



Goedehoop North Colliery

Environmental External Audit Report 2022/ 2023

Submitted as contemplated in section 24N(7)(d) of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA) and Regulation 34 under Part 3 of Chapter 5 of the amended Environmental Impact Assessment Regulations, 2014 (Government Notice No. 982) (EIA Regulations, 2014)

DMRE Reference Numbers: No.: (MP) 30/5/1/2/2/ (143) MR

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Document Control

Version Control

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0.2	October 2023	Internal review	Tebogo Mapinga
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Related Documents

Document	Date	File name

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ACRONYMS

AMD	Acid mine drainage
Anglo	Anglo American Thermal Coal
AOPL	Anglo Operations Proprietary Limited
BECSA	BHP Billiton Energy Coal South Africa (Pty) Ltd
CE	Consulting Engineer
DMR	Department of Mineral Resources and Energy
DWS	Department of Water and Sanitation
EAP	Environmental Assessment Practitioner
EA	Environmental Authorisation
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
EO	Environmental Officer
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMC	Environmental Management/Monitoring Committee
IWULA	Integrated Water Use License Application
MDEDET	Mpumalanga Department of Economic Development, Environment and Tourism
ML/day	Megalitre per Day
WUL	Water Use License

NWA	National Water Act
SABS	South African Bureau of Standards
SLP	Social Labour Plan

1. Introduction

1.1. Background

Goedehoop Colliery is a member Thungela Operations (Pty) Ltd situated approximately 15 to 25 km south-east of eMalahleni, Mpumalanga Province, and is one of the largest mining complexes in Mpumalanga. Goedehoop comprises the Goedehoop North (GHN) and Goedehoop South (GHS) sections. GHN has a remaining life-of-mine (LoM) of approximately two years (2024). GHS has ceased operations and is in the process of effecting/implementing closure towards final site relinquishment.

Bank Colliery is operated by Thungela Operations Proprietary Limited. The Bank Colliery (Goedehoop North) is located approximately 20 km south of the town of Middelburg via R104 regional road, in the Mpumalanga Province. Bank Colliery Goedehoop North had two mining operations i.e., Bank 2 Seam and Bank 5 Seam mining operations.

Bank 2 Seam operations were opened in 1966 to produce Steam Coal and expanded to produce Low Ash Coal in 1977. The No. 5 Seam operations were originally opened as Blesbok Colliery in 1947 to produce Metallurgical coal. The two mining operations were merged in 1981 to form Bank Colliery North. In 1994 Bank Colliery was issued with a mining licence under section 9(1) of the largely repealed Minerals Act, 1991 to mine coal on the various farms as depicted on the Mining Licence with reference number ML27/94. Permission to continue with mining on the properties indicated in the Mining Licence was granted by the now Department of Mineral Resources and Energy ("DMRE") pending the approval of main Environmental Management Programme Report ("EMPr"). This EMPr was subsequently approved in 2001. Bank Colliery North applied for conversion of the old order Mining Licence to a Mining Right in terms of the Mineral and Petroleum Resources Development Act, 2002 ("MPRDA"), which was granted in 2009. The Bank Colliery North EMPr was approved in 2001.

Subsequent to the approval of the Bank Colliery North EMPr, a number of EMPr amendments were submitted and included the following: (i) Global EMPr; (ii) Main Shaft EMPr; (iii) Block 10 (shaft and opencast) EMPr; and (iv) Brown Shaft I and Brown Shaft II EMPrs.

The Brown Shaft Extension EMPr entails the re-commissioning of the Brown Shaft at Bank Colliery, which will be necessary for accessing the remaining unmined No. 2 coal seam, which will be mined by means of underground mining, using the Bord and Pillar mining methods. The Block 10 Opencast, Main Shaft and Brown Shaft II EMPr entail the mining of the No. 2 and No. 5 coal seams by both underground and opencast mining methods. Access to the underground reserves will be via the new incline shafts i.e., Simunye and Brown Shaft II. Note that the Simunye shaft is in its operational phase, whilst the Brown Shaft II is not yet opened, and the Block 10 opencast is mined out and has been decommissioned.

The DMRE requested Thungela Operations Proprietary Limited to align its approved EMPrs to comply with the MPRDA and the Regulations published thereunder. In response to this request, Thungela Operations

Proprietary Limited decided to amalgamate all the above EMPs for projects within the Bank Colliery North mining right area into one EMP that satisfied the requirements of the MPRDA, and the Regulations published thereunder. The amalgamated report aligned to the MPRDA was referred to as the Bank Colliery North Aligned Environmental Impact Assessment Report and Environmental Management Programme. The Bank Colliery North Aligned Environmental Impact Assessment Report and Environmental Management Programme was subsequently approved by the DMRE in December 2016.

Bank Colliery North Amended Environmental Impact Assessment Report and Environmental Management Programme concerns the proposed changes at the approved Brown Shaft II project. The Brown Shaft II project was approved for the No. 2 coal seam underground extension project. Access to the Brown Shaft II underground extension workings will be via the existing Simunye access shaft. Since the approval of the Brown Shaft II project there had been a scope change whereby an alternative to the surface access shaft option was included in the scope of the project, which include the option of accessing the extension underground reserves via the existing No. 4 coal seam workings i.e., Brown Shaft II decline shaft. In this alternative, two decline shafts are planned from no. 4 seam down to no. 2 seam for this option. One shaft will be served as a men and material travel decline shaft and the other will serve as a coal conveyor decline shaft. Due to the consideration of the above alternative, it was necessary that a few surface changes be implemented in order to allow for the shaft changes i.e., the ventilation shaft for the No. 2 underground extension workings that had to be repositioned, which required changes in the approved access road network and power supply infrastructure. In addition to the above, it was also necessary that a new concrete pouring borehole be sited for the proposed Brown Shaft II project. The borehole will be used for the supply of concrete into the underground working which is required for the construction of the decline shafts ramps.

In addition to the above EMP, Goedehoop North Colliery has been granted, an environmental authorisation in terms of the National Environmental Management Act, 1998 ("NEMA") ("EA"). The EA was granted for the Bank 2 mine residue deposit and associated infrastructures in respect of Portion 9 of the Farm Bankfontein 340 JS, situated within the magisterial district of Middelburg: Mpumalanga Region (Reference Number (MP) 30/5/1/2/3/2/1/ (143) EM). The target mineral being mined by Bank Colliery is the No. 2, No. 4 and No. 5 coal seams. At Bank Colliery the main environmental impacts have been assessed using an ISO14001 EMS based approach. The current actions of the mine are to create a climate of continual improvement in terms of risk reduction, pollution control and reduction of consumption. It is planned that controlled waste management practices at Bank Colliery North will be continued in terms of industrial and domestic waste. Pollution control measures have and will be put in place to prevent pollution at all surface infrastructure areas and areas that may cause a negative environmental impact. Amended Environmental Management Program for Bank Colliery North, ref: MP 30/5/1/2/2/ 143 MR, dated May 2021 and approved October 2021

NTC Group (Pty) Ltd was appointed by Thungela as the independent Environmental Assessment Practitioner (EAP) to undertake the 2023 annual environmental authorisation and environmental management programme Compliance Assessment and this report presents the methodologies and findings thereof. This report fulfils the compliance assessment requirement for August 2022 – August 2023 period.

1.2. Terms of Reference

Section 24N(7)(d) of NEMA requires that the holder and any person issued with an environmental authorisation (EA) must monitor and audit compliance with the requirements of the EMPr or environmental management plan. Furthermore, Regulation 34 of the NEMA EIA Government Notice Regulation (GNR) 982 effected 2014 (as amended) states amongst others, that the holder of an EA must, for the period during which the EA, EMPr and the closure plan, in the case of a closure activity remain valid must: a) ensure that the compliance with the conditions of the Environmental Authorisation, the EMPr, and the closure plan is audited; and b) submit the environmental audit report to the relevant Competent Authority. Additionally, the audit findings must be verifiable, in a structured and systematic manner on the level of performance against and compliance of the organisation's EA, it further states that the recommendations to amend the EMPr for rectification of the shortcomings must be subjected to Public Participation for approval by the Competent Authority.

As a result of the above, the Environmental Authorisation and Environmental Management Plan is required to undergo regular auditing in accordance with NEMA EIA Regulations as stated and Appendix 7 as amended in the current EIA Regulation. The frequency is stipulated in the EA, specifically annually. Following from the above, compliance assessments on the approved Environmental Management Programmes for The Bank Colliery (Goedehoop North) were assessed and include:

Environmental Authorisations

- Environmental Authorisation for Bank 2 mine residue deposit (MRD), reclamation of Bank 2 mine residue deposit and associated infrastructures, ref: (MP) 30/5/1/2/3/2/1/ (143) EM, dated June 2018;
- Amended EMPr Environmental Authorisation for Bank Colliery North, ref: (MP) 30/5/1/2/3/2/1/ (143) EM, dated 13 October 2021;

Environmental Management Programme

- Amended Environmental Management Programme for Bank Colliery North, ref: MP 30/5/1/2/2/ 143 MR, dated January 2019 and approved December 2019;
- Environmental Management Plan: Bank Colliery, Bank 2 MRD Expansion Project, ref: MP 30/5/1/2/3/2/1 (143) EA, dated May 2018;
- Amended Environmental Management Programme for Bank Colliery North, ref: MP 30/5/1/2/2/ 143 MR, dated May 2021 and approved October 2021;

The compliance assessments on the approved EA and EMPr as stated above for Bank Colliery (Goedehoop North) were assessed, and findings are detailed in Section 5.

1.3. Assumptions and Limitations

The scope of the compliance assessment was to assess the environmental management practices being implemented during operation of the Bank Colliery (Goedehoop North) project, in accordance with the approved environmental authorisation and other authorisations/license/permits issued.

The objective of the audit included the review of documents, reports etc stated under Section 3 and interview persons, to determine if the operation phase of Bank Colliery (Goedehoop North) is compliant with approved EA and other permits.

The following assumptions and/or limitations will be applicable to the audit process and findings:

- This audit is a snap-shot representation of the Bank Colliery (Goedehoop North) operation, and the audit period assessed includes August 2022 to August 2023. Anything occurring prior to this period is assumed to have been audited previously and was thus not included herein. Therefore, such items were determined to be “Not Applicable”.
- Due to the nature and extent of the operation, not all areas were visited during the site assessment. Instead, specific areas representative of the operation and assessment period were selected to provide a demonstration of site operations.
- Bank Colliery (Goedehoop North) operation is under operational phase, however activities relating to construction, decommissioning, and/or closure and rehabilitation, that may have occurred on site during the audit period will be deemed applicable
- Procedures developed by Bank Colliery (Goedehoop North) specifically, are deemed to be appropriately implemented by site personnel as part of the Integrated Management System by site personnel
- Outdated/repealed legislation or referenced guideline documents in the EA and EMPr will be substituted for current/relevant legislation and referenced guideline documents.

2. Auditors

NTC was established in 2005. It is 100% female black owned with a Level 1 Broad Based Black Economic Empowerment (BBBEE) Rating. We undertake our services with professional integrity and have built good reputations with stakeholders in the environmental management field including regulatory authorities and government departments. We undertake all our services within the requirements of applicable South African legislation, as well as acceptable international best practices, norms and standards. The details of the specific environmental consultants who completed and/or assisted with the Compliance Assessment is provided in Table 1 (Curriculum Vitae and Declaration of Independence attached in Appendix B).

Table 1: Audit Team Contact Details

Role	Responsible Person	Contact Details
Quality Control	Tebogo Mapinga (Pr. Sci. Nat) is an Environmental Auditor (Peer Reviewer) at NTC Group (Pty) Ltd. She has over 16 years' experience in the Environmental Management field including extensive experience within the mining sector. Goodness provided quality assurance during the audit preparations and report compilations.	Tel: +27 11 462 2022
		Fax: +27 86 665 1864
		Email: tebogo@ntcgroup.co.za
Auditor	Ethel Chifunda (MSc) is a Principal Consultant at NTC Group (Pty) Ltd. She has over 4 years' experience in the Environmental Management field including extensive experience within the mining sector. Ethel was the Lead Auditor who undertook the audit preparations, site assessment and audit report compilation.	Tel: +27 11 462 2022
		Fax: +27 86 665 1864
		Email: ethel@ntcgroup.co.za
Auditor	Konanani Nelushi is the Environmental Compliance Manager at NTC Group (Pty) Ltd. He has over 8 years' experience in the Environmental Management field including experience within the mining sector. Konanani was the Auditor who undertook the audit preparations, site assessment and audit report compilation.	Tel: +27 11 462 2022
		Fax: +27 86 665 1864
		Email: konanani@ntcgroup.co.za
Auditor	Jessica Morwasehla is the Environmental Scientist at NTC Group (Pty) Ltd. She has over 5 years' experience	Tel: +27 11 462 2022

Role	Responsible Person	Contact Details
	in the Environmental Management field including extensive experience within the mining sector. Authorisations and undertook the audit preparations, site assessment, as well as compilation of the audit report.	Fax: +27 86 665 1864 Email: jessica@ntcgroup.co.za

3. Disclaimer

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

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

4. Declaration Of Independence

I, Jessica Morwasehla, declare that –

- I act as the independent Auditor;
- I performed the work relating to the audit in an objective manner, even if this results in views and findings that are not favourable to the auditee;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental compliance audits, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have not and will not engage in, conflicting interests in the undertaking of the activity; and
- No circumstances exist that may compromise the objectivity of NTC Group (Pty) Limited, excluding fair remuneration for work performed in connection with this environmental audit.

Signature:

Company: NTC Group (Pty) Ltd

Date: 09 November 2023

5. Audit Methodology

5.1. Information Collation and Review

NTC reviewed the Final Environmental Impact Assessment & Environmental Management Programme Report, Environmental Authorisation as well as other relevant permits, and compiled a checklist that contained the conditions that required compliance assessment. The audit evidence will be made available to the respective authorities by Thungela. The information verified during the audit includes *inter alia*:

- Approval of EMP_Kleinfontein, Ref (MP) 30/5/1/2/3/2/1 (466) EM, date 16 May 2019, Department of Mineral Resources.
- GHS 122MR EMPR Amendment DMR Approval October 2021, Ref (MP) 30/5/1/2/3/2/1 (122) EM, date 13 October 2021 Department of Mineral Resources.
- Goedehoop Colliery Bultfontein Extension EIA EMP, Ref MP 30/5/1/2/2/122 MR, date November 2012
- Goedehoop Colliery FINAL Amended MPRDA EIA EMP Report, Ref MP 30/5/1/2/2/1 (124), date August 2014.
- Goedehoop_OT532613_VanDykdrift_EMPR_DMESTamped, (MP) 30/5/1/2/3/2/1, date 24 April 2008
- Revised EIA and EMP, Ref MP 30/5/1/2/2/466 MR, date January 2011
- Approved Block 20 IWUL Renewal, Ref 06/B11B/GICAJ/5339, date 05 June 2017
- GHS Discard Plant GA approval, Ref 27/2/2/B211/32/3/, date 01 September 2021
- GHS IWULA May 2013, Ref 04/B11B/ACFGIJ/1754, date 08 May 2013
- Exemption IWUL GHS undermining water courses 2018, Exemption no: 27/2/2/B11G/254, date 05/ July 2018.
- Appendix A TOPL Amended Registration Certificate Cor14.3
- Appendix B FAQ
- Draft Agenda, Upper Olifants Catchment Management Forum Meeting, 16 May 2023
- Minutes of the meeting-Upper Olifants Catchment Management Forum Meeting Draft Agenda 16 May 2023,
- DWS Acknowledge of receipt, Goedehoop Internal Integrated Water Use License Audit Report, received by Betty Mnguni, 22 November 2022
- DWS Goedehoop DWS Permits Schedule March 2022 Final for Signature,
- DWS Thungela - AOPL Letter Head_Penstock Letter DWS March 2022 Final for Signature, signature by Leonore van Wyk.
- DWS Acknowledge of receipt, Goedehoop Colliery Quarterly Water Quality Assessment Report January 2022 – March 2022, received by Betty Mnguni, 22 June 2022.
- Final Signed Change of Name Notification of Anglo Operations (Pty) Ltd_DMRE Mpumalanga Emalahleni_March 2022_Phase 2, by Leonore van Wyk, March 2022.
- Final Signed Change of Name Notification of Anglo Operations (Pty) Ltd_DMRE Pretoria_March 2022_Phase 2, Leonore van Wyk, March 2022.

- GH Quarterly WQ Report Submission cover letter, Eugene Moremi, 13 September 2022.
- Name Change FAQs_NEW v3
- RE Submission WQ report annual+ Biomonitoring report, by Willencha Snyders, 2022/04/29
- Invitation to attend Upper Olifants Catchment Management Forum, by Mpumalanga DWS, letter dated 26 October 2022,
- Upper Olifants catchment management forum meeting agenda 22 November 2022
- Upper Olifants attendance register 15 September 2022
- Draft minutes of the Upper Olifants catchment forum meeting, 15 September 2022
- Upper Olifants Catchment Management Forum meeting invite, 17/04/2023, Mpumalanga DWS
- 2021 - 2023 Incidents & Grievances Report
- Goedehoop Colliery (South) Bultfontein Extension Regulation 34 Audit Report, Ref No: 4139/2022, compiled by Geovicon Environmental (Pty) Limited, 05 December 2022.
- Goedehoop Colliery (South) Bultfontein Extension Regulation 34 Audit Report, Ref No: 4140/2022, compiled by Geovicon Environmental (Pty) Limited, 05 December 2022.
- Goedehoop Colliery (South) Main Regulation 34 Audit Report, Ref No: 4138/2022, compiled by Geovicon Environmental (Pty) Limited, 05 December 2022.
- Goedehoop Colliery (South) Van Dykdrift Regulation 34 Audit Report, Ref No: 4141/2022, compiled by Geovicon Environmental (Pty) Limited, 05 December 2022.
- Proof of submission to DMRE - Thungela Reg34 audit reports 2022, submitted by OT Shakwane, 06 December 2022
- Safety Data Sheet – Acetylene, SDS Number: 001, Acetylene / Rev 3 / 2016-03
- Safety Data Sheet – Nitrogen, SDS Number: 089A, Nitrogen / Rev 3 / 2016-03
- Safety Data Sheet – Oxygen, SDS Number: 097A, Oxygen / Rev 3 / 2016-03
- Bank_ML271994_Annexure_F_EMP_Main_v1, Environmental Management Programme Report, Ref OT 6/2/2/133, dated 30/05/2005
- Bank_ML271994_Annexure_F_EMP_Main_v2, Environmental Management Programme Report, Appendices
- Brown II EMP Amendment Approval 03 September 2019, Mpumalanga DMRE.
- EMPR Addendum: Roodepoort-Welverdiend (Bank), Ref MP 30/5/1/2/2/57 MR, compiled by Anglo Coal, 25 August 2005.
- List of Goedehoop Colliery EMPRs
- Bank Approved WUL Amendment, licence no 04/B11H/AFGJ/633, 16/04/2021, Department of Water and Sanitation
- Bank Water Use License, Department of Water Affairs, 18/07/2021, licence no 04/B11H/AFGJ/633
- Brown 2 IWUL Approval, 29 March 2016, Licence no 04/B11H/ACGIJ/4329, Department of Water and Sanitation.
- EA public notice, sent by Geovicon Environmental (Pty) Ltd, 27 October 2021
- GH_ MRD Extension, Water Use Licence, licence no 06/B11H/CGI/9286, 08/06/2022, Department of Water and Sanitation
- IWUL GHS undermining water courses 2018, 05/07/2018, Department of Water and Sanitation, Exemption no 27/2/2/B11G/257

- Thungela GA letter, Department of Water and Sanitation, Ref no:27/2/2/BB11/19/3 (B14067), 29 June 2023
- Thungela Operations registered water use, Ref no:27/2/2/BB11/19/3,(B13378), 11 December 2022
- Goedehoop Colliery Annual Water Quality Assessment Report, January 2022 to December 2022 Report Number: GC/AR/2022/IF, date 24th January 2022, prepared by Aquatico Scientific.
- Goedehoop Colliery Fire Risk Assessment Report 2022,
- Belt Attendent, Measurement Report, date: 2/22/2023
- CM Operator, Measurement Report, date: 2/22/2023
- Faceboss Section 3, Measurement Report, date: 2/22/2023
- Faceboss Section 4, Measurement Report, date: 2/22/2023
- Fitter Roving underground, Measurement Report, date: 3/06/2023
- Faceboss Prime 2, Measurement Report, date: 2/22/2023
- CM Operator Prime 2, Measurement Report, date: 2/22/2023.
- Shuttle Car Operator Prime 2, Measurement Report, date: 2/22/2023
- Shuttle Car Operator Section 9, Measurement Report, date: 2/22/2023
- Roof Bolter Section 9, Measurement Report, date: 2/22/2023
- Shuttle Car Operator Section 4, Measurement Report, date: 2/22/2023
- Washing Plant, Measurement Report, date: 2/22/2023
- Goedehoop Colliery DMR Report Annual Noise
- Drain-, Silt and Oil Trap Maintenance and Clean Up Procedures, Ref:GOE-ENV-PRO-0114, prepared by Willenchia Snyders, date 05/09/2022
- Hazardous Chemicals Management Procedure, Ref: OE-ENG-PRO-0787, prepared by Britz Amke, date 22/08/2022
- Petroleum and chemical product spill and control procedure_2022, Ref: GOE-ENV-PRO-1237, prepared by Willenchia Snyders, date 05/09/2022
- Site rehabilitation topsoil stripping and management procedure, Ref: GOE-ENV-PRO-1279, prepared by Axsell Maruschka, date 03/09/2022
- Vegetation Establishment Maintenance Procedure prepared by Axsell Maruschka, date 31/08/2022
- Waste Management Standard, Ref: 009970, prepared by Axsell Maruschka, date 17/08/2022
- Water Management Procedure, Ref: GOE-ENV-PRO-1407, prepared by Axsell Maruschka, date 02/06/2022
- Environmental Inspection Report – June 2022
- Environmental Inspections: Andru Mining and Bank 2 Plant, 10 May 2023
- Environmental Inspection 13 July 2023
- Environmental Inspection- March 2022
- Environmental Inspections 26 April 2023
- Environmental Inspections, Simunye Shaft – Surface area, 09 November 2022
- Emergency Organogram
- Water Management Procedure, Ref: GOE-ENV-PRO-1228, prepared by Axsell Maruschka, date 17/08/2022

- Environmental Incident and Non-Conformance Reporting Procedure, Ref: GOE-ENV-PRO-1277, prepared by Axsell Maruschka, date 03/09/2022
- Communication Participation and Consultation Procedure, Ref: GOE-ENV-PRO-1280, prepared by Willenchia Snyders, date 19/01/2023
- Mine Closure Plan for Goedehoop Colliery, prepared by WSP Group Africa (Pty) Ltd, Ref:41105407, date December 2022
- Infrastructure Plan_GH South
- Thungela Coal Discards Disposal Operating Contract meeting, 07 March 2023, Quarterly inspection Meeting
- Thungela Coal Discards Disposal Operating Contract meeting, 13 June 2023, GHN Quarterly inspection Meeting.
- Report-Bank - 27 January 2022 retest, Ref no: WAT 6001 / 2022 (138), prepared by Watco Consulting
- 22-1734-ECOI-PM Thungela Goedehoop AQM - March 2023 Ver.00, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-PM Thungela Goedehoop AQM - June 2023 Ver.00, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-PM Thungela Goedehoop AQM_Ver.00, February 2023, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-PM Thungela Goedehoop node ALL AQM (Apr 23) Ver.00, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-PM Thungela Goedehoop node ALL AQM (Apr 23) Ver.01, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-PM Thungela Goedehoop node ALL AQM (May 23) Ver.00, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-PM-Thungela-Goedehoop Colliery AQM (Dec-22) Ver.00, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-PM-Thungela-Goedehoop Colliery AQM (Jan-22) Ver.AA, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-Thungela-Goedehoop Colliery Air Quality Monitoring (Jan-23) Ver.0.0, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-Thungela-Goedehoop Colliery AQM Feb-23 (Jan-23 Sampling Period) Ver.0.0, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-Thungela-Goedehoop Colliery AQM July-23 (June-23 Sampling Period) Ver.0.0, prepared by Eco Elementum (Pty) Ltd
- 22-1734-ECOI-Thungela-Goedehoop Colliery AQM June-23 (May-23 Sampling Period) Ver.0.0, prepared by Eco Elementum (Pty) Ltd
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- Bank Water Treatment Plant and Sewerage treatment Plant Summary Report Jan 2023, prepared by Licebo Environmental and Mining (Pty) Ltd
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- General Disposal Certificate and Tax Invoice, Ref no:180347, date 12/07/2023
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- BME Waste License, Licence no: 12/09/11/L601/06, date 20/03/2012, Department of Environmental Affairs
- Collector Copy and Tax Invoices, Ref 106634, date 02/07/2022
- Komane Drums Recycling, Ref:19/7/3/11
- RF_Registered_Collector_Certificate 2023
- Goedehoop Oil Collected July 2023
- Goedehoop Oil Collected June 2023
- Goedehoop Oil Collected
- Goedehoop Scrap Metal Collected, 20 January 2023
- Goedehoop Scrap Metal Collected, 19 January 2023
- Goedehoop Scrap Metal Weighbridge Recons, January 2023
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- Safe Disposal Certificate, 2023/01/26, Ref: 22102100080002665909, T L Ideas Trading
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- Annual Water Quality Assessment Report January 2022 to December 2022, Ref: GC/AR/2022/IF, 24 January 2022, prepared by Aquatico Scientific.
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- Goedehoop Colliery General Waste 1 June 2023, Ref 0011
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- Goedehoop Colliery General Waste 23 June 2023, Ref 0014
- Goedehoop Colliery General Waste 24 March 2023, Ref 2749
- Goedehoop Colliery General Waste 27 June 2023, Ref 0015
- Goedehoop Colliery General Waste 28 March 2023, Ref 2737
- Goedehoop Colliery General Waste 29 June 2023, Ref 0016
- Goedehoop Colliery General Waste 30 March 2023, Ref 3036
- Goedehoop Colliery Hazardous Waste 23 June 2023, Ref 007
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- Goedehoop Colliery General Waste 10 January 2023 (4), Ref 2832
- Goedehoop Colliery General Waste 13 January 2023 (4), Ref 2718
- Goedehoop Colliery General Waste 17 January 2023 (3), Ref 2820
- Goedehoop Colliery General Waste 20 January 2023 (4), Ref 2855
- Goedehoop Colliery General Waste 31 January 2023 (3), Ref 2866
- Goedehoop Colliery Hazardous Waste 13 January 2023 (4), Ref 2719
- Goedehoop Colliery Hazardous Waste 20 January 2023 (4), Ref 2856
- Goedehoop Colliery Hazardous Waste 31 January 2023 (4), Ref 2867
- Goedehoop Colliery Rubber Waste 13 January 2023 (3), Ref 2720
- Goedehoop Colliery Rubber Waste 20 January 2023 (3), Ref 2857
- Goedehoop Waste Management Report, June 2023 Report

5.2. Site Verification

The site assessment and document review were completed on 16th of August 2023 to 18th of August 2023 by Konanani Nelushi (NTC), Ethel Chifunda (NTC), Jessica Morwawasehla (NTC), Avhadali Matambela (NTC), Dolly Mthethwa (Thungela), Willencha Synders (Thungela), Sarah Burford (Pinsent Masons Africa

LLP), and Siyabonga Machava (Pinsent Masons Africa LLP); and others (refer to Appendix B: Attendance Register for a detailed list). During the site assessment, additional documents were collated, and information was verified, Goedehoop Colliery personnel were interviewed and selected areas were visited i.e., verified using photographic evidence presented in Appendix C: Photo Plate.

5.3. Assessment Methodology

NTC assessed each of the EA and EMPr conditions per the criteria provided in **Error! Reference source not found.** Only conditions in the non-compliance category were given recommendations for rectification. The audit approach was guided by the requirements of the ISO 19011:2018 Guidelines for Auditing Management Systems. The audit scope was based on Section 34 and Appendix 7 of the EIA Regulations, 2014 as amended, which defines the key objectives of an audit as follows:

- Report on the level of compliance with the conditions of the EAs and the EMPr s and the extent to which the avoidance, management and mitigation measures provided for in the EMPrs.
- To identify and assess any new impacts and risks as a result of undertaking the activity;
- To evaluate the effectiveness of the EMPrs;
- To identify shortcomings in the EMPrs; and
- To identify the need for any changes to the avoidance, management and mitigation measures provided for in the EMPrs.

Table 2: Assessment Criteria

Criteria	Acc	Description
Compliant	C	Full Compliance is when the construction or operational activities comply with the EA/EMPr conditions. No mitigation measures are required where operations comply and are adequate.
Non-Compliant	NC	Non-Compliance is when construction or operational activities are in contravention with the EA/EMPR conditions and have the potential to impact on the environment in a detrimental manner. Non-compliance may also be associated with activities breaching legislation. Non-Compliance findings have a high priority and mitigation measures are mandatory.
Not Applicable	N/A	Not Applicable is assigned to EA/EMPr conditions which no longer occur, that do not apply to current activities that may be incorrect and require amendment, fall outside the audit period and/or are duplicates of existing conditions.

6. Audit Findings

Regulation 34(4) of the EIA Regulations, 2014 state the following:

Where findings of the Environmental Audit Report indicate:

- *insufficient mitigation of environmental impacts associated with the undertaking of activity;*
- *insufficient levels of compliance with the EAs or Approved EMPs and where applicable the closure plan;*

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

Based on the findings of the audit, no recommendation for the amendment of the Approved EMP/EAs is proposed.

This section is aimed at highlighting the identified non-compliances so that Bank Colliery (Goedeheop North) can prioritise implementation of recommendations and rectification actions. The full audit details are included in Table 3 to Table 7.

6.1. Audit Findings

Table 3: EMPr for the Bank Colliery (Goedehoop North)'s EMPr Amended ref: MP 30/5/1/2/2/ 143 MR, dated January 2019 and approved December 2019;

Ref No	Condition	Compliance	Finding
PRE-CONSTRUCTION AND CONSTRUCTION PHASE			
Topography			
	Design the dimension of the soil and ROM coal berms and stockpiles, storm water management structures, pollution control dam and mine infrastructure upgrades. Stockpiles will not be higher than 5 m and soil stockpiles not higher than 4 m.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
	Identify and familiarise mine and construction personnel with design specifications of the soil and ROM coal berms and stockpiles, storm water management structures, pollution control dam and mine infrastructure upgrades i.e., positions, heights etc. The position of the infrastructure will be pegged.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
	Topsoil berms and ROM coal stockpiles, storm water management structures, pollution control dam and mine infrastructure to be upgraded constructed to designed perimeters and on pegged areas.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
	Limited access and disturbance of areas of construction phase activities to be within construction sites	N/A	No construction was taking place during the audit. The mine is in the operational phase.
Soil			
	Undertake the following to ensure that the removal of soil profiles do not detrimentally reduce the functionality of the topsoil: Conduct a soil survey to determine the depth of the topsoil and subsoil within the area to be disturbed. Determine the	N/A	No construction was taking place during the audit. The mine is in the operational phase.

Ref No	Condition	Compliance	Finding
	minimum soil layer to be removed during construction phase. • Determine the position of the stockpiling areas and infrastructures areas. • Identify and familiarise mine personnel with design specifications and positions of the mine infrastructure and soil stockpile areas. • Remove the required layer of topsoil as per soil survey from the infrastructure areas, stockpile areas and water management areas. • Survey and quantify the volumes of topsoil and subsoil stockpiles. • Soil stockpiles to be no more than 4 m high and 1:3 slopes. • Stripping and placement of topsoil with appropriate machinery and minimum vehicle traffic.		
	Undertake the following to ensure that movement and stockpiling of soil do not detrimentally reduce the ability to return the area back to use at closure: • Place removed soil material in appropriately demarcated stockpiling areas i.e., topsoil from all infrastructure, ROM stockpile area and pollution control structures as berms around constructed areas. • The topsoil berms will not exceed height of 4 m. This will ensure that the topsoil will to a large extent retain its fertility. • Berms must be fertilised and seeded to ensure that the biological activity of the soil, which will to a large extent preserve the fertility of the soils, is maintained.	N/A	Stockpiling of soil is done in a demarcated area and there are berms to ensure that contaminated are impacting the natural environment on site.
	Undertake the following to ensure that resurfacing of the new	N/A	No construction was taking place during the audit. The mine is in the operational phase.

Ref No	Condition	Compliance	Finding
	and existing infrastructure area (paving, roads and parking areas) does not result in the contamination of soil: • Mix surfacing material only on stripped surfaces or proper surfaces or use pre-mixed material. • All material used for construction must be properly managed and waste disposed of properly. • All additional surfaced areas disturbed, will be rehabilitated after construction. • These areas will be signed off by the mine environmental officer.		
	Undertake the following to ensure that the excavation of the Brown Shaft II and associated infrastructure does not have an impact on the soil: • Ensure that in all areas where vegetation will be cleared, a layer of at least 300mm of topsoil must be removed and stockpiled separately. • The topsoil stockpile must not exceed four meters with the side slopes at a gradient not smaller than 1:3 and will have a footprint of approximately 3 ha.	N/A	No construction was taking place during the audit. The mine is in the operational phase
Land use and capability			
	Undertake the following to ensure that removal of soil profiles do not detrimentally reduce the ability to rehabilitate to final land capability: • Conduct a soil survey to determine the depth of the topsoil and subsoil within the area to be disturbed. Determine the minimum soil layer to be removed during construction phase.	N/A	No construction was taking place during the audit. The mine is in the operational phase.

Ref No	Condition	Compliance	Finding
	- Determine the position of the stockpiling areas and infrastructure areas. - Identify and familiarise mine personnel with design specifications and positions of the mine infrastructure and stockpile areas. - Remove a minimum layer of topsoil as per soil survey (300 mm) from the infrastructure areas, stockpile areas and water management areas.		
	Undertake the following to ensure that soil movement is conducted to have minimum impact on the viability of the soil: - All usable topsoil will be removed from areas to be affected (i.e., 300 mm where needed or 600 mm + where possible). - All topsoil removed will be stockpiled separately on the designated topsoil stockpile area. - The topsoil stockpile will not exceed a maximum height of 4 m and 1:3 slopes.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
	Undertake the following to ensure that the excavation of the Brown Shaft II and associated infrastructure does not have an impact on the land capability: The area of land to be disturbed and isolated for the purpose of construction and mining activities will be limited, as far as practically possible, to the minimum required standards for safe and efficient operation.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
Natural Vegetation			
	Undertake the following to ensure that the removal of topsoil is conducted such that the impacts on the area's ability to maintain natural vegetation cover is minimised: Conduct a soil and vegetation survey to determine the depth of the topsoil/subsoil and types of vegetation occurring within	N/A	No construction was taking place during the audit. The mine is in the operational phase.

Ref No	Condition	Compliance	Finding
	the area to be disturbed. Determine the minimum soil layer to be removed during construction phase. Determine if any vegetation need to be relocated. All topsoil will be removed from areas to be affected by mine infrastructure construction as recommended by the soil and vegetation surveys and mine designs.		
	Undertake the following to ensure that stockpiling of topsoil is conducted in a manner that will not impact on the ability of the area to maintain vegetation cover: - All topsoil removed will be stockpiled separately on the designated topsoil stockpile area. - The topsoil stockpile/berms will not exceed a maximum height of 4 m and 1:3 slopes. - Topsoil stockpiles will be placed such that they will not be contaminated. - Stockpiles will be fertilised and seeded.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
	Undertake the following to ensure that the excavation of the Brown Shaft II and associated infrastructure does not have an impact on the natural vegetation: - The area of land to be disturbed and isolated for the purpose of construction and mining activities will be limited, as far as practically possible, to the minimum required standards for safe and efficient operation. - No unnecessary destruction of vegetation will be allowed. - No open fires will be allowed on site. The mine will monitor the activities and firefighting capabilities of its contractors. - Roads to and from the site will serve as suitable firebreaks for part of the area.	N/A	No construction was taking place during the audit. The mine is kept within the authorised boundary and measures are put in place to ensure minimum or no impacts to the natural environment.

Ref No	Condition	Compliance	Finding
	- Contractors will be required to have access to suitable firefighting equipment such as a water cart, fire beaters and extinguishers. - Key members of the staff will be trained in firefighting and will be available on a call out basis for fighting runaway fires. The assistance of local farmers and mines will be sought to reinforce Bank Colliery's firefighting capability. - Following the completion of the construction phase, any bare areas that fall outside of the immediate infrastructure site will be re- vegetated using a suitable mixture of species. The overburden stockpile (from the box cut) and soil stockpiles will be similarly re-vegetated.		
Animal Life			
	No trapping, hunting and keeping of animals will be permitted on site during the entire operation of the proposed project	N/A	No construction was taking place during the audit. The mine is in the operational phase
Surface Water			
	Undertake the following in ensuring that the construction of pollution control dams, storm water diversion trenches and ROM stockpiling area has the least possible impact on the surface water runoff patterns, and thus loss of MAR within the affected sub- catchment: - Pollution control dam, silt traps or bio-swales, storm water control structures and ROM stockpiling area to be designed by civil engineer to occupy as little space as possible but still complying with the relevant legislation. - Construct the above-mentioned structures according to design specifications. - Maintain and monitor surfaces to ensure that erosion is controlled at all times.	N/A	No construction was taking place during the audit. The mine is in the operational phase.

Ref No	Condition	Compliance	Finding
	- As far as possible, divert all clean storm water away from the construction site during the construction of the above-mentioned structures. - Ensure that silt from construction and infrastructure sites do not enter the Spookspruit. - Clean and dirty water system to be constructed first before rest of the mining infrastructure.		
	Undertake the following to ensure that the excavation of the Brown Shaft II and associated infrastructure does not have an impact on the surface water quantity: Storm water drains will be constructed to divert runoff from adjacent areas away from the shaft area. All storm water runoff originating from any potentially contaminated area in the vicinity of the shaft will flow via dirty water drains to retention ponds. These retention ponds will be designed to contain the 1:50 year return period flood event. Water collected in the retention ponds will be pumped to the mine's industrial water circuit for use. Therefore, although this water will be removed from the catchment, it will not be wasted.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
	Undertake the following to ensure that impacts from cement spills on surface water quality are minimised: - No concrete or any building material will be poured within 100m of any watercourse. - All building material will be pre-mixed before arrival on site, or mixed on a suitable liner.	N/A	No construction was taking place during the audit. The mine is in the operational phase.
	Undertake the following to ensure that impacts from diesel and	N/A	No construction was taking place during the audit.

Ref No	Condition	Compliance	Finding
	oil spills and leakages on surface water quality are minimised: • All fueling and maintenance of machinery will be conducted within the diesel tank area and workshop area respectively with suitable spill controls. • Dirty water from the mine infrastructure area will undergo water and hydrocarbon (diesel and oil) separation before released to french drains. • All plugs on the diesel tank bunded area and workshop areas will be closed when not used for draining. Rainfall build up within the bunded areas must be managed and drained to maintain capacity. • Used oil and oil drums will be stored in a contained storage area and will be removed from the mine site. • Inspections will be conducted on the operation of the diesel tank and workshop areas. Incidents occurring on bare soil will be recorded and action plans to address clean-up will be put in place		
	Undertake the following to ensure that the excavation of the Brown Shaft II and associated infrastructure does not have an impact on the surface water quality: • Water made from the sinking of the shaft (including the ventilation shaft) will be pumped into the retention dams/ponds with the excess water pumped to one of the decommissioned Bank Colliery underground workings or used for dust suppression	N/A	No incline shaft sinking was undertaken at Brown Shaft II project only the drilling of the ventilation shaft.
	Semi-Dirty water and clean water drains will be kept separate within the contractors' yard areas. Areas such as workshops,	N/A	No construction was taking place during the audit.

Ref No	Condition	Compliance	Finding
	diesel storage bays and wash down areas are regarded as dirty. These will be placed on concrete slabs and will have a network of concrete lined "v" drains and pipe culverts that will gravitate to an oil trap. Note: no contractor campsite will be required at the ventilation shaft area, all maintenance will be undertaken off site at the mine's workshops.		
	Further to this, storage and handling areas of hydrocarbon substances will be paved and bunded with concrete to prevent accidental contamination of the soil. Alternatively, an impermeable liner will be placed beneath above-ground storage tanks. The integrity of the liner is to remain sound for the duration of the contract, until removal. Areas containing chemicals and hazardous material will be fenced and security controlled. Only emergency repairs will be undertaken at the ventilation shaft and power line construction sites. This will be undertaken on protected ground, i.e., an impermeable liner will be placed where the repairs are undertaken.	N/A	No construction was taking place during the audit.
	Any significant spillage will be contained and cleaned up.	N/A	No construction was taking place during the audit.
	Contractors will ensure that adequate measures are in place to prevent pollution.	N/A	No construction was taking place during the audit.
Sensitive Landscapes			
	Ensure that impacts from dust generated by blowing wind on local air quality is minimised through conducting the following: - Dust suppression will be undertaken during the construction phase. Dust suppression will be undertaken by water cart. - Water used for dust suppression will be obtained from the underground workings during the construction phase. Note	N/A	No construction was taking place during the audit.

Ref No	Condition	Compliance	Finding
	that the pollution control dam will not be filled with water during this time of the mining operation.		
	Ensure that the construction phase activities are conducted such that the wetlands are not impacted upon through conducting the following: • Clean and dirty water will be separated at the mine. • All surface activities will be limited to the footprint of the dirty water areas and outside the identified wetlands. If any wetlands are to be affected, a water use licence will be applied for, for that particular activity.	N/A	No construction was taking place during the audit.
Air Quality			
	Undertake the following to ensure that the impacts from dust and diesel fumes generated by moving machinery on access and haul roads, on local air quality is minimised: • All machinery employed on site will be in good working condition, and well maintained. • All machinery will be fitted with the correct exhaust systems, which will be maintained in good repair. • All machinery will be required to maintain a minimum speed of 30km/hour at all times whilst on site.	N/A	No construction was taking place during the audit.
	Undertake the following to ensure that impacts from dust generated by blowing wind on local air quality is minimised: • Dust suppression will be undertaken during the construction phase. Dust suppression will be undertaken by water cart. • Water used for dust suppression will be obtained from the underground workings and from the runoff water from the construction site during the construction phase. Note that the pollution control dam will not be filled with water during this time of the mining operation.	N/A	No construction was taking place during the audit.

Ref No	Condition	Compliance	Finding
	Undertake the following to ensure that the excavation of the Brown Shaft II and associated infrastructure does not have an impact on air quality: Dust along the gravel access roads (including the roads to the new ventilation shaft position) and construction areas (including the new ventilation shaft position, concrete pouring borehole and power lines) will be controlled to acceptable levels, by means of spraying with water. In this case, acceptable levels are defined, in terms of the guideline on dust fallout published by the Department of Water and Environmental Affairs, to be between 'slight' (<250-500 mg/m²/day of dust fallout) and 'moderate' (250-500 mg/m²/day of dust fallout). The mine will undertake monthly ambient dust monitoring at various locations where it may impact on interested and affected parties. The mine, in collaboration with an air quality specialist will undertake the setting up of such dust monitoring stations by means of the dust bucket method.	N/A	No construction was taking place during the audit.
Noise Aspects			
	Ensure that noise impacts on machine operators and/or residences are minimised through the following: - Machine operators will be issued with hearing protection and instructed how to use them. - All mining machinery will comply with the mine's noise emission standards.	N/A	No construction was taking place during the audit.
	Ensure that the excavation of the Brown Shaft II and associated infrastructure (including the new ventilation shaft position, its	N/A	No construction was taking place during the audit.

Ref No	Condition	Compliance	Finding
	access roads, new concrete pouring borehole and power lines) does not have an impact on noise and vibration: In the event that blasting is required this will be undertaken in accordance with relevant legislation. The blast will be designed in such a manner as to ensure that noise and vibration levels are limited to within normally accepted levels. Neighbours will be notified in advance of the proposed date and time of the blast.		
	Should complaints be received from the community, these will be addressed promptly.	N/A	No construction was taking place during the audit.
	Machinery and vehicles silencer units will be maintained in good working order. Non-compliant machinery and/or vehicles will be removed from service until repaired.	N/A	No construction was taking place during the audit.
	Should complaints be received from the community regarding the noise generation, the mine management and contractors will, at the discretion of the ECO, commission an independent and registered noise monitor to undertake a survey of noise output levels from the site and implement measures to reduce noise to legislated levels.	N/A	No construction was taking place during the audit.
	The ventilation shaft will be designed and constructed such that any noise from the shaft does not detrimentally impact on the surrounding property owners.	N/A	No construction was taking place during the audit.
Visual Aspects			
	Undertake the following to ensure that dust generated by wind and movement of machinery is minimised to have minimum visual impacts:	N/A	No construction was taking place during the audit.

Ref No	Condition	Compliance	Finding
	- Dust suppression will be conducted on all access/haul roads and stockpiling areas where movement of machinery may generate dust. - The mine will adopt a clean-house policy. All stockpiles will be maintained at specified heights to reduce visual impact. (No greater than 5 m).		
	Undertake the following to ensure that visual impacts from any mine infrastructure are minimised: - Topsoil stripped from the surface infrastructure areas will be used to construct visual berms, to minimise visual impact. - Topsoil berms will be vegetated with a recommended seed mix. - The vegetated topsoil berms will be maintained to add positive aesthetics to the surrounding environment.	N/A	No construction was taking place during the audit.
Socio-economic Aspects			
	Ensure that nuisance and a safety hazard to the provincial road users caused by the upgrading of the private access and its intersection to the provincial road is minimised to have minimum socio-economic impacts: Contractors used to upgrade the private access road will be required to follow relevant transport laws. These included dust suppression, traffic control and erection of road signs signalling the road works	N/A	No construction was taking place during the audit.
	Ensure that the proposed project have positive impacts on the social status and economy of the area: - As far as practically possible all supplies will be obtained from the Greater Middelburg area. - As far as practically possible, mine employees will be recruited from the greater Middelburg area.	N/A	No construction was taking place during the audit.

Ref No	Condition	Compliance	Finding
	Ensure that Influx of labourers seeking employment is reduced and that an open-door policy with interested and affected parties is maintained: • The Mine will utilise people from the surrounding area as far as possible, to minimise the influx of illegal labourers. • No informal settlements will be allowed on the property. • Mine management will maintain an open-door policy, with the Project Manager maintaining cordial relationships with all Interested and Affected Parties. Minutes of all meetings will be kept and made available on request. • An Interested and Affected Parties Forum has been established. Minutes of all meetings will be taken. These Minutes will include a record of all parties in attendance.	N/A	No construction was taking place during the audit.
	Ensure that the concerns raised by the farmers are addressed: • In terms of the mine policy, the mine will not provide accommodation for any contractors working on the project and the contractor will be responsible for providing any site accommodation required by his employees. However, the mine will require any contractor to ensure that none of his employees are housed on any farm unless arrangements have been made with the landowners. • The mine employment policy is based on an open recruitment process taking suitability of candidates in terms of competence, skills and experience into account.	N/A	No construction was taking place during the audit.
OPERATIONAL PHASE			
Topography			
	Undertake the following to ensure that the mining of coal and establishment of borrow pits have minimum impacts on the topography of the undermined and borrowed areas:	C	Sinkholes at the Bank brickworks were identified, the area is currently fenced off using brick cylinders and is monitored to determine if the sinkholes will develop any

Ref No	Condition	Compliance	Finding
	All areas in which sinkholes occur are backfilled, levelled, topsoiled and vegetated. These areas are monitored to detect any further subsidence that may occur.		further. Rock engineers monitors the area, it is currently a risk to enter the area, there are annual survey flyovers that monitors the area, the mine is currently drafting scope of work in terms of rehabilitation the area.
	Areas where local subsidence occurs are re- shaped and made free draining. No ponding is allowed on these areas.	C	No ponding was observed during the audit. The mine is monitoring the area with sink holes and is also planning to rehabilitate the area. The area is still not safe to start with reshaping and revegetation.
	All established borrow pit areas are reshaped with 1:5 slopes, and the soils remediated by application of agricultural lime and fertiliser onto the soils (through ploughing), and establishment of vegetation as per specialist's recommendations. After rehabilitation, all borrow pits are free draining.	N/A	One borrow pit located next to the load up station is operational. The borrow pit is very shallow and horizontal in shape which does not pose a safety risk and it is inside a fenced off area.
	Undertake the following to ensure that the operation of the discard dumps and R.O.M./product coal stockpile has a minimum impact on the topography of the area: During the life of the mine the discard dumps are constructed in accordance with the discard dump operational manual. Management of the discard dumps are controlled under the Mandatory Code of Practice for Residue Deposits. This includes the construction of the dump with a whaleback design, with sides sloped at a maximum of 1:5. In order to ensure stability, regular compaction tests are conducted on the freshly deposited discard. The minimum compaction is 1 600kg/m³. All discard facilities are audited bi-annually by Thungela Technical Division and ACES. A report showing that regular tests are conducted on the freshly deposited discard, with a minimum compaction of 1600kg/m³. Audit reports of the discard facilities.	C	The mine conducts monthly environmental inspections for the entire mine, which include the discard dumps and ROM area. The Geohydrological model and Geochemical Model report indicates that the stability of the discard dump is tested. According to the discard compaction report, four density test points were carried out on the discard facility to determine how tightly the materials are compacted

Ref No	Condition	Compliance	Finding
	Where possible, the dumps are rehabilitated or removed as soon as possible and in such a manner as to reduce the impact on the environment. Currently the Schoonie dump and Bank 5 dumps are rehabilitated. These dumps are maintained and monitored for any further impacts on the environment. If any such impacts are identified, they will be addressed to suitable environmental standards	C	Vegetation growth was observed and shows positive improvements. The mine monitors the area to ensure that the rehabilitation of the area is successful.
	Undertake the following to ensure that the operation of access shafts (including the ventilation shafts and associated infrastructure) have minimum impacts on topography: Spoil removed from the shaft (box cut) would have been stockpiled adjacent to and immediately upslope of the box cut such that it has a low profile. These are maintained and used as berms that prevent surface runoff water from entering the box cut.	C	Spoil removed from the shaft has been used as berms to prevent surface runoff water from entering the shaft. The use of spoils as perimeter berms around the access shaft was verified on site through site observation.
	Undertake the following to ensure that the removal of topsoil during extension of the discard dumps and over all mine infrastructure areas have minimum impact on soils:	N/A	The MRD expansion has not yet commenced.
	Salinisation of soils from dump exudates that occurred downslope of the dumps that have subsequently been rehabilitated has occurred. Soils are being protected from further salinisation by the measures outlined under surface water. Salinised soils are remediated by incorporation of lime and fertiliser into the soils (through ploughing), and vegetation established on the soil.	C	Seepage on Bank 5 was detected in 2021 and measures such as phytoremediation have been implemented to address the seepage environmental impacts from Bank 5 dump.
	All areas affected by the use of carbonaceous material for construction and by coal spillages are being rehabilitated. Contaminating material is removed and placed on the discard dumps and the remaining areas maintained to be free of	C	It was also confirmed on site, although not all areas were inspected, that areas affected by the use of carbonaceous material for construction and by coal

Ref No	Condition	Compliance	Finding
	contaminating material. These areas include the East/South shaft conveyor routes, road that ran behind the Bank 5 dump to the North Shaft, road to the trading store, the old airfield with its landing strip constructed out of discard, slurry built up behind married quarters, slimes at the area where slimes was pumped by borehole to the underground workings, area east of the Bank 5 dump affected by exudes from the dump.		spillages were rehabilitated. The mine is monitoring these areas for any signs of residual impacts.
	On other sites (including the Brown Shaft II ventilation shaft, its access roads, new concrete pouring borehole and power lines), a topsoil layer of 300mm would have been removed and stockpiled adjacent to the construction site and will be used for rehabilitation of that site. The topsoil stockpile must not be more than four meters high with side slopes at a gradient not exceeding 1:4 and will have a footprint.	N/A	The Brown Shaft II ventilation shaft construction activities are completed, and the shaft is operational
	On areas that are not in use by the mine, the conditions of the soils must be maintained to be good. Where the soils are affected, these areas will be limed, fertilised and re-seeded.	C	Goedehoop North Colliery implements an ongoing rehabilitation programme whereby areas affected by any of the mining activities are rehabilitated. The rehabilitation is conducted in line with the requirements of this commitment.
	Undertake the following to ensure that the established borrow pits have minimum impact on soils: All borrow pit areas are reshaped with 1:5 slopes, and the soils remediated by application of agricultural lime and fertiliser into the soils (through ploughing), and establishment of vegetation. After rehabilitation, all borrow pits are free draining.	N/A	One operational borrow pit is located next to the load up station. The borrow pit is very shallow and horizontal in shape and does not pose a safety risk and is within a fenced off area.
	Undertake the following to ensure that the use of the overland conveyor belt has minimum impact on the soil:	C	Most of the conveyor belt for the mine have been decommissioned and are no longer in use. The only conveyor belt in existence and in use is the for the

Ref No	Condition	Compliance	Finding																
	Erosion control structures and surface water velocity breaks are installed in areas adjacent to the conveyors and erosion prone areas to prevent erosion during the life of mine. The spacing of such structures are based on parameters indicated below: Slope angle (°) Spacing between erosion control structures (m) <table><tr><td>< 3</td><td>Not necessary/none</td></tr><tr><td>3 – 6</td><td>100</td></tr><tr><td>6 – 8</td><td>80</td></tr><tr><td>8 – 10</td><td>60</td></tr><tr><td>10 – 12</td><td>40</td></tr><tr><td>12 – 14</td><td>30</td></tr><tr><td>14 – 18</td><td>20</td></tr><tr><td>> 18</td><td>10</td></tr></table>	< 3	Not necessary/none	3 – 6	100	6 – 8	80	8 – 10	60	10 – 12	40	12 – 14	30	14 – 18	20	> 18	10		conveyance of coal from the Simunye Shaft to the coal washing plant and from the plant to the coal stockpiling facility. No concerns regarding erosion were noted during the site visit.
< 3	Not necessary/none																		
3 – 6	100																		
6 – 8	80																		
8 – 10	60																		
10 – 12	40																		
12 – 14	30																		
14 – 18	20																		
> 18	10																		
	All coal spillages identified are removed as soon as possible.	C	Several coal heaps observed throughout the Bank 2 plant. Responsible personnel were Irvin Vilakazi/Tsireledzo Maliehe, and the due date to rectify this incident was 16 May 2023. No heaps were observed during the audit.																
	Undertake the following to ensure that the operation of the mine infrastructure has minimum impact on the soil: Clean and dirty water are being kept separate within the mine infrastructure areas. Areas such as workshops, diesel storage bays and wash down areas are placed on concrete slabs and water from these areas is diverted to the oil traps	C	Workshops, diesel storage bays and wash down areas are placed on concrete slabs and water from these areas is diverted to the oil traps.																
	Areas of storage for lubricants, chemicals and other hazardous substances as well as areas where fuel is handled are paved and bundled with concrete to prevent accidental contamination of the soil.	C	Areas of storage for lubricants, chemicals and other hazardous substances as well as areas where fuel is handled are paved and bundled with concrete to prevent																

Ref No	Condition	Compliance	Finding
	Alternatively, an impermeable liner is placed beneath above-ground storage tanks.		accidental contamination of the soils. This was verified on site via the site observation.
	All hydrocarbons entering and used at the workshops are recorded.	C	All hydrocarbons entering and used at the workshops are recorded on the new system called SAP.
	Usage of hydrocarbon fluids is monitored, and wastage or losses reported to responsible personnel. The responsible personnel are identifying the areas where the loss is occurring and are taking measures to stop the wastage	C	The mine has compiled a spill procedure, highlighting the procedure to be undertaken when a spillage occurs.
	Any spillages are contained and cleaned up.	NC	Hydrocarbon spillages were observed by the shaft workshop. It is understood that the area is bunded and the spillages are contained, however, it is important that the mine avoids any hydrocarbon spillage, as they pose a threat to water courses (run-off) and soil.
	Undertake the following to ensure that the size of the area in which the land capability will be affected (including the Brown Shaft II ventilation shaft area and its access road and the concrete pouring borehole) will be kept to a minimum throughout the life of the mine: All areas necessary for the optimal operation of the mine are being kept as small as practically possible.	C	All activities at the mine are undertaken within the designated areas. No new facilities outside the current mining area are being operated at Bank Colliery.
	Containment of contaminated water will be within dirty water areas (minimisation of seepage).	NC	According to the WQR January 2023 – March 2023, S4 records acidic water conditions with high sulphate (SO ₄), Mn, Fe and Al concentrations. The elevated sulphates indicating seepage from the discard dump.
	Containment of carbonaceous material within designated areas (stockpiling areas, discard dumps, slurry dams).	C	It was confirmed through site observation that carbonaceous material is kept within designated areas.

Ref No	Condition	Compliance	Finding
	Rehabilitation of areas that are not to be used by the mine must be conducted according to the appropriate rehabilitation guidelines.	C	Areas not to be used are rehabilitated in terms of the site rehabilitation guidelines, topsoil stripping and management procedure document.
Natural Vegetation			
	Undertake the following to ensure that rehabilitated areas have minimum impact on natural vegetation: All rehabilitated areas will be seeded utilising a seed mix consisting of Eragrostis gayana (5kg/ha), Digitaria eriantha (5kg/ha), Cynodon dactylon (3kg/ha), Pennisetum clandestinum (2kg/ha) and Eragrostis tef	C	Rehabilitation of unused areas/facilities at Bank Colliery include mini pit operations, surface roads, complexes (plants, supportive and administrative buildings), shafts, conveyors and associated infrastructure, pollution control dams, mineral residue deposit/stockpile facilities, villages and water and sewage treatment plants. A number of these facilities have been rehabilitated at Bank Colliery and it was indicated by the mine that the rehabilitated areas are seeded utilising the Thungela's seed mix.
	The use of P. clandestinum (Kikuyu) is necessary on discard dumps and pollution control water structures to ensure stabilisation of the soil, as kikuyu tends to spread more rapidly, and provide better cover than, most suitable indigenous species.	C	All rehabilitated areas are seeded utilising the Thungela's seed mix.
	P. clandestinum is controlled by the retraction of fertilisers, thus preventing it spreading into the natural veld. If it is found that P. Clandestinum is migrating into the natural veld, mechanical control is used in conjunction with the retraction of fertilisers.	C	All rehabilitated areas are seeded utilising the Thungela's seed mix.
	Vegetation cover will be maintained by annual application of fertiliser for at least 3 years after rehabilitation, combined with biennial cutting or burning for the first three years. After this period, fertiliser will be applied as and when required. This will be determined by monitoring the basal cover and fertiliser	C	It was indicated that the Thungela environmental team and the rehabilitation team inspects the areas before and after rehabilitation. There are areas that are already rehabilitated

Ref No	Condition	Compliance	Finding
	levels against Thungela Operations Proprietary Limited standards.		
	A site-specific declared invader species eradication programme is undertaken on the AOL surface area under Bank Colliery control. Declared invader species to be eradicated, are in accordance with Regulation 15 and 16 of the Conservation of Agricultural Resources Act, 1983. Note, that over and above this, P. Clandestinum (although not a declared invader species) is controlled as indicated above.	NC	The mine did not provide proof of control of alien vegetation and weed species. The mine must provide proof of control of alien vegetation and weed species to verify compliance.
	Undertake the following to ensure that areas affected by saline exudates are properly revegetated: - Areas affected by daylighting of saline or acidic water are rehabilitated first by liming, top soiling and the re-establishment of vegetation. However, the re-establishment of vegetation is only feasible once water management is improved. - Eucalyptus macarthurii may be planted in designated areas at the base of the dump. This will serve the dual purpose of intercepting contaminated water as well as providing a visual screen for the dumps	C	The mine has undertaken rehabilitation of several areas within the mine and include a Bank 5 discard dump and the areas affected by the daylighting water from the dump. This included liming, topsoiling and the re-establishment of vegetation. To that extent Bank Colliery undertook the use of phytoremediation in order to treat the seepage emanating from Bank 5 discard dump.
	Undertake the following to ensure that damage caused by runaway fires is minimised: No open fires are allowed on any site throughout the mine area. The mine is monitoring the activities and firefighting capacities of its own staff and contractors.	C	No open fire is allowed on site and the mine ensures that there are personnel that properly trained. All employees are also trained on what to do when a fire breaks.
	Roads to and on sites are serving as suitable firebreaks for part of the affected areas.	C	All roads on site have firebreaks.

Ref No	Condition	Compliance	Finding
	Relevant contractors and mine staff are required to have ready access to suitable firefighting equipment such as water carts, fire beaters and extinguishers.	C	Fire extinguishers are available on site and emergency numbers are found in all close notice boards.
	Key members of staff are trained in firefighting and are available on a call out basis for fighting runaway fires. The assistance of local farmers and mines are available to reinforce the Bank Colliery's firefighting capacity.	C	All employees are also trained on what to do when a fire breaks.
Surface Water			
	Undertake the following to ensure that steps are taken to adhere to the water balance and storm water management at the mine: The water and salt balances are being further developed.	C	A water balance was compiled for the mine and was made available for the audit.
	Ensure that operational capacities of dams are not exceeded. Water levels within the polluted water dams are maintained by pumping.	C	The mine implemented a SCADA system. SCADA is the live system used to monitor the water reticulation and management system. Information from the flow meters is transmitted to the system to update and record all volumes of water pumped abstracted and disposed of at the mine.
	Where water is pumped, a dual pump system with sufficient capacity to deal with the water make and function of the facility, is in place to ensure that water can be removed from the dams in the event of a breakdown within one of the pumps. This is necessary to ensure that dam operational capacities are maintained by water reticulation through the dirty water system (recycling).	C	Pumps from the dams are automated. A dual pump system is not in place.
	Flow meters are installed on all major water pipelines and dirty water facilities.	C	Flow meters are installed in all pipes and all the dirty facilities. Calibration Certificates were provided, and they indicate that the mine has flow measuring devices.

Ref No	Condition	Compliance	Finding
	Clean and dirty water separation systems are constructed at all relevant surface infrastructure.	C	The mine has put in place stormwater management infrastructures that ensure separation clean and dirty water on site. During the site audit this was noted.
	All systems are constructed in such a manner as to contain the runoff from a 1:100-year 24-hour storm event with a 0,5 meter freeboard.	C	This condition is noted by Geodehoop Colliery. All systems were constructed to ensure that a 1:100-year 24-hour storm event will be contained.
	Bank Colliery commits to maintain a clean and dirty water separation system around all relevant surface infrastructure areas.	C	This condition is noted by Goedehoop Colliery. Inspections of the separation system is done frequently to ensure that no dirty water ends up in the natural environment without been treated.
	All clean and dirty water separation systems are timeously repaired/maintained to prevent blockages, leakages and breaches.	C	The mine has put in place stormwater management infrastructures that ensure separation clean and dirty water on site. During the site audit this was noted.
	All diversion trenches (clean or dirty) are cleaned regularly.	C	The mine has developed a Drain, Silt-, and oil trap maintenance clean-up procedure. Inspections are carried out on a bi-weekly and monthly basis or at any interval within the week.
	All vegetation in the trenches is cut or removed to ensure that the trench has the required operational capacity. For the purpose of definition, the height of the vegetation within the trench is not exceeding 30 cm (unless otherwise prescribed by a Civil Engineer).	C	According to Drain, Silt-, and oil trap maintenance clean-up procedure, should vegetation be found in the trenches, the silt/vegetation will be removed from the trenches and silt traps and placed along the trench/ next to the silt trap in order to allow it to dry off. Once it is adequately dry, it must be transported to the closest Co-disposal Facility.
	To ensure that the clean and dirty water trenches still have sufficient capacity to contain the runoff from a 1:100-year 24 hour storm event with a 0.5 meter freeboard over and above the normal design flow. A civil engineer has audited all the	NC	The mine did not provide any engineering audit report during the audit. It is, therefore, not verified whether trenches have sufficient capacity.

Ref No	Condition	Compliance	Finding
	trenches on Bank Colliery, and conducted such calculations necessary based on existing conditions.		
	All future dams will be engineer designed according to specifications required within regulation GN704, which is to contain the water from a 1:50 year rainfall event with a 0.8m freeboard.	N/A	This condition is noted by Goedehoop Colliery.
	All surface pollution control dams will be lined with impermeable membranes to prevent water loss within the dirty water system. This leads to the primary benefit of reduced dirty water entering the natural environment.	C	The Bank Colliery return water dam is Clay lined. The lining system used for the return water dam (clay lining) was approved in the Bank Colliery EMPr.
	Silt traps are constructed upslope of the dirty water dams to ensure that a silt build-up does not occur within the dirty water dams. These silt traps are civil engineer designed. Construction dates for future silt traps will conform to the lining of the respective future dams.	N/A	This condition is noted by Goedehoop Colliery.
	Undertake the following to ensure that surface rehabilitation is undertaken to improve the surface water environment: The discard dumps are constructed, in accordance with the discard dump operational manual ref. no. CED/014/97. Management is in accordance with the Mandatory Code of Practice for Mine Residue Deposits. The minimum compaction required is 1 600kg/m³.	C	The discard dumps were constructed in accordance with the Mandatory Code of Practice for Mine Residue Deposits and compacted as required.
	Any sinkholes developing on the mineral rights area are backfilled with non-carbonaceous material. Any areas of local subsidence are shaped to promote free surface runoff and prevent ponding.	N/A	This condition is noted by Goedehoop Colliery.

Ref No	Condition	Compliance	Finding
	Undertake the following to ensure the mine related activities on the surface water environment does not affect the surface water users: Spookspruit Area A three-phase project was implemented whereby the clean and dirty water separation around the co-disposal facility, washing plant and surrounding areas was improved. A return water dam is now used instead of the Bankfontein dam for the collection of dirty water from the above-mentioned areas. This area will be maintained and monitored. Any impacts residual to the rehabilitation work noted will be addressed promptly.	C	The project was completed in 2008. According to Goedeheop Colliery Quarterly Water Quality Assessment Report, compiled by Aquatico Scientific for the period Jan 2023 to March 2023, it was identified that surface water monitoring is undertaken on a monthly basis at the return water dam.
Groundwater			
	Undertake the following activities to ensure that impacts on groundwater by mining and related activities is minimised: With the exception of Bank Colliery's return water dam, all pollution control dams are lined and all future supplemental dams will be engineer designed and lined. The construction of these dams will comply with the GN704.	C	The Bank Colliery return water dam is Clay lined. The lining system used for the return water dam (clay lining) was approved in the Bank Colliery EMP.
	Investigation into the decant points of seepage from the rehabilitated dumps will be continued and where necessary sub-surface drains may be installed on finalisation of the investigation.	C	In-between the trenches phytoremediation trees are planted, however they were very young. It was indicated that they take five years to mature. The mine personnel indicated that the planted phytoremediation trees are essential for reducing the flow of the seepage by drinking the seepage water with roots and evaporating clean water into the atmosphere. Dongalocks and organic material will be utilised in order to neutralise the Ph in trenches. In complying with the general duty of care, it is important that the effectiveness of the actions

Ref No	Condition	Compliance	Finding
			implemented is monitored and further preventative measures are taken were required.
	The Bank Colliery Bank 5 and Schoonie dumps have been rehabilitated and is being maintained. If it has impacts, measures will be undertaken to minimise the impacts on the groundwater.	C	Seepage was detected on Bank 5. The mine is currently undertaking rehabilitation for this area.
	The coal stockpiles are bunded around and the floors are compacted to allow water drainage to the pollution control structure hence limiting seepage into the groundwater.	C	The coal stockpiles floors are compacted, and the area has adequate stormwater trenches that collects the dirty water.
	Groundwater seeping into the workings cannot be prevented but will be managed. This water will be managed in such a manner that is moved around the underground workings from active workings to old workings as required. All underground water bodies will be mapped and the information used to determine where there is storage capacity underground and how the water is to be moved around. Should it be proven during the life of mine that there is no sufficient underground storage capacity, Bank Colliery will investigate and institute reasonable measures to deal with the situation, in collaboration with relevant state departments. Based on the recommendations from the investigation, appropriate measures will be undertaken to address the issue.	C	The mine indicated that there is sufficient ground water storage underground to contain water as required. Water balance is updated on an annual basis to confirm the capacities.
	ABA testing will be undertaken for the coal mined and discard generated at Bank Colliery.	C	The mine undertakes inspections on the discard dumps on a monthly basis where four density test points were carried out on the discard facility.
	Undertake the following activities to ensure that the requirements of legitimate groundwater users are met in terms of groundwater quality and quantity:	C	Proof of groundwater monitoring was verified

Ref No	Condition	Compliance	Finding
	Static groundwater levels and quality of boreholes within the zone of two kilometres around the mining area are measured. This ensures that a sound database is established.		
	If proven that the mining operation is indeed affecting the quantity of the groundwater available to users, the affected parties would be compensated.	N/A	This condition is noted by Goedehoop Colliery.
	Underground water is continuously pumped out of the workings to surface (into dams such as Erickson dams or dirty water dams) as mining continues and does not leave the premises of the mine, since it is re-used within the mining area. Water will be re-used at the underground workings and any excess water will be pumped back into the old and used underground workings.	N/A	No water is currently pumped from underground workings, as these are dry.
	A groundwater model is being undertaken to determine the overall direction and rate of the pollution plume from the mine and its surface infrastructure. This must be updated regularly.	C	A ground water modelling was updated by Delta H, dated August 2023.
	Undertake the following to ensure that impacts from dust generated by blowing wind on local air quality is minimised: - Dust suppression will be undertaken during the operational phase. Dust suppression will be undertaken by water cart. - Water used for dust suppression will be obtained from the underground workings. Note that the pollution control dam will not be filled with water during this time of the mining operation.	C	Sprayers and water tankers are used for dust suppression. This was confirmed during the site visit conducted at the mine. A water balance compiled by Golder confirms that water for dust suppression at Bank Colliery is obtained from the mine's return water dam.
Sensitive landscape			
	Undertake the following to ensure that impacts from dust generated by blowing wind on local air quality is minimised:	C	Sprayers and water tankers are used for dust suppression. This was confirmed during the site visit conducted at the mine.

Ref No	Condition	Compliance	Finding
	- Dust suppression will be undertaken during the operational phase. Dust suppression will be undertaken by water cart. - Water used for dust suppression will be obtained from the underground workings. Note that the pollution control dam will not be filled with water during this time of the mining operation.		A water balance compiled by Golder confirms that water for dust suppression at Bank Colliery is obtained from the mine's return water dam
	Undertake the following to ensure that the construction phase activities are conducted such that the wetlands are not impacted upon. Clean and dirty water will be separated at the time	C	The stormwater infrastructure on site allows for dirty and clean water is separated on site.
	All surface activities will be limited to the footprint of the dirty water areas and outside the identified wetlands. If any wetlands are to be affected, a water use licence will be applied for, for that particular activity.	C	The stormwater infrastructure on site allows for dirty and clean water is separated on site. The mine ensures that less to none impacts on the wetlands.
Air quality			
	Undertake the following to ensure that impacts from gaseous pollutants on local air quality is minimised: Current mining practice in the operation and maintenance of coal stockpiles and waste dumps prevent spontaneous combustion. This minimises emission of gaseous and particulate emissions. No additional management is necessary.	C	This condition is noted by Goedehoop Colliery. A Dozer is dedicated to the facility in case spontaneous combustion occurs.
	Undertake the following to ensure that impacts from dust and diesel fumes generated by machinery on local air quality is minimised. All machinery employed on site are being kept in good repair, and well maintained.	C	All machinery is maintained within the designated areas. It was confirmed through site verification that machinery is indeed well maintained.

Ref No	Condition	Compliance	Finding
	All machinery is fitted with the correct exhaust systems, which will be maintained and kept in good repair.	C	All machinery is maintained within the designated areas. It was confirmed through site verification that machinery is indeed well maintained.
	All vehicles transporting material from the mining operation are required to obey a maximum 40km/h speed limit. This reduces the generation of dust on the haul roads.	C	The mine installed speedometers that monitor the speed limit. Speed limit boards were observed during the site inspection.
	The Rapid Loading Terminal at the plant is contained within a silo and therefore reduces dust generation.	C	Rapid loading terminal at the plant is contained within a silo
	Undertake the following to ensure that impacts from dust generated by blowing wind on local air quality is minimised: Dust suppressions are undertaken during the operational phase on the Co-disposal facilities; on transfer points on conveyor belts, on unpaved roads, stockpiling areas and on rehabilitation sites where movement of machinery is generating dust.	C	A water balance compiled by Golder confirms that water for dust suppression at Bank Colliery is obtained from the mine's return water dam.
	A dust fallout monitoring network has, however, been installed by AER (Pty) Ltd at Bank Colliery to quantify dust fallout in the vicinity of the co-disposal facilities and the main plant complexes. This monitoring will continue for life of mine. The system of monitoring points will be reviewed on a 2-yearly basis, and additional monitoring points installed if necessary.	C	A real time monitoring checks the dust result immediately. ECO Elementum has been appointed by Thungela to conduct an Air Quality Monitoring Report dated June 2023 and the report was available for review.
Noise. and vibration			
	Undertake the following to ensure that noise impacts on surface operations associated with shafts, workings and plant areas are minimised: Personnel within the plant confines are supplied with hearing protection.	C	Personnel within the plant are supplied with PPE and are provided with hearing protection.

Ref No	Condition	Compliance	Finding
	The fans at the ventilation shafts (including the ventilation shaft at the Brown Shaft II project area) are designed such that the noise levels do not exceed seven decibels above the ambient noise levels.	C	The mine has indicated that the noise levels do not exceed seven decibels above the ambient noise levels.
	Noise levels are monitored at all strategic positions on Bank Colliery.	C	Noise levels are monitored by the mine. A noise personal exposure report was provided during the audit, as well as measurement reports for different sections/operations of the mine.
	Undertake the following to ensure that noise impacts from conveyor belts and shaft fans on local communities are minimised: The fans (including the ventilation shaft at the Brown Shaft II project area) are designed and operated such that the noise levels do not exceed seven decibels above the ambient noise levels.	C	Noise levels are monitored by the mine. A noise personal exposure report was provided during the audit, as well as measurement reports for different sections/operations of the mine. The noise levels do not exceed seven decibels above the ambient noise levels.
	The overland conveyors are provided with half-moon cladding which minimises the potential for noise and they are provided with vulcanised joints, which further reduces noise levels.	C	The overland conveyors are installed with cladding and the joints are vulcanized. This was confirmed during the site visit.
Visual aspects.			
	During the operational phase there will be a number of berms and tree screens put in place. These will be no more than 5 rows deep. No declared invader tree species will be planted in these screens.	C	There are no complaints with regards to visual from the community. The mine is aware that they must maintain a good visual for the area.
Socio economic aspects.			
	Undertake the following to ensure that positive impacts on surrounding communities are enhanced: Bank Colliery is actively involved in community development projects including the development of	C	To ensure implementation of SLP commitments, Social and Labour Plan assessments are undertaken at Thungela Resources Head Office on a regular basis. A copy of the SLP was availed for verification by the auditor

Ref No	Condition	Compliance	Finding
	small-scale farming by providing land lots (on property owned by Thungela Operations Proprietary Limited). See Social and labour plans for more projects.		
	As far as practically possible, all supplies are obtained from the Greater Middelburg/Witbank area as outlined in the Social and Labour Plan for Bank Colliery.	C	Thungela Resources has implemented employment and recruitment policies as well as procurement policies. Such policies are included in the Social and Labour Plan for Goedehoop Colliery. A copy of the SLP was availed for verification by the auditor
DECOMMISSIONING AND CLOSURE PHASE			
Topography, Soils, Land Capability, Land Use and Natural vegetation.			
	Infrastructure including residential areas and their infrastructure; roads, railway track occurring within the mine, conveyors, plants workshops and stores, mineral residue deposits, underground workings and rehabilitation of dangerous areas (shafts and subsided areas), opencast and their final voids will be rehabilitated and the rehabilitated areas maintained as per the rehabilitation plan attached.	C	The mine has demolished some sections of the mine and has rehabilitated these areas. Rehabilitation is still being undertaken on site, to ensure the natural environment restored after closure of these mine activities. The rehabilitated areas were observed during the site audit.
	Through the rehabilitation plan Thungela Operations Proprietary Limited will ensure that post-closure uses of land occupied by mine infrastructure are identified in consultation with the surrounding landowners and land users (this is to be done during the operational phase).	N/A	This condition is noted by Goedehoop Colliery.
	Through the rehabilitation plan Thungela Operations Proprietary Limited will ensure that the disturbed areas are rehabilitated such that they are in a state that is suitable for its post closure use, such that it is in compliance with the applicable environmental quality objectives (air quality	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.

Ref No	Condition	Compliance	Finding
	objectives and water quality objectives) and such that post-closure management is minimised. Thungela Operations Proprietary Limited will ensure that the impacts on staff affected by the closure is minimised. Thungela Operations Proprietary Limited will ensure that relevant authorities are informed of the progress of the decommissioning and closure of the mine. Submission of all monitoring data to relevant state departments will be undertaken.		
Soil			
	All vehicles and machinery used at the rehabilitation site will be kept in good working order. No repairs of mine vehicles or machinery will be conducted at the rehabilitation site unless it is emergency repairs, which will be conducted on protected ground. Movement of mine vehicles and machinery will be limited to demarcated routes, which will be rehabilitated when no longer in use.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.
	Maintenance of rehabilitated areas with respect to erosion will be conducted on a minimum three-monthly basis if and where required. This frequency will be reassessed after a 3-year period. The final rehabilitated surface will be stable, self-sustaining, and erosion-free.	C	The mine indicated that Simba (Clerk of works overseeing engineering projects that includes rehabilitation) monitors the rehabbed areas and notifies the environmental department if additional areas need work.
Surface Water			
	The disturbed areas will be rehabilitated to be free draining. Erosion protection measures such as the use of contour berms and repair of gullies will be undertaken until such time that the rehabilitated surfaces can be shown to be sustainable.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.

Ref No	Condition	Compliance	Finding
	Existing roads should be used where possible and new disturbed areas should be minimised.		
Groundwater			
	If it is found that the groundwater system and/or streams are indeed negatively affected by pollution from the rehabilitation sites, measures to intercept polluted seepage water must be investigated. Implement as many closure measures during the operational phase, while conducting appropriate monitoring programmes to demonstrate actual performance of the various management actions during the life of mine. Ensure that all possible sources of dirty water have been identified and that appropriate collection and containment systems have been implemented and that these do not result in further unnecessary water quality deterioration.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.
Sensitive landscapes			
	Runoff from the rehabilitation site will be routed such that it enters a sediment trap prior to discharge to the environment. The wetlands adjacent to the Bank 2 MRD facility will be maintained and where possible rehabilitated to ensure that their PES and EIS are either maintained or improved.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.
Air quality			
	Wet suppression using water carts will be conducted at areas with excessive dust emissions, which include unpaved roads. Chemical surfactants will be considered should water suppression not yield satisfactory results. The existing and paved roads needed during decommissioning will be maintained, which will reduce the extent of areas that	N/A	

Ref No	Condition	Compliance	Finding
	can generate dust. These roads will be rehabilitated after their use. The traffic volumes and speed within the rehabilitation site will be controlled. This will be in accordance to the safety rules of the mine.		
Noise.			
	Mine's environmental awareness training will include a noise component, allowing employees and contractors to realise the potential noise risks that activities (especially night-time activities) pose to the surrounding environment. White-noise generators instead of tonal reverse alarms will be used on heavy vehicles operating on roads. Smaller or less noisy equipment should where possible be used when rehabilitating. Equipment will be well maintained and fitted with the correct and appropriate noise abatement measures such as acoustical mufflers (or silencers), noise absorption braids and engine bay covers over heavy equipment.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.
Visual aspects			
	Unless approved the by authorities, all infrastructure will be removed during this phase in accordance to the rehabilitation plan.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.
	The MRD facilities will be rehabilitated to form a whale back shape. The MRD facilities and all other areas will be vegetated with a seed mix recommended by a suitably qualified specialist.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.
Socio-economic aspects			
	Transfer and redeploy employees and contractors wherever possible.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.

Ref No	Condition	Compliance	Finding
	Implement non-mining related skills development programmes for employees and family members through the SLP throughout the life of mine to enable retrenched employees to seek alternative employment or start income-generating businesses.	N/A	This condition is noted by Goedehoop Colliery. The mine is still operational.

Table 4: EMPr for the Bank Colliery (Goedehoop North)'s Bank 2 mine residue deposit (MRD), ref: (MP) 30/5/1/2/3/2/1/ (143) EM, dated May 2021 and approved October 2021;

Ref No	Condition	Compliance	Finding	Recommendations
PRE-CONSTRUCTION AND CONSTRUCTION PHASE				
Soils				
	The topsoil from the MRD expansion area will be stripped to depths as recommended by the soil specialist. These will be stockpiled in the existing MRD's topsoil stockpile.	N/A	The expansion of the MRD has not yet commenced.	
	The stockpiling of the topsoil may be used to create a perimeter berm that will act as a visual shield and noise barrier for the surrounding community.	N/A	The expansion of the MRD has not yet commenced.	
	The stockpiling of the stripped topsoil will not result in the existing topsoil stockpile exceeding a height of five meters, which will assist in minimizing compaction of the soils.	N/A	The expansion of the MRD has not yet commenced.	
	The stockpiled topsoil will be seeded with are commended seed mix to ensure that a good vegetation cover is achieved, which will prevent erosion of the stockpile.	N/A	The expansion of the MRD has not yet commenced.	
	No mixing of the topsoil with subsoil will be allowed.	N/A	The expansion of the MRD has not yet commenced.	
	As far as possible, areas with disturbed vegetation cover were selected for sitting the proposed MRD expansion and associated infrastructure.	N/A	The expansion of the MRD has not yet commenced.	
Land use and capability				
	Soils will be stripped and stockpiled as describe in the management actions under soils. This will result in the restoration of as much seed bank as possible.	N/A	The expansion of the MRD has not yet commenced.	
Flora				

Ref No	Condition	Compliance	Finding	Recommendations
	Soils will be stripped and stockpiled as describe in the management action under soils. This will result in the restoration of as much seed bank as possible	N/A	The expansion of the MRD has not yet commenced.	
	As much as possible areas with disturbed ecosystems were used for the siting of the MRD expansion and its associated infrastructure.	N/A	The expansion of the MRD has not yet commenced.	
	The establishment of the MRD expansion and the construction associated infrastructure will be limited to the approved development site. Where possible markers will be used to demarcate the approved development site.	N/A	The expansion of the MRD has not yet commenced.	
	Where possible, areas that will not be used during the operational phase should be rehabilitated and seeded with a recommended seed mix. This must also ensure that alien species do not encroach into the disturbed and rehabilitated areas. The unused areas must be maintained such that they do not deteriorate from their pre-mining state.	N/A	The expansion of the MRD has not yet commenced.	
	The disturbed and rehabilitated areas will be monitored for identification of alien and invader plant species.	N/A	The expansion of the MRD has not yet commenced.	
Surface Water				
	The MRD expansion and associated infrastructure has been designed to occupy as small an area as possible.	N/A	The expansion of the MRD has not yet commenced.	
	The storm water diversion structures for the MRD expansion and associated surface infrastructure will be constructed in accordance with the Bank 2 MRD Expansion project civil designs approved by the DWS (Appendix 1), which shows the storm water management systems' silt control and erosion protection.	N/A	The expansion of the MRD has not yet commenced.	

Ref No	Condition	Compliance	Finding	Recommendations
	The construction site will be optimised to limit over stripping. This will ensure that the generation of unnecessary volumes of silted water is controlled on site.	N/A	The expansion of the MRD has not yet commenced.	
	The constructed storm water diversion structures will be maintained in good order, which will be including cleaning out the structures where necessary.	N/A	The expansion of the MRD has not yet commenced.	
	Any damage within the constructed storm water diversion structures will be repaired as soon as possible.	N/A	The expansion of the MRD has not yet commenced.	
	Storm water diversion structures (berms and trenches) will be constructed to divert clean water runoff to the nearby Spook Spruit (Bankfontein Dam). If a situation exists where the storm water diverted is contaminated and cannot be diverted to the clean water system, this water will be collected into a sump and then pumped via the new dirty water pipeline to the existing return water dam.	N/A	The expansion of the MRD has not yet commenced.	
	Areas that are to be stripped of topsoil should be optimised to limit unnecessary stripping.	N/A	The expansion of the MRD has not yet commenced.	
	Storm water from upslope of the stripped areas should be diverted around these areas to limit the amount of storm water flowing over these areas.	N/A	The expansion of the MRD has not yet commenced.	
	Excessive sedimentation of storm water run-off from the site will be prevented.	N/A	The expansion of the MRD has not yet commenced.	
	Hydro seeding of the topsoil stockpile is recommended to speed up vegetation cover establishment thereby ensuring stability of the stockpiles. An appropriate seed mix should be recommended by a rehabilitation specialist.	N/A	The expansion of the MRD has not yet commenced.	

Ref No	Condition	Compliance	Finding	Recommendations
	Mine vehicles and machinery used during the construction phase must be well maintained.	N/A	The expansion of the MRD has not yet commenced.	
	Storm water diversion and the new pollution control dam will be constructed for the diversion and capturing of water from the dirty water areas of the MD expansion project (as stipulated in the design report and drawings approved by DWS).	N/A	The expansion of the MRD has not yet commenced.	
	The placement of coarse discard for the construction of the slimes compartment walls will be undertaken such that the walls are competent and that no spillages occurs from the elevated slimes compartment.	N/A	The expansion of the MRD has not yet commenced.	
Groundwater				
	Excavation of the material will be undertaken such that all carbonaceous material removed from the site is transported to the exiting MRD facility.	N/A	The expansion of the MRD has not yet commenced.	
	The MRD has been designed and will be constructed and signed off by a professional engineer in the following manner, which will ensure that seepage water from the MRD expansion is collected and stored at the pollution control dam i.e.: Topsoil from the foundation of the MRD area will be removed to a depth of 150mm. The underlying soil below 150mm will be ripped, re- compacted and graded towards the toe-drains to be constructed around the MRD. This is to allow water seeping from the expanded MRD facility to flow along the levelled ground into the toe collection drains (discussed below). Dirty water seeping beyond the treated (compacted) foundation soils (flowing easterly away from the expanded MRD) will be intercepted by a natural barrier of residual sandstone and siltstone observed as per the geotechnical investigation. A seepage collection drain will be constructed along the eastern perimeter of the entire MRD facility to	N/A	The expansion of the MRD has not yet commenced.	

Ref No	Condition	Compliance	Finding	Recommendations
	a depth of 3m below natural ground level to capture seepage water above the stiff weathered residual sandstone /siltstone. This will ensure that most of the contaminated seepage water is captured. The pollution control dam will be lined as per approved civil designs and the dirty storm water diversion trenches will be concreted as per approved civil designs.			
	Mine machinery will be repaired in the existing workshops. No maintenance outside the dedicated workshop will be allowed unless it is emergency repairs which must be on protected ground.	N/A	The expansion of the MRD has not yet commenced.	
	All hydrocarbon liquids will be stored in leak and corrosion resistant containers. These containers will be placed on concrete floors. The containers used for the storage of hydrocarbon liquids will be maintained in good condition.	N/A	The expansion of the MRD has not yet commenced.	
	Training, which will be in compliance with the requirements of the norms and standards for the waste storage facilities will be conducted for employees working with waste (hydrocarbon liquid), including contractors' employees.	N/A	The expansion of the MRD has not yet commenced.	
	All spillages must be contained, and the affected areas remedied. An emergency preparedness plan, which will be in line with the mine's environmental emergency plan and the norms and standards for the waste storage facilities will be used. Where necessary, sufficient supply of absorbent fibre will be kept at site to contain accidental spills.	N/A	The expansion of the MRD has not yet commenced.	
	Credible waste collectors will be used for the removal of waste from the site to a registered waste disposal facility.	N/A	The expansion of the MRD has not yet commenced.	
Sensitive Landscapes				

Ref No	Condition	Compliance	Finding	Recommendations
	The MRD expansion will be designed and established such that as little seepage and runoff water from the mineral residue deposit reports to the remaining wetland. See design specifications under the groundwater section.	N/A	The expansion of the MRD has not yet commenced.	
	The development footprint of the Bank 2 MRD expansion facility and associated infrastructure will be demarcated with visible markers before its establishment	N/A	The expansion of the MRD has not yet commenced.	
	The MRD expansion site will be outside one hundred meters from the Spook Spruit wetland and the Bankfontein Dam.	N/A	The expansion of the MRD has not yet commenced.	
	No construction activities will be allowed outside the MRD facility expansion development footprint. As far as possible, disturbed areas will be used for sitting the MRD expansion footprint and existing routes will be used to provide access during construction as this will reduce the extent of the newly disturbed area along the route.	N/A	The expansion of the MRD has not yet commenced.	
	A storm water management system that will ensure that clean storm runoff water from the MRD expansion area is diverted to the nearby stream will be constructed. Storm water from the construction area will be managed in such a manner to prevent any release of sedimentation runoff into the nearby stream/wetlands. Where necessary, silt and erosion barrier structures will be installed where silt build up and high velocity run can be expected.	N/A	The expansion of the MRD has not yet commenced.	
	All wetland soils and vegetation that will be removed from the affected wetland (wetland within the footprint of the MRD expansion) will be stockpiled at the existing topsoil stockpiling area for future rehabilitation. Alien vegetation control program will be	N/A	The expansion of the MRD has not yet commenced.	

Ref No	Condition	Compliance	Finding	Recommendations
	implemented within remaining wetland areas. Construction will be restricted to the drier months, if possible, to avoid sedimentation of wetland features			
	Denuded areas due to construction must be vegetated after construction with grasses endemic to the area. Erosion prevention measures must be installed prior to the onset of construction activities.	N/A	The expansion of the MRD has not yet commenced.	
Air Quality				
	Wet suppression using water carts will be conducted at areas with excessive dust emissions, which will include used open spaces and unpaved roads, transfer points and any other areas with potential to generate excessive dust. Chemical surfactants will be considered should water suppression not yield satisfactory results.	N/A	The expansion of the MRD has not yet commenced.	
	Traffic will be restricted to demarcated areas and traffic volumes and speeds within the MRD Expansion construction site will be controlled.	N/A	The expansion of the MRD has not yet commenced.	
	The farmers and community meetings conducted by the mine will be used for environmental reporting and community liaison on matters relating to the impacts on air quality.	N/A	The expansion of the MRD has not yet commenced.	
Noise aspects				
	The existing MRD facility and topsoil will be used as a sound barrier around noisy parts of the MRD Expansion area. This will partially control noise towards the Bank Village.	N/A	The expansion of the MRD has not yet commenced.	
	Limit the maximum speed on the haul roads to 60 km/h or less, subject to risk assessment.	N/A	The expansion of the MRD has not yet commenced.	
	Ensure that the mine employees are issued with earplugs and that they are instructed to use them.	N/A	The expansion of the MRD has not yet commenced.	

Ref No	Condition	Compliance	Finding	Recommendations
	Educate employees on the dangers of hearing loss due to mine machinery noise.	N/A	The expansion of the MRD has not yet commenced.	
	Any deviation detected by the noise monitoring results must be addressed.	N/A	The expansion of the MRD has not yet commenced.	
Visual Aspects				
	Use the perimeter berms, topsoil and existing MRD facility as a visual screen from the surrounding communities	N/A	The expansion of the MRD has not yet commenced.	
	The shaping of the slopes of MRD facility will be conducted to complement the surrounding landscape, including the current MRD facility.	N/A	The expansion of the MRD has not yet commenced.	
	Where possible areas disturbed by construction activity, must be suitably top soiled and vegetated as soon as is possible. The progressive rehabilitation measures will allow for the maximum growth period before the completion of the project	N/A	The expansion of the MRD has not yet commenced.	
	Limit areas of disturbance to areas where infrastructure or facilities will be constructed or placed. Where possible, the existing vegetation will be supplemented with indigenous plant species to increase the effectiveness of the visual buffer.	N/A	The expansion of the MRD has not yet commenced.	
	Dust suppression will be undertaken at all areas that will be affected by construction activities and where dust will be generated.	N/A	The expansion of the MRD has not yet commenced.	
	Existing large trees that fall outside the earthworks area must be retained. Note that the alien eradication program, if any, will supersede this condition.	N/A	The expansion of the MRD has not yet commenced.	
	Avoid upwards lighting of structures but rather direct the light downwards to focus on the object to be illuminated.	N/A	The expansion of the MRD has not yet commenced.	
	Light spill, particularly upwards, must be minimised by implementing the following: Not allowing external light fittings to shine upwards, all	N/A	The expansion of the MRD has not yet commenced.	

Ref No	Condition	Compliance	Finding	Recommendations
	security and road lighting shall have “blinkers” or be specifically designed to ensure light is directed downwards to reduce light spill beyond the property boundary.			
Sites of archaeological and cultural importance				
	Since the establishment of the MRD expansion facility will have direct impact on a graveyard site, the mortal remains of the graves will be exhumed and relocated. All specific procedures required for the exhumation and relocated of the human remains, which will include consultation will be complied with by Thungela Operations Proprietary Limited.	N/A		
Socio-economic Aspects				
	Local labour and contractors will be appointed. This will ensure that economic spin-offs that result due to employment, benefit the local community.	N/A	The expansion of the MRD has not yet commenced.	
	Bank Colliery will ensure that the creation of unrealistic expectations are prevented by communicating the period of the construction phase to the local communities and the communities will be informed that few new positions will be created. Local councilors will be involved in the above communication.	N/A	The expansion of the MRD has not yet commenced.	
	Thungela Operations Proprietary Limited will adhere to its procurement strategy, which aims to increase local content of the project to its maximum.	N/A	The expansion of the MRD has not yet commenced.	
	As much of the construction material and service requirements as possible will be sourced from suitably qualified supplies and contractors in eMalahleni, Middelburg and the surrounds.	N/A	The expansion of the MRD has not yet commenced.	

Ref No	Condition	Compliance	Finding	Recommendations
	The mine must comply with the requirements as guided by the Mining Charter with regards to SMME development and the mine's procurement policy.	N/A		The expansion of the MRD has not yet commenced.
	Announce road closures and other disruptions;	N/A		The expansion of the MRD has not yet commenced.
	Erect signboards (if required) indicating access restrictions to the construction site;	N/A		The expansion of the MRD has not yet commenced.
	Non compliances will be managed according to the mine's complaints procedure	N/A		The expansion of the MRD has not yet commenced.
	Limit all activities to the development footprint of the proposed construction site;	N/A		The expansion of the MRD has not yet commenced.
	Fence off the development footprint of the proposed construction site prior to the commencement of site- clearing and construction activities;	N/A		The expansion of the MRD has not yet commenced.
	Keep communication with neighboring landowners, land occupiers and the public (interested and affected parties) open during the construction phase of the project.	N/A		The expansion of the MRD has not yet commenced.
	Keep local SAPS informed of the construction and its progress.	N/A		The expansion of the MRD has not yet commenced.
	Use local labour with no criminal records.	N/A		The expansion of the MRD has not yet commenced.
	Limit access to the construction area to employees and visitors with access permits.	N/A		The expansion of the MRD has not yet commenced.
	Safety and security measures will be undertaken to comply with the current mine safety standards. These will include fencing, installation of CCTV cameras, 24- hour security guards, random security checks and access control	N/A		The expansion of the MRD has not yet commenced.

Table 5: EMPr for the Bank Colliery (Goedehoop North)'s EMPr Amended for Bank Colliery North, ref: (MP) 30/5/1/2/2/ 143 MR, dated 13 October 2021;

Ref No	Condition	Compliance	Finding
OPERATION PHASE			
Groundwater			
	Undertake the following activities to ensure that impacts on groundwater by mining and related activities is minimised: The following are the measures undertaken at Bank 5 dump to minimise the impacts on the groundwater: • Three hectares was planted with <i>Searsia lancea</i> saplings in three blocks during winter/spring 2020 (July – October) around the dump. • <i>Searsia lancea</i> saplings planted during summer 2020 (November) around the dump.	N/A	This condition is noted by Goedehoop Colliery. This activity will be undertaken during the rehabilitation phase.
	The following are the measures undertaken at Bank 2 dump to minimise the impacts on the groundwater: Drilling of one (1) monitoring borehole in the vicinity of the MRD facility.	C	The quarterly water report dated January 2023-March 2023 indicates that two monitoring boreholes were drilled at the Bank 5 Dump (BH21R & BH25R). The impacts of Bank 5 Dump are highlighted in the report.
	Drilling of seven (7) new monitoring boreholes and re- drill of one 1 monitoring borehole.	C	The mine is currently undertaking drilling of the required boreholes. The mine received a quotation, date July 2023, from a borehole drilling specialist (J.A Coetzee Waterboor/Drilling). The mine also provided an invoice issued to the specialist. The drilled boreholes will be observed during the next audit.
	Drilling of one (1) urgent monitoring borehole next to Lapa for the trial currently at the dump	C	According to the groundwater modelling report, a borehole near the Lapa is used to get samples for monitoring.

Ref No	Condition	Compliance	Finding
	Water sampling and analysis at the affected wetland areas.	C	Water sampling does occur at the affected wetland areas. The Water quality report dated January 2023 – March 2023, indicates locations that are used for monitoring.
	Excavation of clean and dirty water separation trenches and berms.	C	Trenches were excavated from the Bank 5 MRD that collects seepage from Bank 5 MRD to spookspruit and from the stream into Bankfontein dam.
	Excavation of a toe drain around the MRD facility. Ensure that toe seep trench is excavated deep enough and water from the toes drain flows into the RWD for seepage collection and re-use.	N/A	No construction activities are undertaken on site.
	Close the daylighting trenches, rehabilitating first by liming, top soiling and the re-establishment of vegetation. Divert dirty water to diversion trenches.	N/A	During the site observation no daylighting trenches were observed. Seepage water is diverted into the diversion trenches.
	De- silting the Return water dam.	C	The mine de-silts the dam.
	Undertake the following activities to ensure that impacts on groundwater by mining and related activities is minimised: With the exception of Bank Colliery's return water dam, all pollution control dams are lined and all future supplemental dams will be engineer designed and lined. The construction of these dams will comply with GN704.	N/A	This condition is noted by Geodehoop Colliery.
	Investigation into the decant points of seepage from the rehabilitated dumps will be continued and where necessary sub-surface drains may be installed on finalisation of the investigation.	N/A	This condition is noted by Goedehoop Colliery.

Ref No	Condition	Compliance	Finding
	The Bank Colliery Bank 5 and Schoonie dumps have been rehabilitated and is being maintained. If it has impacts, measures will be undertaken to minimise the impacts on the groundwater.	N/A	This condition is noted by Goedehoop Colliery.
	The coal stockpiles are bunded around and the floors are compacted to allow water drainage to the pollution control structure hence limiting seepage into the groundwater.	N/A	This condition is noted by Goedehoop Colliery.
	Groundwater seeping into the workings cannot be prevented but will be managed. This water will be managed in such a manner that is moved around the underground workings from active workings to old workings as required. All underground water bodies will be mapped, and the information used to determine where there is storage capacity underground and how the water is to be moved around. Should it be proven during the life of mine that there is no sufficient underground storage capacity, Bank Colliery will investigate and institute reasonable measures to deal with the situation, in collaboration with relevant state departments. Based on the recommendations from the investigation, appropriate measures will be undertaken to address the issue.	N/A	This condition is noted by Goedehoop Colliery.
	ABA testing will be undertaken for the coal mined and discard generated at Bank Colliery.	N/A	This condition is noted by Goedehoop Colliery.
	Undertake the following activities to ensure that the requirements of legitimate groundwater users are met in terms of groundwater quality and quantity:	N/A	This condition is noted by Goedehoop Colliery.

Ref No	Condition	Compliance	Finding
	If proven that the mining operation is indeed affecting the quantity of the groundwater available to users, the affected parties would be compensated.		
	Underground water are continuously pumped out of the workings to surface (into dams such as Erickson dams or dirty water dams) as mining continues and does not leave the premises of the mine, since it is re-used within the mining area. Water will be re-used at the underground workings and any excess water will be pumped back into the old and used underground workings.	N/A	This condition is noted by Goedehoop Colliery.
	A groundwater model is being undertaken to determine the overall direction and rate of the pollution plume from the mine and its surface infrastructure. This must be updated regularly.	C	Groundwater modelling report has been compiled and updated by Deltha H. The recent report was finalised in August 2023 and it indicates that groundwater monitoring is undertaken for the entire Goedehoop Colliery.
	Static groundwater levels and quality of boreholes within the zone of two kilometres around the mining area are measured. This ensures that a sound database is established.	C	Proof of groundwater monitoring was verified
	Any major structures of preferred groundwater flow such as dykes and fault zones should be grouted if excessive groundwater inflow is encountered.	C	The mine indicated that major structures such as dykes and fault zones are filled if excessive groundwater inflow is encountered.
	Groundwater pollution at the shafts and underground workings are being kept to a minimum by limiting the time the underground water is exposed to the open rock faces where mining takes place.	C	The mine indicated that water from underground is pumped into Erickson dams.

Ref No	Condition	Compliance	Finding
Sensitive Landscapes			
	Undertake the following to ensure that if surface subsidence occurs within wetland areas, a loss of wetland habitat as well as a loss of connectivity between wetland areas is minimised: A buffer of 100m must be placed around all wetlands associated with high-risk areas for subsidence. These areas, as well as the buffers around them, must be excluded from the mine plan.	C	The mine has well buffered the wetland areas and mine activities do not occur within these sensitive areas.
	Undermined streams and the stability of pillars in workings should be monitored. A qualified surveyor will be appointed to survey the undermined streams and the stability of pillars in workings on a monthly basis.	N/A	The mine indicated that currently, no areas are planned to undermine streams.
	The safety factors as recommended in the geotechnical report (Saxum 2015) must be applied for underground mining.	C	The mine indicated that, the panels are designed optimally. Different factors of Safety are achieved according to the DMRE requirements.
	The state of the pans and any development of sinkholes will be monitored using extensometers.	C	The sinkholes are monitored by the yearly flyovers and scrutinizing of any surface subsidence picked up. The mine is also officially alerted by farmers and the community if and when subsidence or perceived sinkholes occur.
	Undertake the following to ensure that impacts from dust generated by blowing wind on local air quality is minimised: Water used for dust suppression will be obtained from the underground workings. Note that the	C	A water balance compiled by Golder confirms that water for dust suppression at Bank Colliery is obtained from the mine's return water dam.

Ref No	Condition	Compliance	Finding
	pollution control dam will not be filled with water during this time of the mining operation.		
	Undertake the following to ensure that impacts from dust generated by blowing wind on local air quality is minimised: Dust suppression will be undertaken during the operational phase. Dust suppression will be undertaken by water cart.	C	The mine undertakes dust suppression and according to the Water Balance, the water used for dust suppression is sourced from the RWD.
	Water used for dust suppression will be obtained from the underground workings. Note that the pollution control dam will not be filled with water during this time of the mining operation.	C	The mine undertakes dust suppression and according to the Water Balance, the water used for dust suppression is sourced from the RWD.
	Undertake the following to ensure that the construction phase activities are conducted such that the wetlands are not impacted upon. Clean and dirty water will be separated at the time	C	The stormwater infrastructure on site allows for dirty and clean water to be separated on site.
	All surface activities will be limited to the footprint of the dirty water areas and outside the identified wetlands. If any wetlands are to be affected, a water use licence will be applied for, for that particular activity.	C	This condition is noted by Goedehoop Colliery. All activities are outside the sensitive areas and stormwater infrastructure put in place ensures not dirty water flows into the water bodies.
Visual aspects			
	Existing large trees that fall outside the earthworks area must be retained. Note that the alien eradication program, if any, will supersede this condition.	C	During site observation it was noted that existing trees are retained.

Ref No	Condition	Compliance	Finding
	All trucks transporting material on the mining areas will be required to obey the speed limit. This will reduce dust generation.	C	The mine installed speedometers that monitor the speed limit. Speed limit boards were observed during the site inspection.
	The mine will adopt a clean-house policy.	C	The mine conducts environmental inspections to ensure good clean-house and rectifying the incidents.
	All coal stockpiles and MRD facilities will be maintained at specified heights to reduce visual impact. MRD facilities will be operated and rehabilitated as per the relevant code of practice for the mine.	C	The MRD facilities are operated and rehabilitated as per the relevant code of practice for the mine. The coal stockpiles and MRD facilities are operated under the following heights: MRD dump-42.0m Product stockpile- 26.1m ROM stockpile- 19.7m
	Avoid upwards lighting of structures but rather direct the light downwards to focus on the object to be illuminated.	C	The lighting at the mine is controlled to ensure at all objects are illuminated and to provide good visual at all times.
	During the operational phase there will be a number of berms and tree screens put in place.	C	The mine has put in place berms and all other stormwater infrastructures.
	These will be no more than 5 rows deep. No declared invader tree species will be planted in these screens.	N/A	This condition is noted by Goedehoop mine.
Sensitive landscapes			
	All decommissioning activities should be restricted to their disturbed footprints and make use of existing access routes and roads.	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.
	Boundary markers around wetland areas should be maintained until completion of decommissioning and closure activities.	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.
	All waste should be removed from site and disposed of at suitable waste disposal sites offsite.	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.

Ref No	Condition	Compliance	Finding
	Areas where soils could potentially have been contaminated should be tested to determine contamination levels and appropriate remediation activities. Remediate contaminated soils in situ if possible. If not possible, remove and dispose of off-site.	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.
	Disturbance footprints should be revegetated as soon as possible following completion of demolition activities.	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.
	Alien vegetation management plan should be implemented following re-vegetation to clear alien plant species.	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.
	Alien vegetation management plan should be implemented following re-vegetation to clear alien plant species.	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.
	The wetlands adjacent to the Bank 2 MRD facility will be maintained and where possible rehabilitated to ensure that their PES and EIS are either maintained or improved	C	A part of the mine is still in the operational phase; however, the mine has undertaken rehabilitation in areas that are been decommissioned.

Table 6: Environmental Authorisation for Bank 2 mine residue deposit (MRD), reclamation of Bank 2 mine residue deposit and associated infrastructures, ref: 30/5/1/2/3/2/1/ (143) EM, dated June 2018.

EA Ref No'	Condition	Compliance	Finding
8.1 Standard Condition			
8.1.1.	Authorisation of the activity is subject to the conditions as obtained in this Authorisation, which forms part of the Environmental Authorisation and are binding on the holder of this Environmental Authorisation.	C	This condition has been noted by Goedehoop Colliery.
8.1.2.	The holder of the Authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the Authorisation.	C	This condition has been noted by Goedehoop Colliery.
8.1.3.	Any changes to, or deviations from, the project description set out in this Authorisation must be approved, in writing, by the Department before such changes or deviations may be affected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the Authorisation to apply for further Authorisation in terms of the Regulations.	C	There are no changes to the project description to date.
8.1.4.	Where any of the applicant's contact details change, including the name of the responsible person, the	N/A	Mine personnel confirmed that no changes have occurred that require notification of the department.

EA Ref No'	Condition	Compliance	Finding
	physical or postal address and/or telephonic details, including the transfer of this authorisation, the applicant must in writing notify the Regional Manager of this Department, within fourteen (14) days of the above specified change.		
8.1.5.	A copy of this authorisation must be kept on site. The Authorisation must be produced to any Government official(s) who may requests to see it inspection purposes and must be made available to the contractor(s)/subcontractor(s) authorised to undertake work at the property.	N/A	The environmental authorisation is kept at the mine's Environmental Department in both electronic and hard copy format. An electronic copy of the environmental authorisation is also kept on the shared server to which all employees have access
8.1.6.	This authorisation does not negate the holder of the Authorisations responsible to comply with any other statutory requirements that may be applicable to the undertaking of the activity.	C	This condition is noted by Goedehoop Colliery.
8.1.7.	After an appeal period has expired and no good course to extent the appeal period has been submitted in accordance with chapter 2 of the National Appeal Regulations of 2014, a thirty (30) day-written notice must be given to the Department that the activity will commence. Commencement for this purpose of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence	N/A	The expansion of the MRD has not commenced.
8.2 Specific conditions			
8.2.1 Commissioning of the activity			

EA Ref No'	Condition	Compliance	Finding
8.2.1.1	This Authorisation is hereby solely granted for, the expansion of Bank 2 MRD, reclamation of the existing Bank 2 dump as well as construction of supporting infrastructures (i.e., pollution control dam, access road, re-routing of sewage pipeline, water supply pipeline, electrical cable data).	N/A	The expansion of the MRD has not commenced.
8.2.1.2	The activity may not commence without the necessary permits/licenses/approvals and/or service agreements, where it is relevant, from or with the relevant regulatory authorities whether national, provincial or local.	N/A	The expansion of the MRD has not commenced.
8.2.1.3	The construction of the expansion of the mineral residue and pollution control dam may only commence after approval of the engineering drawings as required in terms of Government Notice R 632 in Government Gazette 39020 of 24 July 2015 or its successor in title.	N/A	The expansion of the MRD has not commenced.
8.2.1.4	Construction within the site must be carried out under the supervision of a professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 2000 (Act 46 of 2000) and in line with approved designs.	N/A	The expansion of the MRD has not commenced.

EA Ref No'	Condition	Compliance	Finding
8.2.1.5	The site, or any portion thereof must be covered and maintained in such a way that- • The formation of pools, and or demanding due to rain is prevented • Free surface runoff of rain-water is ensured, • Contamination of storm water is prevented, • Minimal or no erosion occurs.	N/A	The expansion of the MRD has not commenced.
8.2.1.6	The company must apply the principle of best practicable environmental option for all technologies used/implemented during the expansion project	N/A	The expansion of the MRD has not commenced.
8.2.1.7 Pre-Construction Phase			
a)	The applicant must appoint an independent Environmental Control Officer (ECO) who will monitor contractors, compliance with EMP and EA (see 8.2.2. Management of the activity for more details).	N/A	No construction activities associated with the MRD expansion project have as yet been commenced with. No construction activities were undertaken for the reclamation project.
b)	The applicant must provide all contractors and sub-contractors with a copy of Environmental Management Programme and Environmental Authorisation prior to the mining activities.	N/A	No construction activities associated with the MRD expansion project have as yet been commenced with.
c)	All pre-construction phase mitigation measures as outlined in the Environmental Management Programme attached in Environmental Impact Assessment report must be adhered to at all times.	N/A	No construction activities associated with the MRD expansion project have as yet been commenced with.

EA Ref No'	Condition	Compliance	Finding
d)	In order to ensure safety, all employees must be given the necessary personnel protective equipment (PPE).	N/A	No construction activities associated with the MRD expansion project have as yet been commenced with.
e)	Appropriate notification sign must be erected at the mining area warning the public (residents, visitors etc.) about the hazard around the mining area and presence of heavy vehicles and machinery.	N/A	No construction activities associated with the MRD expansion project have as yet been commenced with.
F)	Construction must include design measures that allow surface and subsurface movement of water along the drainage lines so as not to impede natural surface and subsurface water flow, and drainage measures must promote the dissipation of storm water runoff.	N/A	No construction activities associated with the MRD expansion project have as yet been commenced with.
g)	Construction areas (e.g., material lay down areas), topsoil and subsoil must be protected from contamination or pollution. Stockpiling must not take place in drainage lines or areas where it will impede surface water runoff.	N/A	No construction activities associated with the MRD expansion project have as yet been commenced with.
h)	If any soil contamination is noted at any phase of the proposed activity (ies), the contaminated soil must be removed to a licensed waste disposal facility and the site must be rehabilitated to the satisfaction of the Department and Department of Water and Sanitation. The opportunity for the onsite remediation and re-use of contaminated soil must be investigated prior to the disposal and this	C	Based on the site observation, no signs of soil contamination could be noted at the reclamation project area. It must be noted that the reclamation project is undertaken within the footprint of the current MRD and hence all wastewater from the site is contained within the MRD's dirty water collection system.

EA Ref No'	Condition	Compliance	Finding
	Department must be informed in this regard.		
8.2.1.8 Access Roads and Traffic Impact			
a)	Necessary signage and traffic measures must be implemented for safe and convenient access to the site from adjacent roads.	C	It was confirmed during the site observation that signages were erected at the reclamation site, warning the public (residents, visitors etc) about the hazard around the reclamation site and presence of heavy vehicles and machinery.
b)	Access roads must be well maintained throughout the mining operation.	C	All roads are kept in good condition on site.
Air Quality Management			
a)	Proper measures must be put in place to suppress dust in order to minimize nuisance conditions.	C	It was confirmed during the site visit that dust suppression using water carts is conducted at the site. The mine conducts an ongoing dust fallout monitoring, which is used to determine the effectiveness of the dust suppression.
b)	A speed restriction of 40km/h must be enforced and monitored on site for all mining vehicles	C	All mine vehicles are required to obey the mines traffic regulation and Traffic Management Plan. A speed limit of 30 km/h is enforced at the mine. Speed restriction signs are erected on the haul roads and at the co-disposal facility. A system is installed at the mine's bakkies, they are tagged to ensure the speed in not exceeded.
8.2.1.10 Proliferation of Alien Species			
a)	All construction/mining equipment and vehicles must be cleaned before entering and leaving the site to reduce the chances of spreading weeds and invasive species.	C	None of Thungela Operations Proprietary Limited's machinery were used on site, all contractors were made aware of this condition. It was also indicated and was confirmed on site that all activities are occurring on the MRD facility with very little to no chance of alien species proliferation.
8.2.1.11 Noise			
a)	Mining/construction activity must be limited to normal working hours (7h00 17h00).	C	The reclamation activities are limited to normal workings hours, with no activities conducted before 07h00 or after 17h00.

EA Ref No'	Condition	Compliance	Finding
b)	Mining vehicles must be fitted with standard silencers prior to beginning of construction	N/A	No construction activities associated with the MRD expansion of the facility have yet commenced.
8.2.1.12 Erosion control measures			
a)	All soil surfaces compacted as a result of mining/construction activities must be ripped, and imported materials must be removed.	N/A	No construction activities associated with the expansion of the facility have yet commenced.
b)	Any erosion channel developed during mining/construction period or during vegetation establishment must be restored to a proper condition.	N/A	No construction activities associated with the expansion of the facility have yet commenced.
8.2.1.13 Excavation activities			
a)	Topsoil must be stripped and stockpiled prior to excavation in a designated area.	N/A	No activities associated with the expansion that requiring topsoil stripping were conducted.
b)	Under no circumstances should material stockpiles be disposed of outside the boundary of the mining area.	N/A	This condition is noted by Goedeheop Colliery.
8.2.1.14 Waste management			
a)	General waste must be kept in containers which are wind and scavenger proof, and disposed of at a permitted landfill site, no temporary dumping and littering of waste is allowed on site.	C	Waste management at Goedeheop Colliery is done according to the Waste Management Procedure for Goedeheop Colliery. According to the waste management procedure the waste at Goedeheop is disposed of at a registered municipal landfill. There is also proof of disposal provided.
b)	No waste must be disposed of through burying and burning.	C	No waste is burned or buried on site. All waste is collected and disposed of at a registered landfill.
c)	All hazardous waste must be disposed of at an official registered site or be removed by registered hazardous waste contractors.	C	Waste management at Goedeheop Colliery is done according to the Waste Management Procedure for Goedeheop Colliery. According to the waste management procedure the waste at Goedeheop is

EA Ref No'	Condition	Compliance	Finding
			disposed of at a registered municipal landfill. There is also proof of disposal provided.
d)	All emergency preparedness plan to address any pollution incidents (.i.e such as oil spillage etc) that occur on site must be developed.	C	Goedehoop Colliery has developed a waste management procedure and the environmental incident procedure that highlights the procedure of reporting and correcting the incidents.
8.2.12 Surface and groundwater contamination must be prevented and/or mitigated by implementation of the following conditions			
a)	Specific area must be demarcated for fuelling and workshop services. And such area must be bunded to reduce the possibility of soil and water contamination.	C	The mine has developed a service workshop area, and the area is bunded to ensure less contamination.
b)	Irrespective of the nature of a spillage (whether major or minor), all spillages must be cleaned up as soon as they occur.	C	In the event of a spillage, the activity is ceased immediately, the incident report to the responsible head of department and logged on the Enablon system. The Environmental Coordinator is also notified of the incident. When safe to do so, and as soon as possible, the spillage is cleaned. Spillages of hazardous substances, including leakages from vehicles and machinery, are managed according to the Goedehoop Petroleum and Chemical Product Spill and Control Procedure. The procedure mentioned above includes measures for containment, clean-up and reporting of spillages.
c)	Spillage of petrochemical products must be avoided. In the case of accidental spillage, contaminated soil must be removed for bioremediation or disposed of at a facility for the substance concerned. Disturbed land must be rehabilitated and seeded with vegetation seed naturally occurring on site.	C	In the event of a spillage, the activity is ceased immediately, the incident report to the responsible head of department and logged on the Enablon system. The Environmental Coordinator is also notified of the incident. When safe to do so, and as soon as possible, the spillage is cleaned. Spillages of hazardous substances, including leakages from vehicles and machinery, are managed according to the Goedehoop Petroleum and Chemical Product Spill and Control

EA Ref No'	Condition	Compliance	Finding
			Procedure. The procedure mentioned above includes measures for containment, clean-up and reporting of spillages.
8.2.1.13 Fire prevention and management			
a)	Fire extinguishers that are in good working conditions must be made available at all times for their usage during the occurrence of accidental fires.	C	Fire extinguishers are made available in strategic locations across the mine. This was conformed through site observation.
b)	Workers must be adequately trained in the handling of firefighting equipment	C	As part of the induction process, training in the use of fire extinguishers is provided, with training records available.
c)	Open fires must strictly be prohibited.	C	Open fires are strictly forbidden on operational areas. No concerns in this regard were noted.
d)	Smoking must be prohibited in the vicinity of flammable substances.	C	Smoking is only permitted in designated areas with signage available indicating such.
e)	Cooking and heating fires must be permitted only in designated area with appropriate safety measures.	C	Cooking fires are only permitted in designated area e.g., offices. Site observation did not reveal any concerns in this regard.
8.2.1.14 Stormwater Management			
a)	Storm water management plan must be developed and implemented on site.	C	The activities are within the existing dirty storm water area. No recommendation applicable
Safety			
a)	Potentially hazardous area must be demarcated with danger tape.	C	No danger tapes are required as the mine has existing safety measures put in place.
b)	Appropriate signage must be placed to caution employees and contractors not to attempt to enter certain structures without being authorised.	C	Signage was erected throughout the mine, at all different sections of the mine.
a)	An Emergency Response Plan should be available for accidental spills and firefighting during both construction and operation of the project.	C	Spillages of hazardous substances, including leakages from vehicles and machinery, are managed according to the Goedeheop Petroleum and Chemical Product Spill and Control Procedure. The

EA Ref No'	Condition	Compliance	Finding
			procedure mentioned above includes measures for containment, clean-up and reporting of spillages. A firefighting team is available at Goedehoop Colliery. The fire team is also adequately trained in firefighting practices with certificates of firefighting training available.
b)	In the event of emergency, the holder must notify the department within 24hrs, and contact relevant emergency services in the area.	C	No emergencies that required reporting to the department and relevant emergency services occurred during the audit period.
c)	All significant pollution incidents must be reported to this Department within forty-eight (48) hours of occurrences.	C	No significant pollution incidents that required reporting to the department occurred during the audit period.
a)	The National Environmental Management Act, 1998 (Act 107 of 1998), with particular reference to the principles in chapter 2 of the said Act.	C	The mine is aware of the Duty of Care as provided for in terms of section 28 of the NEMA as well as section 19 of the NWA.
b)	The National Water Act, 1998 (Act 36 of 1998), with particular reference to the sections pertaining to mining in the proximity of dams and their catchments areas, rivers, marshes, streams, pans and other water courses.	C	The mine is aware of the Duty of Care as provided for in terms of section 28 of the NEMA as well as section 19 of the NWA.
c)	The issuance of this authorisation does not exempt the licence holder from compliance with any other legislation including Section 40 of the National Water Act, 1998 (Act 36 of 1998).	C	This condition is noted by Goedehoop Colliery. No unlawful activities are undertaken on site.
d)	The National Environmental Management Air Quality Act (Act 36 of 2004), with particular reference to the sections pertaining to the liberation of dust, and other emissions, created by prospecting activities, into the atmosphere	C	The mine has put in place dust suppression measures to prevent dust emissions. The mine is aware of their responsibility to reduce any emissions.

EA Ref No'	Condition	Compliance	Finding
e)	The Conservation of Agriculture Resources Act, 1983 (Act 43 of 1983), with particular references to the sections pertaining to soil conservation.	C	This condition is noted by Goedehoop Colliery. The mine ensures that mining activities are kept within the disturbed areas. It has also put in place a rehabilitation plan that encourages rehabilitation of the environment to its near state.
f)	The National Heritage Resources Act, 1989 (Act No 25 of 1999), with particular reference to the protection of all historical and pre-historical cultural remains.	C	This condition is noted by Goedehoop Colliery. The mine is aware of the importance of heritage object protection.
g)	The Mine Health and Safety Act, 1996 (Act No 25 of 1999), with particular reference to the protection of all historical and pre-historical cultural remains.	C	This condition is noted by Goedehoop Colliery. The mine has put in place health safety measures to ensure that health and safety incidents are reduced to none.
h)	All provisions of the Occupations Health and Safety Act, 1993 (Act No 85 of 1993) and any other applicable legislation must be adhered to by the holder of this Authorisation	C	This condition is noted by Goedehoop Colliery. The mine has put in place health safety measures to ensure that health and safety incidents are reduced to none.
i)	The National Environmental Management: Waste Act (Act No. 59 of 2008)	C	This condition is noted by Goedehoop Colliery. The mine is ensuring that the waste management practices are adhered to. The mine ensures that they separate the waste and ensures waste is disposed of at registered landfills.
a)	The competent authority shall not be held responsible for any damages or losses suffered by the holder or his/her successor in title in any instance where reclamation/construction or operation subsequent to construction are to be temporarily or permanently stopped for reasons of non-compliance by the holder with conditions of approval as set out in the document or any other subsequent document emanating from	N/A	This condition is noted by Goedehoop Colliery

EA Ref No'	Condition	Compliance	Finding
	Authorisation. The holder shall be responsible for all costs necessary to comply with the above condition unless otherwise specified.		
b)	Any complaint from the public during the life of mine must be attended to by the holder of this Authorisation as soon as possible to the satisfaction of parties concerned.	C	All complaints received by the mine are loaded onto the Enablon system and assigned to the responsible person.
c)	The contractor must ensure that serviceable ablution facilities are available for employees. It is the responsibility of the holder of the Authorisation to see to it that this condition is adhered to.	C	No additional ablution facilities are currently required as the existing ablution facilities at the contractor office and workshop area is being used
a)	A copy of an Environmental Authorisation and Environmental Management Programme must always be available on site so to monitor compliance with conditions outlined in both the documents. Both documents must be used as on-site reference document during the life of mine.	C	The mine keeps the EAs, EMPs and other permits/licenses on site.
b)	The Environmental Management Programme prepared by Geovicon Environmental (Pty) Ltd (attached to the EIA Report) must be adhered to during the life of mine.	C	It is the responsibility of the Environmental Coordinator to ensure compliance to the provision of the EMP. Compliance is assessed during the weekly inspections, annual internal audits and annual external audits.
c)	All duties and responsibilities as outlined in the Environmental Management Programme attached are binding throughout the life of the mine.	C	This condition is noted by Goedehoop Colliery.
d)	Any proposed amendments to the Environmental Management Programme (as a result of this authorisation or otherwise) must be submitted in	C	This condition is noted by Goedehoop Colliery.

EA Ref No'	Condition	Compliance	Finding
	writing to this Department for approval prior to the amendment being implemented. On approval of the proposed amendment the EMP must be accordingly amended and adhered to.		
a)	An Environmental Control Officer must be appointed, who will monitor and ensure compliance and correct implementation of all mitigation measures and provisions as stipulated in the Environmental Authorisation and Environmental Management Programme, prior to any commencement of mining activities on site.	N/A	This condition is noted by Goedehoop Colliery. The mine is currently not undertaking any construction.
b)	The Environmental Control Officer appointed must monitor the construction of the infrastructure to ensure that the layout plans are in accordance to the designs and record important finding of the site inspection.	N/A	This condition is noted by Goedehoop Colliery. The mine is currently not undertaking any construction.
c)	The Environmental Control Officer must also monitor the implementation of specific elements of the Environmental Management Programme by contractors.	N/A	This condition is noted by Goedehoop Colliery. The mine is currently not undertaking any construction.
d)	All duties and responsibilities as outlined in the Environmental Management Programme attached are binding throughout the life of project/mine.	C	This condition is noted by Goedehoop Colliery.
a)	The commissioning and decommissioning of individual activity within the overall listed mining activity must take place within the phases and timeframes as set out in the EMPR.	N/A	This condition refers to decommissioning and closure activities that are not yet applicable

EA Ref No'	Condition	Compliance	Finding
b)	The application for closure indicated above must be submitted together with all relevant documents as indicated in Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended.	N/A	This condition refers to decommissioning and closure activities that are not yet applicable
c)	All mitigation measures for the decommissioning phase, as outlined in the EA. The holder of EA must apply for a closure certificate in terms of Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended within 180 days of occurrence of lapsing, abandonment, cancellation, cessation, relinquishment and completion of the operation.	N/A	This condition refers to decommissioning and closure activities that are not yet applicable
a)	This Department reserves the right to monitor and audit the activity to ensure compliance with legislation and the conditions stipulated in this authorisation	N/A	This condition is noted by Goedehoop Colliery.
b)	It is the holder of this Authorisation responsibility to ensure that an ongoing management and monitoring of the impacts of the activity on the environment throughout the life of the mine is put into practice.	C	This condition has been noted by Goedehoop Colliery. The mine ensures that impacts on the environment are minimized or avoided.
c)	Water monitoring The company must implement ground water monitoring on quarterly basis in order to quantify impacts on ground water resources during construction, operation and decommissioning phases	C	Water monitoring at Goedehoop Colliery is undertaken as part of the Water Management Procedure. Surface water and groundwater monitoring are undertaken on a monthly and quarterly basis, respectively.

EA Ref No'	Condition	Compliance	Finding
	Early warning leachate detection system, seepage interception trenches as well as controls shall be put in place to minimize the impacts of pollution and to allow timely control of contamination incidents	N/A	The construction of the Bank 2 Co-disposal Facility expansion has not yet commenced.
	In the event that the ground water and downstream users are affected by migration of pollution from the mine residue deposits, Thungela Operations (Pty) Ltd, Bank Colliery, shall compensate such affected water users with portable water as directed by the responsible authority	C	This condition is noted by Goedeheop Colliery.
	The groundwater monitoring (quality and quantity) must be extended to cover shallow monitoring borehole adjacent to the existing ones to monitor.	C	This condition is note by Goedeheop Colliery. Groundwater is monitored monthly.
	The effects of mine residue deposits facility on the shallow aquifer	C	The effects of the mine residue deposits is included in the groundwater monitoring report.
	The applicant must develop groundwater remediation plan to ensure that the corrective measures are implemented for identified pollution. The plan must be submitted to the Department of Water and Sanitation for approval.	C	Thungela Operations Proprietary Limited has applied for an integrated water use license for the Bank 2 MRD Expansion project. Part of the application included the development of a groundwater management plan for managing any pollution from the expansion project.
d)	Detection monitoring Monitoring for groundwater quality must be considered for variables listed as per the EIAr on quarterly basis or such frequency as may be determined by the responsible authority.	C	Water monitoring at Goedeheop Colliery is undertaken as part of the Water Management Procedure. Surface water and groundwater monitoring are undertaken on a monthly and quarterly basis, respectively.
e)	Investigation monitoring	C	This condition is noted by Goedeheop Colliery.

EA Ref No'	Condition	Compliance	Finding
	If, in the opinion of the responsible authority, a water quality variable listed under the detection monitoring programme, shows an increasing trend, the licence holder shall initiate a monthly monitoring programme until such time that the variable is within acceptable limits confirmed by the responsible authority.		
	Methods of analysis - The licence Holder shall carry out all tests in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS, referred to in the standards act, 2008 (Act 08 of 2008), to analyze the samples taken under the monitoring programme. - The licence holder shall only use another method of analysis if written proof that the method is at least equivalent to the SABS method and is confirmed by the responsible authority.	C	Goedeheop Colliery uses Aquatiko for all water quality analysis. The laboratory is a SANAS accredited facility (Facility Accreditation Number: T0685), with all tests carried out in accordance to prescribed methods.
8.4 Recording and reporting to the department			
Auditing			
	Audit and inspections The responsible authority reserves the right to audit and /or inspect the site at any time and at such a frequency as the responsible authority may decide, or to have the site audited or inspected.	C	This condition is noted by Goedeheop Colliery.

EA Ref No'	Condition	Compliance	Finding
	The licence holder must make any records or documentation available to the responsible authority upon request, as well as any other information the responsible authority may require.		
Reporting			
	Reporting of incidents The licence holder must, within 24 hours, notify the responsible authority of the occurrence or detection of any incident on the site which has the potential to cause or has caused water pollution.	C	No reportable incidents occurred at the Bank 2 MRD reclamation project during the audit period.
	The licence holder must, within 14 days, or a shorter period of time, if specified by the responsible authority, from the occurrence or detection of any incident to the responsible authority of measures taken to Correct the impact resulting from the incident Prevent the incident from causing any further impacts, Prevention a recurrence of a similar incident	C	No reportable incidents occurred at the Bank 2 MRD reclamation project during the audit period.
	In the event that measures have not been implemented within 21 days to address impacts caused by the incident or measures which have been implemented are inadequate, the responsible authority may implement the necessary measures at the cost and risk of the licence holder.	C	No reportable incidents occurred at the Bank 2 MRD reclamation project during the audit period.

EA Ref No'	Condition	Compliance	Finding
	Other reports The information required in terms of water monitoring must be reported to the responsible authority in a yearly report. The information must also be included into a trend report, which must contain a graphical presentation of all monitoring results obtained previously, as well as an interpretation and discussion of the reports of each monitoring occasion.	C	A surface water and groundwater monitoring are undertaken on a monthly and quarterly basis, respectively with quarterly and annual reports submitted to the DWS.
	The licence holder must submit a written report to the responsible authority regarding any deviations from plans described in this authorisation and must obtain written permission from the responsible authority before such deviations may be implemented.	C	This condition has been noted by Goedehoop Colliery. No changes to the project description have occurred.
	The authorisation holder must submit annual an environmental audit report during the operation of the activity, unless otherwise requested by the department. The audit report must convey the following: - The date in which the audit was carried out, - The outcome of the audit, in relation to the conditions stipulated in the environmental authorisation and the EMPr as well as the actions taken to mitigate environmental impacts on site. - Records of monitoring and/or auditing must be made available for inspection to this	C	No changes to the project description have occurred. The environmental audits are undertaken annually on this environmental authorisation and the accompanying approved EMPr. The outcome of the audit and the date on which the audit was undertaken is included in this report.

EA Ref No'	Condition	Compliance	Finding
	Department and any other relevant authority inspecting the development activities. - Records relating to compliance and non-compliance with the conditions of this authorisation must be kept in good order. Such records shall be made available to this Department within seven (7) days of receipt of a written request by the Department. Environmental compliance will further be monitored through complaints received from the public. - All records relating to the implementation of the Environmental Management Programme must be kept in the office where it is safe and can be retrievable.		
8.5 Non-Compliance			
a)	In the event of non-compliance by any contractor during the construction/operation of the authorised activity, the holder of this Authorisation will be liable.	N/A	This condition is noted by Goedehoop Colliery.
b)	The holder shall be responsible for all costs necessary to comply with the above conditions unless otherwise specified.	N/A	This condition is noted by Goedehoop Colliery.
c)	The holder must in the event of non-compliance with any condition of this Authorisation inform the Regional Manager of Mpumalanga region of this Department, in writing, within forty-eight (48) hours.	C	The mine takes note of this condition. Non-compliances findings were identified during auditing of this environmental authorisation.

EA Ref No'	Condition	Compliance	Finding
d)	Noncompliance to this authorisation is an offence as provided for in terms of the National Environmental Management Act, 1998, Section 49(a) and Regulation 48. Any conviction of such offence may result in Section 49(a) being enforced.	N/A	This condition is noted by Goedehoop Colliery.
Appeal of Authorisation			
	The holder of the authorization must notify every registered interested and affected party, in writing and within fourteen days of receiving the Department's decision. The notification must- - Specify the date on which the Authorization was issued. - Inform the registered interested and affected parties of the appeal procedure provided for in Chapter 2 of the National Appeal Regulations of 2014. - Advise the interested and affected parties that a copy of the Authorization and reasons for the decision will be furnished on request. - An appeal against the decision must be lodged in terms of Chapter 2 of the National Appeal Regulations of 2014.	N/A	This condition is noted by Goedehoop Colliery.

TABLE 7: AMENDED EMPR ENVIRONMENTAL AUTHORISATION FOR BANK COLLIERY NORTH, REF: MP 30/5/1/2/3/2/1/ (143) EM.

EA Ref No'	Condition	Compliance	Finding	Recommendations
8.1 Standard Condition				
8.1.1.	The company must adhere to the amended EMPR submitted to this office on the 25th of May 2021.	C	The mine adheres to the amended EMPr by conducting environmental audits.	
8.1.2.	The company must conduct an annual internal and external environmental performance audit and submit the report to this office (this should be for the whole mine).	C	The mine conducts internal audits and appoints external auditors. For this audit period, NTC was appointed to conduct an external audit.	
8.1.3.	All recommendations in the specialist reports must be adhered to.	C	The mine adheres to the recommendations by conducting environmental audits.	
8.1.4.	All comments and recommendations from other state Departments must be adhered to.	C	This condition is noted by Goedehoop Colliery.	
8.1.5.	Authorisation of the activity is subject to the conditions contained in this Authorisation, which forms part of the Environmental Authorisation and are binding on the holder of the Authorisation.	C	This condition is noted by Goedehoop Colliery.	
8.1.6.	The holder of the Authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-	C	This condition is noted by Goedehoop Colliery.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
	contractor, employee or person rendering a service to the holder of the Authorisation.			
8.1.7.	Any changes to, or deviations from, the project description set out in this Authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the Authorisation to apply for further Authorisation in terms of the Regulations.	C	The project description that has been authorised remain unchanged. The client is aware that a process of authorisation must be undertaken if changes occur.	
8.1.8.	Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, including the transfer of this authorization, the applicant must in writing notify the Regional Manager of this Department, within fourteen (14) days of the above specified change.	C	Mine personnel confirmed that no changes have occurred that require notification of the department.	
8.1.9.	A copy of this authorisation must be kept on site. The Authorisation must be produced to any Governmental official(s) who may requests to see it for inspection purposes and must be made available to the contractor(s) /Subcontractor(s) authorised to undertake to undertake work at the property.	C	The environmental authorisation is kept at the mine's Environmental Department in both electronic and hard copy format.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
8.1.10.	This authorization does not negate the holder of the Authorisation's responsible to comply with any other statutory requirements that may be applicable to the undertaking of the activity	C	This condition is noted by Goedehoop Colliery.	
8.1.11.	After an appeal period has expired and no good course to extent the appeal period has been submitted in accordance with Chapter 2 of the National Appeal Regulations of 2014, a thirty (30) day-written notice must be given to the Department that the activity will commence. Commencement for purpose of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.	N/A	No construction activities that were associated with the EMP amendment; therefore, this condition is not applicable	
8.2 Specific conditions				
8.2.1 Commissioning of the activity				
8.2.1.1.	This Authorisation is hereby solely granted for the following: a. Inclusion of risk, their significance and mitigation measures related to the wetland areas: During the initial impact assessment, a detailed sensitive landscape assessment was not conducted This has therefore resulted in the approved EMPR not having sufficiently identified risk and management measures	N/A	This condition is noted by Goedehoop Colliery.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
	related to sensitive landscape occurring in the vicinity of Bank Colliery operation. A detailed sensitive landscape assessment was conducted in 2016, which assessed and identified all risk on wetlands associated with the mine and how such risk can be managed. This assessment was used to support this amendment application. The amendment will be undertaken to ensure that the above risk and their management measures are included in the mine's approved EMPR.			
	a. Bank 5 mineral residue deposit facility: This facility was rehabilitated in 2011, which included the removal of all slurry spillages along the Bank Spruit. The above rehabilitation was aimed at ensuring that impacts from the facility, which include the concentration of the ground and surface water near the facility from facility seepage water, are managed. Water monitoring around the facility has however indicated that no significant water quality improvement in the water resources surrounding the MRD facility has resulted since its rehabilitation. Due to the above situation and the need to ensure remediation of latent and residual environmental impacts from the MRD facility, the company has undertaken investigations on measures that must be undertaken to ensure the remediation of the	N/A	This condition is noted by Goedehoop Colliery.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
	impacts from the MRD facility. Based on the outcome of the investigations, two feasible treatment options were identified which			
8.2.1.2	The activity may not commence without the necessary permits/licenses/approvals and/or service agreements, where it is relevant, from or with the relevant regulatory authorities whether national, provincial or local.	N/A	This condition is noted by Goedehoop Colliery.	
8.2.1.3	The company must apply the principle of best practicable environmental option for all technologies used/implemented during the project.	N/A	This condition is noted by Goedehoop Colliery.	
8.2.1.4 Pre-Construction Phase				
a)	The Environmental Control Officer (ECO) must monitor the activities and also monitor compliance with conditions of the EA and the submitted amended EMPr.	N/A	The mine is not undertaking any construction activities; therefore, this condition is not applicable. .	
b)	In order to ensure safety, all employees must be given the necessary personnel protective equipment (PPE).	C	It was confirmed through site verification that all employees must be given the necessary personnel protective equipment.	
c)	Appropriate notification sign must be erected at all sites affected by this amendment warning the	C	The mine has put in place safety signs on site to notify of potential hazards on sites.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
	public (residents, visitors etc.) about the hazards that may occur.			
d)	If any soil contamination is noted at any phase of the proposed activity (ies), the contaminated soil must be removed to a licensed waste disposal facility and the site must be rehabilitated to the satisfaction of this Department and Department of Water and Sanitation. The opportunity for the onsite remediation and re-use of contaminated soil must be investigated prior to the disposal and this Department must be informed in this regard.	C	According to the environmental incident reports, no soil contamination occurred during the auditing period.	
8.2.1.5 Access Roads and Traffic Impact				
a)	Existing roads and the authorized roads to be established as per the initial EA and this amendment must be used to relocate the dragline.	N/A	This condition is not applicable to the EMPr amendment activities.	
b)	Necessary signage and traffic measures must be implemented for safety of other road users regarding the diversion of the main roads (if applicable.)	N/A	The mine will not divert the main roads, the condition is not applicable to the EMPr amendment activities.	
c)	Necessary signage and traffic measures must be implemented for safe and convenient access to the site from adjacent roads.	C	It was verified during site visit that traffic signage and measures were implemented for safe and convenient access to the site from adjacent roads.	
d)	Rehabilitation must be conducted simultaneously with the dragline walk. Not more than 500m of the	N/A	This condition is not applicable to the EMPr amendment activities.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
	disturbed area must be left rehabilitated during the dragline walk.			
e)	Access roads must be well maintained throughout the mining operation	C	It was verified during the site visit that road are well maintained.	
8.2.1.6 Air Quality Management				
a)	Proper measures must be put in place to suppress dust in order to minimize nuisance conditions.	C	Sprayers and water tankers are used for dust suppression.	
b)	A speed restriction of 40km/h must be enforced and monitored on site for all mining vehicles	C	A speed limit of 30 km/h is enforced at the mine. Speed restriction signs are erected on the haul roads and at the co-disposal facility. A system is installed at the mine's bakkies, they are tagged to ensure the speed in not exceeded.	
8.2.1.7 Noise				
a)	Activities must be limited to normal working hours.	C	The mine indicated that the amendment activities were limited to normal workings hours.	
b)	Mine vehicles must be fitted with standard silencers prior to beginning of construction.	N/A	No construction activities were undertaken during the audit.	
8.2.1.8 Erosion control measures				
a)	All soil surfaces compacted as a result of mining/construction activities must be ripped, and imported materials must be removed.	C	It was verified during site visit that soil surfaces were well rehabilitated.	
b)	Any erosion channel developed must be restored to a proper condition	C	No erosion channels were noted during site visit	
8.2.1.19 Excavation activities				
a)	Topsoil must be stripped and stockpiled prior to excavation in a designated area.	N/A	No activities associated with the expansion that requiring topsoil stripping were conducted.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
b)	Under no circumstances should material stockpiles be disposed of outside the boundary of the mining area.	N/A	This condition is noted by Goedehoop Colliery.	
8.2.1.14 Waste management				
a)	General waste must be kept in containers which are wind and scavenger proof and disposed of at a permitted landfill site. No temporary dumping and littering of waste is allowed along the dragline route.	C	Waste is managed properly on site. The mine encourages minimization of waste.	
b)	No waste must be disposed of through burying and burning.	C	No waste is burned or buried on site. Waste is disposed of at a licensed landfill. Proof for this condition was provided.	
c)	All hazardous waste must be disposed of at an official registered site or be removed by registered hazardous waste contractors.	C	All hazardous is properly stored on site and disposed of at a licensed landfill.	
d)	An emergency preparedness plan to address any pollution incidents (e.i such as oil spillage etc) that occur on site must be developed (along the dragline walk route).	C	The mine has developed an incident procedure that includes an emergency preparedness plan to ensure that all incidents are properly dealt with and swiftly.	
8.2.12 Surface and groundwater contamination must be prevented and/or mitigated by implementation of the following conditions				
a)	Mine vehicles that will be used as support to the dragline relocation must not be refuelled on bare ground. Specific areas must be demarcated for fuelling, workshop services and parking areas and such area must be bunded to reduce the possibility of soil and water contamination.	N/A	This condition is not applicable to the EMP amendment activities.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
b)	Irrespective of the nature of a spillage (whether major or minor), all spillages must be cleaned up as soon as they occur.	C	The mine has developed a spill procedure and has proven to respond swiftly on the issue. Responsible person is assigned, to ensure that such issues are dealt with properly.	
c)	Spillage of petrochemical products must be avoided. In the case of accidental spillage, contaminated soil must be removed for bioremediation or disposed of at a facility for the substance concerned. Disturbed land must be rehabilitated and seeded with vegetation seed naturally occurring on site...	C	In the event of a spillage, the activity is ceased immediately, the incident report to the responsible head of department and logged on the Enablon system.	
8.2.1.13 Fire prevention and management				
a)	Fire extinguishers that are in good working conditions must be made available at all times for their usage during the occurrence of accidental fires.	C	Fire extinguishers are made available in strategic location across the mine. This was conformed through site observation.	
b)	Workers must be adequately trained in the handling of firefighting equipment	C	As part of the induction process, training in the use of fire extinguishers is provided, with training records available.	
c)	Open fires must strictly be prohibited.	C	Open fires are strictly forbidden on operational areas. No open fire was observed during the audit.	
d)	Smoking must be prohibited in the vicinity of flammable substances.	C	Smoking is only permitted in designated areas with signage available indicating such.	
e)	Cooking and heating fires must be permitted only in designated area with appropriate safety measures.	C	Cooking fires are only permitted in designated area e.g., offices. Site observation did not reveal any concerns in this regard.	
8.2.1.15 Safety				
a)	Potentially hazardous area must be demarcated with danger tape.	N/A	No construction activities that were associated with the EMPr amendment; therefore, this condition is not applicable.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
b)	Appropriate signage must be placed to caution employees and contractors not to attempt to enter certain structures without being authorised.	N/A	No construction activities that were associated with the EMPr amendment; therefore, this condition is not applicable.	
8.2.1.16 Emergency Response Plan				
a)	An Emergency Response Plan should be available for accidental spills and firefighting during both construction and operation of the project.	C	Spillages of hazardous substances, including leakages from vehicles and machinery, are managed according to the Goedehoop Petroleum and Chemical Product Spill and Control Procedure.	
b)	In the event of emergency, the holder must notify the department within 24hrs, and contact relevant emergency services in the area.	N/A	No emergencies that required reporting to the department and relevant emergency services occurred during audit period.	
c)	All significant pollution incidents must be reported to this Department within forty-eight (48) hours of occurrences.	N/A	No significant pollution incidents that required reporting to the department occurred during audit period.	
8.2.1.18 Compliance with other legislation				
a)	The National Environmental Management Act, 1998 (Act 107 of 1998), with particular reference to the principles in chapter 2 of the said Act.	C	This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.	
b)	The National Water Act, 1998 (Act 36 of 1998), with particular reference to the sections pertaining to any activity in the proximity of dams and their catchments areas, rivers, marshes, streams, pans and other water courses.	C	This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.	
c)	The issuance of this authorization does not exempt the license holder from compliance with any other legislation including Section 40 of the National Water Act, 1998 (Act 36 of 1998).	C	This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
d)	The National Environmental Management Air Quality Act (Act 36 of 2004), with particular reference to the sections pertaining to the liberation of dust, and other emissions, created by mining related activities (stockpile), into the atmosphere.	C		This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.
e)	The Conservation of Agriculture Resources Act, 1983 (Act 43 of 1983), with particular references to the sections pertaining to soil conservation.	C		This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.
f)	The National Heritage Resources Act, 1989 (Act No 25 of 1999), with particular reference to the protection of all historical and pre-historical cultural remains.	C		This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.
g)	The Mine Health and Safety Act, 1996 (Act 29 of 1996) in conjunction with the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), with particular reference to those sections and regulations pertaining to health and safety at mines; mining within 100 m from structures (silos), that must be protected; as well as those sections pertaining to rehabilitation of the surface (in this case the dragline relocation route).	C		This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.
h)	All provisions of the Occupational Health and Safety Act, 1993 (Act No.85 of 1993) and any other applicable legislation must be adhered to by the holder of this Authorisation.	C		This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.

EA Ref No'	Condition	Compliance	Finding	Recommendations
i)	The National Environmental Management: Waste Act (Act No. 59 of 2008)	C	This condition is noted by Goedehoop Colliery. The mine is not undertaking any activities without an authorisation, and it is complying with this legislation.	
8.2.1.19 Liability of the holder of this Authorisation				
a)	The competent authority shall not be held responsible for any damages or losses suffered by the holder or his/her successor in title in any instance where reclamation/ construction or operation subsequent to the operation being temporarily or permanently stopped for reasons of non-compliance by the holder with conditions of approval as set out in the document or any other subsequent document emanating from this Authorisation. The holder shall be responsible for all the costs necessary to comply with the above condition unless otherwise specified.	N/A	This condition has been noted by Goedehoop Colliery. .	
b)	Any complaint from the public during the period of the dragline walk must be attended to by the holder of this Authorisation as soon as possible to the satisfaction of parties concerned.	N/A	This condition is not applicable to the EMPr amendment activities.	
c)	The holder and the contractor must ensure that serviceable ablution facilities are available for employees.	N/A	No construction activities have been undertaken on site.	
8.2.2 Management of the activity				
a)	A copy of an EA amended EMPr, and all other reports associated with this application must always be available on site so as to monitor	C	The mine all EAs, EMPrs and permits/licenses in both soft and hard copies on site.	

EA Ref No'	Condition	Compliance	Finding	Recommendations
	compliance with conditions outlined in both the documents. Both documents must be used as on-site reference document during the life of mine.			
b)	All duties and responsibilities as outlined in this EA are binding throughout the life of the mine.	N/A	This condition has been noted by Goedehoop Colliery. .	
c)	Any proposed amendments to the amended EMPr (as a result of this authorisation or otherwise) must be submitted in writing to this Department for approval prior to the amendment being implemented. On approval of the proposed amendment the EMP must be accordingly amended and adhered to.	N/A	This condition has been noted by Goedehoop Colliery. .	

7. Deliberations

7.1. Adequacy and compliance of the proposed Goedehoop Colliery Environmental Management Programmes

Goedehoop North Colliery Environmental Management Plans were assessed not only for the Goedehoop North Colliery compliance towards the commitments of the respective EMPr, but also assessed for the ability of the measures contained in the EMPr to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the project activities.

7.1.1. Compliance with the proposed Goedehoop Colliery Environmental Management Programme Amended ref: MP 30/5/1/2/2/ 143 MR, dated January 2019 and approved December 2019

The following non-compliances were identified during the audit for the Goedehoop Colliery EMPrs:

- The mine conducts monthly environmental inspections for the entire mine, which include the discard dumps and ROM area. However, the inspection reports do not indicate whether tests are conducted to indicate the stability of the discard dump.
- Hydrocarbon spillages were observed by the shaft workshop. It is understood that the area is bunded and the spillages are contained, however, it is important that the mine avoids any hydrocarbon spillage, as they pose a threat to water courses (run-off) and soil.
- According to the WQR January 2023 – March 2023, S4 records acidic water conditions with high sulphate (SO₄), Mn, Fe and Al concentrations. The elevated sulphates indicate seepage from the discard dump.
- The mine did not provide proof of control of alien vegetation and weed species. The mine must provide proof of control of alien vegetation and weed species to verify compliance.
- The mine did not provide any engineering audit report during the audit. It is, therefore, not verified whether trenches have sufficient capacity.
- No proof of ABA testing was provided during the audit.
- There is no indication of static groundwater level and quality of boreholes within the zone of two kilometres around the mine in the water quality report.
- No proof of local supplier was provided during the audit.

7.1.2. Compliance with the proposed Goedehoop Colliery Environmental Management Programme for Bank 2 mine residue deposit (MRD), ref: (MP) 30/5/1/2/3/2/1/ (143) EM, dated May 2021 and approved October 2021

No non-compliances were identified during the audit period.

7.1.3. Compliance with the proposed Goedehoop Colliery Environmental Management Programme Amended for Bank Colliery North, ref: (MP) 30/5/1/2/2/ 143 MR, dated 13 October 2021;

- There is no indication of static groundwater level and quality of boreholes within the zone of two kilometres around the mine in the water quality report.

7.2. Adequacy and compliance of the Goedehoop Colliery Environmental Authorisations

Based on the assessment of the Goedehoop North Colliery EA stated herein, we are of the opinion that the EA does fully sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the operation of Goedehoop North Colliery. All identified areas for improvement noted, have been provided with recommendations that may facilitate future compliance with the EA commitments and improve on site environmental management.

7.2.1. Compliance with the proposed Greenside Colliery Environmental Authorisation for Bank 2 mine residue deposit (MRD), reclamation of Bank 2 mine residue deposit and associated infrastructures, ref: 30/5/1/2/3/2/1/ (143) EM, dated June 2018.

No non-compliances were identified during the audit period.

7.2.2. Compliance with the proposed Greenside Colliery Environmental Authorisation for Bank Colliery North, Ref: MP 30/5/1/2/3/2/1/ (143) EM.

No non-compliances were identified during the audit period.

8. Conclusion

This environmental audit report was compiled to comply with the relevant legislative requirements specifically the NEMA, with the main objectives to report on the compliance status of the commitments and conditions, as well as the appropriateness and adequacy of the various EMPs and EA's. This audit report will be submitted to the competent authority. within 7 days of submission of this Audit Report to the competent authority (DMRE), Thungela Operations (Pty) Ltd, Goedehoop Colliery, must notify all potential and registered I&APs of the submission, and make this report immediately available to anyone on request and on a publicly accessible website.

It is recommended that Goedehoop Colliery develop action plans to address non-compliances to the EA and EMP commitments, reported in this audit report and the actions be implemented to ensure compliance.

APPENDIX A: Attendance Register

APPENDIX B: PHOTOGRAPHIC EVIDENCE



