maintenance of access roads will be the responsibility of the holder of the prospecting right.	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.
	Newly constructed access roads shall be adequately maintained so as to minimise dust, erosion or undue surface damage.	Not-applicable	No prospecting was conducted during the audit period and hence no new roads were constructed.
<b>F 2.2.3</b>	<b>Dust control on the access and haul roads</b>		
	The liberation of dust into the surrounding environment shall be effectively controlled by the use of, inter alia, water spraying and/or other dust-allaying agents. The speed of haul trucks and other vehicles must be strictly controlled to avoid dangerous conditions, excessive dust or excessive deterioration of the road being used.	Not-applicable	No prospecting was conducted during the audit period and hence no prospecting site was established.
<b>F 2.4</b>	<b>Rehabilitation of access roads</b>		

	Whenever a mining permit/ prospecting right is suspended, cancelled or abandoned or if it lapses and the holder does not wish to renew the permit or right, any access road or portions thereof, constructed by the holder and which will no longer be required by the landowner/tenant, shall be removed and/or rehabilitated to the satisfaction of the Regional Manager.	Compliant	Existing roads were used. Where necessary, temporary "tracks" to the borehole are made and rehabilitated on departure. Based on our site observation there were no latent impacts caused by roads on the environment.
	Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre prospecting situation.	Not-applicable	No prospecting was conducted during the audit period and hence no gate or fence erected.
	Roads shall be ripped or ploughed, and if necessary, appropriately fertilised (based on a soil analysis) to ensure the regrowth of vegetation. Imported road construction materials which may hamper regrowth of vegetation must be removed and disposed of in an approved manner prior to rehabilitation.	Compliant	Existing roads were used. Where necessary, temporary "tracks" to the borehole are made and rehabilitated on departure. Based on our site observation there were no latent impacts caused by roads on environment.
	If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the prospecting operation, be corrected and the area be seeded with a seed mix to the Regional Manager's specification.	Noted	Existing roads were used. Where necessary, temporary "tracks" to the borehole are made and rehabilitated on departure. Based on our site observation there were no latent impacts caused by roads on environment.
F 2.3	Note: No exploration office will be constructed in this prospecting area.	Noted	No prospecting was conducted during the audit period and hence no exploration office was constructed.
<b>F 2.3.1</b>	<b>Establishing office / camp sites</b>		
	Office and camp sites shall be established, as far as is practicable, outside the flood plain, above the 1 in 50 flood level mark within the boundaries of the prospecting area.	Not-applicable	No prospecting was conducted during the audit period and hence no exploration office/camp sites were established.
	The area chosen for these purposes shall be the minimum reasonably required and which will involve the least disturbance to vegetation. Topsoil shall be handled as described in F 2.1 above.	Not-applicable	
	No camp or office site shall be located closer than 100 metres from a stream, river, spring, dam or pan.	Not-applicable	

	No trees or shrubs will be felled or damaged for the purpose of obtaining firewood, unless agreed to by the landowner/tenant.	Not-applicable	
	Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a fire-break shall be cleared around the perimeter of the camp and office sites.	Not-applicable	
	Lighting and noise disturbance or any other form of disturbance that may have an effect on the landowner/tenant/persons lawfully living in the vicinity shall be kept to a minimum.	Not-applicable	
<b>F 2.3.2</b>	<b>Toilet facilities, waste water and refuse disposal</b>		
	Chemical toilet facilities or other approved toilet facilities such as a septic drain shall preferably be used and sited on the camp site in such a way that they do not cause water or other pollution.	Not-applicable	No prospecting was conducted during the audit period and hence no toilet facilities, waste and refuse disposal were established.
	The use of existing facilities must take place in consultation with the landowner/tenant.	Not-applicable	
	In cases where facilities are linked to existing sewerage structures, all necessary regulatory requirements concerning construction and maintenance should be adhered to.	Not-applicable	
	All effluent water from the camp washing facility shall be disposed of properly, as far as possible, but not less than 200 metres, from any stream, river, pan, dam or borehole.	Not-applicable	
	Only domestic type wash water shall be allowed to enter this drain and any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognised facility.	Not-applicable	
	Spills should be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognised facility.	Not-applicable	
	Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., shall be stored in a container at a collecting point and collected on a regular basis and	Not-applicable	

	disposed of at a recognised disposal facility. Specific precautions shall be taken to prevent refuse from being dumped on or in the vicinity of the camp site.		
	Biodegradable refuse generated from the office/camp site, processing areas vehicle yard, storage area or any other area shall either be handled as indicated above or be buried in a pit excavated for that purpose and covered with layers of soil, incorporating a final 0,5 metre thick layer of topsoil (where practicable). Provision should be made for future subsidence of the covering.	Not-applicable	
<b>F 2.3.3</b>	<b>Rehabilitation of the office/camp site</b>		
	<p>On completion of operations, all buildings, structures or objects on the camp/office site shall be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), which states:</p> <p>(1) When a prospecting right, exploration right, mining right, retention permit or mining permit lapses, is cancelled or is abandoned or when any prospecting or mining operation comes to an end, the holder of any such right or permit may not demolish or remove any building, structure, object</p> <p>(a) which may not be demolished in terms of any other law;</p> <p>(b) which has been identified in writing by the Minister for purposes of this section</p> <p>(c) which is to be retained in terms of an agreement between the holder and the owner or occupier of the land, which agreement has been approved by the Minister in writing.</p> <p>(2) The provision of subsection</p> <p>(1) does not apply to bona fide mining equipment which may be removed</p> <p>Where office/camp sites have been rendered devoid of vegetation/grass or where soils have been compacted owing to traffic, the surface shall be scarified or ripped.</p>	Not-applicable	No prospecting was conducted during the audit period and hence no exploration office/camp sites were established.

	Areas containing French drains shall be compacted and covered with a final layer of topsoil to a height of 10cm above the surrounding ground surface.		
	The site shall be seeded with a vegetation seed mix adapted to reflect the local indigenous flora		
	If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the prospecting operation be corrected and the area be seeded with a vegetation seed mix to his or her specification.		
	Photographs of the camp and office sites, before and during the prospecting operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of the Regional Manager.	Not-applicable	No prospecting was conducted during the audit period and hence no photographs of the camp and office sites, before and during the prospecting operation and after rehabilitation were taken.
<b>F 2.4</b>	<b>VEHICLE MAINTENANCE YARD AND SECURED STORAGE AREAS</b>		
F 2.4.1	Establishing the vehicle maintenance yard and secured storage areas.	Not-applicable	No prospecting was conducted during the audit period and hence no vehicle maintenance yard and secured storage areas were established.
F 2.4.2	Maintenance of vehicles and equipment		
F 2.4.3	Waste disposal		
F 2.4.4	Rehabilitation of vehicle maintenance yard and secured storages areas		
F 3.	Operating procedures in the mining area		
<b>2. THE WATER USE LICENCE</b>			
	The National Water Act, (Act 36 of 1998), is based on the principles of sustainability, efficiency and equity, meaning that the protection of water resources must be balanced with their development and use. In addition to being issued with a prospecting right or mining permit a small-scale miner may also need to get a water use licence for the proposed water uses that will take place, except in certain cases.	Not-applicable	At the time of the approval of the EMPlan, no need for a water use licence for the drilling of the boreholes at Grootvlei prospecting area. No water use licence was hence applied for.
<b>F 3.3</b>	<b>EXCAVATIONS</b>		
<b>F 3.3.1</b>	<b>Establishing the excavation areas</b>		
	Whenever any excavation is undertaken for the purpose of locating and/or extracting ore bodies of all types of	Not-applicable	No bulk sampling was undertaken for this prospecting operations.

	<p>minerals, including precious stone bearing gravels, the following operating procedures shall be adhered to:</p> <ul style="list-style-type: none"> <li>• Topsoil shall, in all cases (except when excavations are made in the river-bed), be handled as described in F 2.1 above.</li> <li>• Excavations shall take place only within the approved demarcated prospecting area.</li> <li>• Overburden rocks and coarse material shall be placed concurrently in the excavations or stored adjacent to the excavation, if practicable, to be used as backfill material once the ore or gravel has been excavated.</li> <li>• Trenches shall be backfilled immediately if no ore or precious stone-bearing gravel can be located.</li> </ul>		
<b>F 3.3.2</b>	Rehabilitation of excavation areas		
<b>F 3.4</b>	<b>PROCESSING AREAS AND WASTE PILES (DUMPS)</b>		
<b>F 3.4.1</b>	Establishing processing areas and waste piles	Not-applicable	
<b>F 3.4.2</b>	Rehabilitation of processing areas	Not-applicable	
<b>F 3.5</b>	TAILINGS DAM(S) (SLIMES DAM)	Not-applicable	
<b>F 3.6</b>	<b>FINAL REHABILITATION</b>		
	All infrastructure, equipment, plant, temporary housing and other items used during the mining period will be removed from the site (section 44 of the MPRDA)	Non-compliant	Borehole No. SRC0740 was not fully rehabilitated. This borehole is utilized for drinking water purposes of the livestock on the farm.

			
	<p>Waste material of any description, including receptacles, scrap, rubble and tyres, will be removed entirely from the mining area and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on the site.</p>	<p>Not-applicable</p>	<p>No prospecting was conducted during the audit period and hence no waste material was established.</p>
	<p>Final rehabilitation shall be completed within a period specified by the Regional Manager.</p>	<p>Non-compliant</p>	<p>Borehole No. SRC0740 was not fully rehabilitated within the period specified by the Regional Manager.</p>
<p><b>F 4.</b></p>	<p><b>MONITORING AND REPORTING</b></p>		
<p><b>F 4.1.</b></p>	<p><b>Inspections and monitoring</b></p>		
	<p>Regular monitoring of all the environmental management measures and components shall be carried out by the holder of the prospecting right, exploration right, mining permit or reconnaissance permission in order to ensure that the provisions of this programme are adhered to.</p>	<p>Non-compliant</p>	<p>No inspection records of the prospecting area were available to determine compliance with this condition.</p>
	<p>Ongoing and regular reporting of the progress of implementation of this programme will be done.</p>	<p>Compliant</p>	<p>Anglo Operations Limited appointed Geovicon Environmental to conduct the Environmental Audit Report. The audit was also used to determine the progress of the operation with the implementation of the EMP.</p>

	Various points of compliance will be identified with regard to the various impacts that the operations will have on the environment.	Compliant	Through the audit and the environmental audit report, points of compliance were identified with regard to the various impacts that the operations had on the environment.
	Inspections and monitoring shall be carried out on both the implementation of the programme and the impact on plant and animal life.	Non-compliant	No records of inspections and monitoring was available to determine compliance with this condition.
	Visual inspections on erosion and physical pollution shall be carried out on a regular basis.	Non-compliant	No records of inspections and monitoring was available to determine compliance with this condition.
<b>F 4.2</b>	<b>Compliance reporting / submission of information</b>		
	Layout plans will be updated on a regular basis and updated copies will be submitted on a biennial basis to the Regional Manager.	Non-compliant	Proof of submission of the plans to the Regional Manager were not available for review.
	Reports confirming compliance with various points identified in the environmental management programme will be submitted to the Regional Manager on a regular basis and as decided by the said manager.	Compliant	Anglo Operations Limited appointed Geovicon Environmental to conduct the Environmental Audit Report. Through the audit and the environmental audit report, points of compliance were identified with regard to the various impacts that the operations had on the environment.
	Any emergency or unforeseen impact will be reported as soon as possible.	Not-applicable	No prospecting was conducted during the audit period and hence no waste material was established.
	An assessment of environmental impacts that were not properly addressed or were unknown when the programme was compiled shall be carried out and added as a corrective action.	Non-compliant	SRC0740 is one of the boreholes that was not properly rehabilitated, the borehole casing was not removed. 
<b>F 5.</b>	<b>CLOSURE</b>		

	When the holder of a prospecting right, exploration right, mining permit or reconnaissance permission intends closing down his/her operations, an environmental risk report shall accompany the application for closure. The requirements of such a risk report is contained in Regulation 60 of the Regulations promulgated in terms of the Act and is quoted below:	Noted	Anglo Operations Limited takes note of this condition.
<b>F 5.2.</b>	<b>CLOSURE OBJECTIVES</b>		
	Closure objectives form part of this EMPlan and must- (a) identify the key objectives for mine closure to guide the project design, development and management of environmental objectives; (b) provide broad future land use objective(s) for the site; and (c) provide proposed closure cost	Compliant	Closure and Environmental objectives forms part of the EMPlan which state the intended end use for the area prospected after closing of operations.
<b>F 5.3</b>	<b>CONTENTS OF CLOSURE PLAN</b>		

	<p>A closure plan forms part of the EMP and must include the following:</p> <ul style="list-style-type: none"> <li>a) a description of the closure objectives and how these relate to the prospecting or mine operation and its environmental and social setting;</li> <li>(b) a plan contemplated in Regulation 2(2), coordinated according to generally accepted standards, showing the land or area under closure;</li> <li>(c) a summary of the regulatory requirements and conditions for closure negotiated and documented in the environmental management programme or plan;</li> <li>(d) a summary of the results of the environmental risk report and details of identified residual and latent impacts;</li> <li>(e) a summary of the results of progressive rehabilitation undertaken;</li> <li>(f) a description of the methods to decommission each prospecting or mining component and the mitigation or management strategy proposed to avoid, minimize and manage residual or latent impacts;</li> <li>(g) details of any long-term management and maintenance expected;</li> <li>(h) details of financial provision for monitoring, maintenance and post closure management, if required;</li> <li>(i) a plan or sketch at an appropriate scale describing the final land use proposal and arrangements for the site;</li> <li>(j) a record of interested and affected persons consulted; and</li> <li>(k) technical appendices, if any.</li> </ul>	<p>Noted</p>	<p>Anglo Operations Limited takes note of this condition.</p>
<b>F 5.4</b>	<b>TRANSFER OF ENVIRONMENTAL LIABILITIES TO A COMPETENT PERSON</b>		
	<p>Should the holder of a prospecting right, exploration right, mining permit or reconnaissance permission wish to transfer any environmental liabilities and responsibilities to another person or persons, the following will pertain:</p> <p>(1) An application to transfer environmental liabilities to a competent person in terms of section 48) of the Act, must</p>	<p>Noted</p>	<p>Anglo Operations Limited takes note of this condition.</p>

	<p>be completed on Form O as set out in Annexure 1 to the Regulations and be lodged to the Minister for consideration.</p>		
<p>(2) The holder of a prospecting right, mining right or mining permit may transfer liabilities and responsibilities as identified in the environmental management plan and the required closure plan to a competent person as contemplated in Regulation 58.</p>			
<p>(3) When considering the transfer of environmental liabilities and responsibilities in terms of section 48) of the Act, the Minister must consult with any State department which administers any law relating to matters affecting the environment.</p>			
<p>(4) No transfer of environmental liabilities and responsibilities to a competent person may be made unless the Chief Inspector of Mines and the Department of Water Affairs and Forestry have confirmed in writing that the person to whom the liabilities and responsibilities is transferred to, have the necessary qualifications pertaining to health and safety and management of potential pollution of water resources.</p>			

---

## 8 DELIBERATIONS

---

### 8 ADEQUACY AND COMPLIANCE WITH THE GROOTVLEI PROSPECTING PROJECT EMPR

#### 8.1.1 ADEQUACY OF THE GROOTVLEI PROSPECTING PROJECT EMPR

Grootvlei prospecting project, was assessed not only for the compliance towards the commitments of the EMPr, but also assessed for the ability of the measures contained in the EMPr to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of Grootvlei Prospecting Project. From a review of the EMPr, the auditor is of the opinion that it sufficiently provides for the avoidance, management and mitigation of environmental impacts associated with the undertaking of Grootvlei Prospecting Project.

#### 8.1.2 COMPLIANCE WITH THE GROOTVLEI PROSPECTING PROJECT EMPR COMMITMENTS

All no non-compliances were identified in table 7.1.

---

## 9 CONCLUSION

---

This environmental audit report was compiled to comply with the relevant legislative requirements specifically the NEMA, with the main objectives to report on the compliance status of the commitments and conditions, as well as the appropriateness and adequacy of the EMPr. This audit report will be submitted to the competent authority. Within 7 days of submission of this Audit Report to the competent authority (DMRE), Anglo Operations (Pty) Limited, Grootvlei Prospecting Project, must notify all potential and registered I&APs of the submission, and make this report immediately available to anyone on request and on a publicly accessible website.

We do not recommend any amendment of the EMPr.

---

## 10 DISCLAIMER

---

This report has been produced by Geovicon Environmental (Pty) Limited, with the skill and care normally exercised by a reasonable independent Environmental Consultant during the rendering of the service. The service provided by Geovicon Environmental (Pty) Limited should not be considered as a legal opinion of any kind, but shall be a representation of the findings. The work performed was based on the Client's scope of work, time and resource allocations, as well as information provided by the Client. Any reference to legislation in this report should not be considered as a substitute for the provisions of such legislation.

Geovicon Environmental (Pty) Limited ensures by all means, that information provided by management and/or representatives is correct and relevant, and that this report is based on information that could reasonably have been sourced within the time period allocated to the audit performed. It should not be assumed that all possible and applicable findings are included in this report as this report represents a sample of the audit. Therefore, should additional information become available, Geovicon Environmental (Pty) Limited reserves the right to amend its findings accordingly.

---

## 11 DECLARATION

---

Mr. Ornassis Tshepo Shakwane of Geovicon Environmental (Pty) Limited, hereby declares that he is an independent auditor and that Geovicon Environmental (Pty) Limited and himself have no business, financial, personal or other interest in this project in respect of which Geovicon Environmental (Pty) Limited is appointed. Furthermore, no circumstances exist that may compromise the objectivity of Geovicon Environmental (Pty) Limited, excluding fair remuneration for work performed in connection with this environmental audit.



Signed: \_\_\_\_\_

Date: 10/11/2021

O.T. Shakwane

Managing Director

Geovicon Environmental (Pty) Limited

tshepo@geovicon.co.za

www.geovicon.co.za