

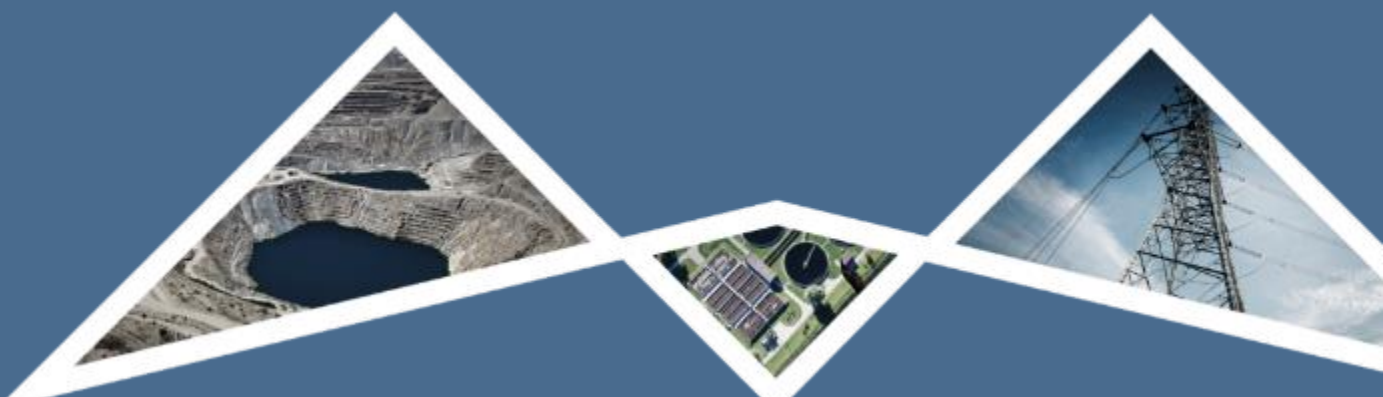


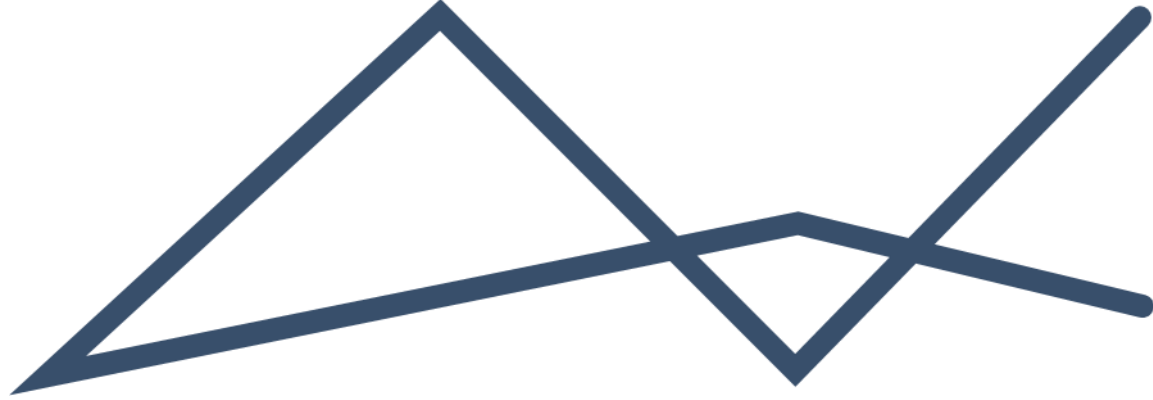
ENVIRONMENTAL
IMPACT
MANAGEMENT
SERVICES

T 011 789 7170 E info@eims.co.za W www.eims.co.za




ANNUAL EXTERNAL WATER USE LICENCE AUDIT REPORT - 2024 MOOPLAATS COLLIERY

IWUL NO: 08/C11B/AGJ/2141
FILE NO: 16/2/7/C112/C155





EIMS REFERENCE: 1656
DOCUMENT TITLE: ANNUAL EXTERNAL IWUL AUDIT REPORT – 2024
MOOIPLAATS COLLIERY (MPC)

	NAME	SIGNATURE	DATE
COMPILED:	Emmanuel Manyange		2024/10/01
CHECKED:	Liam Whitlow		2024/10/01
AUTHORIZED:	Liam Whitlow		2024/10/01

REVISION AND AMENDMENTS

REVISION DATE:	REV #	DESCRIPTION
2024/09/09	ORIGINAL DOCUMENT	AUDIT REPORT
2024/10/01	REVISION 1	AUDIT REPORT

This document contains information proprietary to Environmental Impact Management Services (Pty) Ltd. and as such should be treated as confidential unless specifically identified as a public document by law. The document may not be copied, reproduced, or used for any manner without prior written consent from EIMS. Copyright is specifically reserved.



TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1 INTRODUCTION.....	5
2 BRIEF PROJECT DESCRIPTION.....	5
3 CONTACT DETAILS OF THE LICENSE HOLDER.....	8
4 AUDIT METHODOLOGY	8
4.1 AUDIT TEAM	8
4.2 AUDIT DOCUMENTATION.....	8
4.3 AUDIT METHOD.....	8
4.4 AUDIT EVALUATION CRITERIA	9
4.4.1 EVALUATION CRITERIA 1	9
4.4.2 EVALUATION CRITERIA 2	9
5 RESULTS OF THE AUDIT.....	10
5.1 COMPLIANCE SUMMARY.....	10
5.2 IWUL COMPLIANCE CHECKLIST	10
6 SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS.....	28
7 PHOTOGRAPHIC RECORD.....	36
8 CONCLUSION.....	43

LIST OF FIGURES

Figure 1: Mooiplaats Colliery locality map.	6
Figure 2: Mooiplaats Colliery infrastructure.....	7
Figure 3: Summary of compliance to the conditions of the IWUL (number of conditions).....	10
Figure 4: Acceptable signs indicating the risks involved in case of an unauthorised entry observed at the wastewater dams at the entrance gate.	36
Figure 5: Flow meters observed in a good condition. The readings are recorded by the mine staff.	36
Figure 6: View of Usuthu boreholes supplying water to site.....	36
Figure 7: The hazardous storage cage bunded area required a plug on the draining pipe that is open to reduce risk of possible spills to the environment (left picture) and lacks relevant signs (right picture).	37
Figure 8 The silted wash plant PCD.	37
Figure 9: Potentially contaminated run-off water from the wash plant by passing the silted PCD and flows to the wetland.	38
Figure 10: View of workshop impervious surface and drainage and car washing activity with potential to pollute the environment	38
Figure 11: View of Erickson dams at the wash plant (left picture) and decommissioned ones adjacent dam 1 (right picture refer to Figure 2 - 36).....	38



Figure 12: Traces of MPC pollution risk to the environment due to inadequate stormwater management on site.	39
Figure 13: Underground operations ceased end of 2021 and back filling has commenced as part of rehabilitation.	39
Figure 14: Co-disposal Dam 3 and Dam 1.	39
Figure 15: Uncontrolled flow of contaminated water from the gooseneck towards the wetland.	40
Figure 16: Uncontrolled flow of contaminated water from site towards the wetland.	40
Figure 17: Erosion of the channel discharging potentially contaminated stormwater into the wetland on the north-eastern side.	40
Figure 18: Discarding of potentially contaminated material onto the stormwater channel along the RoM.	41
Figure 19 Dumping of carbonaceous material outside stormwater management controls with potential to pollute the environment.	41
Figure 20: Lined Return Water Dam (34) and poorly maintained silt trap (35) on the northwestern side of Co-disposal facility.....	41
Figure 21: Inadequately maintained north-western drainage system for the co-disposal facility.....	42
Figure 22: Visual observation traces of seepage potentially from the co-disposal facility on the northern-western side of the facility. This has potential to impact the Witpuntspruit from upstream (WT-S01) to downstream (WT-S06) if no interception is undertaken.....	42

LIST OF TABLES

Table 1: Summary of findings of the audit.	1
Table 2: License Holder Contact Details	8
Table 3: Checklist of compliance to the conditions of the IWUL.	11
Table 4: Findings and Recommendations of the Audit.	28

APPENDICES

Appendix 1: Declaration of independence of the auditor

Appendix 2: Signed Attendance Register



ABBREVIATIONS AND DEFINITIONS

DMR	:	Department of Mineral Resources
DWS	:	Department of Water and Sanitation (formerly DWA)
EIMS	:	Environmental Impact Management Services (Pty) Ltd
EMPR	:	Environmental Management Programme
EMS	:	Environmental Management System
GN704	:	Government Notice 704, dated June 1999
GSW	:	Geo Soil and Water cc
IWWMP	:	Integrated Water and Waste Management Plan
IWUL	:	Integrated Water Use License
MPC	:	Mooiplaats Colliery
NEMA	:	National Environmental Management Act (Act 107 of 1998)
NWA	:	National Water Act (Act 36 of 1998)
PCD	:	Pollution Control Dam
POD	:	Proof of Delivery
RSIP	:	Rehabilitation Strategy and Implementation Programme



EXECUTIVE SUMMARY

Mooiplaats Colliery (MPC) is located approximately 18km south of the town of Ermelo, between the N2 and N11, and lies about 2km to the south of the Eskom Camden Power Station which falls within the municipal boundaries of the Gert Sibande District Municipality, Mpumalanga Province. The mine has an existing WUL (Ref #; 08/C11B/AGJ/2141). MPC is owned and operated by Langcarel (RF) Pty Limited (trading as Mooiplaats Colliery). The Colliery is located on Portions 1, 2 and 9 of the farm Mooiplaats 290 IT. An Integrated Water Use Licence (IWUL) was approved by the Department of Water and Sanitation (DWS) on 2 May 2013 (Licence No: 08/C11B/AGJ/2141). The approved water uses included in the IWUL include the following:

- Section 21 (a) of the Act: Taking of water from a water resource;
- Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource; and
- Section 21 (j) of the Act: Removing, discharging or disposing of water found underground if it is necessary for the effective continuation of an activity or for the safety of people.

The objectives of the Annual External Compliance Audit are to:

- Establish compliance with the commitments in the approved licence;
- Provide the management of the mine with appropriate information for the initiation of corrective action, where necessary or appropriate, as identified through the audit.

Mooiplaats Colliery ceased underground mining on 31 December 2021 and is currently making use of third-party miners receiving coal and washing at the plant. The external and internal water use audits that were conducted in 2018 and 2019 respectively identified certain water uses that have not been licenced within the Mooiplaats Colliery Mining Right as well as coordinates of licenced water uses that are incorrect. These new water uses and amendments to coordinates are included in the IWWMP. Mooiplaats submitted an application for the additional water uses and amendments to the existing licence in 2020 and 2023. In August 2022 the DWS requested additional information on the application which the applicant was not able to provide and the application was subsequently withdrawn. Phase 1 and 2 e-WULAAS were done in 2023. Currently Phase 3 e-WULAAS is still pending finalisation.

Following the initial checklist preparation and documentation review, a site visit was undertaken on 28th of August 2024. The findings of this assessment are based on visual inspection of the operational areas, interviews, as well as documentation reviewed.

An audit checklist was prepared to evaluate the compliance of Mooiplaats Colliery with each condition contained in the IWUL. A total of 93 IWUL conditions were assessed, of which 23 were “not applicable”. Of the applicable conditions (70), a total of 40 conditions were found to be fully compliant, 11 non-compliant and 19 partially compliant. The level of compliance for each commitment was calculated according to the methodology described in Section 4. Utilising this scoring system, **a straight compliance score of 57.14% and a weighted compliance score of 70.71%** was obtained for the audit. The non compliances stem from the lack of implementation of stormwater management plan, run-off of dirty water from the plant into the wetland and the general lack of maintenance of infrastructure.

A summary of the key findings of the audit of the conditions of the IWUL is provided in Table 1 below. Details of the findings are provided in Section 6 of this report:

Table 1: Summary of findings of the audit.

Finding Reference #	Finding
1	A letter dated 17 April 2018, to the Regional Head indicating the change in address and Directors for Mooiplaats Colliery was provided. More so, the letter (Ref no. MP -017)



Finding Reference #	Finding
	addressed to the Regional Head for Department of Economic Development, Environment and Tourism by the General Manager (Mr F. Gouela) dated 17 May 2018 notifying of the same changes was provided. However, proof of submission or acknowledgement of receipt was not provided. It was also reported that Mooiplaats Colliery was sold to Overlooked Group. There is also a new CEO as the previous Louis Loubser was replaced by QM Senosi. However, there is no proof that DWS was notified of the change in status. No further information was provided.
2	Based on the audit site inspection conducted on 28 August 2024, run-off by-passing the silted plant pollution control dam (PCD) and stormwater channel discharging potentially contaminated effluent into the wetland constitutes reportable incidents to DWS. The last incident report provided was for the catchment sump overflow in December 2018, no recent incident register or incidents considered reportable to the DWS were provided.
3	Based on the Mooiplaats Colliery 2023 annual flow meter readings report 244 658 m ³ process water was abstracted during the reporting period January to December 2023 from the Usutu boreholes exceeding the set IWUL annual limit of 65 700 m ³ . This deficiency is in the process of being rectified through the pending application.
4	The capacity of the PCDs is compromised by the level of siltation and vegetation growing within the dams to conserve as much water as possible resulting in overflows. There is generally an infrastructural maintenance gap as water pipes at the plant were observed leaking. However, the mine reuses runoff water from the dirty area at the workshop and wash plant areas. The toilets have smaller cisterns so as to conserve water when flushing.
5	During the site visit, the operation and maintenance of the waste containment facilities was considered inadequate as pipes were leaking in the plant and Genset Dam overspilling to the environment. The plant PCD is silted, vegetation growing and overflowing into the environment.
6	The 2019 WUL internal audit report captured that as-built drawings for the plant PCD and Genset concrete dam were provided along with the Construction Completion Report, dated October 2015. The design drawings, design parameters and capacity analysis for the discard dump were provided. The as-built drawings for the remaining PCD's as well as the proof of delivery of as-build drawings were not available. However, proof of appointment of a consultant to undertake as built drawings for existing pollution control dams was provided (PO109500 dated 14 June 2024).
7	As per the Quarterly Water Quality Report 1 (01 February 2024 to 31 April 2024) and Annual Water Quality Report 2023 (01 February 2023 to 31 January 2024), water quality from the mine water/pollution control dams exceeded limits in terms of EC, TDS, CaCO ₃ , Ca, Mg, Cl, SO ₄ , Fe, and Mn. This is typical of water associated with coal washing/mining activities. Wastewater is planned to be contained in storage facilities and circulated in a closed circuit. The pH of process / wastewater should be closely monitored and managed to prevent damage to water infrastructure. However, it is reported that an amendment application was submitted to the department on 30 June 2015 and again on 27 February 2017 to adjust certain of these limits as the current limits for the variables such as Iron (Fe), Aluminium (Al) and Manganese (Mn) are set below the detection limit. As such, any amount of these variables presents in the wastewater will be seen as non-compliance. Furthermore, the corrections to Table 4 were made based on the actual averages of the water quality measured in the wastewater facilities and limits as set by SANS 241 Class II Limits.



Finding Reference #	Finding
8	Outside the mining right area, based on the water quality monitoring report, water quality remains stable and of good quality, with slight seasonal fluctuations. Naturally high CaCO ₃ concentrations (geological) resulted in elevated EC concentrations that exceeded the Grootdraai Dam Guidelines - Vaal Origin for EC and CaCO ₃ . Due to very low IWUL limits (SO ₄ of 0.25mg/L, Ca of 15.18 mg/L and Mg of 6.96 mg/L) variable concentrations in its natural state exceeded the limit. Neutral to high pH values and Alkalinity (CaCO ₃) concentrations indicate geological conditions. No impact from Mooiplaats colliery were observed in the groundwater monitored as stipulated in the GSW Annual Water Quality Report 2022. MPC has an opportunity to submit an amendment regarding this condition.
9	Water balance for 2024 was not provided however an email received stated that the updating is in process.
10	Process water from plant gooseneck for dust suppression, and potential seepage from the holding trench located on the eastern side of the substation was observed discharging into the wetland. Traces of contaminated water from the weighbridge was observed flowing through the stormwater channel at the admin offices carport discharging into the wetland. More so, visual observation of traces of seepage potentially from the co-disposal facility on the northern-western side of the facility. This has potential to impact the Witpuntspruit from upstream (WT-S01) to downstream (WT-S06) if no interception of seepage is undertaken. However, it was reported that a consultant was appointed to compile a stormwater management report for the MPC site (PO109500 dated 14 June 2024).
11	The storm water control works were noted to be compromised with major erosion in the drain at the admin offices carport and adjacent Dam 3 areas. RoM stormwater drains were partially blocked with contaminated soil stockpiles dumped within the channel. No evidence of maintenance or ongoing repairs to this erosion was noted at the time of the audit inspection.
12	No specific reagent storage tanks and reaction units were noted at the Colliery. However, one of the bunded area required a plug on the draining pipe that was open posing risk of pollution in the event of a spill.
13	No records (investigations and outcomes) of system malfunctions resulting in non-compliance with the requirements of the licence (e.g.: overflow of dirty water system during care and maintenance) were available at the time of the audit.
14	An updated RSIP (2023) was provided during the audit with proof of submission (email - Mon 2023/06/26 16:45). No proof was submitted for the updated IWWMP. However, updating of 2024 IWWMP and RSIP is reportedly in progress.
15	No geochemical report was provided by the time of the audit however, it was confirmed that geochemical analysis will be conducted as part of pending Phase 3 eWULAA and the 2024 IWWMP update.
16	It is reported that water was only pumped during January to March 2022 as underground mining activities ceased at the end of 2021. It is not clear if the Regional Head was notified 180 days prior to intended closure of the section 21(g). However, amendments were captured in both the IWWMP and RSIP.
17	A full GN 704 audit was not included in the scope of this 2023 external audit. It was however noted that certain of the GN 704 requirements have not been adhered to such as a gap in the maintenance of the dirty water system (overflows into the wetland), mining related



Finding Reference #	Finding
	infrastructure located within 100m of a watercourse. Furthermore, no Section 21c&i water uses (or GN704 exemptions) are authorised in the IWUL. There are however certain aspects of GN704 being complied with which is protection of water resource through reuse of water.
18	Evidence of consultation with I&AP's during the application phase (2009) was provided however no further I&AP consultation evidence relating to ongoing review of post closure impacts and plans was available.
19	Monthly measurement of groundwater levels are undertaken manually. It is understood that no electronic measuring instruments are installed to monitor the water levels on an hourly basis.



1 INTRODUCTION

Mooiplaats Colliery (MPC) is located approximately 18km south of the town of Ermelo, between the N2 and N11, and lies about 2km to the south of the Eskom Camden Power Station which falls within the municipal boundaries of the Gert Sibande District Municipality, Mpumalanga Province. The mine has an existing WUL (Ref #; 08/C11B/AGJ/2141). MPC is owned and operated by Langcarel (RF) Pty Limited (trading as Mooiplaats Colliery). The Colliery is located on Portions 1, 2 and 9 of the farm Mooiplaats 290 IT. Mooiplaats Colliery has an existing Water Use Licence (Ref.no.: 08/C11B/AGJ/2141) issued on 2 May 2013. The approved water uses included in the IWUL include the following:

- Section 21 (a) of the Act: Taking of water from a water resource;
- Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource; and
- Section 21 (j) of the Act: Removing, discharging or disposing of water found underground if it is necessary for the effective continuation of an activity or for the safety of people.

The objectives of the Annual External Compliance Audit are to:

- Establish compliance with the commitments in the approved licence;
- Provide the management of the mine with appropriate information for the initiation of corrective action, where necessary or appropriate, as identified through the audit.

Mooiplaats submitted an application for the additional water uses and amendments to the existing licence in 2020 and 2023. In August 2022 the DWS requested additional information on the application which the applicant was not able to provide and the application was subsequently withdrawn. Phase 1 and 2 e-WULAAS were done in 2023. Currently Phase 3 e-WULAAS is still pending finalisation.

2 BRIEF PROJECT DESCRIPTION

Mooiplaats Colliery is an underground coal mine which has since been sealed off. All five accesses to the underground workings (5 adits shaft) situated near the northern boundary of the Mooiplaats property have been sealed or plastered. Final engineer's audit or inspection was undertaken, wall was drilled, sealed and passing certificates were issued by OEM Civil Engineer in May 2023. Four (4) rescue boreholes were rehabilitated (opened 3m deep, capped with concrete slab topsoiled and grassed). Rehabilitation of the exploration boreholes (42) which were identified underground with the holes staked out and the shaft area in 2023 was completed. The mine ceased underground mining on 31 December 2021 and is currently making use of third-party miners receiving coal and washing at the plant. Third party coal is processed at the Colliery's Wash Plant with discard disposed of on the onsite co-disposal dump. The Mooiplaats Colliery is situated on Portion 1 and 9 of the farm Mooiplaats 290 IT.

The locality of Mooiplaats Colliery, as well as the relevant infrastructure of the mine, are shown in Figure 1 and Figure 2 respectively.

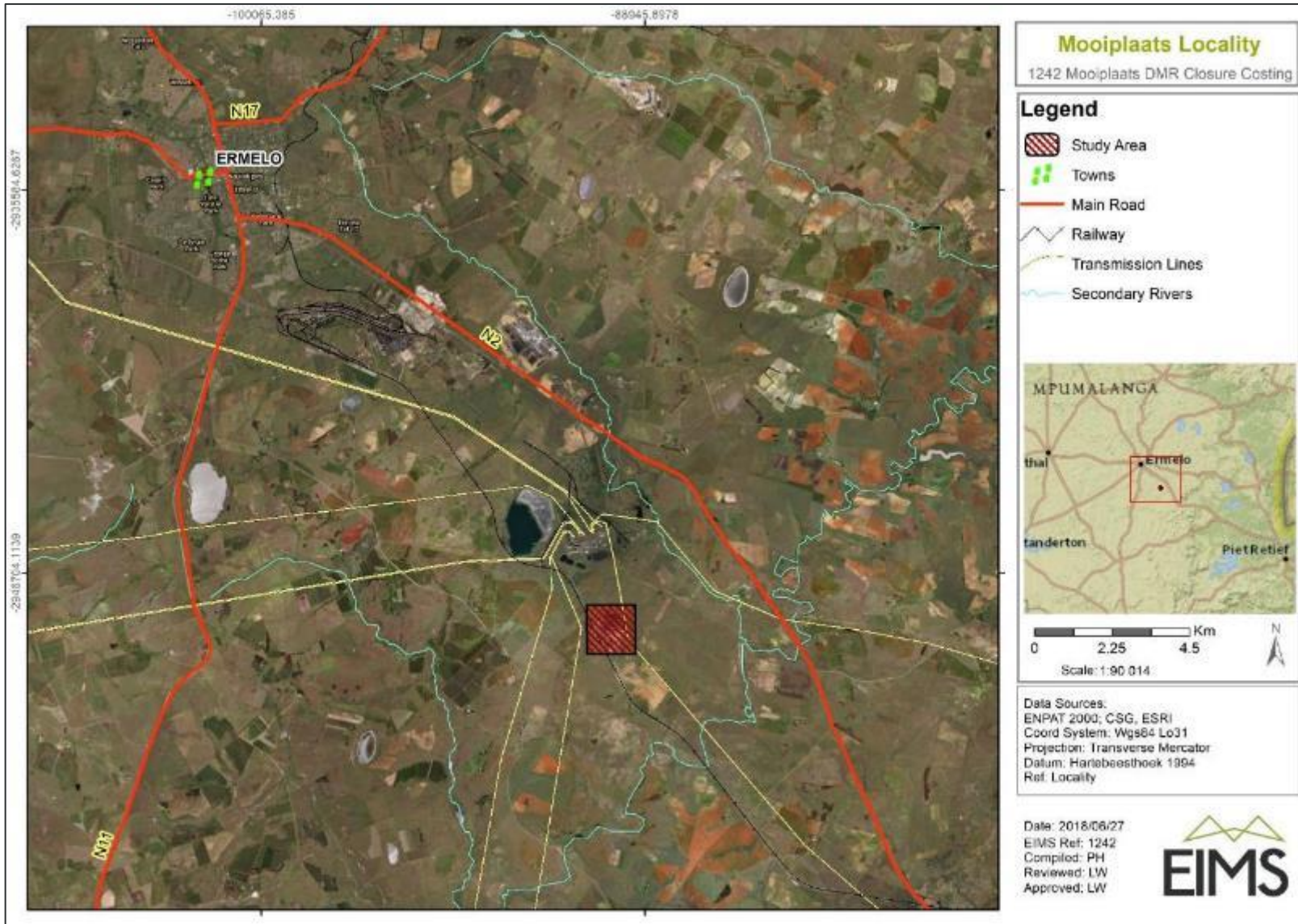


Figure 1: Mooiplaats Colliery locality map.

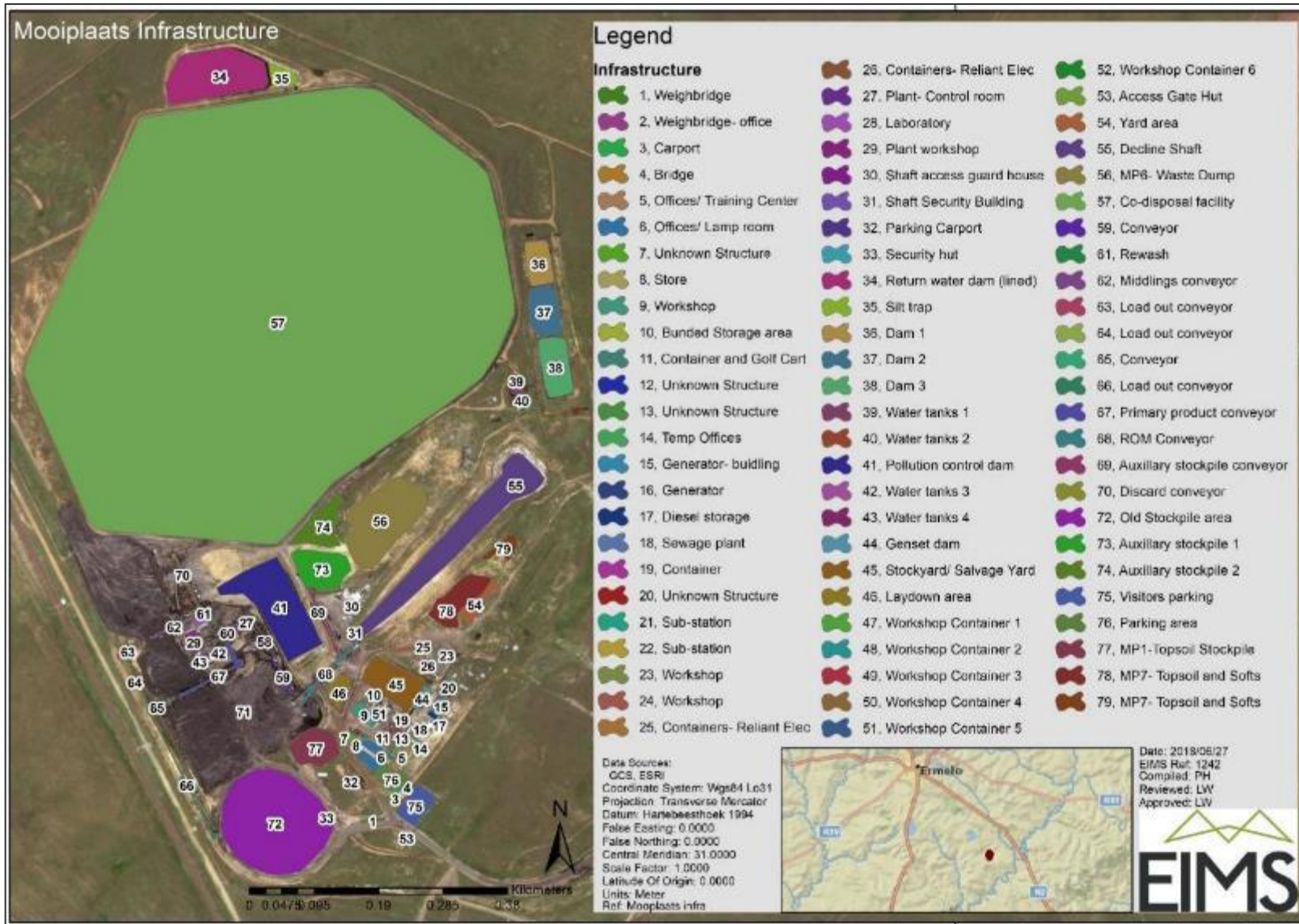


Figure 2: Mooiplaats Colliery infrastructure.



3 CONTACT DETAILS OF THE LICENSE HOLDER

The details of the licence holder are summarised in Table 2.

Table 2: License Holder Contact Details

Full name (and surname) of person or company holding the Mining Right and WUL	Langcarel (RF) Pty. Ltd. T/A Mooiplaats Colliery
ID number of person or company/ CC registration number	1975/002 667/07
Postal address	PO Box 1481 Glenvista Gauteng 2058
Physical/ residential address	4 Sedibeng Road Alrode South Gauteng 1451
Applicant's telephone number	+27 10 003 8075
Name	QM Senosi (CEO)

4 AUDIT METHODOLOGY

This section describes the audit methodology for the 2024 Annual External IWUL Audit.

4.1 AUDIT TEAM

- Auditor: Emmanuel Manyange from Environmental Impact Management Services Pty Ltd. (EIMS).
- Auditees: Richman Mbowane and Adri Joubert from Geo Soil and Water cc (mine environmental representatives).

Emmanuel has over 22 years of auditing and environmental management experience and his Curriculum Vitae is available on request.

4.2 AUDIT DOCUMENTATION

Mooiplaats provided the auditor with relevant and available background documentation. The majority of the documentation and records were made available electronically for review prior to the site visit. Certain information or aspects required for verification of compliance were inspected during the site visit. Follow-up documentation requests were provided following the site inspection and prior to finalisation of this report. No physical testing or chemical analysis was performed during the assessment and information provided by employees was verified by inspection and review only.

4.3 AUDIT METHOD

A checklist was prepared based on the conditions of the IWUL. Following the initial checklist preparation and documentation review, a site visit was undertaken on the 28th of August 2024 and all surface mining areas were



inspected. The purpose of the site visit was to assess the current status of the site/operations and to verify certain compliance aspects. No public consultation process was undertaken as part of this audit.

The findings of this assessment are based on visual inspection to operational areas, interviews, as well as documentation reviewed. No physical testing or chemical analysis was performed, and information provided by employees was verified by inspection and review only.

Compliance with the requirements of the IWUL was evaluated using pre-determined scoring criteria as described in Section 4.4. The results of the evaluation are provided in Section 5.1 and the findings are described in Section 6. Each condition in the IWUL was weighted equally in order to determine a compliance score.

4.4 AUDIT EVALUATION CRITERIA

Two sets of evaluation criteria were used to calculate compliance scores. Evaluation criteria 1 determined the straight compliance score and evaluation criteria 2 determined the weighted compliance score. The straight compliance score is calculated based on the compliance with the relevant conditions (i.e., yes or no). The weighted compliance score is calculated by using the compliance rating protocol (0, 2, 4) and scoring the individual conditions and calculating the percentage compliance. The evaluation criteria are further explained in sections 4.4.1 and 4.4.2.

4.4.1 EVALUATION CRITERIA 1

The straight compliance score is calculated by evaluating the compliance of the organisation against the requirements of each condition of the audit criteria and the scoring criteria used is as follows:

- Fully Compliant: Indicating that the condition was fully complied with and provided with a compliance score of **(4)**.
- Non-Compliant: Indicating that the condition has not been complied with and provided with a compliance score of **(0)**.
- Not Applicable **(N/A)**: Indicating that the condition is not currently applicable. Not applicable conditions were removed from the total number of conditions from which the compliance score was calculated.

4.4.2 EVALUATION CRITERIA 2

The weighted compliance score is calculated by evaluating the compliance of the organisation against the requirements of each condition of the audit criteria and applying a pre-determined scoring system, where each condition in the IWUL was weighted equally. The scoring criteria used during the audit was as follows:

- Full-Compliance **(4)**: Indicating that the condition was fully complied with.
- Partial-Compliance **(2)**: Indicating that the condition has not been fully complied with.
- Non-Compliance **(0)**: Indicating that the condition has not been complied with or no evidence of compliance could be provided.
- Not Applicable **(N/A)**: Indicating that the condition is not currently applicable. Not applicable conditions were removed from the total number of conditions from which the compliance score was calculated.
- Not Verified **(-)**: Due to valid absence of data and/or events, certain conditions were unable to be verified at the time of the audit.

Certain conditions have been included in the IWUL for information purposes and are therefore not possible to verify compliance with these conditions. These conditions do not contribute to the audit scoring and as such have been marked as not applicable (N/A) or not verified (-). However, it is important to note that despite these conditions being marked as 'not applicable' or 'not verified' in the audit checklist, these conditions remain binding on the applicant and must be implemented and complied with as and when relevant to ensure compliance.



5 RESULTS OF THE AUDIT

The result of the audit is based on the evaluation criteria described in Section 4.4 of this report and have been described in Table 3.

5.1 COMPLIANCE SUMMARY

A total of 93 IWUL conditions were assessed, of which 23 were “not applicable”. Of the applicable conditions (70), a total of 40 conditions were found to be fully compliant, 11 non-compliant and 19 partially compliant. The level of compliance for each commitment was calculated according to the methodology described in Section 4. Utilising this scoring system, **a straight compliance score of 57.14% and a weighted compliance score of 70.71%** was obtained for the audit. The non compliances stem from the lack of implementation of stormwater management plan, run-off of dirty water from the plant into the wetland and the general lack of maintenance of infrastructure. A summary of the number of conditions of the IWUL rated as Fully Compliant, Partially Compliant and Non-Compliant presented graphically in Figure 3.

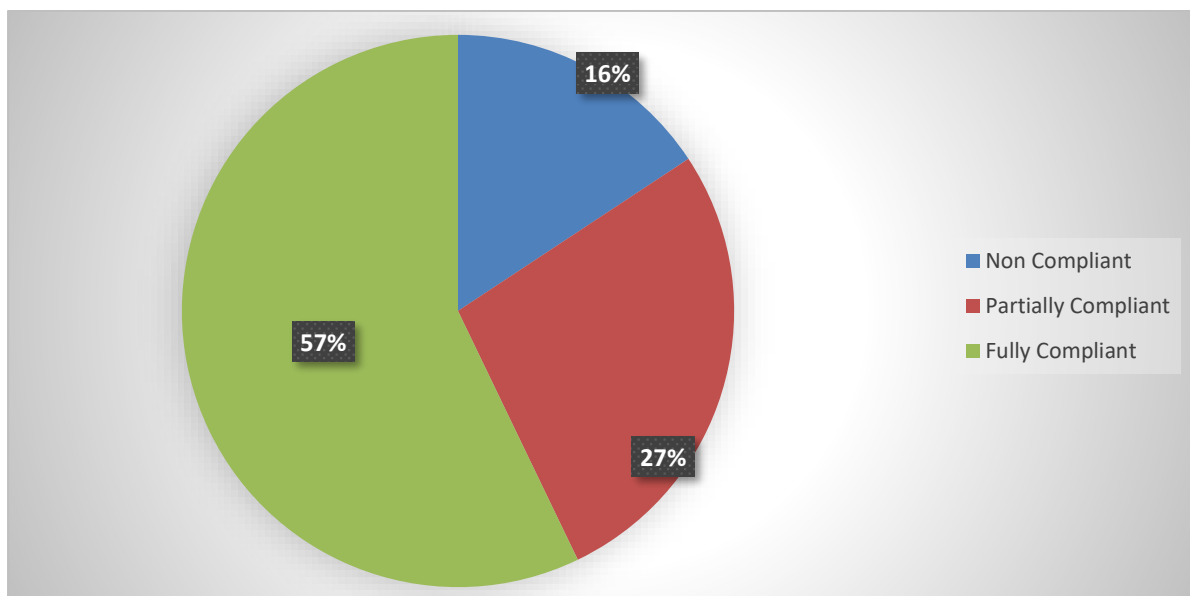


Figure 3: Summary of compliance to the conditions of the IWUL (number of conditions).

5.2 IWUL COMPLIANCE CHECKLIST

A summary of compliance to the conditions of the IWUL is provided in Table 3. It should be noted that some of the IWUL conditions below have been corrected to adhere to South African English spelling and grammatical conventions. Certain IWUL conditions were not applicable at the time of this audit and these conditions have been excluded from the audit scoring (marked not applicable or not verified). This audit reflects compliance at the time of the audit. It is important to note that conditions that were not applicable or not verified at the time of the audit, are still binding on the holder of the licence and may become applicable depending on the circumstances at the mine, which are not constant and may change over time. As such Mooiplaats Colliery is reminded to constantly monitor their operations and to ensure that all relevant conditions of the IWUL are implemented and complied with as required.



Table 3: Checklist of compliance to the conditions of the IWUL.

IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
Appendix I: General Conditions of the Licence			
1	The License is subjected to all provision of the NWA, Act 36 of 1998.	N/A	This condition is a statement to be noted by the Licence Holder and therefore not scored.
2	The responsibility for complying with the provisions of the license is vested in the licensee and not any other person or body.	N/A	This condition is a statement to be noted by the Licence Holder and therefore not scored.
3	The Licensee must immediately inform the Provincial head of any change of name, address, premises and/or legal status.	2	A letter dated 17 April 2018, to the Regional Head indicating the change in address and Directors for Mooiplaats Colliery was provided. More so, the letter (Ref no. MP -017) addressed to the Regional Head for Department of Economic Development, Environment and Tourism by the General Manager (Mr F. Gouela) dated 17 May 2018 notifying of the same changes was provided. However, proof of submission or acknowledgement of receipt was not provided. It was also reported that Mooiplaats Colliery was sold to Overlooked Group. There is also a new CEO as the previous Louis Loubser was replaced by QM Senosi. However, there is no proof that DWS was notified of the change in status. No further information was provided.
4	If the properties mentioned in respect of which this license is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the property to the Provincial Head of the Department within 60 days of the said change taking place.	4	It is understood that no changes have been made with respect to the status of the approved properties. However, there was a request for amendment to the IWUL which include corrections in farm portions and coordinates of the approved water uses. The letter to the DWS Regional Head was dated 26 October 2018. More so, an appointment letter for the proposed Mooiplaats Colliery WUL Amendment on behalf of Langcarel RF (Pty) Ltd dated 15 November 2023 and Phase 1 application was provided.
5	If a water user association is established in the area to manage the resources, membership of the Licensee to this association is compulsory.	4	Proof of Grootdraai Dam Catchment Forum (Meeting ID: 2732093523, August 2021) with list of attendees showing the mine's participation was provided.
6	The Licensee is responsible for any water use charges or levies imposed by a responsible authority.	N/A	This condition is considered not applicable at this stage as the DWS is yet to issue an invoice for water use charges or levies.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
7	While effect must be given to the Reserve as determined in terms of the Act, where a desktop determination of the reserved has been used in issuance of a license, when a comprehensive determination of the Reserve has finally been made, it shall be given effect to.	N/A	The availability of a comprehensive determination of the Reserve is unknown.
8	The license must not be construed as exemption of the licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-Law.	N/A	The licensee understands their obligation to comply with any other laws.
9	The license and amendment of this license are also subject to all applicable procedural requirements and other applicable provision of the act as amended from time to time.	N/A	The licensee understands that any amendments to the licence are subject to the relevant processes. MPC requested an amendment to the IWUL which included corrections in farm portions and coordinates of the approved water uses in a letter dated 26 October 2018 (Ref no. MP -026). More so, an appointment letter for the proposed Mooiplaats Colliery WUL Amendment on behalf of Langcarel RF (Pty) Ltd dated 15 November 2023 and Phase 1 and 2 application was provided.
10	The Licensee must conduct an annual internal audit on compliance with the conditions of the license. A report on the audit must be submitted to the Provincial Head within one month of the finalisation of the audit.	4	Proof of 2023 annual internal audit report submitted to DWS was provided (email - Monday, June 26, 2023, 4:55 PM). Email confirmation for 2024 Internal WUL Audit to be conducted on 4 September 2024 was received.
11	The Licensee must appoint an independent external auditor to conduct an annual audit on compliance with the conditions of the license. The first audit must be conducted within 3 months of the date of issue of the license and a report on the audit must be submitted to the Provincial Head within one month of finalisation of the report.	4	EIMS (Pty) Ltd was appointed to conduct an annual external audit report dated 18 July 2023. The report was submitted to DWS and proof of submission was provided.
12	Flow metering, recording and integrating devices must be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates must be available for inspection by the Provincial head or his/her representative upon request.	4	Flow meters were noted during the site visit and were in sound state of maintenance. The calibration certificates for the meters dated 11 May 2023 were provided.
13	Any incident that causes or may cause water pollution must be reported to the Provincial Head or his/her designated representative within 24 hours.	0	Based on the audit site inspection conducted on 28 August 2024, run-off by-passing the silted plant pollution control dam (PCD) and stormwater channel thereby discharging potentially contaminated effluent into the wetland constitutes reportable incidents to DWS. Refer to Figure 9, Figure 15 and Figure 16. The last incident report



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
			provided was for the catchment sump overflow in December 2018, no recent incident register or incidents considered reportable to the DWS were provided.
14	The Licensee shall ensure that they pay the water use charges and their account is up to date.	N/A	Evidence was provided which indicates that the DWS is yet to issue an invoice for water use charges or levies. As such, this condition is considered not applicable at this stage.
15	Should it be established that you have engaged in water use activities prior the granting of this license, cost of the usage may be established, and you will be liable for penalty.	N/A	No evidence was noted to indicate that the licensee engaged in water use activities prior to the granting of the licence. As such, this condition is scored as not applicable.
Appendix II: Section 21 (a): Taking Water from a Resource			
1	The licence authorises the taking of a maximum quantity of water from boreholes on the farms as indicated in Table 2 below, for mining (during dry periods only) and domestic purposes.	0	Based on the Mooiplaats Colliery 2023 annual flow meter readings report 244 658 m ³ process water was abstracted during the reporting period January to December 2023 from the Usutu boreholes exceeding the set IWUL annual limit of 65 700 m ³ .
2	The quantity of water authorised to be taken in terms of this license may not be exceeded without prior authorisation by the Minister.	0	Based on the Mooiplaats Colliery 2023 annual flow meter readings report 244 658 m ³ process water was abstracted during the reporting period January to December 2023 from the Usutu boreholes exceeding the set IWUL annual limit of 65 700 m ³ . This deficiency is in the process of being rectified through the pending application.
3	This license does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.	N/A	This condition is a general statement and is therefore scored as not applicable.
4	The Licensee shall continually investigate new and emerging technologies and put into practice water efficient devices or apply technique for the re-use of water containing waste, in an endeavour to conserve water at all times.	2	The capacity of the PCDs is compromised to conserve as much water as possible by the level of siltation and vegetation growing within the dams resulting in overflows especially the silted plant PCD. Refer to Figure 8 and Figure 9. There is generally run-off of contaminated water from the plant towards the wetland. However, the mine reuses water from the dirty containment areas at the workshop and wash plant areas. The toilets have smaller cisterns so as to conserve water when flushing.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
5	All water taken from the resource shall be measured as follows: 5.1 the daily quantity of water taken must be metered or gauged and the total recorded at the last day of each month; and 5.2 the licensee shall keep record of all water taken and a copy of the records shall be forwarded to the Regional Head on or before end of January and end July of each year	4	Based on the Mooiplaats Colliery annual flow meter readings report (January to December 2023), all quantities of water removed and disposed, are metered in the form of self-registering flow meters, installed on the delivery lines. Volumes are recorded on a daily basis and the daily and monthly flow meter readings are captured into the Mooiplaats Information Management System Database for Flow Meter Readings (MIMS-FM), which are updated on a monthly basis for submission to the Regional Head.
6	No water taken may be pumped, stored, diverted, or alienated for purposes other than intended in this license, without written approval by the Minister or his/her delegated nominee.	4	All water is used for mining and associated purposes.
7	The Licensee shall install and monitor appropriate water measuring to measure the amount of water abstracted; received and/or consumed, as applicable- to the infrastructure.	4	Flow meters have been installed and annual flow meter readings report (January 2023 to December 2023) was provided. The mine installed new flow meters replacing damaged, vandalised or stolen ones in 2023.
8	The Licensee shall be responsible for any water use charges or levies, which may be imposed from time to time by the Department or responsible authority in terms of the Department's Raw Water Pricing Strategy.	N/A	The DWS is yet to issue an invoice for water use charges or levies. As such, this condition is considered not applicable at this stage.
9	Notices prohibiting unauthorised persons from entering certain areas, as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.	4	Internationally acceptable signs indicating the risks involved in case of an unauthorised entry were observed at the wastewater dams at the entrance gate. Perimeter fencing is in place around the mine and the PCDs.
10	The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of: 10.1 Shortage of water 10.2 Inundation or flood; 10.3 Required reserve releases.	N/A	This condition is a general statement and is therefore scored as not applicable.
11	The Licensee shall ensure that all measuring devices are properly maintained and in good working order and must be easily accessible. This shall include a programme of checking, calibration, and/or renewal of measuring devices.	4	Measuring devices were observed to be properly maintained and in good working order and are easily accessible.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
12	The licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders for the need to for Water Conservation and Water Demand Management.	4	Water conservation posters (numerous locations such as toilets, kitchen, lamp room, training centre and reception notice board) and awareness training (induction) was noted during the audit.
	Appendix III: Section 21 (g): Disposing of Waste in a Manner Which May Detrimentially Impact on a Water Resource		
1	Construction and Operation		
1.1	The Licensee shall carry out and complete all the activities, including the construction and operation of the water containing waste containment facilities according to the final plans as approved by the Regional Head.	4	The only PCDs that were built after the issue of the IWUL was the Plant PCD and Genset PCD. According to the Construction Completion Report by Elements Consulting Engineers in 2015, the PCDs were constructed in line with the design plans.
1.2	The construction of the above structures must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990), as approved by the designer.	4	As per the Construction Completion Report by Elements Consulting Engineers in 2015 the construction of the PCD and Genset Dam was supervised by a Professional Engineer.
1.3	Within 30 days after the completion of the activities (storm water management infrastructure construction) referred here in accordance with the relevant provisions of this license, the Licensee shall in writing, under reference 16/2/7/C112/C81/C155, inform the Regional Head thereof. This shall be accompanied by a signature of approval from the designer referred to above that the construction was done according to the design plans referred to in the Report.	-	Based on the findings of previous audit reports, a post construction audit of the PCD and Genset dam was undertaken and the Regional Head was informed thereof. As such, this condition was not scored during this audit.
1.4	The Licensee must ensure that the disposal of the waste and water containing waste and the operation and maintenance of the system are done according to the provisions in the WUL Report.	0	During the site visit, the operation and maintenance of the waste containment facilities was considered inadequate as run-off water from the plant was flowing to the environment. The plant PCD is silted, vegetation growing and overflowing into the environment. Refer to Figure 9.
1.5	The Licensee shall as well submit a set of as-built drawings to the Regional Head after the construction of the water containing waste and waste management facilities.	2	The 2019 WUL internal audit report captured that as-built drawings for the plant PCD and Genset concrete dam were provided along with the Construction Completion Report, dated October 2015. The design drawings, design parameters and capacity analysis for the discard dump were provided. The as-built drawings for the remaining PCD's as well as the proof of delivery of as-built drawings were not available. However, proof of appointment of a consultant to



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
			undertake as built drawings for existing pollution control dams was provided (PO109500 dated 14 June 2024).
1.6	The water containing waste and waste containment facilities shall be operated and maintained to have a minimum freeboard of 0.8 meters above full supply level and all other water systems related thereto shall be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.	2	The plant PCD was silted, vegetation growing and overflowing at the time of the site visit. However, some return water dams were cleaned-up to have a minimum freeboard. It was also reported that the contractor for the dirty water dam's clean-up has since been appointed to maintain dam levels. Refer to Figure 8 and Figure 20.
1.7	The detailed designs drawings of all the dirty water system including storm water management plan should be submitted within a year after the issuance of the license.	2	The 2019 WUL internal audit report captured that as-built drawings for the plant PCD and Genset concrete dam were provided along with the Construction Completion Report, dated October 2015. The design drawings, design parameters and capacity analysis for the discard dump were provided however, no as-built drawings for the discard were available. The as-built drawings for the remaining PCD's as well as the proof of delivery of as-build drawings were not available.
2	Storage of Water Containing Waste		
2.1	The Licensee is authorised to dispose waste or water containing waste of maximum quantities into waste management facilities on the farms as indicated in Table 3.	4	The volumes of wastewater storage is recorded by the colliery and an amendment application was submitted to the DWS (dated 26 October 2018 and 10 July 2024) to correct a few clerical errors with respect to the location (coordinates) of the facilities and water uses.
2.2	The Licensee is authorised to suppress dust on haul roads with a volume of water containing waste not exceeding twenty-one thousand, nine hundred cubic meters per annum (21 900m ³ /a) of contaminated water from a Erickson Dam.	4	MPC annual flow meter readings report (January 2023 to December 2023) reported that 12 100 m ³ of water was used for dust suppression for the annual period, well within the set limit of 21 900 m ³ .
3	Quality of Wastewater to be Disposed		



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
3.1	<p>The quality of contaminated water disposed of into the Settling Dams, Return Water Dam, Plant Erickson Dam and Pollution Control Dam shall be of the following quality:</p> <p>pH: 3.5-8.5 Ammonia (NH₃) in mg/l: 0.24 Electrical conductivity (EC) in mS/m: 150 Fluoride (F) in mg/l: 3.23 Total Dissolved Solids (TDS) in mg/l: 1288 Chlorides (Cl) in mg/l: 116.66 Sulphate (SO₄) in mg/l: 740 Sodium (Na) in mg/l: 725 Calcium (Ca) in mg/l: 87 Magnesium (Mg) in mg/l: 51.40 Manganese (Mn) in mg/l: 0.15 Iron (Fe) in mg/l: 0.001 Aluminium (Al) in mg/l: 0.09</p>	2	<p>As per the Quarterly Water Quality Report 1 (01 February 2024 to 31 April 2024) and Annual Water Quality Report 2023 (01 February 2023 to 31 January 2024), water quality from the mine water/pollution control dams exceeded limits in terms of EC, TDS, CaCO₃, Ca, Mg, Cl, SO₄, Fe, and Mn. This is typical of water associated with coal washing/mining activities. Wastewater is planned to be contained in storage facilities and circulated in a closed circuit. The pH of process water / wastewater should be closely monitored and managed to prevent damage to water infrastructure. However, it is reported that an amendment application was submitted to the department on 30 June 2015 and again on 27 February 2017 to adjust certain of these limits as the current limits for the variables such as Iron (Fe), Aluminium (Al) and Manganese (Mn) are set below the detection limit. As such, any amount of these variables present in the wastewater will be seen as non-compliance. Furthermore, the corrections to Table 4 were made based on the actual averages of the water quality measured in the wastewater facilities and limits as set by SANS 241 Class II Limits.</p>
4	Monitoring		
4.1	<p>The Licensee shall monitor on monthly basis the water resources at Surface water monitoring point and Groundwater monitoring point to determine the impact of the wastewater facilities and other activities on the water quality by taking samples at the monitoring points as described in Table 5 and 6 of the IWUL.</p>	4	<p>The Mooiplaats Colliery Annual Water Quality Report 2023 (01 February 2023 to 31 January 2024), Quarterly Water Quality Report 1-2024 (01 February 2024 to 31 April 2024) prepared by Geo Soil and Water presented the water quality for both surface and groundwater monitoring points with photographic record of the points.</p>
4.2	<p>The date, time and monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.</p>	4	<p>The monitoring reports prepared by Geo Soil and Water (dated February 2024 and June 2024) included the date, time and monitoring point in respect of each sample taken. The analysis of the data was presented in the report.</p>
4.3	<p>The Licensee shall use acknowledged methods for sampling and the date, time and sampler must be indicated for each sample</p>	4	<p>The monitoring report prepared by Geo Soil and Water (dated 15 February 2024 and June 2024) included the date, time and monitoring point in respect of each sample taken. The laboratory accreditation (YankaLabs Sanas testing laboratory T0647) and sampling methods were included in the reports.</p>



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
4.4	Monitoring points shall not be changed prior to notification and written approval by the Regional Head.	4	An updated monitoring programme (2018) was prepared and submitted to the DWS on 25 October 2018.
4.5	Water quality tests to be performed on the monitoring boreholes on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the Regional Head. If any high-water quality levels as specified is exceeded, the Licensee must institute an investigation to determine the cause of pollution.	4	GSW is undertaking surface and groundwater monitoring on quarterly basis.
4.6	Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), in terms of the Standards Act 1982 (Act 30 of 1982).	4	The monitoring report prepared by Geo Soil and Water (dated 15 February 2024) included laboratory accreditation (YankaLabs Sanas testing laboratory T0647) and sampling methods were included in the reports.
4.7	The methods of analysis shall not be changed without prior notification to and written approval by the Minister.	4	No evidence was noted to show a deviation from the analysis methodology.
4.8	Water quality testing to be performed on the Pollution Control Dam and Make up Water Dam, must be done on a quarterly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the Regional Head. If any concentrations levels as specified above are exceeded, the Licensee must institute an investigation to determine the cause of pollution.	2	As per the Quarterly Water Quality Report 1 (01 February 2024 to 31 April 2024) and the Annual Water Quality Report 2023 (01 February 2023 to 31 January 2024), water quality from the mine water/pollution control dams exceeded limits in terms of EC, TDS, CaCO ₃ , Ca, Mg, Cl, SO ₄ , Fe, and Mn. This is typical of water associated with coal washing/mining activities. Wastewater is contained in storage facilities and circulated in a closed circuit. The pH of process water / wastewater should be closely monitored and managed to prevent damage to water infrastructure. No evidence of investigations into the exceedance was available at the time of the audit.
5	Water Resource Protection		



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
5.1	<p>The impact of the activities of the mine on groundwater shall not exceed the following water quality range as provided for by the groundwater reserve in the WUL (Table 7 in the WUL documentation).</p> <p>pH: 8.78 Electrical Conductivity: 150 Chloride (mg/l): 19.97 Nitrate (mg/l): 0.07 Sulphate (mg/l): 0.25 Fluoride (mg/l): 0.30 Magnesium (mg/l): 6.96 Calcium (mg/l): 15.18 Sodium (mg/l): 61.55</p>	0	<p>Outside the mining right area, based on the water quality monitoring report, water quality remains stable and of good quality, with slight seasonal fluctuations. Neutral to high neutral pH values, Alkalinity (CaCO₃), and Ca concentrations indicate geological conditions. The movement of pH values, EC concentrations and variables associated with geology indicate the consistent recharge of natural groundwater without mining impacts. This exceeded the Grootdraai Dam Guidelines - Vaal Origin for EC and CaCO₃. Due to very low IWUL limits (SO₄ of 0.25mg/L, Ca of 15.18mg/L and Mg of 6.96 mg/L) variable concentrations in its natural state exceeded the limit. Neutral to high pH values and Alkalinity (CaCO₃) concentrations indicate geological conditions. The movement of pH values, EC concentrations and variable associated with geology indicate the consistent recharge of natural groundwater without mining impacts. No impact from Mooiplaats colliery were observed in the groundwater monitored as stipulated in the GSW Annual Water Quality Report 2023. MPC has an opportunity to submit an amendment regarding this condition.</p>
6	Reporting		
6.1	<p>The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.</p>	2	<p>Water balance for 2024 was not provided however, an email was received stated that the updating is in process.</p>
6.2	<p>The Licensee shall submit the results of analysis for the monitoring requirements to the Regional Head on a quarterly basis under reference number 16/2/7/C112/C155.</p>	4	<p>Water quality testing is being undertaken on all wastewater storage facilities on a monthly basis and proof of submission of the quarterly monitoring reports was provided in the form of emails dated (QWQR -1 sent on Wednesday, July 3, 2024, 12:27 PM.</p>
6.3	<p>The Licensee shall at all times ensure that Acid Mine Drainage (AMD) is prevented and minimised during the operation and after operation of the mine.</p>	4	<p>AMD is monitored on an adjacent mining property (not owned by Mooiplaats) and the results reported on in the Mooiplaats monitoring reporting. No AMD resulting from Mooiplaats Colliery has been reported by the groundwater specialist to date.</p>
7	Stormwater Management		



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
7.1	Storm water leaving the Licensee's premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.	0	Process water from plant, gooseneck for dust suppression, and potential seepage from the holding trench located on the eastern side of the substation was observed discharging into the wetland. Traces of contaminated water from the weighbridge was observed flowing through the stormwater channel at the admin offices carport discharging into the wetland. More so, visual observation of traces of seepage potentially from the co-disposal facility on the northern-western side of the facility. This has potential to impact the Witpuntspruit from upstream (WT-S01) to downstream (WT-S06) if no interception of seepage is undertaken. However, it was reported that a consultant was appointed to compile a stormwater management report for the MPC site (PO109500 dated 14 June 2024). Refer to Figure 15
7.2	Increase runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm water does not lead to bank instability and excessive levels of silt entering the stream.	0	Significant erosion was noted within the clean stormwater channel at the offices. No evidence of erosion control measures being implemented. Refer to Figure 17.
7.3	Stormwater shall be diverted from the mining area complex site and roads and must be managed in such a manner as to disperse runoff and concentrating the storm-water flow.	0	Eroding stormwater channel is evidence of concentrated runoff noted from the admin offices carport and plant areas until it discharges into the wetland.
7.4	Where necessary works must be constructed to attenuate the velocity of any storm-water discharge and to protect the banks of the affected watercourses.	0	Significant erosion was noted within the clean stormwater channel at the offices. No evidence of erosion control measures being implemented.
7.5	Storm water control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.	0	The storm water control works were noted to be compromised with major erosion in the drain at the admin offices carport and adjacent Dam 3 areas. RoM stormwater drains were partially blocked with contaminated soil stockpiles dumped within the channel. No evidence of maintenance or ongoing repairs to this erosion was noted at the time of the audit inspection. Refer to Figure 18.
7.6	All storm water that would naturally run across the pollution areas shall be diverted via channels and trapezoidal drains designed to contain the 1:50 year flood.	2	Plant PCD was noted silted and the run-off dirty water by-passing the dam flowing along preferential flow paths discharging into the wetland on the south-eastern and north-eastern sides respectively. More so, the RoM on the north-western side of the mine lacks



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
			stormwater management control measures thereby posing potential pollution to the environment. Refer to Figure 8 and Figure 9.
7.7	The polluted storm water captured in the storm water control dams shall be pumped to the process water treatment plant for reuse and recycled.	4	The system was designed to re-use polluted stormwater in the beneficiation process. Treatment of this water is not required for re-use in this process.
8	Plant Areas and Conveyances		
8.1	Pollution caused by spills from the conveyances must be prevented through proper maintenance and effective protective measures especially near all stream crossings.	4	A dedicated team was observed within the wash plant cleaning any possible coal spillages. No concerns were noted at the time of the site inspection with respect to significant pollution as a result of the plant and/or conveyances. The mine has ceased mining operations and is in the process of decommissioning, rehabilitation and closure. The mine is however, currently processing third party coal from other mines in the vicinity.
8.2	All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system shall be maintained in a state of good repair and standby pumps must be provided.	2	No specific reagent storage tanks and reaction units were noted at the Colliery. However, one of the bunded area required a plug on the draining pipe that was open posing risk of pollution in the event of a spill.
8.3	Any hazardous substances must be handled according to the relevant legislation relating to the transport, storage and use of the substance.	4	The oil extraction equipment was not functional at the time of site inspection however, a service provider is reportedly contracted to drains the oil for recycling from the storage tank /drums at regular basis.
8.4	Any access roads or temporary crossings must be: 8.4.1 structurally stable and shall not induce any flooding or safety hazard; and 8.4.2 Be repaired immediately to prevent further damage.	4	No concerns were raised regarding site access roads at the time of the audit site inspection. No temporary crossings were present at the time of this audit.
9	Access Control		
9.1	Strict access procedures must be followed in order to gain access to the property. Access to the Dirty Water Management Facilities (all dams) must be limited to authorized employees of the Licensee and their Contractors only.	4	Access is controlled to the Colliery and the Dirty Water Management Facilities.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
9.2	Notices prohibiting unauthorized persons from entering the areas referred to in condition 9.1, as well as internationally acceptable signs indicating the risks involved in case of an unauthorized entry must be displayed along the boundary fence of these areas.	4	Notices were available at the Dirty Water Management Facilities.
10	Contingencies		
10.1	Accurate and up-to-date records shall be kept of all system malfunctions resulting in non-compliance with the requirements of this license. The records shall be available for inspection by the Regional Head upon request. Such malfunctions shall be tabulated under the following headings with a full explanation of and the contributory circumstances: 10.1.1 Operating errors; 10.1.2 Mechanical failures (including design, installation or maintenance); 10.1.3 Environmental factors (e.g., flood); 10.1.4 Loss of supply services (e.g., power failure); and 10.1.5 Other causes.	0	No records (investigations and outcomes) of system malfunctions resulting in non-compliance with the requirements of the licence (e.g.: overflow of dirty water system during care and maintenance) were available at the time of the audit.
10.2	The Licensee must, within 24 hours, notify the Regional Head of the occurrence or potential occurrence of any incident which has the potential to cause, or has, caused water pollution, pollution of the environment, health risks or which is a contravention of the license conditions.	0	Based on the audit site inspection conducted on 28 August 2024, the run-off water from the plant by-passing the silted plant PCD and stormwater channel discharging potentially contaminated effluent into the wetland constitutes reportable incidents to DWS. The last incident report provided was for the catchment sump overflow in December 2018, no recent incident register or incidents considered reportable to the DWS were provided.
10.3	The Licensee must within 14 days, or a shorter period time, as specified by the Regional Head, from the occurrence or detection of any incident referred above, submit an action plan, which must include a detailed time schedule, to the satisfaction of the Regional Head of measures taken to: 10.3.1 correct the impacts resulting from the incident; 10.3.2 prevent the incident from causing any further impacts; and 10.3.3 Prevent a recurrence of a similar incident.	0	There appears to be a gap in the reporting of incidents to DWS as indicated above in that no recent action plan was submitted. This condition has been scored a non-compliance as there is a gap in reporting of incidents.
11	Auditing		



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
11.1	The Licensee shall conduct an annual internal audit on compliance with the conditions of this license. A report on the audit shall be submitted to the Regional Head within one month of finalisation of the audit. The report shall be made available to an external auditor should the need arise. The first audit must be conducted within 3 (three) months of the date this license was issued and a report on the audit shall be submitted to the Regional Head within one month of finalisation of the report.	4	Proof of recent annual internal audit report for 2023/2024 submitted to DWS was provided (email - Thursday, February 29, 2024, 1:33 PM).
11.2	The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this license. The first audit must be conducted within 3 (three) months of the date of this license and a report on the audit shall be submitted to the regional Head within one month of finalisation of that report.	4	EIMS was appointed to conduct an annual audit for 2023 and the annual external audit report was submitted to DWS. This report forms the 2024 annual audit report for 2024.
12	Integrated Water and Waste Management		
12.1	The Licensee must update an Integrated Water and Waste Management Plan (IWWMP), which must together with the Rehabilitation Strategy and Implementation Programme (RSIP), be submitted to the Regional Head for approval within one (1) year from the date of issuance of this license.	2	An updated RSIP (2023) was provided during the audit with proof of submission (email -Mon 2023/06/26 16:45). No proof was submitted for the updated IWWMP. However, updating of 2024 IWWMP and RSIP is reportedly in progress.
12.2	The License shall undertake geochemical assessment on all mine residue deposit which shall together with the IWWMP be submitted to the Regional Head within a year after the issuance of the license.	2	No geochemical report was provided by the time of the audit however, it was confirmed that geochemical analysis will be conducted as part of pending Phase 3 eWULAA and the 2024 IWWMP update.
12.3	The IWWMP and RSIP shall thereafter be updated and submitted to the Regional approval, annually.	4	The IWWMP and RSIP for 2024 were reportedly being updated and will be submitted to the Regional Head.
12.4	The Licensee must, at least 180 days prior to the intended closure of any facility or any portion thereof, notify the Regional Head of such intention and submit any final amendments to the IWWMP and RSIP as well as a final Closure Plan, for approval.	2	It is reported that water was only pumped during January to March 2022 as underground mining activities ceased at the end of 2021. It is not clear if the Regional Head was notified 180 days prior to intended closure of the section 21(g). However, amendments were captured in both the IWWMP and RSIP.
12.5	The Licensee shall make full financial provision for all investigations, designs, construction, operation and maintenance for a water treatment plant should it become a requirement as a long-term water management strategy.	-	At the time of the audit, the colliery confirmed that a water treatment plant is not required at this stage as no AMD/decant is occurring from the Colliery. As such, this condition is not scored at this time.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
13	General Conditions		
13.1	<p>Water samples must be taken from all the monitoring boreholes by using approved sampling techniques and adhering to recognised sampling procedures. Samples should be analysed for both organic as well as inorganic pollutants, as mining activity often lead to hydrocarbon spills in the form of diesel and oil. At least the following water quality parameters should be analysed for:</p> <ul style="list-style-type: none"> - Major ions (Ca, K, Mg, Na, SO₄, NO₃, Cl, F) - pH - Electrical Conductivity (EC) - Total Petroleum hydrocarbon (TPH) - Total Alkalinity <p>These should be recorded on a data sheet. It is proposed that the data should be entered into an appropriate computer database and reported to the Department of Water Affairs.</p>	4	The GSW water quality monitoring report (QWQR 1 -2024 and Annual Water Quality Report 2023) includes the results for the borehole samples and the data is recorded in a database for future trend analysis.
13.2	The Licensee shall at all times together with the conditions of this license adhere to the Regulations on use of water for mining and related activities aimed at the protection of water resources (GN 704, 4 June 1999).	2	A full GN 704 audit was not included in the scope of this 2024 external audit. It was however noted that certain of the GN 704 requirements have not been adhered to such as a gap in the maintenance of the dirty water system (overflows into the wetland). There are however certain aspects of GN704 being complied with which is protection of water resource through reuse of water. More so, applying for authorisation of mining related infrastructure located within 100m of a watercourse and section 21c&i water uses in the IWUL.
Appendix IV: Section 21(j): Removing, Discharging or Disposing of Water found Underground if it is Necessary for the Efficient Continuation of an Activity or for the Safety of People			
1	General Requirements		
1.1	The Licensee is authorised to remove a volume not exceeding forty-three thousand, eight hundred cubic meters per annum (43 800m ³ /a) of groundwater from underground workings situated at Portion 9 of Mooiplaats 290 IT.	N/A	Pumping of water from underground ceased from March 2022 as removal of coal ceased at the end of 2021 and therefore this condition is not scored.
1.2	The Licensee is authorised to extract groundwater from the mining shaft for the purposes of ensuring continued safe mining.	N/A	Underground mining activities ceased at the end of 2021 and therefore this condition is not scored.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
1.3	The disposal of water into the containment facility shall take place at the following location: Portion 1 of Mooiplaats 290 IT (Settling Dam 1) S 25°42'24.6" E 29°58'37.2"	N/A	Water was only pumped from January to April 2023 as underground mining activities ceased at the end of 2021 and therefore could not be scored.
1.4	The water removed from underground in terms of this license shall be disposed of into a Settling Dam 1 authorized in Appendix III of this license.	N/A	Water was only pumped from January to April 2023 as underground mining activities ceased at the end of 2021 and therefore could not be scored.
1.5	The quantity of groundwater authorized to be removed in terms of this license may not be exceeded without prior approval by the responsible authority.	N/A	Based on the Annual Flow Meter Reading Report (January 2023 to December 2023), no (0 m3) water quantities were removed from underground and therefore could not be scored.
1.6	The quantity of water removed from the pit must be metered and recorded daily.	N/A	No water was removed from underground during the reporting period as underground mining activities ceased at the end of 2021. Before sealing the shaft, remaining water was removed until March 2022 and therefore could not be scored
1.7	The Groundwater levels shall be monitored every six months (once in the beginning of dry season and once in the beginning of wet season).	4	As indicated in the GSW quarterly water monitoring report 1- 2024 (01 February 2024 to 31 April 2024), groundwater levels are monitored on a quarterly basis to determine the possible impact of mining activities on the groundwater aquifer (6 monthly trends).
1.8	The quality of the water disposed into the Settling Dam 1 shall not exceed the quality as specified in Appendix III (Table 4 of the WUL).	2	Based on the water quality reports, the quality of water disposed into the Settling Dam 1 exceeds some of the limits as prescribed in the IWUL. An amendment request was however submitted to the DWS on 30 June 2015 and again on 27 February 2017 to amend the limits where relevant. The system is designed to be a closed system and the water should not be released into the natural environment however traces of potentially contaminated water was observed flowing into the wetland. Refer to Figure 12 and Figure 14.
1.9	Self-registering flow meters must be installed in the delivery lines at easily accessible positions near the dewatering points.	N/A	Water was only pumped from January to April 2023 as underground mining activities ceased at the end of 2021 and therefore could not be scored.
1.10	The date and time of monitoring in respect of each sample taken shall be recorded together with the results of the analysis.	N/A	Water was only pumped from January to April 2023 as underground mining activities ceased at the end of 2021 and therefore could not be scored.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
1.11	A diagrammatic plan of the entire current infrastructure for pumping of water to surface, indicating positions, capacity and quality of the water pumped must be submitted to the Regional Head within a year of issuance of the license.	N/A	Water was only pumped from January to April 2023 as underground mining activities ceased at the end of 2021 and therefore could not be scored.
1.12	No water taken may be pumped, stored, diverted, or alienated for purpose other than intended in this license without written approval by the Regional Head.	N/A	Water was only pumped from January to April 2023 as underground mining activities ceased at the end of 2021 and therefore could not be scored.
1.13	The Licensee shall undertake the mine planning and development, active mining operations and mine decommissioning in a manner that minimises disturbance to existing hydrological and Geohydrological systems and minimises water ingress or water 'make' into the mine.	4	Underground mining activities ceased at the end of 2021 resulting in 5 adits getting plugged and plan for rehabilitation of the area is in place. No concerns were noted during the audit site inspection and documentation reviewed with regards to the disturbance to existing hydrological and geohydrological systems and water ingress into the mine.
1.14	A post closure water management programme must be developed and submitted to the Regional Head within 24 months from the date of issuance of this license. Details on financial provision and an operational plan for implementation of the post closure management programme must be outlined.	4	The post closure water management plan (dated September 2017) was provided during the audit. The plan outlines the financial provision and operational plan for implementation of the post closure management programme.
1.15	The Licensee shall consult with interested and Affected Parties (I & APs) on closure objectives and closure plans, and ongoing review of post-closure impacts and plans.	2	Evidence of consultation with I&AP's during the application phase (2009) was provided however, no further I&AP consultation evidence relating to ongoing review of post closure impacts and plans was available.
2	Site Specific Conditions		
2.1	Additional monitoring boreholes should be sited and drilled using approved geophysical methods. The updated groundwater monitoring plan should be submitted within six (6) months of license issuance.	4	An updated monitoring plan was reportedly provided to the auditor (October 2018) and proof of submission to DWS on 25 October 2018.
2.2	Electronic measuring instruments must be installed and properly calibrated to monitor and record any fluctuation in water levels on an hourly basis, to ensure that the abstraction is not affecting neighbouring boreholes.	2	Monthly measurement of groundwater levels are undertaken manually. It is understood that no electronic measuring instruments are installed to monitor the water levels on an hourly basis.



IWUL Ref #	Condition	Compliance Rating	Comments/ Verification
2.3	Water levels in boreholes must be measured before pumping starts and after 12-hour recovery period. Water levels must be measured daily by hand using the depth meter for the first four weeks and then weekly for the first six months thereafter monthly water level measurements will be required. The water level records should be submitted on annual basis.	4	Monthly groundwater levels are recorded, and the results submitted to the DWS annually.
2.4	The waste and water containing waste containment facilities designs to incorporate an HDPE geomembrane liner of 1.5mm thickness, as provided for in the report.	4	It was observed that all the PCDs were lined. A purchase order (PO109500) confirming appointment of a consultant to undertake as built drawings for existing pollution control dams. This will help to determine the lining type or thickness.



6 SUMMARY OF KEY FINDINGS AND RECOMMENDATIONS

A summary of the key findings of the audit is provided in Table 4 below together with recommendations to address the findings.

Table 4: Findings and Recommendations of the Audit.

Finding Reference #	IWUL Ref #	Condition	Finding
1	Appendix I, 3	The Licensee must immediately inform the Provincial head of any change of name, address, premises and/or legal status.	A letter dated 17 April 2018, to the Regional Head indicating the change in address and Directors for Mooiplaats Colliery was provided. More so, the letter (Ref no. MP -017) addressed to the Regional Head for Department of Economic Development, Environment and Tourism by the General Manager (Mr F. Gouela) dated 17 May 2018 notifying of the same changes was provided. However, proof of submission or acknowledgement of receipt was not provided. It was also reported that Mooiplaats Colliery was sold to Overlooked Group. There is also a new CEO as the previous Louis Loubser was replaced by QM Senosi. However, there is no proof that DWS was notified of the change in status. No further information was provided.
2	Appendix I, 13 Appendix III, 10.2	Any incident that causes or may cause water pollution must be reported to the Provincial Head or his/her designated representative within 24 hours.	Based on the audit site inspection conducted on 28 August 2024, run-off by-passing the silted plant pollution control dam (PCD) and stormwater channel discharging potentially contaminated effluent into the wetland constitutes reportable incidents to DWS. Refer to Figure 9. The last incident report provided was for the catchment sump overflow in December



Finding Reference #	IWUL Ref #	Condition	Finding
			2018, no recent incident register or incidents considered reportable to the DWS were provided.
3	Appendix II, (1,2)	The licence authorises the taking of a maximum quantity of water from boreholes on the farms as indicated in Table 2 below, for mining (during dry periods only) and domestic purposes.	Based on the Mooiplaats Colliery 2023 annual flow meter readings report 244 658 m ³ process water was abstracted during the reporting period January to December 2023 from the Usutu boreholes exceeding the set IWUL annual limit of 65 700 m ³ . This deficiency is in the process of being rectified through the pending application.
4	Appendix II, 4	The Licensee shall continually investigate new and emerging technologies and put into practice water efficient devices or apply technique for the re-use of water containing waste, in an endeavour to conserve water at all times.	The capacity of the PCDs is compromised by the level of siltation and vegetation growing within the dams to conserve as much water as possible resulting in overflows. There is generally an infrastructural maintenance gap as water pipes at the plant were observed leaking. However, the mine reuses runoff water from the dirty area at the workshop and wash plant areas. The toilets have smaller cisterns to conserve water when flushing.
5	Appendix III, 1.4	The Licensee must ensure that the disposal of the waste and water containing waste and the operation and maintenance of the system are done according to the provisions in the WUL Report.	During the site visit, the operation and maintenance of the waste containment facilities was considered inadequate as run-off water from the plant was flowing to the environment. The plant PCD is silted, vegetation growing and overflowing into the environment. Refer to Figure 8 and Figure 9.



Finding Reference #	IWUL Ref #	Condition	Finding
6	Appendix III, 1.5	The Licensee shall as well submit a set of as-built drawings to the Regional Head after the construction of the water containing waste and waste management facilities.	The 2019 WUL internal audit report captured that as-built drawings for the plant PCD and Genset concrete dam were provided along with the Construction Completion Report, dated October 2015. The design drawings, design parameters and capacity analysis for the discard dump were provided. The as-built drawings for the remaining PCD's as well as the proof of delivery of as-built drawings were not available. However, proof of appointment of a consultant to undertake as built drawings for existing pollution control dams was provided (PO109500 dated 14 June 2024).
7	Appendix III, 3.1	<p>The quality of contaminated water disposed of into the Settling Dams, Return Water Dam, Plant Erickson Dam and Pollution Control Dam shall be of the following quality:</p> <p>pH: 3.5-8.5</p> <p>Ammonia (NH₃) in mg/l: 0.24</p> <p>Electrical conductivity (EC) in mS/m: 150</p> <p>Fluoride (F) in mg/l: 3.23</p> <p>Total Dissolved Solids (TDS) in mg/l: 1288</p> <p>Chlorides (Cl) in mg/l: 116.66</p> <p>Sulphate (SO₄) in mg/l: 740</p> <p>Sodium (Na) in mg/l: 725</p> <p>Calcium (Ca) in mg/l: 87</p>	As per the Quarterly Water Quality Report 1 (01 February 2024 to 31 April 2024) and Annual Water Quality Report 2023 (01 February 2023 to 31 January 2024), water quality from the mine water/ pollution control dams (PCDs) exceeded limits in terms of EC, TDS, CaCO ₃ , Ca, Mg, Cl, SO ₄ , Fe, and Mn. This is typical of water associated with coal washing/ mining activities. Wastewater is planned to be contained in storage facilities and circulated in a closed circuit. The pH of process / wastewater should be closely monitored and managed to prevent damage to water infrastructure. However, it is reported that an amendment application was submitted to the department on 30 June 2015 and again on 27



Finding Reference #	IWUL Ref #	Condition	Finding
		Magnesium (Mg) in mg/l: 51.40 Manganese (Mn) in mg/l: 0.15 Iron (Fe) in mg/l: 0.001 Aluminium (Al) in mg/l: 0.09	February 2017 to adjust certain of these limits as the current limits for the variables such as Iron (Fe), Aluminium (Al) and Manganese (Mn) are set below the detection limit. As such, any amount of these variables presents in the wastewater will be seen as non-compliance. Furthermore, the corrections to Table 4 was made based on the actual averages of the water quality measured in the waste water facilities and limits as set by SANS 241 Class II Limits.
8	Appendix III, 4.8, 5.1	The impact of the activities of the mine on groundwater shall not exceed the following water quality range as provided for by the groundwater reserve in the WUL (Table 7 in the WUL documentation). pH: 8.78 Electrical Conductivity: 150 Chloride (mg/l): 19.97 Nitrate (mg/l): 0.07 Sulphate (mg/l): 0.25 Fluoride (mg/l): 0.30 Magnesium (mg/l): 6.96 Calcium (mg/l): 15.18 Sodium (mg/l): 61.55	Outside the mining right area, based on the water quality monitoring report, water quality remains stable and of good quality, with slight seasonal fluctuations. Naturally high CaCO ₃ concentrations (geological) resulted in elevated EC concentrations that exceeded the Grootdraai Dam Guidelines - Vaal Origin for EC and CaCO ₃ . Due to very low IWUL limits (SO ₄ of 0.25mg/L, Ca of 15.18mg/L and Mg of 6.96 mg/L) variable concentrations in its natural state exceeded the limit. Neutral to high pH values and Alkalinity (CaCO ₃) concentrations indicate geological conditions. No impact from Mooiplaats colliery were observed in the groundwater monitored as stipulated in the GSW Annual Water Quality Report 2022. MPC has an opportunity to submit an



Finding Reference #	IWUL Ref #	Condition	Finding
			amendment regarding this condition.
9	Appendix III, 6.1	The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.	Water balance for 2024 was not provided however, an email received stated that the updating is in process.
10	Appendix III, 7.1, 7.2, 7.3, 7.4	Storm water leaving the Licensee's premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.	Process water from plant, gooseneck for dust suppression, and potential seepage from the holding trench located on the eastern side of the substation was observed discharging into the wetland. Traces of contaminated water from the weighbridge was observed flowing through the stormwater channel at the admin offices carport discharging into the wetland. More so, visual observation of traces of seepage potentially from the co-disposal facility on the northern-western side of the facility. This has potential to impact the Witpuntspruit from upstream (WT-S01) to downstream (WT-S06) if no interception of seepage is undertaken. However, it was reported that a consultant was appointed to compile a stormwater management report for the MPC site (PO109500)



Finding Reference #	IWUL Ref #	Condition	Finding
			dated 14 June 2024). Refer to Figure 15 and Figure 22.
11	Appendix III, 7.5, 7.6	Storm water control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.	The storm water control works were noted to be compromised with major erosion in the drain at the admin offices carport and adjacent Dam 3 areas. RoM stormwater drains were partially blocked with contaminated soil stockpiles dumped within the channel. Refer to Figure 18. No evidence of maintenance or ongoing repairs to this erosion was noted at the time of the audit inspection.
12	Appendix III, 8.2	All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system shall be maintained in a state of good repair and standby pumps must be provided.	No specific reagent storage tanks and reaction units were noted at the Colliery. However, one of the bunded area required a plug on the draining pipe that was open posing risk of pollution in the event of a spill. Refer to Figure 7.
13	Appendix III, 10.1	Accurate and up-to-date records shall be kept of all system malfunctions resulting in non-compliance with the requirements of this license. The records shall be available for inspection by the Regional Head upon request. Such malfunctions shall be tabulated under the following headings with a full explanation of and the contributory circumstances: 10.1.1 Operating errors; 10.1.2 Mechanical failures (including design,	No records (investigations and outcomes) of system malfunctions resulting in non-compliance with the requirements of the licence (e.g.: overflow of dirty water system during care and maintenance) were available at the time of the audit.



Finding Reference #	IWUL Ref #	Condition	Finding
		installation or maintenance); 10.1.3 Environmental factors (e.g., flood); 10.1.4 Loss of supply services (e.g. power failure); and 10.1.5 Other causes.	
14	Appendix III, 12.1	The Licensee must update an Integrated Water and Waste Management Plan (IWWMP), which must together with the Rehabilitation Strategy and Implementation Programme (RSIP), be submitted to the Regional Head for approval within one (1) year from the date of issuance of this license.	An updated RSIP (2023) was provided during the audit with proof of submission (email -Mon 2023/06/26 16:45). No proof was submitted for the updated IWWMP. However, updating of 2024 IWWMP and RSIP is reportedly in progress.
15	Appendix III, 12.2	The License shall undertake geochemical assessment on all mine residue deposit which shall together with the IWWMP be submitted to the Regional Head within a year after the issuance of the license.	No geochemical report was provided by the time of the audit however, it was confirmed that geochemical analysis will be conducted as part of pending Phase 3 eWULAA and the 2024 IWWMP update.
16	Appendix III, 12.4	The Licensee must, at least 180 days prior to the intended closure of any facility or any portion thereof, notify the Regional Head of such intention and submit any final amendments to the IWWMP and RSIP as well as a final Closure Plan, for approval.	It is reported that water was only pumped during January to March 2022 as underground mining activities ceased at the end of 2021. It is not clear if the Regional Head was notified 180 days prior to intended closure of the section 21(g). However, amendments were captured in both the IWWMP and RSIP.
17	Appendix III, 13.2	The Licensee shall at all times together with the conditions of this license adhere to the Regulations on use of water for mining and related activities aimed at the protection of	A full GN 704 audit was not included in the scope of this 2023 external audit. It was however noted that certain of the GN 704 requirements have not been adhered to such as a



Finding Reference #	IWUL Ref #	Condition	Finding
		water resources (GN 704, 4 June 1999)	gap in the maintenance of the dirty water system (overflows into the wetland), mining related infrastructure located within 100m of a watercourse. Furthermore, no Section 21c&i water uses (or GN704 exemptions) are authorised in the IWUL. There are however certain aspects of GN704 being complied with which is protection of water resource through reuse of water.
18	Appendix IV, 1.15	The Licensee shall consult with interested and Affected Parties (I & APs) on closure objectives and closure plans, and ongoing review of post-closure impacts and plans.	Evidence of consultation with I&AP's during the application phase (2009) was provided however no further I&AP consultation evidence relating to ongoing review of post closure impacts and plans was available.
19	Appendix IV, 2.2	Electronic measuring instruments must be installed and properly calibrated to monitor and record any fluctuation in water levels on an hourly basis, to ensure that the abstraction is not affecting neighbouring boreholes.	Monthly measurement of groundwater levels are undertaken manually. It is understood that no electronic measuring instruments are installed to monitor the water levels on an hourly basis.



7 PHOTOGRAPHIC RECORD



Figure 4: Acceptable signs indicating the risks involved in case of an unauthorised entry observed at the wastewater dams at the entrance gate.



Figure 5: Flow meters observed in a good condition. The readings are recorded by the mine staff.



Figure 6: View of Usuthu boreholes supplying water to site.



Figure 7: The hazardous storage cage bunded area required a plug on the draining pipe that is open to reduce risk of possible spills to the environment (left picture) and lacks relevant signs (right picture).



Figure 8 The silted wash plant PCD.



Figure 9: Potentially contaminated run-off water from the wash plant by passing the silted PCD and flows to the wetland.



Figure 10: View of workshop impervious surface and drainage and car washing activity with potential to pollute the environment



Figure 11: View of Erickson dams at the wash plant (left picture) and decommissioned ones adjacent dam 1 (right picture refer to Figure 2 - 36).



Figure 12: Traces of MPC pollution risk to the environment due to inadequate stormwater management on site.



Figure 13: Underground operations ceased end of 2021 and back filling has commenced as part of rehabilitation.



Figure 14: Co-disposal Dam 3 and Dam 1.



Figure 15: Uncontrolled flow of contaminated water from the goseneck towards the wetland.



Figure 16: Uncontrolled flow of contaminated water from site towards the wetland.



Figure 17: Erosion of the channel discharging potentially contaminated stormwater into the wetland on the north-eastern side.



Figure 18: Discarding of potentially contaminated material onto the stormwater channel along the RoM.



Figure 19 Dumping of carbonaceous material outside stormwater management controls with potential to pollute the environment.



Figure 20: Lined Return Water Dam (34) and poorly maintained silt trap (35) on the northwestern side of Co-disposal facility.



Figure 21: Inadequately maintained north-western drainage system for the co-disposal facility.



Figure 22: Visual observation traces of seepage potentially from the co-disposal facility on the northern-western side of the facility. This has potential to impact the Witpuntspruit from upstream (WT-S01) to downstream (WT-S06) if no interception is undertaken.



8 CONCLUSION

A total of 93 IWUL conditions were assessed, of which 23 were “not applicable”. Of the applicable conditions (70), a total of 40 conditions were found to be fully compliant, 11 non-compliant and 19 partially compliant. The level of compliance for each commitment was calculated according to the methodology described in Section 4. Utilising this scoring system, **a straight compliance score of 57.14% and a weighted compliance score of 70.71%** was obtained for the audit. The major decline in compliance stems from the lack of implementation of stormwater management plan, run-off of dirty water from the plant into the wetland and the general lack of maintenance of infrastructure.

Mooiplaats Colliery ceased underground mining on 31 December 2021 and is currently making use of third-party miners receiving coal and washing at the plant. The external and internal water use audit that were conducted in 2018 and 2019 respectively identified certain water uses that had not been licenced within the Mooiplaats Colliery Mining Right as well as coordinates of licenced water uses that were incorrect. These new water uses and amendments to coordinates are included in the IWWMP. Mooiplaats submitted an application for the additional water uses and amendments to the existing licence in 2020 and 2023. In August 2022 the DWS requested additional information on the application which the applicant was not able to provide and the application was subsequently withdrawn. Phase 1 and 2 e-WULAAS were done in 2023. Currently Phase 3 e-WULAAS is still pending finalisation.



Appendix 1: Declaration of independence of the auditor

1 October, 2024

I, **Emmanuel Manyange**, declare that –

- I act as the independent environmental auditor;
- I will perform the work relating to the audit in an objective manner, even if this results in views and findings that are not favourable to the Licensee;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental audits, including knowledge of the environmental Acts, regulations and any guidelines that have relevance to the audited operations;
- I will comply with the relevant Acts, regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the audit process;
- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the NEMA.
- I do not have and will not have any vested interest (either business, financial, personal or other) in the audit other than remuneration for work performed.

Signature of the auditor:



Appendix 2: Signed Attendance Register

AUDIT ATTENDANCE REGISTER					
Job no.	1656	Project name	Mwali Colliery (Pty) Ltd External WUL Audit		
Description:	Mwali Colliery WUL Audit	OPENING MATTERS & ST		Page 1 of 1	
Venue:	Mwali Colliery (Pty) Ltd	Date	28 August 2024		Time
ATTENDEES					
Representative	Company	Designation	Phone number	E-mail address	Signature
Emmanuel Manyange	EIMS	Lead Auditor	0744256720	emmanuel@eims.co.za	<i>[Signature]</i>
Lucien James	EIMS	Consultant	0699553087	lucim@eims.co.za	<i>[Signature]</i>
Mbarene Richman	M.P.C	ENV Inter	0724731390	embarne@mpc.co.za	<i>[Signature]</i>