



NEW KLEINFONTEIN GOLDMINE (PTY) LTD

(A SUBSIDIARY OF GOLD ONE GROUP LIMITED)

EXTERNAL ENVIRONMENTAL AUDIT REPORT FOR THE HOLFONTein MINE, SPRINGS, GAUTENG

FOR THE PERIOD: FEBRUARY 2022 – MARCH 2024

Prepared for:

NEW KLEINFONTEIN GOLDMINE (PTY) LTD

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**DMRREF NO.: DMR REF. GP30/5/1/2/2(182) MR
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ACRONYMS

DMR / DMRE	Department of Mineral Resources / Department of Mineral Resources and Energy
DWA / DWS	Department of Water Affairs / Department of Water and Sanitation
EA	Environmental Authorisation
EC	Electrical Conductivity
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMPr	Environmental Management Programme
EPRP	Emergency Preparedness and Response Plan
IAP	Interested and Affected Party
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
LOM	Life of Mine
NKGM	New Kleinfontein Gold Mine
NWA	National Water Act
PCD	Pollution Control Dam
ROM	Run of Mine
SANS	South African National Standards
SASS5	South African Scoring System Index
TCTA	Trans Caledon Tunnel Association
TDS	Total Dissolved Solids
TSF	Tailings Storage Facility
TSS	Total Suspended Solids
VEGRAI	Vegetation Response Assessment Index
WRD	Waste Rock Dump
WUL	Water Use Licence

1 GENERAL INFORMATION

1.1 Licence holder

Company	New Kleinfontein Goldmine (Pty) Ltd (NKGM)
Site contacts	Busisiwe Mthembu / Athabile Mrubata
Email address	Busisiwe.Mthembu@gold1.co.za / Athabile.Mrubata@gold1.co.za
Site address	Remaining Extent (RE) of the farm Holfontein IR, City of Ekurhuleni, near Springs, Gauteng Province, South Africa
Physical address	Corner, Cloverfield & Outeniqua Road, Eastvale, Springs, 1560, Gauteng
Responsible Person	Jon Hericourt (Senior Vice President Operations)
Email address	Jon.Hericourt@gold1.co.za

1.2 Independent external auditor

Company	Prime Resources (Pty) Ltd
Physical address	70 - 7 th Avenue, Parktown North, Johannesburg
Postal address	Postnet suite # 002, Private bag x1, Woodhill, 0076
Telephone number	011 447 4888
Fax number	086 604 2219
Email	prime@resources.co.za
Professional affiliations	ECSA SACNASP SAIMM EAPASA IAIAAsa
Date of site visit	26 March 2024
Draft report issued	8 May 2024
Audit finalisation date	29 May 2024

Prime Resources is a specialist environmental consulting firm providing environmental and related services and was established in 2003. Prime Resources was founded by Peter Theron (PrEng, SAIMM), who has over 30 years' experience in the field of environmental science and engineering.

Gené Main (Pr. Sci. Nat. and EASAPA registered), the Project Manager and Principal Scientist for the proposed project, has a M.Sc. (Botany) from the University of the Western Cape and 16 years' experience in the field of environmental science.


Stephen Tarlton is a Senior Environmental Scientist (Pr.Sci.Nat; SACNASP 115011), with an MSc focusing on plant conservation and ecology along with over ten years of consulting experience. He has expertise in environmental authorisations, monitoring and compliance auditing with experience in several fields including large infrastructure, mining and waste management.

1.3 Declaration of independence

As the appointed external auditor, Prime Resources (Pty) Ltd has no other beneficial interest in the Holfontein Project as pertains to the undertaking of this assignment other than fair remuneration in accordance with normal professional environmental consulting practice. The conclusions and opinions expressed in this report are entirely those of Prime Resources and are based wholly upon the information described throughout this report.


I, Stephen Tarlton of Prime Resources (Pty) Ltd, declare that:

- I will act as an independent auditor and that neither myself nor Prime Resources (Pty) Ltd has any business, financial, personal, or other interest in this project other than fair remuneration for undertaking services related to the environmental audit.
- I will undertake the services related to the audit in an objective manner, even if this results in findings and recommendations that are not favourable to our client.
- There are no circumstances that will compromise my objectivity and independence in undertaking this work.
- I have the necessary expertise and experience to conduct this environmental audit, including knowledge of the relevant legislation.
- I have not, and will not, engage in conflicting interests in the undertaking of the audit.
- All information furnished by me for the audit is true and correct at the time of compiling the report.

Signed:	 Stephen Tarlton Date: 8 May April 2024
Role	Auditor
Position	Senior Environmental Scientist
Affiliations	Pr.Sci.Nat. (Env. Sci.) No. 115011

I, Gené Main of Prime Resources (Pty) Ltd, declare that:

- I will act as an independent auditor and that neither myself nor Prime Resources (Pty) Ltd has any business, financial, personal, or other interest in this project other than fair remuneration for undertaking services related to the environmental audit.
- I will undertake the services related to the audit in an objective manner, even if this results in findings and recommendations that are not favourable to our client.
- There are no circumstances that will compromise my objectivity and independence in undertaking this work.
- I have the necessary expertise and experience to conduct this environmental audit, including knowledge of the relevant legislation.
- I have not, and will not, engage in conflicting interests in the undertaking of the audit.
- All information furnished by me for the audit is true and correct at the time of compiling the report.

Signed:	 Gené Main Date: 8 May April 2024
Role	Reviewer
Position	Principal Consultant
Affiliations	Pr.Sci.Nat. (Env. Sci.) No. 400370 EAPASA Registered, No. 1257

1.4 Assumptions, uncertainties, and gaps in knowledge

- The findings recorded in this report are limited to the timeframe during which the audit was undertaken.
- Where insufficient evidence of compliance was provided, the condition was marked as partially or non-compliant until that evidence was produced. Where partial compliance was observed in the preceding audit, those conditions are considered long-standing and rated as non-compliant until fully addressed.
- No monitoring of environmental conditions was undertaken for this audit.

1.5 Disclaimer

Prime Resources has expressed due and diligent care to comprehensively evaluate the compliance of activities and operations undertaken at the project by the Holder with the stated licence-/s, standard-/s or authorisation-/s against which the audit was conducted, for the period under review. It is noted, however, that the audit relies on findings made during a single site inspection, substantiated with information supplied by the Holder for the period under review. It is assumed that all data provided by NKGM is true and correct. The possibility is acknowledged that areas of partial and-/or non-conformance were either not observed during the site inspection or did not come to light from a review of the data provided. The onus lies with those responsible to use the precautionary principle to address potential deviations or non-compliances that were not identified in this report and to implement all legislated and permitted license conditions.

The scope of this audit does not include a comprehensive legal, Occupational Health and Safety, or Mine Health and Safety compliance audit.

2 INTRODUCTION

2.1 Background and location

The Holfontein Project Environmental Impact Assessment (EIA) (including Environmental Management Programme - EMPr) was approved and Environmental Authorisation (EA) issued by the Department of Mineral Resources and Energy (DMRE) on 24 August 2016.

The Holfontein Project is located close to the existing Modder East (ME) Operations in Springs, Ekurhuleni (Figure 1). The purpose of the Holfontein Project is to supplement the drop in production once the New Kleinfontein Goldmine (NKGM) ME operations tonnage profile begins to decline. Holfontein has an existing historical shaft, last mined in the 1940s, and no mining activities are currently occurring on site. No other mining infrastructure is located on site.

The LoM will consist of two years of construction and development, and eight years of gold production. A further period of six months to a year is assumed for decommissioning and closure. After the operations are complete, decommissioning will commence.



Figure 1. Holfontein location

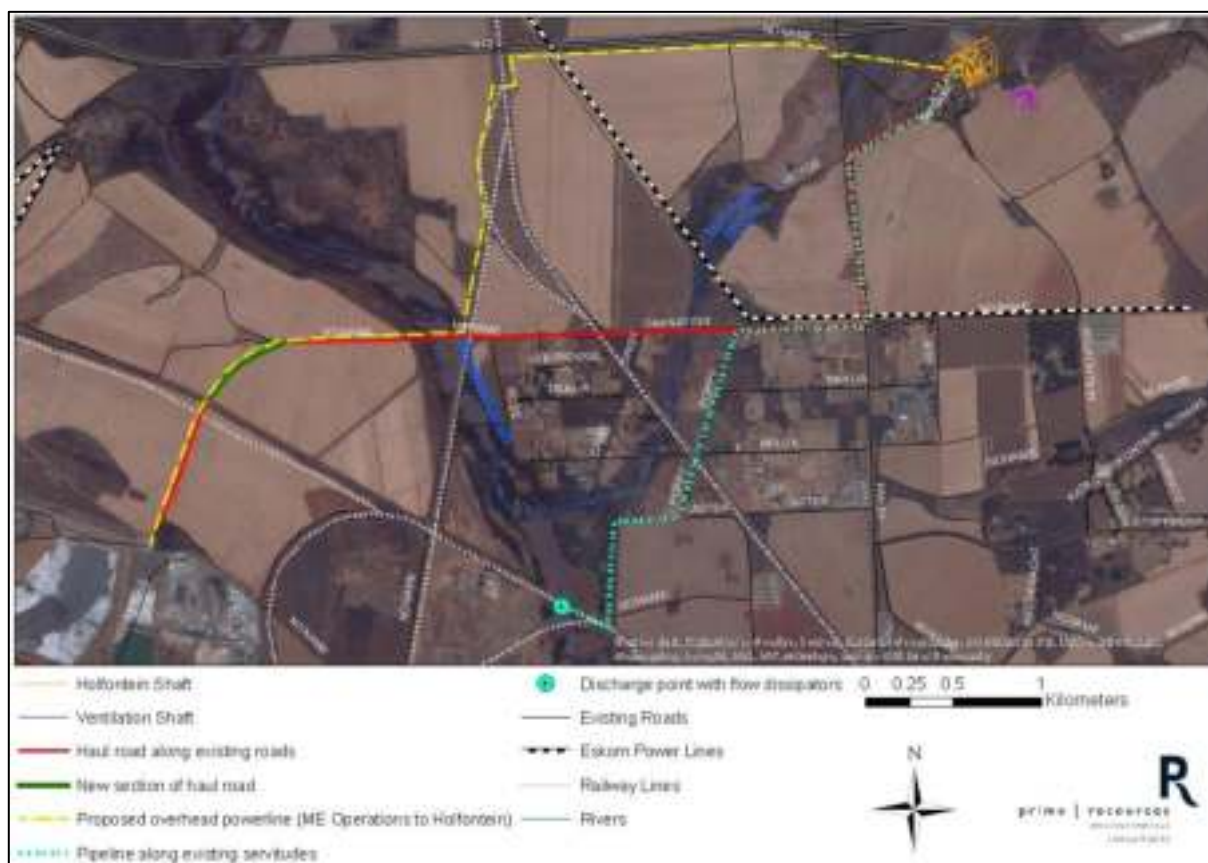


Figure 2. Holfontein preferred final layout

2.2 Infrastructure and activities

2.2.1 Proposed infrastructure and activities

The areas where surface infrastructure and access roads are to be located will be cleared of vegetation and the topsoil stripped and stockpiled for use in rehabilitation and closure and the end of the project life.

The mine will be operated as a section of ME operations with services and support being provided by ME. Primary access will be by means of the re-equipped Holfontein shaft and the construction of a ventilation shaft (Figure 3). Overburden and ore will be hoisted via the shaft and transported to ME operations by road.

Potable water at the containerised office and ablutions will be trucked from ME operations and stored in a potable water storage container. Excess groundwater produced at Holfontein will be pumped to above-ground surface water tanks, after which it will be pumped to a water treatment facility and discharged to the Blesbokspruit via a pipeline (the pipeline is to run within the road reserve). All sludge or brine resulting from the water treatment facility will be transported back to the ME TSF (or as directed by DWS) via road.

A salvage yard, timber yard and laydown area will be constructed on site. There will be a designated area for the temporary storage of waste, which will be collected, separated and disposed of at a licensed landfill facility. The waste storage area will be bunded, have an impermeable surface, have a sump, and will be covered with a roof. The volumes applicable to the identified waste stream will fluctuate with the requirements of the mine. There will be no long-term storage of any waste materials on site.

All dirty water from the dirty water catchment (entire surface infrastructure area) will be diverted to a pollution control dam. Containerised toilets will be provided on surface. A sewage treatment plant will be installed. Sewage treatment plant effluent will be treated in the water treatment facility, if required, prior

to discharge to the Blesbokspruit via a pipeline. All brine will be transported to the ME TSF (or as directed by DWS) via road.

Electrical power will be sourced from ME operations. Two 6 MVA lines, will be constructed between ME operations and the proposed substation building at the Holfontein Project adjacent to the proposed ventilation shaft.

The haul route consists of 3 km of existing gravel road and 3 km of existing tarmac surface. A gravel access road will be constructed from Holfontein Road to the Holfontein shaft area, and a gravel portion of haul road will be constructed in proximity to the ME Operations. The river crossing over the Blesbokspruit and its associated wetland will be upgraded to accommodate haul trucks. A series of culverts will be constructed across the floodplain wetland.

For the operational phase, employees will be sourced from the existing ME operations. No new employment opportunities will be created. Mine employees will be transported by bus from ME operations, where there are existing change rooms etc.

2.2.2 Existing infrastructure and ongoing activities

Murray and Roberts (M&R) is the on-site contractor. The following infrastructure was existing on-site at the time of the audit:

- 2 x winders (one large and a small one for emergencies)
- 2 x winder house
- 1 x temporary headgear
- Containerised lamproom
- Emergency generator (placed on historical concrete hardstand but not bunded)
- Substation connected to Eskom electricity supply.
- Containerised offices
- Containerised ablutions (3 x showers and 3 x toilets) connected to a below ground conservancy tank.
- 2 x chemical toilets
- Workshop built on an existing concrete hardstand with a container for stores.
- Diesel stored in tanks on the ground or bunded using historical infrastructure.
- Chemicals (paint, oil, etc.) in a roofed and fenced area which is not bunded.
- Waste bins for general waste, a skip, and spill kits. (The external contractor BJB Scrap removes the waste from the site - disposal certificates not kept on site).
- Potable water is delivered to site and stored in a tank.
- Lighting is present around the site for use at night.
- Signage was present that prohibits unauthorised entry.
- The area is secured with a fence and security guards requiring sign-in on entry (Appendix 3 Photos 1 and 16).

Activities on site at the time of the audit:

- Dewatering at ~5 ML per day (water level within the shaft was at ~328 m below surface); a second pump had been installed but was not in use at the time of the audit.
- Operating hours are limited to daylight hours.

-
- Refurbishment activities include replacing damaged/ old wood from underground workings with steel supports. Wood brought to surface is checked for radiation before it is removed from site and disposed of or donated to the community for firewood (if free from radiation).
 - Point source noise monitoring is carried out.
 - Training includes inductions and daily safety meetings.

NKGM indicated that the above activities and infrastructure are related only to the dewatering activities for prospecting purposes, and the mining project has not commenced.



Figure 3. Holfontein preferred final layout (1:3 000) (as per EMPr, 2015)

3 LEGAL FRAMEWORK

3.1 NEMA (1998), as amended and EIA Regulations (2014), as amended

The Competent Authority (CA) for this Project is the Department of Mineral Resources and Energy (DMRE), Gauteng Regional Office, regulating in terms of the National Environmental Management Act (No. 107 of 1998), as amended (NEMA) and the 2014 Environmental Impact Assessment (EIA) Regulations (GNR982) as amended.

EIA Regulations 34 to 37 (GNR982 of 2014 as amended) are relevant to the auditing of the Environmental Authorisation (EA) and Environmental Management Programme (EMPr) and are summarised below.

Regulation 34. Auditing of compliance with EA, EMPr and closure plan

- (1) The holder of an EA must, for the period during which the EA, EMPr and closure plan in the case of a closure activity, remain valid –
 - (a) ensure that compliance with the conditions of the EA, EMPr and closure plan, is audited; and
 - (b) submit an environmental audit report (EAR) to the DMRE
- (2) The EAR must –
 - (a) be prepared by an independent person with the relevant environmental auditing expertise
 - (b) provide verifiable findings, in a structured and systematic manner, on –
 - (i) performance against and compliance with the provisions of the EA, EMPr and closure plan in the case of a closure activity; and
 - (ii) the ability of the measures contained in the EMPr and closure plan, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the Table 1; and
 - (c) be conducted and submitted to the CA at intervals as indicated in the EA.
- (3) The EAR must determine –
 - (a) the ability of the EMPr and closure plan to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity on an ongoing basis, and with the closure of the facility; and
 - (b) the level of compliance with the provisions of EA, EMPr and closure plan.
- (4) Where the findings of the EAR indicate –
 - (a) insufficient mitigation of environmental impacts; or
 - (b) insufficient levels of compliance with the EA, EMPr or closure plan;the holder must submit recommendations to amend the EMPr or closure plan in order to rectify the shortcomings identified in the EAR.
- (5) When submitting recommendations, such recommendations must have been subjected to a public participation process, as agreed with the CA and as appropriate to bring the proposed amendment/s to the attention of potential and registered interested and affected parties (IAPs), for approval by the CA.
- (6) Within 7 days of submitting of an EAR to the CA, the holder of an EA must notify all potential and registered IAPs of the submission of that report, and make such report immediately available –
 - (a) to anyone on request; and
 - (b) on a publicly accessible website, where the holder has such a website.
- (7) An EAR must contain all information set out in Appendix 7 to these Regulations.

Table 1. Contents of an Environmental Audit Report (EAR) in terms of Appendix 7 of the EIA Regulations (2014)

Ref	Requirement	Section of report
3(1)(a)	The environmental audit report must contain details of - i. The independent person who prepared the environmental audit report; and ii. The expertise of the independent person that compiled the environmental audit report	Section 1.2 and 1.3
3(1)(b)	A declaration that the independent auditor is independent in a form as may be specified by the competent authority	Section 1.3
3(1)(c)	An indication of the scope of, and the purpose for which, the environmental audit report was prepared	Section 2
3(1)(d)	A description of the methodology adopted in preparing the environmental audit report	Section 4.3
3(1)(e)	An indication of the ability of the EMPr, and where applicable, the closure plan in the case of a closure activity, to i. Sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking and closure of the activity on an ongoing basis ii. Ensure compliance with the provisions of the EA, EMPr, and where applicable, the closure plan	Section 4.5 and 5
3(1)(f)	A description of any assumptions made, and any uncertainties or gaps in knowledge	Section 1.4
3(1)(g)	A description of any consultation process that was undertaken during the course of carrying out the environmental audit report	Section 4.3.2
3(1)(j)	A summary and copies of any comments that were received during any consultation process	Section 4.3.2
3(1)(k)	Any other information requested by the competent authority	NA

Regulation 35. Amendment of EMPr or closure plan as a result of an audit

- (1) The CA must consider the EAR and amended EMPr and closure plan, and approve such amended EMPr and amended closure plan, if it is satisfied that it sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity, or in the case of a closure activity the closure of the facility, and that it has been subjected to an appropriate public participation process.
- (2) Prior to approving an amended EMPr or closure plan, the CA may request such amendments to the EMPr or closure plan as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity or to ensure that the closure plan sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the closure of the facility in the case of a closure activity.

Regulation 36. Other amendments of EMPr or closure plan

- (1) Where an amendment is required to the impact management actions of an EMPr, such amendments may immediately be effected by the holder and reflected in the next EAR submitted as contemplated in the EA and regulation 34.
- (2) Where an amendment to the impact management outcomes or objectives of an EMPr or an amendment of the closure objectives of a closure plan in the case of a closure activity is required before an audit is required in terms of the EA, an EMPr or closure plan may be amended on application by the holder of the EA.

Regulation 37. Amendment of EMPr or closure plan on application by holder of EA

- (1) Where the holder of an EA identifies amendments to the impact management outcomes or objectives of the EMPr or amendments to the closure objectives of the closure plan before an audit is required

in terms of the EA, such holder must notify the CA of its intention to amend the EMPr or closure plan at least 60 days prior to submitting such amendments to the EMPr or closure plan to the CA for approval.

- (2) The holder of the EA must invite comments on the proposed amendments to the impact management outcomes or objectives of the EMPr or amendments to the closure objectives of the closure plan from potential IAPs, including the CA, by using any of the methods provided for in the Act for a period of at least 30 days.
- (3) Reasonable alternative methods, as agreed to by the CA, to invite comments may be used in those instances where a person desires but is unable to participate in the process due to –
 - (a) illiteracy
 - (b) disability, or
 - (c) any other disadvantage.
- (4) The invitation to comment must include an indication that any comments to the proposed amendments must be submitted to the holder of the EA within 30 days of such invitation.
- (5) If no comments are received, the holder of the EA may amend the EMPr or closure plan in accordance with its intention and submit the amended EMPr or closure plan to the CA for approval within 60 days of inviting comments.
- (6) Prior to approving an amended EMPr or closure plan contemplated in sub-regulation (5), the CA may request such amendments to the EMPr or closure plan as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity or to ensure that the closure plan sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the closure of the facility.
- (7) If comments are submitted to the holder of the EA, such holder must submit such comments to the CA, including responses to such comments, together with the proposed amended EMPr or closure plan.
- (8) The CA must, within 30 days of receipt of the information consider such information and issue a decision to approve the amended EMPr or closure plan or not.
- (9) After the CA has reached a decision, the CA must, within 5 days –
 - (a) provide the holder of the EA with its decision, including the amended EMPr or closure plan if the decision was to approve the amended EMPr or closure plan, as well as reasons for the decision
 - (b) draw the attention of the holder of the EA to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations; and
 - (c) instruct the holder of the EA to, within 14 days of the date of the decision, inform the parties who submitted comments on the decision, to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations.

4 ASSESSMENT OF COMPLIANCE

Prime Resources was appointed by NKGGM to conduct the external EA and EMPr compliance audit. According to Regulation 34 of the NEMA EIA Regulations (2014), the environmental audit must be conducted and submitted to the CA at intervals as indicated in the EA. The Holfontein EA requires that an EAR be compiled by an independent specialist and submitted to the DMRE biennially (every two years), as required in terms of Section 24Q of the NEMA.

The closure plan was not audited during this process as the project has not commenced and there are no project changes relevant to the closure plan at this stage. Closure activities have not been applied for or granted as part of the EA.

4.1 Objectives

The EAR is focussed on compliance with measures and conditions of the:

- Environmental Impact Assessment Report and Environmental Management Programme Report for Holfontein Project. August 2016. DMRE reference FS 30/5/1/2/2/1036 MR.
- Environmental Authorisation issued to New Kleinfontein Goldmine on 29 August 2016 in terms of the NEMA as amended, the EIA Regulations, 2014, for activities related to an amendment to a mining right in terms of Section 102 of the MPRDA. EA Ref GP30/5/1/3/2/1(182) EM.

In terms of Appendix 7 of the NEMA EIA Regulations (2014), the EAR must provide recommendations regarding the need to amend the EMPr. The objectives of the EAR are to –

- Report on the level of compliance with the conditions of the EA and the EMPr, and the extent to which the avoidance, management and mitigation measures provided for in the EMPr achieve the objectives and outcomes of the EMPr
- Identify and assess any new impacts and risks
- Evaluate the effectiveness of the EMPr
- Identify shortcomings in the EMPr, and
- Identify the need for any changes to the measures provided for in the EMPr.

4.2 Content and period applicable to this assessment

Table 1 outlines the required information to be provided in an EAR as per Appendix 7 of the EIA Regulations. The audit review period for this assessment is February 2022 to March 2024, the previous audit was compiled in March 2022.

4.3 Methodology

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

- Creation of a checklist of all commitments and conditions indicated in the EMPr and EA
- Consideration of compliance with the commitments and conditions
- Site visit and interviews with mine personnel where necessary to confirm the assessment.

4.3.1 Site visit

A physical site inspection was undertaken on 26 March 2024 by Louise Jones and Bronwyn Grover from Prime Resources, and Athabile Mrubata from NKGGM. Photographs from the site visit can be found in Appendix 3.

4.3.2 Consultation and comments

No consultation with Interested and Affected Parties (IAPs) was undertaken during the process of compiling this Environmental Audit Report (EAR). No comments were therefore received from IAPs for inclusion in the report.

NKGM is aware of consultation requirements set out in EIA Regulations 34.6 and 7 of GNR982 and will make this EAR available for public comment as prescribed.

4.3.3 Information requested by the competent authority

The CA has not requested any specific information (in terms of Section 3.1(k) of Appendix 7 of the EIA Regulations) to be included in this report.

4.4 Rationale for scoring system

The performance of the site is audited in terms of a rating system, with the final score calculated and presented as a percentage. An average compliance score is determined from which the overall compliance percentage is determined.

Where an item is in full compliance with a particular condition, the maximum score is awarded, i.e., 2 / 2 (C). When the site only partially complies with a condition, half of the maximum score is awarded, i.e., 1 / 2 (PC). When the site does not comply with a condition at all, zero points are awarded (NC). If a condition is not pertinent or currently applicable, compliance with that condition will be scored as Not Applicable or Not Audited (NA) and no points are allocated or included in the final score.

All conditions and commitments are valued equally; no weighting has been taken into account. It should be noted that because the project was still in its pre-construction phase, very few management measures and conditions were applicable, effectively assessed, and scored.

An update of the partial and non-compliances identified in the March 2022 EA and EMPr audit is provided in Table 3 and Table 4 respectively.

4.5 Audit findings

Overall compliance in terms of the EA and EMPr is shown in Table 2.

Table 2. Overall compliance in terms of the EA and EMPr

Description	EA	EMPr
Σ Total Compliance Score	98	77
No. Conditions Audited	62	56
Average Compliance Score	1.58	1.38
Compliance Percentage (%)	79%	69%

Partial or non-compliant conditions for the current audit of the EA and EMPr are summarised in Table 5 and Table 6, respectively. Refer to Appendix 1 and 2 for the full compliance audit checklists.

Table 3. Update on previous partial and non-compliances in the EA compliance audit

No.	EA condition	2022	2024	Comments
Site specific EA conditions				
2	The civil engineering designs for the Pollution Control Dam, and Sewerage and Mine Wastewater Treatment Plants (including pipeline outlet) must be approved and a water use authorisation must also be issued by the DWS prior to the commencement of such construction activities.	PC	C	A WUL has been granted by the DWS (DWS Ref. 08/C21D/CI/8500) and a WUL amendment was issued on 18 May 2023. No mining water uses have commenced. Civil engineering designs for the dam were submitted as part of the WUL application. A temporary conservancy tank for sewage was in the process of being installed at the time of the audit to allow for ablutions for the team undertaking dewatering at the site. The treatment and discharge of abstracted groundwater is ongoing as part of the proposed further prospecting activities. Permanent sewage reticulation and water treatment plant still need to be investigated further.
8	Plans with timeframes addressing bullet points 5, 6 and 7 must be submitted to this Department for approval within one year after issuance of this environmental authorisation.	NC	NC	Authorisation was granted in 2016. However, construction has not commenced. It is recommended that this condition be amended so that the Licensee should submit plans prior to the commencement of construction activities on site.
Department standard EA conditions				
1. Scope of Authorisation				
17	1.4 Where any of the holder of the EA contact details change including name of the responsible person, physical or postal address / or telephonic details, the holder of the EA must notify the Department as soon as the new details become known to the holder of the EA.	PC	PC	The contact person on the EA is noted as Evan Cook and the contact email address is Ntsiki.Kgame@gold1.co.za . These contact details (including the addresses) are outdated and the DMRE must be notified of all changes.
5. Reporting to the Department				
79	5.1 The holder of the EA must submit an Environmental Audit Report to this Department biennially and such report must be done by a qualified Environmental Assessment Practitioner and the audit must specify whether conditions of this EA and an approved EMPPr/closure plan are adhered to:	PC	C	This report serves as the second Environmental Audit Report. It covers the period from February 2022 to March 2024.
7. Emergency preparedness plan				
	7.1 The holder of the EA must maintain and implement an emergency preparedness plan and review it bi-annually when conducting audits and after each emergency and or major accident. The plan must, amongst others, include:	-	PC	An Emergency Preparedness and Response Plan (EPRP) is included in the EMPPr, and it is understood that a standalone EPRP has been developed for the site, however it was not provided for review. The EPRP should be in place to address activities being undertaken on site and should be available at the site.
97	7.1.4 Industrial action, and	NC	NC	The EPRP does not address industrial action.
98	7.1.5 Contact details of police, ambulances, and any emergency centre closer to the site	NC	NC	The EPRP does not contain contact details for the local police, ambulance or emergency centre

Table 4. Update on previous partial and non-compliances in the EMPr compliance audit

No.	EMPr commitment	2022	2024	Comments
Wetland management measures				
Construction Phase				
222	No construction activities must commence within 500 m from a wetland prior to authorisation thereof by DWS in the form of an authorised WUL.	PC	C	Construction has not commenced. The Licensee does however have an authorised WUL allowing for construction within 500 m of a wetland.

Table 5. Findings of the 2024 EA compliance audit (reference to partial and non-compliance only)

No.	Condition	2024	Compliance
		Comments / Recommendations	
Site specific EA conditions			
6	Ground stability must be assessed by a qualified specialist for any geological strata with dolomitic aquifers which have been dewatered as a result of the mining activities and provide measures to prevent any sinkhole development or seismic events on such land.	Construction of the mining project has not yet commenced. J.J. Geyser (a Rock Engineer) of Open House Management Solutions provided a Note of Record (June 2018) which concludes that the recommended support methods to be employed will ensure there is no surface subsidence as a result of the activities undertaken by NKGm. Measures to prevent any sinkhole development or seismic events due to dewatering have not been proposed.	PC
8	Plans with timeframes addressing bullet points 5, 6 and 7 must be submitted to this Department for approval within one year after issuance of this environmental authorisation.	Authorisation was granted in 2016. However, construction has not commenced. It is recommended that this condition be amended so that the Licensee should submit plans prior to the commencement of construction activities on site.	NC
10	All materials with lubricants, fuel and hydraulic fluid must be stored in a demarcated area with bund walls to contain spillages and avoid contamination of groundwater.	The mining project has not commenced, however lubricants and fuel for the dewatering project are stored on site in a demarcated area. In several instances there is no bunding for these materials (Appendix 3, Photos 4, 13 and 14). It is recommended that all hazardous substances be stored as per the MSDS and the EA.	PC
Department standard EA conditions			
1. Scope of Authorisation			
1.4	Where any of the holder of the EA contact details change including name of the responsible person, physical or postal address / or telephonic details, the holder of the EA must notify the Department as soon as the new details become known to the holder of the EA.	The contact person on the EA is noted as Evan Cook and the contact email address is Ntsiki.Kgame@gold1.co.za . These contact details (including the addresses) are outdated and the DMRE must be notified of all changes.	PC
3. Commencement of the activity (ies)			
3.2	This EA must be provided to the site operator and the requirements thereof must be made fully known to him or her	M&R has been appointed as the contractor to undertake construction activities for the dewatering project. While the EA and EMPr were not available on site at the time of the audit, it is understood that the Contractor has been made aware of the requirements of the EA. The site operator should have a copy of the EA and EMPr on site.	PC

No.	Condition	2024	Compliance
		Comments / Recommendations	
3.18	Hydraulic fluid or chemicals required during construction must be stored in a concrete lined surface with bund walls and shall be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment. Should any spills occur it should be cleaned immediately by removing spillage together with the polluted solids and dispose it in the authorised disposal site permitted for such waste. The regional office of the Department of Water and Sanitation must be notified within 24 hours of an incident that may pollute surface and underground water resources	Small quantities of hazardous substances were stored on site at the time of the audit and a spill kit was located alongside the hazardous store. The hazardous store had a roof and could be secured however, it was not bunded (Appendix 3, Photo 4). It is recommended that hazardous substances be stored on a concrete lined surface with appropriate bunding.	PC
3.29	The waste storage site must have a firm, impenetrable, chemical resistant floor and a roof to prevent direct sunlight and rain water from getting into contact with the waste.	A skip was present on site containing waste and areas were set aside for scrap / salvage material. These areas were not equipped with floors and roofs to prevent water, rain, and sunlight from coming in contact with waste. All waste should be removed within three months. The final waste storage and handling areas have not been constructed. Adequate waste storage facilities should be constructed.	PC
3.30	The storage of hydrocarbons must have bund walls with adequate capacity to contain the maximum volume that is stored in the area. Uncontaminated storm water must be prevented from coming into contact with the waste and must be diverted away from the storage site.	Several diesel tanks were suspended over a concrete "bund" which would act to contain a spill resulting from tank failure. Other diesel tanks were placed on concrete hardstand (Appendix 3, Photos 13 and 14). It is recommended that all hydrocarbons and hazardous substances be stored within bunds which have adequate capacity (see requirements of SANS 10089).	PC
4. Management of activity (ies)			
4.1	A copy of the EA and EMPr must be kept at the property or on site office where the activity (ies) will be undertaken. The IEA and EMPr must be produced to any authorised officials of the Department who request to see it and must be made available for inspection by any employee or agent of the holder of the IEA who works or undertakes work at the property (ies).	A copy of the EA and EMPr were not available on site at the time of the audit. It is recommended that a hard copy of the EA and EMPr be kept on site for reference.	NC
4.2	The content of the EMPr and its objectives must be made known to all contractors, subcontractors, agent and any other people working on the site, and any updates or amendments to the EMPr must be submitted to the Department for approval.	M&R has been appointed as the contractor to undertake construction activities for the dewatering project. While the EA and EMPr were not available on site at the time of the audit, it is understood that the Contractor has been made aware of the requirements of the EA.	PC
4.11	Only listed activities that are expressly specified in the EMPr that forms part of this EA may be conducted, and additional or new activities not specified herein must be applied for by the holder and authorised by Department before such activities may be commenced with. This condition is also applicable in the case of the amendment, addition, substitution, correction, and removal or updating of any detail in the aforesaid EMPr	Noted. The project description has not changed, only the activities specified in the Annexure 1 of the EA and those detailed in the EMPr are proposed. However, construction activities are currently being undertaken for a dewatering project that has been approved by DWS via a WUL. No additional listed activities have or are expected to occur on site, therefore no amendment application was submitted to the Department. It is recommended however that the Department be notified about the dewatering project.	PC
4.13	The holder of EA must ensure that the name and contact details of the ECO are made available to the Regional Manager within 30 days of commencement. The holder of IEA must also ensure that an ECO is always available on site to ensure	The mining project has not commenced. However, construction is underway for the dewatering project and the name and contact details of the ECO should be made available to the Regional Manager.	PC

No.	Condition	2024	Compliance
		Comments / Recommendations	
	that activity (ies) at all times comply with the issued EA and approved EMPr.		
4.14	The ECO must:		
4.14.1	Keep and maintain a detailed incidents register (including any spillages of fuels, chemicals or other material)	The mining project has not commenced. However, there are preparatory works taking place on site for the dewatering project. Apart from the water quality monitoring undertaken for the dewatering project, no environmental monitoring or reporting is currently taking place. It is recommended that the ECO be appointed and commence monitoring and reporting duties.	PC
4.14.2	Keep a complaint register on site indicating the complaint and how the issues were addressed, what measures were taken and what preventative measures were implemented to avoid re-occurrence of complaints		PC
4.14.3	Keep records relating to monitoring and auditing on site and avail them for inspection to any relevant authorised officials		PC
4.14.4	Keep copies of all environmental reports submitted to the Department		PC
4.14.5	Keep the records of all permits, licences and authorisations required by the operation		PC
4.14.6	Compile a monthly monitoring report and make it available to the Department if requested		PC
6. Site security and access control			
6.2	Weather proof, durable and legible notices in at least three official languages applicable in the area must be displayed at each entrance to the site. These notices must prohibit unauthorised entry and state the hours of operation, the name, address and telephone number of the holder of the EA and the person responsible for the operation of the site	Weatherproof, durable, and legible notices in three official languages were displayed at the entrance to the site prohibiting unauthorised entry. The hours of operation, the name, address, and telephone number of the person responsible for the operation of the site are not included in the signage. It is recommended that the prescribed signage be erected.	PC
7. Emergency preparedness plan			
7.1	The holder of the EA must maintain and implement an emergency preparedness plan and review it bi-annually when conducting audits and after each emergency and or major accident. The plan must, amongst others, include:	An Emergency Preparedness and Response Plan (EPRP) is included in the EMPr and has not been revised. Activities are taking place on site and a standalone EPRP should be in place and reviewed to account for identified risks prior to construction.	PC
7.1.4	Industrial action, and	The EPRP does not address industrial action as the site is not yet operational.	NC
7.1.5	Contact details of police, ambulances, and any emergency centre closer to the site	The EPRP does not contain contact details for the local police, ambulance, or emergency centre.	NC

Table 6. Findings of the 2024 EMPr compliance audit (reference to partial and non-compliance only)

No.	Condition	2024	Compliance
		Comments / Recommendations	
Water management measures			
Construction Phase			
57	Ensure that the water treatment facility is operational to meet DWS water quality specifications before dewatering commences. Measure EC of water to be discharged daily, when EC begins to deteriorate the water treatment facility must be commissioned.	The mining project has not yet been constructed but there is dewatering taking place via a separate WUL, to undertake further prospecting. This water is being monitored regularly. The treatment plant / facilities are not yet in place to be able to treat non-compliant water. It is recommended that the water treatment options as required in the dewatering WUL are available should the water require treatment prior to discharge.	PC
58	Ensure that lay down area/salvage yard, where corroded materials removed from the shaft are to be placed, is fitted with drains to the PCD prior to the commencement of refurbishment.	Salvaged yard material is placed in areas without drains and the PCD has not yet been installed (Appendix 3, Photos 6, 8 and 15). It is recommended that areas used for the storage of salvaged materials are appropriately designed to contain any contamination from the site. Prior to construction of the mining project, the salvage yard needs to be fitted with drains to the PCD. Run-off from laydown / salvage yards may not be allowed to enter watercourses.	PC
Construction and Operation Phase			
88	Inspect the Blesbokspruit downstream of the discharge point for on a monthly basis in the summer months for excessive growth of aquatic vegetation, which may impede flow. If excessive growth, which is impeding flow, is noted implement cutting of vegetation.	The mining project has not commenced. Excessive growth of vegetation within the Blesbokspruit, which may impede flow, was not observed during the audit. Appendix II Condition 3.2.5 of the dewatering WUL requires regular checks of the downstream culverts to ensure they are not blocked by debris or vegetation. The 2024 external audit of the dewatering WUL indicates that culvert inspections have not taken place. Monthly inspections of the Blesbokspruit should be undertaken.	PC
Noise management measures			
Construction, Operation and Decommissioning			
106	Isolate compressors and generators in separate acoustically treated enclosures or buildings.	The onsite generator (which only operates during power cuts) enclosure was not acoustically treated and the doors remained open to allow sufficient airflow for cooling. Acoustically isolate generators in enclosures or buildings.	PC
Socio-economic management measures			
Prior to Construction Phase			

No.	Condition	2024	Compliance
		Comments / Recommendations	
112	<p>A Stakeholder Engagement Plan (SEP) and Grievance Mechanism must be drawn up for the Holfontein Project. The main objectives of a SEP are as follows:</p> <ul style="list-style-type: none"> • Identification of stakeholders / IAPs. • Disclosure of planned project activities. • Identification of concerns and grievances from stakeholders. • Harnessing of local expertise and knowledge from IAPs. • Ongoing disclosure of project activities and monitoring results. • Response to grievances and enquiries of stakeholders (via a Grievance Mechanism). 	<p>The mining project has not commenced. The SEP should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.</p>	PC
113	<p>It is recommended that NKGm establish a Community Engagement and Security Forum (CESF) to ensure that stakeholders are notified and consulted throughout the LoM:</p> <ul style="list-style-type: none"> • Ensuring that the authority and IAP contact details are updated. • Informing IAPs of the establishment of the CESF and providing them with the opportunity to join the forum, attend meetings, and receive any relevant information. • Facilitating meetings during construction and operation, taking minutes of these meetings, and distributing meeting minutes prior to the next meeting (it is recommended that these meetings be held every second month). • Distributing information relevant to community health and safety to stakeholders (including environmental monitoring data, the Emergency Preparedness and Response (EPR) Plan, Grievance Mechanism (GM), issues and concerns raised). • Maintaining communication channels throughout the life of the project. • Drafting an action plan to enable the affected communities and relevant government agencies to understand the potential safety and security impacts and disseminating the plan to IAPs prior to construction. • Timeously communicating any changes to the proposed project, impacts and/or mitigation and monitoring methods, and ensuring that proper legal procedures will be followed. 	<p>The mining project has not commenced. The CESF should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.</p>	PC

No.	Condition	2024	Compliance
		Comments / Recommendations	
	<ul style="list-style-type: none"> Maintaining an accident register and compiling accident reports (for the haul route). This accident register should be submitted to the CESF on a monthly basis. 		
Construction, Operation and Decommissioning			
116	NKGM personnel and contractors must be familiar with relevant environmental and social commitments within the authorised EMPr. Managers will need to be appropriately trained and familiarised with respect to the EMPr in order to possess the skills necessary to impart EMPr requirements to their subordinates. All personnel involved in the construction and operation of the project must undergo a training and awareness programme on health, safety, environmental and social requirements and obligations prior to commencing activities.	The mining project has not commenced. Activities were being undertaken for the dewatering project. No evidence was provided that awareness training has been undertaken on site. Relevant training material must be compiled, and training must be undertaken with personnel and contractors responsible for managing the site.	PC
117	<p>Community Health and Safety training must be conducted to assist NKGM in raising awareness with the local community (Holfontein Community and Welgedacht SH) regarding project-associated risks. The objectives of the community health and safety training will be:</p> <ul style="list-style-type: none"> Raising awareness associated with all project activities. Identification of health concerns and associated behaviour, including HIV/AIDS awareness, hygiene, related to potential sewage / chemical toilet spills; water quality and use. Encouraging the use of safety initiatives undertaken by NKGM, including fencing and creation of a pedestrian walkway. Identification of dangerous / hazardous site activities, including haul roads, PCD, discharge point and pipeline, and the shafts. 	The mining project has not commenced. Community Health and Safety training material must be compiled and implemented for the dewatering project. The material can be updated as needed for the mining project prior to construction.	PC
119	The SEP must be implemented. Ongoing stakeholder engagement will play a key role in monitoring socio-economic impacts and the effectiveness of mitigation and management strategies. Remedial actions must be taken where the mitigation and management strategies are ineffective.	The mining project has not commenced. The SEP should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	PC
120	The Grievance Mechanism should be monitored on an ongoing basis and any grievances should be adequately responded to in a timeous fashion.	The mining project has not commenced. The Grievance Mechanism should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	PC
121	The CESF should be engaged with on an ongoing basis and remedial actions taken in response to any issues raised through this avenue.	The mining project has not commenced. The CESF should be formed and engaged with during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	PC

No.	Condition	2024	Compliance
		Comments / Recommendations	
122	The security policy must be adhered to and updated with remedial actions for any security issues which arise.	The mining project has not commenced. The security policy should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	PC
Biodiversity management measures			
Construction and Operation Phase			
159	Environmental awareness training must be implemented as per the environmental awareness plan educating personnel and contractors on how to interact with the environment.	The mining project has not commenced. Activities were being undertaken for the dewatering project. No evidence was provided that awareness training has been undertaken on site. Relevant training material must be compiled, and training must be undertaken with personnel and contractors responsible for managing the site.	PC
160	Hydrocarbons must be managed according to the Hydrocarbon Management Plan to avoid contamination of the environment.	Hydrocarbons are stored and handled on site. The storage areas are temporary but not all storage areas were bunded at the time of the audit (Appendix 3, Photos 4 and 14). It is recommended that hydrocarbons must be managed according to the Hydrocarbon Management Plan and the hydrocarbon management plan be audited internally on a regular basis.	PC
165	The development of new electrical infrastructure poses a collision risk to avifauna and volant (flying) mammals (i.e. bats). A possible high collision risk area within the Holfontein study area could be where the lines cross the Blesbokspruit as it is possible that this area is used as a flight corridor for water fowl moving to and from the Blesbokspruit IBA. It is recommended that that an ECO monitors the newly constructed power lines once a week for bird collisions associated with the overhead lines. It is important to identify which bird species are affected by the collisions in the long term to ensure that wires are marked appropriately (in response to the collision data) and all the data which has been collected on bird collisions must be submitted to the Endangered Wildlife Trust and Birdlife South Africa.	Power transmission lines to the site have been installed and the risk to flying avifauna and mammals has therefore been realised. No monitoring of bird or mammal strike data has been provided for review. It is recommended that the power line route is monitored once a week for bird collisions and the affected bird species recorded.	PC
167	Road related faunal mortalities must be recorded to identify any additional high collision risk areas. Mitigation measures recommended in this report should then also be adapted to these areas.	No records of road kill were provided for review. Additional high collision risk areas have not been identified or addressed. Records of collisions must be maintained.	PC
168	Alien invasive vegetation eradication and monitoring must be conducted throughout the construction and operation phases as detailed in the Biodiversity Monitoring Programme.	Biodiversity monitoring data was not provided for review. The Biodiversity Monitoring Programme must be implemented and invasive vegetation controlled.	PC
169	Biodiversity monitoring must be conducted as per the Biodiversity Monitoring Programme.		PC
170	The dry grasslands associated with the project (i.e. dry grassland adjacent to the proposed haul road) must be burned every second year to remove moribund plant material.	Evidence that some of the grassland alongside the site had been burned however, it is unclear if this was a scheduled / controlled burn or not. Fires in the vicinity of the project should be monitored to ensure that the burning rotation is maintained.	PC
Wetland management measures			

No.	Condition	2024	Compliance
		Comments / Recommendations	
Construction Phase			
222	<p>The contractor has a responsibility to inform all staff of the need to be vigilant against any practice that will have a harmful effect on wetlands habitat. This information shall form part of the Environmental Education Programme to be effected by the Contractor, including the following:</p> <ul style="list-style-type: none">- No construction shall take place in areas of high sensitivity such as wetlands or 50 m buffer zone.- Any proclaimed weed or alien species that germinates during the contract period shall be cleared by hand before flowering.- Infilling, excavation, drainage, dumping of building material and hardened surfaces (including buildings and asphalt) should not occur in any of the wetland, riparian or within the 50 m buffer zone as a minimum, but should preferably be done as far away as practically possible from these areas. <ul style="list-style-type: none">• Imported fill material must be monitored during and after construction for the presence of any alien species. Any such species must be removed immediately.• Emergency plans and spill kits must be in place in case of pollutant spillages.• All stockpiles must be protected from erosion, stored on flat areas where runoff will be minimised, and be surrounded by bunds. It should also only be stored for the minimum amount of time necessary.• Erosion control of all banks must take place so as to reduce erosion and sedimentation into drainage channels or wetland areas.• Silt traps and culverts must be regularly maintained and cleared so as to ensure effective drainage.• Littering and contamination of water sources during construction must be mitigated by effective construction camp management.• All construction materials including fuels and oil must be stored in a demarcated area that is contained within a bunded impermeable surface to avoid spread of any contamination. The storage areas must be constructed as far away as practically possible outside of wetlands, riparian and buffer zones.• Cement and plaster should only be mixed within mixing trays. Washing and cleaning of equipment should also be done within a bermed area, in order to trap any cement or plaster and avoid excessive soil erosion. These sites	<p>The contractor is on site for implementation of the dewatering project. Evidence of an Environmental Education Programme to be effected by the Contractor was not provided for review. It is recommended that the Environmental Education Programme be developed and implemented on site as soon as possible.</p>	PC

No.	Condition	2024 Comments / Recommendations	Compliance
	must be rehabilitated prior to commencing the operational phase.		
Construction and Operation Phase			
228	Water to be discharged must be treated as per the Water Management Plan to ensure wetlands are not contaminated.	Refer to assessment of Water Management Plan. The discharge water is monitored regularly but no measures are in place to treat the water should it not comply with the discharge quality standards. To date the water quality has been largely compliant with these standards. This is being managed and monitored in terms of the dewatering WUL. Measures must be put in place to allow for the treatment of non-compliant water prior to discharge.	PC
231	Water must be discharged as per the Water Management Plan to ensure wetlands are not impacted.	Water is currently being discharged to the wetland associated with the Holfontein stream (Appendix 3, photos 15 and 16), as approved by the dewatering WUL. Specialist studies have been undertaken to determine whether there are any impacts associated with the discharge and measures are in place to address these.	PC
236	Monitoring must be carried out as per the Wetland Monitoring Programme.	No wetland monitoring is taking place. Monitoring must be carried out as per the Wetland Monitoring Programme and a wetland specialist must be consulted regarding the mitigation of any specific problems or issues identified.	PC
237	The ECO must be briefed by a wetland specialist on specific monitoring issues during the construction phase. Appropriate mitigation needs to be implemented after consultation with relevant specialist should any problems or issues be identified.		PC
Hydrocarbon management measures			
Construction, Operation and Decommissioning			
243	All generators will be placed on drip trays to catch spills and leaks, while all maintenance work on equipment, vehicles, machinery, etc. will be done over a plastic tarpaulin or steel drip trays situated within dirty water catchment areas.	Generators, vehicles, and machinery required for the dewatering project are on site. The generator has been placed on hardstand however, no facility has been provided to contain spills or leaks that may arise from generator operation. No maintenance work was observed. Precautionary spill management should be implemented.	PC
244	Any pumps, machinery or other equipment that require oil, diesel, etc., that are to remain in one position for longer than two days will be placed on drip trays which are to be emptied regularly. Any effluent from the drip trays and any spilled oils and fuels will be collected and stored in 210 litre drums within the service-bay area before being collected and disposed of by a licensed waste removal company.		PC
246	Store fuel, oils and other lubricants in a bunded storeroom with a capacity to contain 110% of the total volume thereof.	The hazardous substances store and fuel containers were not appropriately bunded (Appendix 3, Photos 4 and 14). It is recommended that all hazardous liquids are stored in a bunded facility.	PC
250	The Mine must keep copies of all disposal certificates on-site.	Although BJB Scrap (an external contractor) has been appointed to remove the waste from the site, the disposal certificates were not kept on site. It is recommended that copies of all disposal certificates are kept on-site.	PC
251	The fuel storage facility and associated bund walls will be maintained according to the SANS for the "storage and	The temporary fuel facilities on site do not comply with the requirements of SANS 10089 (Appendix 3, Photos 13 and 14). It is recommended that fuel storage facilities comply with SANS 10089.	PC

No.	Condition	2024	Compliance
		Comments / Recommendations	
	distribution of petroleum products in above-ground bulk installations" (SANS 10089-1:2003, edition 4.1).		
256	Implement a spill response plan and train personnel to react efficiently to address any spillage.	No evidence was provided of a spill response plan or associated training being implemented on site. It is recommended that a spill response plan be compiled, and personnel are trained to react efficiently to address any spillage.	PC
Hazardous waste/hazardous substances management measures			
Construction, Operation and Decommissioning			
273	The mine will keep Material Safety Data Sheets (MSDS) on site for all hazardous substances kept on site and comply with the requirements of all MSDS.	MSDSs were not available for review during the site visit. It is recommended that Material Safety Data Sheets (MSDS) are kept on site for all hazardous substances.	PC
274	Include effective and relevant information regarding the handling and storage of hazardous substances / waste into environmental awareness training provided to personnel and contractors during induction.	No training material and training registers were provided to the auditor. It is recommended that awareness training is provided to personnel and contractors regarding the handling and storage of hazardous substances / waste.	PC
280	A walled concrete platform, dedicated store with adequate flooring or bermed area must be used to accommodate substances such as paint, herbicide and insecticides etc., as appropriate according to their specific MSDS, in well-ventilated areas.	Such a facility has not been installed on site but the volumes of hazardous materials currently being stored on site are low. It is recommended that an appropriate hazardous store be installed on site - having berms, adequate flooring and roofing.	PC
286	The bund walls for all storage facilities containing any industrial or related hazardous substances / wastes will have sufficient storage capacity of 110% from the combined storage capacity.	Not all hazardous substances were stored in appropriately bunded facilities (Appendix 3, Photos 13 and 14). All storage facilities containing any industrial or related hazardous substances / wastes are to be appropriately bunded.	PC
290	The mine will request a safe disposal certificate for all hazardous waste streams removed by external contractors that will be kept on-file for the life of the mine.	No safe disposal certificates were available at the time of the audit. Records regarding the waste volumes generated, and removed should be maintained.	PC

5 CONCLUSION AND RECOMMENDATIONS

This EAR was compiled to assess compliance with the conditions of the EA and commitments made in the EMPr. Partial and non-compliances have been identified. Compliance of the site with the EA is 79% (an improvement from the previous audit) and compliance with the EMPr is 69%.

At the time of the audit, the project was in the pre-construction phase. While the conditions related to the specific tasks that were being undertaken were audited, the majority of the EMPr commitments and EA conditions are associated with mobilisation of the mine and the subsequent project phases (operation, and closure). Therefore, many mitigation/management measures and conditions remain inapplicable to the current stage of the project and could not be adequately assessed. However, they will be assessed in future audits (biennially) as the project officially commences. Preparatory tasks were being undertaken on site, that have environmental aspects, include the storage of hydrocarbons, the establishment of salvage/waste areas and the ongoing dewatering and discharge of groundwater.

5.1 Compliance with the EA and EMPr

The majority of the non-compliances were largely a result of incomplete site mobilisation and the installation of only temporary structures and equipment. During the site visit, it was observed that there was inadequate storage and handling of hazardous materials including diesel. The site is located close to sensitive watercourses. Therefore, any spills may have an impact on the prevailing aquatic ecology and all substances on site need to be stored appropriately; runoff from the site must also be contained. Appropriate facilities must be installed prior to potentially contaminating substances being brought onto the site. Other findings that were observed include:

- Environmental training and awareness have not been implemented.
- Environmental records are not being maintained on site, including safe disposal certificates, copies of the EMPr, incident register, internal audit reports, permits, licences, monitoring reports, grievance /complaints register, MSDSs and training records.
- Communication with the department including notifying the Department of the dewatering project and the details of the ECO.
- Development and implementation of various plans (including an SEP and CESF) and a review of the EPRP.
- The lack of measures to prevent any sinkhole development or seismic events on land overlying dolomitic aquifers during and as a result of dewatering.
- Water management infrastructure has not been installed and no water treatment options are currently available to address any discharge quality issues that may arise.
- Monthly inspections for debris and vegetation growth of the downstream watercourses (including the Blesbokspruit) have not taken place.
- Generators are not kept in enclosures or buildings to manage the noise impacts.
- Biodiversity and wetland monitoring and management measures have not been implemented.

5.2 Adequacy of the Holfontein EA and EMPr

None of the NEMA regulated activities, approved in the EA, have commenced, nor were there any unauthorised listed activities taking place at the time of the audit. Therefore, the EA remains suitable for the current activities and the proposed project.

Dewatering and discharge are taking place on the site. While the existing EMPr addresses dewatering and discharge (Appendix 3, Photos 15 and 16), the nature of the activity does not reflect that which was contemplated in the EIA / EMPr. However, the changes have been authorised by the dewatering WUL and are addressed in the associated IWWMP. It is therefore recommended that the Department should be notified of changes to the dewatering project.

5.3 EMPr recommendation report

Regulation 34 of the NEMA EIA Regulations (2014) requires the holder of the EA to submit recommendations to amend the EMPr or closure plan where findings of the EAR indicate:

- Insufficient mitigation of environmental impacts associated with the undertaking of activity.
- Insufficient levels of compliance with the EA or EMPr.

The audit indicated that compliance with the EA and EMPr could be improved. However, there were no impacts that had not been identified in the ESIA, and sufficient measures have been included in the EMPr to manage these impacts. The main difference between the authorised activities and the current site activities relates to the location of the discharge point – into the wetland associated with the Holfontein Stream rather than into the Blesbokspruit via pipeline. The impacts from the dewatering project are likely to be similar and the WUL / IWWMP for the dewatering project have included sufficient measures to address these. Considering that the dewatering project as it is currently being undertaken is authorised only as a temporary project, there is no need to update the EMPr.

5.4 Recommended actions

The audit identified several commitments and conditions that should be addressed prior to construction but may not yet be relevant, considering the unknown timeframe for construction. While these commitments were not considered non-compliant or partially compliant, recommendations are provided to address these timeously. Timeframes for construction must be determined and actions planned to align with the following commitments:

- Air quality monitoring should commence at least 6 months prior to the construction phase to allow for the collection of an ambient air quality baseline data set.
- A weather station is required to be installed on site prior to construction.
- The zoning requirements of the property should be reviewed to ensure that zoning is appropriate for the proposed activities.
- Noise barriers should be erected and visual screening in the form of trees should be planted.
- Personnel and contractors must be educated regarding the possible presence of subterranean archaeological and/or historical sites, features, or artefacts, as part of environmental awareness training during induction. Relevant archaeological training material must be compiled and incorporated into the environmental awareness plan.
- The current low water bridge across the Blesbokspruit must be upgraded to ensure that flow within the Blesbokspruit is improved.
- A dedicated borehole must be drilled at proposed ventilation shaft position, to identify high-yielding fissures/fractures and seal these prior to shaft sinking.
- Erect an acoustic barrier around ore hoisting and loading areas (at least 5.6 m in height) between the boundary of the activities and sensitive receptors during construction phase. If the material to be used

for the construction of the acoustic barrier is listed in terms of NEM:WA (i.e. mine residue material), authorisation must be obtained prior to construction.

- NKGM must compile a Community Development Plan (CDP) for the dewatering component of the Holfontein Project which can be updated as the other activities commence. It is recommended that NKGM collaborates with EMM and local government.
- A Stakeholder Engagement Plan (SEP) and Grievance Mechanism must be drawn up for the Holfontein Project.
- It is recommended that NKGM establish a Community Engagement and Security Forum (CESF) to ensure that stakeholders are notified and consulted throughout the LoM.
- In order to prevent conflict between the mine and the surrounding community, a security policy must be compiled. The security policy should be developed before construction commences. This is relevant because the residents of the Holfontein Community living in the unused mine houses and informal dwellings are close to the site.
- An In-Migration Management Plan must be developed to reduce the in-migration of job-seekers into the area, and to mitigate the negative impacts associated with this potential in-migration. No evidence of in-migration was observed during the site visit.
- The Grievance Mechanism should be monitored on an ongoing basis and any grievances should be adequately responded to in a timeous fashion. Relevant materials must however be put in place prior to construction to ensure an adequate complaints procedure, health awareness programmes, procedures for reporting illegal mining, ongoing communication with communities, and good relationships with employees.
- A survey must be undertaken prior to site establishment to identify species of conservation concern and to take appropriate action for their rescue / relocation.
- Relocation permits for any plant species of conservation concern to be impacted (i.e. *Hypoxis hemerocallidea* and *Kniphofia typhoides*) and demarcation permits for alien invasive species which are to remain on site (i.e. the blue gum trees on site) are to be obtained from DFFE prior to the commencement of construction activities.
- Wetland buffer zones to be demarcated on design drawings prior to construction. The design drawings need to be updated to align with those in the approved WUL, including the correct location of the discharge point.
- Hazardous waste training must take place prior to any hazardous wastes being handled on site.
- Environmental Awareness training material must be compiled for staff and contractors and put in place prior to construction.
- Plans with timeframes to address the following should be submitted to the Department within 1 year of commencing with construction activities:
 - Credible modelling must be implemented by a qualified specialist to assess the potential impacts for acid mine drainage during the life of the mining operation and provide mitigation measures.
 - Ground stability must be assessed by a qualified specialist for any geological strata with dolomitic aquifers which have been dewatered as a result of the mining activities and provide measures to prevent any sinkhole development or seismic events on such land.
 - Post closure impacts for all environmental media must be assessed and their mitigation measures provided during the life of mining operation, to ensure that proper closure options and future land use plans are identified for the disturbed land.

- Informal residents and residents of Welgedacht SH should be informed before construction commences as part of the establishment of the Community Engagement and Security Forum (CESF).
- A standalone EPRP should be compiled for the site prior to construction. The EPRP should include industrial action and contact details of police, ambulances, and any emergency centre closer to the site.
- All sludge or brine resulting from the water treatment facility will be transported back to the ME TSF via road. It must be confirmed that the ME TSF has sufficient capacity to accommodate the additional tailings material and brine. All waste streams from Holfontein must be taken into consideration during ME TSF planning.

5.5 Conclusions

In terms of Regulation 34 of the EIA Regulations, within 7 days of the date of submission of the EAR to the DMRE, NKGM is required to notify all potential and registered IAPs of the submission of the report, to and make the report immediately available - (a) to anyone on request; and (b) on a publicly accessible website, if such a website is available.

APPENDIX 1

Environmental Authorisation – compliance checklist

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
Site specific EA conditions				
1	The civil engineering designs for the road bridge (culverts) crossing the Blesbokspruit must be approved and water use authorisations for such an activity must also be issued by the Department of Water and Sanitation (DWS) prior to the commencement prescribed in terms of Regulations 983, activities 12 and 19.	C	A WUL has been granted by the DWS. (DWS Ref. 08/C21D/CI/8500) and a WUL amendment was been issued 18 May 2023. No WUL activity has commenced. Civil engineering designs for the culverts were submitted as part of the WUL application. Activities 12 and 19 have not commenced.	2
2	The civil engineering designs for the Pollution Control Dam, and Sewerage and Mine Wastewater Treatment Plants (including pipeline outlet) must be approved and a water use authorisation must also be issued by the DWS prior to the commencement of such construction activities.	C	A WUL was issued by the DWS (DWS Ref. 08/C21D/CI/8500) and a WUL amendment was issued on 18 May 2023. No mining water uses have commenced. Civil engineering designs for the dam were submitted as part of the WUL application. A temporary conservancy tank for sewage was in the process of being installed at the time of the audit to allow for ablutions for the team undertaking dewatering at the site. The treatment and discharge of abstracted groundwater is ongoing as part of the proposed further prospecting activities. Permanent sewage reticulation and water treatment plant still need to be investigated further.	2
3	Adequate Stormwater Management Plan with effective drainage designs systems designed to ensure that no contaminated surface water runoff leaves the mining area and any clean surface water runoff is diverted from the mining area, must be implemented prior to the mining operation.	C	Stormwater management has been adequately considered in the design drawings and there is an approved WUL and IWWMP in place. Mining has not yet commenced.	2
4	Sunk shafts must have their walls sealed for any fissures, dykes or faults which may result in the potential ingress of groundwater into the underground mine workings prior to the mining operation.	C	Construction activities for mining have not yet commenced on site. The dewatering project is currently underway and NKGM indicated that they sealed significant inflow to the shaft when fissures were encountered, to prevent ingress into the shaft during shaft refurbishment.	2
5	Credible modelling must be implemented by a qualified specialist to assess the potential impacts for acid mine drainage during the life of the mining operation and provide mitigation measures thereof.	NA	Construction activities for mining have not yet commenced on site. Groundwater monitoring is however included in the EMPr and IWWMP for all phases of the project. The Groundwater Impact Assessment (Groundwater Square, 2015) used numerical modelling to predict the Acid Mine Drainage and included mitigation measures.	-
6	Ground stability must be assessed by a qualified specialist for any geological strata with dolomitic aquifers which have been dewatered as a result of the mining activities and provide measures to prevent any sinkhole development or seismic events on such land.	PC	Construction of the mining project has not yet commenced. J.J. Geyser (a Rock Engineer) of Open House Management Solutions provided a Note of Record (June 2018) which concludes that the recommended support methods to be employed will ensure there is no surface subsidence as a result of the activities undertaken by NKGM. Measures to prevent any sinkhole development or seismic events due to dewatering have not been proposed.	1
7	Post closure impacts for all environmental media must be assessed and their mitigation measures provided during the life of mining operation, to ensure that proper closure options and future land use plans are identified for the disturbed land.	C	An Interim Closure Plan has been developed for Holfontein (Prime Resources, 2015) which addresses post-closure impacts and monitoring. Construction activities for mining have not yet commenced on site and therefore post-closure impact mitigation activities have not commenced nor are they relevant yet.	2
8	Plans with timeframes addressing bullet points 5, 6 and 7 must be submitted to this Department for approval within one year after issuance of this environmental authorisation.	NC	Authorisation was granted in 2016. However, construction has not commenced. It is recommended that this condition be amended so that the Licensee should submit plans prior to the commencement of construction activities on site.	0
9	The installation of fuel tanks including all secondary equipment must be done by a professional, in accordance with the relevant SANS codes of practice.	NA	The mining project has not commenced and there is no permanent fuel infrastructure on site.	-
10	All materials with lubricants, fuel and hydraulic fluid must be stored in a demarcated area with bund walls to contain spillages and avoid contamination of groundwater.	PC	The mining project has not commenced, however lubricants and fuel for the dewatering project are stored on site in a demarcated area. In several instances there is no bunding for these materials (Appendix 3, Photos 4, 13 and 14). It is recommended that all hazardous substances be stored as per the MSDS and the EA.	1

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
11	All soils compacted as a result of construction activities must be ripped and profiled and soil erosion should be minimised by installation of berms, silt traps and hessian curtains on the construction site.	NA	Soil erosion was not observed at the time of the audit.	-
12	Under no circumstances should the untreated mine water from the shaft be released to the Blesbokspruit and associated water bodies without authorisation from the DWS.	C	Dewatering of the underground voids is being undertaken with approval from the DWS via a WUL (Appendix 3, Photos 2 and 12). Compliance with the WUL has been assessed separately.	2
13	Dust fallout levels must be monitored during the life of the mining operation, to ensure compliance with the National Dust Control Regulations No R 827, dated 01 November 2013.	NA	The mining project has not commenced and no dust-generating activities were observed during the site visit.	-
Department standard EA conditions				
1. Scope of Authorisation				
1.1	The holder of the EA shall be responsible for ensuring compliance with the conditions contained in the EA. This includes any person acting on the holder's behalf, including but not limited to an agent, servant, contractor, subcontractor, employee, consultant or any person rendering a service to the holder of EA.	NA	The mining project has not commenced, and most of the EA conditions are not applicable. However, it is understood that the holder of the EA is aware of this condition.	-
1.2	Any changes to, or deviation from the project description set out in this EA must be approved in writing by this Department before such changes or deviation may be effected. In assessing whether to grant such approval or not, the Department may request such information as is deemed necessary to evaluate the significance and impacts of such changes or deviation and it may be necessary for the holder of the EA to apply for further authorisation in terms of the EIA Regulations.	NA	This condition is noted. No changes are being considered for the project.	-
1.3	The activity (ies), which are authorised, may only be carried out at the property (ies) indicated in the EA and or on the approved EMPr.	NA	No listed activities as per the EA have yet commenced on site on any of the properties listed in the EA and EMPr.	-
1.4	Where any of the holder of the EA contact details change including name of the responsible person, physical or postal address / or telephonic details, the holder of the EA must notify the Department as soon as the new details become known to the holder of the EA.	PC	The contact person on the EA is noted as Evan Cook and the contact email address is Ntsiki.Kgame@gold1.co.za. These contact details (including the addresses) are outdated and the DMRE must be notified of all changes.	1
1.5	The EA does not negate the responsibility of the holder to comply with any other statutory requirements that may be applicable to the undertaking of such activity (ies)	NA	It is understood that the EA holder intends to comply with relevant regulatory requirements in addition to the EA. A rezoning application still needs to be submitted for the project area. This should be finalised prior to construction.	-
1.6	The holder of EA must ensure that all areas where the authorised activities occur have controlled access to ensure safety of people and animals.	NA	No listed activities in terms of the EA have yet commenced on site. The site is fenced and access to the site is managed by security guards (Appendix 3, Photo 1 and 16).	-
3. Commencement of the activity (ies)				
3.1	In order to ensure safety, all employees must be given the necessary personnel protective equipment (PPE) and training	C	The mining project has not commenced. Employees on site were observed utilising PPE.	2
3.2	This EA must be provided to the site operator and the requirements thereof must be made fully known to him or her	PC	Murray and Roberts (M&R) has been appointed as the contractor to undertake construction activities for the dewatering project. While the EA and EMPr were not available on site at the time of the audit, it is understood that the Contractor has been made aware of the requirements of the EA. The site operator should have a copy of the EA and EMPr on site.	1

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
3.3	Hauling routes for construction vehicles and machinery must be clearly marked and appropriate signalling must be posted to that effect. Furthermore, movement of construction vehicles and machinery must be restricted to areas outside of the drainage line or wet areas	C	Hauling activities have not yet commenced for the mining project. No permanent roads have been constructed. All vehicle activity for the dewatering project is currently taking place outside of the regulated areas.	2
3.4	Appropriate notification signage must be erected at the mining site, warning the public (residents, visitors, etc) about the hazard around the mining site and presence of heavy vehicles and machinery	C	The mining project has not commenced on site. Signage was observed at the entrance of the site prohibiting access and various locations on the site had signage indicating potential hazards (Appendix 3, Photos 16 and 17).	2
3.5	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.	NA	The mining project has not commenced on site. Storm water management and drainage has been catered for in the design drawings however, permanent infrastructure has not been installed. At the time of the site visit, no stormwater management measures had been installed for the dewatering project.	-
3.6	Vegetation clearance must be limited on areas where the individual activities will occur, and mitigation measures must be implemented to reduce the risk of erosion and alien species invasion.	C	The mining project has not commenced on site. Minor vegetation clearance for the installation of temporary infrastructure has taken place, this has been limited to individual project components.	2
3.7	The holder of the EA must note that in terms of the National Forest Act (Act No. 84 of 1998) protected plant species must not be cut, disturbed, damaged, destroyed and their products must not be possessed, collected, removed, transported, exported, donated, purchased or sold unless permission is granted by the Department of Agriculture, Forestry and Fisheries.	NA	No species protected by the Forest Act were observed during the site visit, nor were any noted during the site visits undertaken by specialists during the EIA process.	-
3.8	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	C		2
3.9	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 on site remediation and re-use of contaminated soil must be investigated prior to the disposal and this Department must be informed in this regard	C	While mining has not yet commenced on site, there is currently construction of the dewatering project infrastructure on site. No soil contamination was observed on site at the time of the audit. Topsoil has not been stockpiled within drainage areas.	2
3.10	An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate avoidance, reduction, recycling, treat, reuse and disposal where appropriate. Uncontaminated rubble generated on the premises can be re-used as back filling material on site. Ensure that no refuse or rubble generated on the premises is placed, dumped or deposited on the adjacent properties or public places and open space	C	An Integrated Waste and Water Management Plan (IWWMP) is in place for the mining project. All waste generated on site is collected by an external contractor (BJB Scrap). An IWWMP has been compiled for the dewatering project and should be implemented. Compliance with the IWWMP is assessed via a separate audit. To date, all waste management has been undertaken suitably.	2
3.11	In terms of sections 28 and 30 of NEMA, and sections 19 and 20 of the National Water Act, 1998 (No. 36 of 1998), any costs incurred to remedy environmental damage must be borne by the person responsible for the damage. It is therefore imperative that the holder of the EA reads through and understands the legislative requirements pertaining to the mining right. It is the holder of EA's responsibility to take reasonable measures which include informing and educating contractors and employees about environmental risks of their work and training them to operate in an environmentally acceptable manner	NA	Noted. The most recent update was submitted to the DMRE in January 2022. The EMPr includes an Environmental Awareness Plan. It is recommended that the Environmental Awareness Plan be updated and implemented on site.	-
3.12	Construction vehicles must be serviced and maintained in the manner whereby excessive smoke and noise production is reduced to acceptable levels, and to prevent oil leaks. Contaminated soil must be remediated on site or removed to an authorised landfill site.	NA	During the site visit vehicles were not being serviced on site. All vehicles are serviced at Modder East Operations. No evidence of soil contamination was noted at the site visit.	-

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
3.13	Residents (if any) on the property (ies) and surrounding areas must be informed if any unusually noisy activities are planned.	NA	It is not clear whether a Community Engagement and Security Forum (CESF) has yet been established but this should be prioritised to address the dewatering project construction as well. Informal residents and residents of Welgedacht SH should be informed before construction commences.	-
3.14	Dust suppression measures must be implemented on all exposed surfaces to minimise and control airborne dust	C	Large-scale clearing has not commenced, and most surfaces remain vegetated. Airborne dust appeared to be adequately maintained at the time of the audit.	2
3.15	Mixing of cement, concrete, paints, solvent, sealants and adhesive must be done in specified areas on concrete aprons or on the protected plastic linings to contain spillage or overflow onto soil to avoid contamination of underground water and environmental damage	C	Concrete works have not commenced. No evidence that spillage or overflow onto soil from the handling of hazardous substances was observed.	2
3.16	Should any heritage remains be exposed during operation or any actions on the site, these must immediately be reported to the South African Heritage Resources Agency (SAHRA). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from the South African Heritage Resource Agency (SAHRA).	NA	No large excavations have commenced and no chance finds have been unearthed.	-
3.17	Care must be taken to ensure that the material and excavated soil required for backfilling are free of contamination from hydrocarbons	NA	No excavated soils have been stockpiled for backfilling.	-
3.18	Hydraulic fluid or chemicals required during construction must be stored in a concrete lined surface with bund walls and shall be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment. Should any spills occur it should be cleaned immediately by removing spillage together with the polluted solids and dispose it in the authorised disposal site permitted for such waste. The regional office of the Department of Water and Sanitation must be notified within 24 hours of an incident that may pollute surface and underground water resources	PC	Small quantities of hazardous substances were stored on site at the time of the audit and a spill kit was located alongside the hazardous store. The hazardous store had a roof and could be secured however, it was not bunded (Appendix 3, Photo 4). It is recommended that hazardous substances be stored on a concrete lined surface with appropriate bunding.	1
3.19	Chemical sanitation facilities or systems such as toilets that do not rely on the seepage of liquids must be provided with a ratio of 1 for every 15 workers. These must be placed such that they prevent spills or leaks to the environment and must be maintained according to the operating instructions and the content thereof must be disposed of at an authorised waste water treatment works	C	The site has five toilets (three toilets connected to a buried conservancy tank and two chemical toilets) for the 21 people working on the site	2
3.20	The holder of EA must ensure that any water uses listed in terms of Section 21 of National Water Act must get authorisation from Department of Water and Sanitation prior to the commencement of such activity (ies)	C	A WUL has been awarded.	2
3.21	This EA does not purport to absolve the holder of the EA from its common law obligations towards the owner of the surface of land affected.	NA	It is understood that the EA holder intends to comply with relevant regulatory requirements in addition to the EA.	-
3.22	The holder of the EA must ensure that rehabilitation of the disturbed areas caused by operation at all times comply with the approved EMPr	NA	Rehabilitation of disturbed areas has not yet commenced on site.	-
3.23	This EA may be amended or withdrawn at any stage for non-compliance and provides no relief from the provisions of any other relevant statutory or contractual obligations	NA	Noted.	-
3.24	The holder of the EA must note that in terms Section 43A of the NEM:WA, residue must be deposited and managed in a prescribed manner on any site demarcated for that purpose in the revised EMPr. No person may temporary or permanently deposit residue stockpile or residue deposit on any area or site other than on site indicated on the revised EMPr	C	Noted. No waste or mine residue is being stockpiled or deposited on site. Waste	2

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
3.25	The holder to the EA must note that in terms of Section 20 of the NEM:WA, no person may commence, undertake or conduct a waste management activity, except in accordance with the requirements of norms and standards determined in terms of Section 19(3) for that activities or a waste management licence is issued in respect of that activity if licence is required	C	management for all stages of the project is also addressed in the IWWMP.	2
3.26	An appeal under Section 43(7) of the NEMA suspends an EA or exemption or any provisions of conditions attached hereto, or any directive unless the Minister directs otherwise	NA	Noted. An appeal was lodged in October 2016 and dismissed in March 2017.	-
3.27	Should you be notified by the Minister of a suspension of the authorisation pending appeal procedure, you may not commence with the activity (ies) until such time that the Minister allows you to commence with the activity (ies) in writing	NA	The auditor is not aware of any communication from the Minister or any audits undertaken by the Regional Manager.	-
3.28	The Department reserves the right to audit and/or inspect the activity (ies) without prior notification at any reasonable time and at such frequency as may be determined by the Regional Manager.	NA		-
3.29	The waste storage site must have a firm, impenetrable, chemical resistant floor and a roof to prevent direct sunlight and rain water from getting into contact with the waste.	PC	A skip was present on site containing waste and areas were set aside for scrap / salvage material. These areas were not equipped with floors and roofs to prevent water, rain and sunlight from coming in contact with waste. All waste should be removed within three months. The final waste storage and handling areas have not been constructed however, adequate waste storage facilities should be constructed.	1
3.30	The storage of hydrocarbons must have bund walls with adequate capacity to contain the maximum volume that is stored in the area. Uncontaminated storm water must be prevented from coming into contact with the waste and must be diverted away from the storage site.	PC	Several diesel tanks were suspended over a concrete "bund" which would act to contain a spill resulting from tank failure. Other diesel tanks were placed on concrete hardstand (Appendix 3, Photos 13 and 14). It is recommended that all hydrocarbons and hazardous substances be stored within bunds which have adequate capacity (see requirements of SANS 10089).	1
3.31	Subject to the commencement and duration requirements of the MPRDA and NEMA for the listed mining activity is valid for the period for which the aforesaid permit is granted provided that this activity must commence within 10 years. If the commencement of the activity does not occur within the specified period, the EA lapses and a new application for EA in terms of the NEMA and the EIA Regulations should be made for the activity to be undertaken.	C	The EA was granted on 24 August 2016. Listed activities have not yet commenced on site, however the applicant is still within the 10 year time frame.	2
3.32	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 EMP or EMPr.	NA	No construction has commenced of the mining project has commenced. Only temporary works have been undertaken for the dewatering project.	-
3.33	This EA will only be effective in the event that a corresponding Permit or right is issued in terms of MPRDA as amended and none of the activities listed in this EA may commence without permit	C	A Mining Right has been awarded, reference number GP30/5/1/2/2(182) MR.	2
3.34	The listed activity (ies), including site preparation, must not commence within 20 (twenty) calendar days of the date of the notification of the decision being sent to the registered I&APs. In the even that an appeal is lodged with the appeal administrator, the effect of this environmental authorisation is suspended until such time as the appeal is decided.	C	More than 20 calendar days have passed since the date that IAPs were notified of the Department's decision to authorise the activities.	2

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
3.35	Should there be any conflicting conditions between this EA and other approvals granted by other authorities, it is upon the holder of the EA to bring it to the attention of the Department for resolution	NA	There are no conflicting conditions that the auditor is aware of.	-
4. Management of activity (ies)				
4.1	A copy of the EA and EMPr must be kept at the property or on site office where the activity (ies) will be undertaken. The IEA and EMPr must be produced to any authorised officials of the Department who request to see it and must be made available for inspection by any employee or agent of the holder of the IEA who works or undertakes work at the property (ies).	NC	A copy of the EA and EMPr were not available on site at the time of the audit. It is recommended that a hard copy of the EA and EMPr be kept on site for reference.	0
4.2	The content of the EMPr and its objectives must be made known to all contractors, subcontractors, agent and any other people working on the site, and any updates or amendments to the EMPr must be submitted to the Department for approval.	PC	Murray and Roberts (M&R) has been appointed as the contractor to undertake construction activities for the dewatering project. While the EA and EMPr were not available on site at the time of the audit, it is understood that the Contractor has been made aware of the requirements of the EA.	1
4.3	Regular monitoring and maintenance of storm water drainage facilities must be conducted at all times, if damaged as directed by the Department or any other relevant authority	NA	Storm water drainage facilities, as per the WUL, have not been installed yet.	-
4.4	A buffer zone of 100 metres between the activity (ies) and the residential areas, cemeteries or burial grounds must be clearly demarcated and maintained	C	Residential areas, cemeteries or burial grounds areas are more than 100 m from the site.	2
4.5	The holder of the EA must prevent nuisance conditions or health hazards, or the potential creation of nuisance conditions or health hazards	C	Potential nuisance conditions or health hazards were not observed at the time of the audit.	2
4.6	The holder of the EA must ensure that all non-recyclable wastes are disposed of at waste management facilities licensed to handle such wastes and all recyclable wastes are collected by licensed waste management facilities for recycling, reuse or treatment	NA	Any wastes generated on site is collected by an external contractor "BJB Scrap". Sewage waste is diverted to the conservancy. No liquid wastes are released on site.	-
4.7	The holder of the EA must ensure that all liquid wastes, whose emissions to water or land could cause pollution are diverted to sewer, after testing water quality and receiving written approval from the relevant local authority	NA		-
4.8	Non-compliance with any condition of this EA or EMPr may result in the issuing of a directive in terms of section 28 and or a compliance notice in terms of section 31L of NEMA	NA	Noted. The auditor is not aware of any directives/compliance notices issued on this site.	-
4.9	Should it be discovered or come to the attention of the Department that the EIA has been obtained through fraud, non-disclosure of information or misrepresentation of a material fact, the Department will suspend your EA in terms of the provisions of regulation 38 (1) of the EIA Regulations.	NA	Noted. The auditor is not aware of any fraud, non-disclosure of information or misrepresentation of a material fact.	-
4.10	This EA only authorises activities specified in the Annexure 1 and a new authorisation must be applied for in respect of any new listed activity not specified as part of Annexure 1.	C	Noted. The project description has not changed, only the activities specified in the Annexure 1 of the EA and those detailed in the EMPr are proposed. However, construction activities are currently being undertaken for a dewatering project that has been approved by DWS via a WUL. No additional listed activities have or are expected to occur on site, therefore no amendment application was submitted to the Department. It is recommended however that the Department be notified about the dewatering project.	2
4.11	Only listed activities that are expressly specified in the EMPr that forms part of this EA may be conducted, and additional or new activities not specified herein must be applied for by the holder and authorised by Department before such activities may be commenced with. This condition is also applicable in the case of the amendment, addition, substitution, correction, and removal or updating of any detail in the aforesaid EMPr	PC		1

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
4.12	Rehabilitation of the disturbed surface caused by operation at all times must comply with the conditions set in the approved EMPr	NA	Rehabilitation of disturbed areas has not yet commenced on site.	-
4.13	The holder of EA must ensure that the name and contact details of the ECO are made available to the Regional Manager within 30 days of commencement. The holder of IEA must also ensure that an ECO is always available on site to ensure that activity (ies) at all times comply with the issued EA and approved EMPr.	PC	The mining project has not commenced. However, construction is underway for the dewatering project and the name and contact details of the ECO should be made available to the Regional Manager.	1
4.14	The ECO must:			
4.14.1	Keep and maintain a detailed incidents register (including any spillages of fuels, chemicals or other material)	PC	The mining project has not commenced. However, there are preparatory works taking place on site for the dewatering project. Apart from the water quality monitoring undertaken for the dewatering project, no environmental monitoring or reporting is currently taking place. It is recommended that the ECO be appointed and commence monitoring and reporting duties.	1
4.14.2	Keep a complaint register on site indicating the complaint and how the issues were addressed, what measures were taken and what preventative measures were implemented to avoid re-occurrence of complaints	PC		1
4.14.3	Keep records relating to monitoring and auditing on site and avail them for inspection to any relevant authorised officials	PC		1
4.14.4	Keep copies of all environmental reports submitted to the Department	PC		1
4.14.5	Keep the records of all permits, licences and authorisations required by the operation	PC		1
4.14.6	Compile a monthly monitoring report and make it available to the Department if requested	PC		1
4.15	The duties and responsibility of the ECO should not be seen as exempting the holder of the EA from the legal obligations in terms of the NEMA and NEMWA.	NA	Noted.	-
4.16	The footprint of the activity (ies) must be limited on the areas authorised for the actual construction works and operational activities and all areas outside of the footprint must be regarded as a "no go" area.	C	Construction to date has not exceeded the areas authorised.	2
4.17	Erosion and soil loss must be prevented by minimising the construction site exposed to surface water run-off. Where necessary erosion stabilising action such as gabions or revegetation must be implemented to prevent further habitat deterioration.	C	Erosion was not observed on site, large-scale clearing had not commenced, and much of the site remained vegetated.	2
4.18	The holder of the EA must ensure that all personnel who work with hazardous waste are trained to deal with these potential hazardous situations so as to minimise the risk involved. Records of training and verification of competence must be kept by the holder of the EA	NA	The mining project has not commenced. Hazardous waste training must take place prior to any hazardous wastes being stored on site.	-
4.19	In order to prevent nuisance conditions, the holder of the EA must ensure that all storage skips and bins are not overfilled	C	The the bins on site were not overfilled and nuisance conditions were not observed at the time of the audit.	2
5. Reporting to the Department				
5.1	The holder of the EA must submit an Environmental Audit Report to this Department biennially and such report must be done by a qualified Environmental Assessment Practitioner and the audit must specify whether conditions of this EA and an approved EMPr/closure plan are adhered to:	C	This report serves as the second Environmental Audit Report. It covers the period from February 2022 to March 2024.	2
5.1.1	identify and assess any new impacts and risks as a result of undertaking the activity/ies, if applicable	C	The listed activities have not commenced. However, dewatering of groundwater and subsequent discharge is occurring on site, as approved by the DWS. The impact of the dewatering and discharge were assessed by specialists prior to applying for these activities. There has been an increase in the volume of water dewatered and discharged, from that approved in the WUL, and the impacts of these are currently being assessed by specialists, with the aim of applying for a new/revised WUL with the increased volumes.	2

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
5.1.2	identify shortcomings in the EMPr, if applicable	C	The listed activities have not commenced therefore the performance of the EMPr cannot be adequately assessed and improved. The EAR identifies the shortcomings of the EMPr, the need for any amendments and indicates where corrective actions have taken place.	2
5.1.3	identify the need, if any, for any changes to the management, avoidance and mitigation measures provided for in the EMPr	C		2
5.1.4	if applicable, specify that the corrective action/s taken for the previous audit's non-conformities, was adequate	C		2
5.1.5	Specify the name of the auditor; and be submitted by the holder to the competent authority within 30 days from the date on which the auditor finalised the audit	C	This report specifies the names of the people involved in the audit.	2
5.2	Should any shortcomings in terms of Regulation 34(4) be identified, the holder must submit recommendations to amend the EMPr/closure plan in order to rectify any shortcomings with the aforementioned audit report	C	Recommendations in terms of Regulation 34(4) be identified are included within the body of the EAR.	2
5.3	Any complaint received from the I&APs during all phases of the operation must be attended to as soon as possible and addressed to the satisfaction of all concerned interested and affected parties	NA	As far as the auditor is aware, no complaints have been received from I&APs	-
5.4	The holder of the EA must annually assess the environmental liabilities of the operation by using the master rates in line with the applicable Consumer Price Index (CPI) at the time and address the shortfall on the financial provision submitted in terms of section 24P of NEMA	C	The most recent Financial Provision Report was compiled by Umhlaba Environmental Consulting and dated 31 March 2023. Therefore, the Financial Provision should be updated in April 2024.	2
5.5	The holder of the EA must, within 24 hours of incidents occurring, notify the Competent Authority of the occurrence or detection of any incident on the site, or incidental to the operation of the site, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution	NA	To the auditors knowledge, no incidents have taken place on site.	-
5.6	The holder of the EA must, within 14 days, or a shorter period of time, if specified by the Competent Authority from the occurrence of detection of any incident referred to in condition 5.5, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by top management, to the satisfaction of the Competent Authority of measures taken to	NA	To the Auditor's knowledge no incidents in terms of Section 30 of NEMA have occurred on site.	-
5.6.1	Correct the impact resulting from the incident	NA		-
5.6.2	Prevent the incident from causing any further impact, and	NA		-
5.6.3	Prevent a recurrence of a similar incident	NA		-
5.7	In the event that measures have not been implemented with 21 days of the incident referred to in condition 5.6, or measures which have been implemented are inadequate, the Competent Authority may implement the necessary measures at the cost of the holder of the EA.	NA		-
6. Site security and access control				
6.1	The holder of the EA must ensure effective access control on the site to reasonably prevent unauthorised entry. Signs indicating the risks involved in unauthorised entry must be displayed at each entrance	C	The area is secured with a fence and security guards ensure access control to site.	2
6.2	Weather proof, durable and legible notices in at least three official languages applicable in the area must be displayed at each entrance to the site. These notices must prohibit unauthorised entry and state the hours of operation, the name, address and telephone number of the holder of the EA and the person responsible for the operation of the site	PC	Weatherproof, durable and legible notices in three official languages were displayed at the entrance to the site prohibiting unauthorised entry. The hours of operation, the name, address and telephone number of the person responsible for the operation of the site are not included in the signage. It is recommended that the prescribed signage be erected.	1

No.	EA condition	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
7. Emergency preparedness plan				
7.1	The holder of the EA must maintain and implement an emergency preparedness plan and review it bi-annually when conducting audits and after each emergency and or major accident. The plan must, amongst others, include:	PC	An Emergency Preparedness and Response Plan (EPRP) is included in the EMPr and it is understood that a standalone EPRP has been developed for the site however it was not provided for review. The EPRP should be in place to address activities being undertaken on site and should be available at the site.	1
7.1.1	Site fire	C	The EPRP addresses uncontrolled fires.	2
7.1.2	Spillage	C	The EPRP addresses bulk fuel spills.	2
7.1.3	Natural disasters such as floods	C	The EPRP addresses natural disasters.	2
7.1.4	Industrial action, and	NC	The EPRP does not address industrial action.	0
7.1.5	Contact details of police, ambulances, and any emergency centre closer to the site	NC	The EPRP does not contain contact details for the local police, ambulance or emergency centre	0
7.2	The holder of EA must ensure that an up-to-date emergency register is kept during all phases of the operation. This register must be made available upon request by the Department.	NA	There is not currently an emergency register on site, but it was indicated that no environmental emergencies have occurred on site to date. An emergency register should be developed and maintained on site.	-
8. Investigations				
8.1	If, in the opinion of the CA, nuisances or health risks may be or are occurring on the site, the holder of the EA must initiate an investigation into the cause of the problem or suspected problem.	NA	The CA has not provided an opinion on nuisances, pollution or health risks.	-
8.2	If, in the opinion of the CA, pollution may be or is occurring, the holder of the EA must initiate an investigation into the cause of the problem or suspected problem. Such investigation must include the monitoring of the water quality variable, at those monitoring points and such frequency as may be specified by the CA.	NA		-
8.3	Investigations carried out in terms of conditions 8.1 and 8.2 above must include the monitoring of the relevant environmental pollution, nuisance, and health risk variables, at those monitoring points and such frequency to be determined in consultation with the Competent Authority.	NA		-
8.4	Should the investigation carried out as per conditions 8.1 and 8.2 above reveal any unacceptable levels of pollution, the holder of the EA must submit mitigation measures to the satisfaction of the CA.	NA		-
9. Commissioning and decommissioning				
9.1	The decommissioning of individual activities must comply with the EIA Regulations.	NA	This is not yet relevant as none of the activities have commenced.	-
10. Site closure				
10.1	The holder of the EA must apply for a closure certificate in terms of Section 43 of the MPRDA, as amended within 180 days of occurrence of lapsing, abandonment, cancellation, cessation, relinquishment and completion of development.	NA	To the Auditor's knowledge the holder of the EA has no intention of abandoning, cancelling, ceasing, relinquishing, or completing the development within 180 days.	-
10.2	The application for closure indicated above must be submitted together with all relevant documents as indicated in Section 43 of the MPRDA, as amended.	NA		-
10.3	No exotic plants may be used for rehabilitation purposes only indigenous plant can be utilized for rehabilitation purposes.	NA	No rehabilitation activities are taking place.	-
10.4	The holder of the EA remains responsible for any environmental liability, pollution or ecological degradation, the pumping and treatment of extraneous water, compliance with the conditions of EA and the management and sustainable closure thereof until the Minister has issued a Closure Certificate in terms of Section 43 of the MPRDA as amended. Where necessary the Minister may retain a portion of financial provision for residual, health or environmental impacts that might be known in future.	NA	See comments in terms of condition 10.1.	-

APPENDIX 2

Environmental Management Programme – compliance checklist

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
Air quality management measures				
Construction, Operation and Decommissioning				
1	Mine health and safety requirements in terms of air quality within the boundaries of the proposed development must be adhered to and compliance thereto audited regularly.	NA	No air quality related activities were taking place at the time of the audit. No dust was visible.	-
2	Speed of construction vehicles and haul trucks travelling on unpaved roads must be limited to 40 km/h.	NA	No dust generated by vehicles was observed. It is recommended that signage limiting the speed of vehicles be erected.	-
3	Dust suppression through watering (2 l/m ² per hr) must be implemented on unpaved access and on site roads.	NA		-
4	An inspection and maintenance programme to service equipment in accordance with the equipment manufacturer specifications must be implemented.	NA	Most equipment has not yet been mobilised to site yet. An inspection and maintenance programme should be put in place.	-
5	Low sulphur diesel must be used to fuel vehicles and equipment.	NA	It is unknown which diesel is being used on site.	-
6	Vehicle idling must be limited.	C	No idling vehicles were observed on site a the time of the audit.	2
7	Dust fallout monitoring must be conducted as per the Air Quality Monitoring Programme.	NA	At least six months of baseline monitoring must be conducted prior to construction occurring. Timeframes for construction of the mining project must be confirmed and monitoring planned.	-
8	Any complaints relating to dust must be recorded and additional management measures must be investigated to address these if monitoring indicates exceedances in the standards.	NA	NKGM indicated that no complaints have been received for the site.	-
Construction Phase				
9	Access tracks used for soil stripping during the loading and unloading cycle must be watered.	NA	Vegetation clearing, soil stripping and earth-moving activities for the mining project have not yet commenced.	-
10	Soil stripping must be limited to areas required for the construction of surface infrastructure.	NA		-
11	Free fall height during topsoil stockpiling must be limited to 3 m.	NA		-
12	A water spray dust suppression system must be implemented during earthmoving and dozing operations. Excavation area to be hosed down prior to removal of material.	NA		-
13	Earthmoving activities must be phased to reduce the source area (i.e. limit the total exposed area at one time).	NA		-
14	Frequency of disturbance of exposed areas must be reduced.	NA		-
15	Exposed areas must be re-vegetated as soon as possible.	NA		-
16	Surface improvement must be implemented in the form of gravel to cap the road surface of unpaved roads.	NA		-
17	The unpaved portion of the haul route - between the Blesbokspruit crossing and paved portion of the Carnation Road - must be paved.	NA		-
18	Truck overloading must be prevented to reduce spillage of waste rock during loading, unloading and hauling.	NA		-
19	The haul trucks must be covered with a tarpaulin and it must be ensured that the waste rock material being hauled is wet.	NA		-
20	Sheltering measures to reduce wind speed must be implemented (i.e. enclosing the chute), thereby ensuring that particulates which may contain harmful metals are contained during ore hoisting and truck loading.	NA		-
21	A weather station must be installed on site to at least monitor wind speed and direction as well as rainfall to assist with interpretation and understanding of the dust fallout.	NA	No weather station has been installed. A weather station is required to be installed on site.	-
Operation Phase				
22	A water spray dust suppression system must be implemented to keep the topsoil stockpile moist to reduce wind erosion.	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
23	All unpaved roads must be regularly maintained (using graders) to minimise the generation of dust. Grading is to be avoided during dry windy conditions and limited to affected areas only.	NA	The operational phase has not commenced.	-
24	Free fall height from the skip to the bin during ore stockpiling must be limited.	NA		-
25	A water spray dust suppression system must be used at the bin during truck loading of ore.	NA		-
26	Truck overloading must be prevented to reduce spillage of ore during loading, unloading and hauling.	NA		-
27	It must be ensured that the ore being hauled is wet and the haul trucks must be covered while transporting ore from the Holfontein shaft to the ME operations.	NA		-
28	Any spillage of ore from haul trucks along the haul route, although unlikely if the above measures are implemented, must be cleared and disposed of appropriately at the ME operations.	NA		-
29	Daily site inspections by environmental personnel must be conducted to provide an indication on the effectiveness of the dust control measures. Visual monitoring must be conducted in for activities which are expected to generate the most dust if not managed effectively (i.e. areas such as the skip, bin and chute at the shaft as well as the unpaved portions of the haul route). Haul trucks must be covered before leaving the site, random inspections must be done to ensure this is being implemented. Inspections for- and the clearing of spillage of ore from haul trucks along the entire haul route must also be included in the inspections.	NA		-
30	Progress reporting must take place at regular intervals (at least quarterly) during operations. Results from site inspections, monitoring results and a summary of any complaints relating to air quality received must be combined to determine if monitoring objectives are being met and the effectiveness of management measures. Progress in terms of air quality management must be reported to all interested and affected parties, including authorities and persons which may be affected by emissions from the proposed project. Corrective action must be taken (i.e. the implementation of contingency measures) in the event that monitoring objectives have not been met.	NA		-
31	As per the requirements of the National Emission Reporting Regulations (GN283 of 2015) the Applicant is to register as a data provider with- and also submit emission reports, in the format required, to the online National Atmospheric Emissions Inventory System (NAEIS). Reports must be submitted for the preceding calendar year to the NAEIS by 31 March for each calendar year.	NA		-
32	The operating hours of discharging of ore into the bin, loading of trucks and hauling must be limited to between 06h00 and 18h00.	NA		-
Closure Phase				
33	The area must be fully rehabilitated and vegetation must be self-sustaining as per the Holfontein Interim Closure Plan to prevent bare areas which are susceptible to wind erosion.	NA	Closure phase has not yet commenced. This is not relevant to the current stage of the project.	-
Archaeology and palaeontology management measures				
Prior to Construction Phase				
34	Personnel and contractors must be educated regarding the possible presence of subterranean archaeological and/or historical sites, features or artefacts, as part of environmental awareness training during induction.	NA	Earth moving and associated awareness training has not commenced. However, relevant archaeological training material must be compiled and put in place prior to construction of the mining project.	-
Construction and Operation Phase				
35	No development is allowed within 30 m of the fence of the cemetery.	NA		-
36	The cemetery should continue to be maintained and descendants should continue to be allowed safe access to grave sites.	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
37	If any unmarked archaeological findings are discovered during activities, the excavation must stop and the ECO must be notified immediately. The ECO must then contact SAHRA to investigate the archaeological findings	NA	No earthworks have commenced for the mining project.	-
38	Activities at the unmarked archaeological sensitive area will be allowed to recommence once SAHRA has investigated the site and given their permission to remove the findings and/or to allow the continuation of the proposed operations. Any mitigation or management measures recommended by the specialist, after assessment of the find, must be implemented.	NA		-
Water management measures				
Prior to Construction Phase				
39	Ensure that the WUL has been awarded prior to the commencement of construction.	C	The project has been awarded a WUL.	2
40	The current low water bridge across the Blesbokspruit must be upgraded to ensure that flow within the Blesbokspruit is improved.	NA	The mining project has not commenced and no construction was being undertaken at the river crossings.	-
	– Culverts must be spaced at regular intervals across the whole width of the wetland to ensure that there is free movement of water.			
	– The culverts should also be designed to be deep enough to allow for interflow within the wetland; and			
	– A turbidity curtain (flexible, barrier used to trap sediment in water bodies) must be installed on the downstream side of the crossing for the construction period.			
41	Upgrade the river and wetland crossing by spreading culverts across the width of the wetland, while using smaller culverts in the centre of the stream ensuring that channel formation is minimised. Each of these culvert outlets must be designed that the energy of the flowing water is dissipated where it leaves to downstream side of the culvert.	NA		-
The design of stormwater drainage systems must ensure there is no contamination, eutrophication or increased erosion of the wetland areas:				
42	– Drainage systems and runoff from the haul road must be spaced at regular intervals within terrestrial areas as far as possible to ensure that the minimum amount of stormwater is received by wetlands directly.	NA	The design of stormwater management infrastructure has been approved by the DWS as part of the WUL. Construction has not commenced on stormwater management infrastructure and no permanent roads have been constructed.	-
The design of the attenuation, soil profile rewetting and diffuse infrastructure should take into account:				
43	– Compacted infill material, historically placed between the wetland and the shaft area must be removed and soil profiles rewetted in order to increase hydrological support and interflow to the seepage wetlands (HGM 2) of the Holfontein Stream;	NA	The mining project has not commenced. Stormwater management and separation has been catered for in the design drawings but has not yet been constructed onsite.	-
	– Rewetting soil profiles must be done through designing and implementing diffuse release channels that are placed on contour well above the seepage wetland habitat;			
	– Clean water from attenuation and clean and dirty-water separation facilities must be released into the diffuse release contour channels and or the size of the diffuse release contour channels could be increased to serve as combined attenuation and diffuse release infrastructure; and			
	– The diffuse release channels must be constructed exactly on contour as to spread the water evenly along the whole length of the infiltration channel.	NA		
Construction Phase				
44	The clean and dirty water management system (including the PCD) is to be constructed at the commencement of construction activities; thereafter the water treatment facility (including the pipeline from the shaft to the discharge point in the Blesbokspruit for mine water) prior to the commencement of discharging activities, to ensure that any dewatered groundwater can be stored without causing any surface water pollution and treated prior to discharge.	NA		-
45	All water dams must be lined according to DWS engineering design standards to prevent contaminated water from seeping into the local groundwater system. Designs of the dams must be done according to specifications and as-built drawings must be submitted to DWS.	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
46	Suitable flow diversion structures, such as diversion berms and/or collection canals, must be established around the border of the proposed operational areas so as to prevent substantial surface runoff contamination.	NA	Construction of the water management infrastructure has not commenced. The overall layout plan needs to be updated to reflect the discharge point as per the approved WUL.	-
47	The construction of surface stormwater drainage systems during the construction phase must be done in a manner that would protect the quality and quantity of the downstream system (e.g. the use of swales which could then be grassed for the operational phase).	NA		-
48	Stormwater management measures, to attenuate stormwater volumes and decrease velocity, must be in place during vegetation clearing operations to prevent soil losses due to water erosion.	NA		-
49	Stormwater outflows should not enter directly into a wetland. The velocity of water that may reach wetlands must be slowed before it is intercepted by virgin soils using a siltation and erosion control structure such as attenuation swales.	NA		-
50	Construction phase clearing of all soils must be minimised.	NA	The mining project has not commenced. Minimal clearing has taken place on site.	-
51	Construct a temporary berm between the Holfontein shaft and Holfontein Stream. No berm is necessary at the ventilation shaft. During rainy season, inspect berm after thunderstorms and repair if necessary. The berm must be maintained until the clean and dirty water management infrastructure has been constructed.	NA	The mining project has not commenced and no berms have yet been constructed between the shaft and the stream. A berm must be constructed and maintained until the clean and dirty water management infrastructure has been completed.	-
52	A dedicated borehole must be drilled at proposed ventilation shaft position, to identify high-yielding fissures/fractures and seal these prior to shaft sinking.	NA	Timeframes for construction must be confirmed and drilling of boreholes must be aligned with those timeframes.	-
53	The recommended monitoring boreholes as per the Geohydrology Monitoring Programme must be drilled at the commencement of construction activities.	NA		-
54	As far as practically possible, water-bearing fissures which are encountered during the refurbishment of the Holfontein shaft must be sealed to minimise groundwater inflows, i.e. minimising the operational phase mine water balance.	NA	The mining project has not commenced only refurbishment activities are taking place underground. <i>It is presumed that the shaft is being sealed during refurbishment.</i>	-
55	No uncontrolled discharges from the construction crew camps to any surface water resources must be permitted. Any discharge points need to be approved by the relevant authority (DWS).	C	No construction crew camps were on site and no uncontrolled discharges were observed during the site visit.	2
56	Construction must be planned for winter (i.e. the dry months) in order to reduce the risk of floods and excessive sedimentation.	NA	The site visit was undertaken during the summer months (wet season); minimal construction was taking place at the time. Construction for the mining project has not yet commenced.	-
57	Ensure that the water treatment facility is operational to meet DWS water quality specifications before dewatering commences. Measure EC of water to be discharged daily, when EC begins to deteriorate the water treatment facility must be commissioned.	PC	The mining project has not yet been constructed but there is dewatering taking place via a separate WUL, in order to undertake further prospecting. This water is being monitored regularly. The treatment plant / facilities are not yet in place to be able to treat non-compliant water. It is recommended that water treatment options must be put in place to treat non-compliant water.	1
58	Ensure that lay down area/salvage yard, where corroded materials removed from the shaft are to be placed, is fitted with drains to the PCD prior to the commencement of refurbishment.	PC	Shaft refurbishment activities have commenced. Salvage yard material is placed in areas without drains and the PCD has not yet been installed (Appendix 3, Photos 6, 8 and 15). It is recommended that salvaged materials are either removed from site or placed on hardstand and run-off from these areas is contained on site. Run-off from laydown / salvage yards may not be allowed to enter watercourses.	1
59	Radiation measurement of all material brought from underground must be carried out by the appointed radiation officer. Remove material as soon as possible to an area of safety off-site after the radiation officer declares material safe for removal.	C	Material brought from underground is assessed for radiation before forwarding it on for reuse, recycling or disposal.	2
60	Ensure that the haul road surface is always in good condition (including crossings). Carry out daily inspections and repair as necessary.	NA	No permanent roads have been constructed and no hauling was taking place at the time of the audit.	-
61	Haul trucks must be covered with a tarpaulin.	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
Construction and Operation Phase				
62	Ensure that the conditions of any awarded WUL are strictly adhered to.	C	Separate WULs are in place for the dewatering project and the mining project. A WUL audit has recently been undertaken to determine compliance with the dewatering WUL.	2
63	Ensure that all Best Management Guidelines as published by the DWS are adhered to.	C	This is considered to have been addressed during the design phase. This will become relevant for future designs.	2
64	Measure and map all fissure related water features.	NA	The mining project has not yet commenced.	-
65	Grouting and sealing fissures/faults/dykes must be introduced where major water inflows are encountered underground.	NA		-
66	Excess groundwater must be pumped to the surface water storage facilities for re-use. Volumes of excess water must be measured and reported as % of available surface storage capacity, if the flows exceed 1 Ml/day. If excess flow is encountered, volumes must be reported daily.	NA		-
67	Runoff from proposed haul roads must be managed by means of adjacent drainage canals and flow dissipaters to avoid potential erosion problems.	NA		-
68	Any attenuation swales must be grassed for the operational phase and the siltation and erosion control structures maintained regularly.	NA	The operational phase has not commenced.	-
69	Clean and dirty water separation infrastructure must be maintained to effectively collect/direct contaminated water to the proposed PCD.	NA	Stormwater management infrastructure has not been constructed for the mining project yet.	-
70	All mining water must be treated as contaminated. Dewatering qualities must be measured at the surface water tanks and PCD to determine if water must be treated prior to discharge (if DWS standards are exceeded). Monthly monitoring of dewatered qualities at the Water Tanks and PCD specifically EC, pH and SO ₄ . Refer to the Geohydrology Monitoring Programme and Hydrology Monitoring Programme.	NA	Dewatering water is being handled and monitored according to the dewatering WUL granted by the DWS. The mining related water uses have not commenced.	-
71	Water qualities must be monitored prior to treatment and after treatment, prior to discharge. Daily monitoring of EC of water to be discharged must take place. Water discharged into the Blesbokspruit must meet DWS standards. Refer to the Hydrology Monitoring Programme.	NA	Mining-related water uses have not commenced and water management infrastructure has not been installed. Mining related water uses (when they commence) will be handled and monitored according to the mining WUL granted by the DWS.	-
72	Water qualities of recycled groundwater must be measured on a continuous basis. Recycled water must be monitored for salinity levels to prevent an adverse build-up of TDS.	NA		-
73	The sewage treatment plant and the water treatment facility should not be over-capacitated with overwhelming volumes of water at the expense of quality and as such, the maximum operating capacity of these facilities should always be considered. In the event of additional volumes needing treatment, additional facilities must be constructed or current facilities must be improved / expanded to accommodate these volumes. Also, amendments to discharge volumes in the applicable WUL must be approved by the DWS.	NA		-
74	Brine from the sewage treatment plant must be removed to the ME Operations.	NA		-
75	The sediment that has accumulated in the PCD must be removed to the ME Operations.	NA		-
76	Sludge from water treatment facility must be removed to the ME Operations.	NA		-
77	Ensure spillages of sludge from water treatment facility do not occur while transporting to the ME Operations by properly training responsible personnel.	NA		-
78	Ensure that water treatment facility is working optimally to avoid sludge spillages.	NA		-
79	Drainage systems must be maintained regularly in order to minimize the runoff of harmful chemical substances into the associated systems.	NA		-
80	The pipe transporting water to be discharged must be regularly inspected and maintained to ensure that no leaks are observed and potential erosion is avoided.	NA		-
81	Regular inspections and maintenance must be undertaken at both treatment facilities (i.e. sewage treatment plant and water treatment facility) in order to facilitate an optimal treatment process.	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
82	Daily visual inspection by responsible person for water treatment facility to ensure that sludge is not routed to stormwater drain or PCD.	NA		-
83	Inspect the Blesbokspruit culvert and discharge point for any channel formation and repair if noted.	NA		-
84	The quality of the discharge from the water treatment plant must be continuously monitored against the water quality stipulated by the DWS to prevent the potential water quality deterioration of the Blesbokspruit catchment. In the event that the quality of the discharge deteriorates substantially, it is recommended that the treatment method be immediately reviewed and adapted until the required water quality standards are restored.	NA		-
85	Flow dissipaters must be used at the discharge point to avoid potential erosion.	NA		-
86	In the case of pollution of any surface or groundwater, the Regional Representative of the DWS must be informed immediately.	NA	No pollution incidents are reported to have taken place.	-
87	It is recommended that a monitoring programme utilising the Direct Estimation of Ecological Effect Potential (DEEEP) approach be established as detailed in the Hydrology Monitoring Programme.	NA	Dewatering water is being handled and monitored according to the dewatering WUL granted by the DWS.	-
88	Inspect the Blesbokspruit downstream of the discharge point for on a monthly basis in the summer months for excessive growth of aquatic vegetation, which may impede flow. If excessive growth, which is impeding flow, is noted implement cutting of vegetation.	PC	The mining project has not commenced. Excessive growth of vegetation which may impede flow was not observed during the audit. Appendix II Condition 3.2.5 of the dewatering WUL requires regular checks of the downstream culverts to ensure they are not blocked by debris or vegetation. The 2024 external audit of the dewatering WUL indicates that culvert inspections have not taken place. Monthly inspections of the Blesbokspruit should be undertaken.	1
89	It is recommended that the geochemical model be updated during the life of the mine in order to calibrate and validate its results and to construct an effective closure plan. The geochemical model must assess the effectiveness of potential mitigation measures.	NA	The mining project has not commenced. It is recommended that the geochemical model be calibrated within two years of operations commencing.	-
90	Monitoring must be conducted as per the Geohydrology Monitoring Programme to verify predictions and record groundwater quality and groundwater level impacts.	NA	Dewatering water is being handled and monitored according to the dewatering WUL granted by the DWS.	-
91	Monitoring must be conducted as per the Hydrology Monitoring Programme.	NA		-
92	If condensate forms at the ventilation shaft, an evaporation pond must be constructed. The sediment from this pond must be transported to the ME Operations.	NA	No ventilation shaft is in use.	-
Decommissioning Phase				
93	Ensure that the conditions of any awarded WUL are strictly adhered to.	NA	Decommissioning and Closure Plan is not relevant to the current phase of the project	-
94	Refer to the Holfontein Interim Closure Plan, detailing the rehabilitation management measures.	NA		-
95	The Hydrology -and Geohydrology Monitoring Programmes must be implemented.	NA		-
Post-Closure Phase				
96	The Hydrology -and Geohydrology Monitoring Programmes for post-closure must be implemented until a closure certificate is awarded.	NA	Post-closure is not relevant to the current phase of the project.	-
Noise management measures				
Construction Phase				
97	Erect an acoustic barrier around ore hoisting and loading areas (at least 5.6 m in height) between the boundary of the activities and sensitive receptors. If the material to be used for the construction of the acoustic barrier is listed in terms of NEMWA (i.e. mine residue material), authorisation must be obtained prior to construction.	NA	The mining project has not commenced.	-
98	Vertical axial fans must be installed below surface level and vertical attenuated exhaust/intake stacks must be utilised.	NA		-
99	Isolate bin and chute by installing an acoustic enclosure.	NA		-
Operation Phase				
100	Hoisting, loading and hauling operations must be limited to daylight hours (06h00-18h00).	NA	The operational phase has not commenced.	-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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Construction, Operation and Decommissioning				
101	Enclose engine compartments of vehicles.	C	The engine compartments of vehicles on site were enclosed at the time of the audit.	2
102	Damp mechanical vibrations of vehicles and equipment.	NA	Activities that produce mechanical vibrations (such as material extraction and shaft sinking) have not commenced.	-
103	Properly design and maintain silencers on diesel-powered vehicles and equipment.	C	While loud, the silencers on the exhaust of the diesel-powered machinery was in place.	2
104	Implement systematic maintenance of all forms of equipment and vehicles.	C	A maintenance log of all forms of equipment and vehicles was not reviewed at the time of the audit. The generator is supplied by a third party (Air Rotary Services), no evidence of damage, breakdown or neglect was observed.	2
105	Train personnel to adhere to operational procedures that reduce the occurrence and magnitude of individual noisy events (i.e. more than 60 dB).	C	Training on operational procedures that reduce the occurrence and magnitude of individual noisy events was not reviewed. However, health and safety toolbox talks are undertaken and signage indicating the risk of noise and the need for hearing protection was observed. Undertake training on operational procedures that reduce individual noisy events.	2
106	Isolate compressors and generators in separate acoustically treated enclosures or buildings.	PC	The on-site generator enclosure was not acoustically treated and the doors remained open to allow sufficient airflow for cooling. Acoustically isolate generators in enclosures or buildings.	1
107	Any complaints relating to noise must be recorded and the ECO must respond to complaints appropriately. If necessary, further mitigation must be investigated and implemented.	NA	It is understood that no complaints have been received.	-
108	Standardised noise measurements must be carried out on individual equipment at delivery to site to construct a reference database. Regular checks must be carried out to ensure that equipment is not deteriorating and to detect increases which could lead to increase in the noise impact over time.	C	OHS noise monitoring is being carried out at individual areas where equipment is operated.	2
109	Monitoring must be conducted as detailed in the Noise Monitoring Programme.	NA	Only temporary equipment is currently on site, a detailed noise monitoring programme is not yet relevant to the current activities. Develop a detailed Noise Monitoring Programme (which includes monitoring the construction activities) before the mining project commences.	-
110	Mine Health and Safety and Occupational Health and Safety Regulations relevant to noise management must also be adhered to within site boundaries and compliance audited regularly.	NA	It is understood that NKGM is aware of this condition however, assessing compliance against Mine Health and Safety and Occupational Health and Safety Regulations is beyond the scope of this audit.	-
Socio-economic management measures				
Prior to Construction Phase				
111	NKGM must compile a Community Development Plan (CDP) specifically for the Holfontein Project. It is recommended that NKGM collaborate with EMM and local government. The following initiatives can be considered for inclusion in the CDP:	NA	The mining project has not commenced. The CDP should be developed before construction commences.	-
	– Provision of additional water tanks and water supply boreholes for the Holfontein Community;			
	– Investigation into possible installation of a modular sewage treatment plant or composting toilets for the Holfontein Community;			
	– Formalising of 1 or 2 tuck shops outside the mine entrance, which could be run by the Holfontein Community; and			
	– Upgrading and maintenance of Carnation Road will ensure a reduction in dust generation and will provide Welgedacht SH residents with a better road than the existing one.			
112	A Stakeholder Engagement Plan (SEP) and Grievance Mechanism must be drawn up for the Holfontein Project. The main objectives of a SEP are as follows:			

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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	<ul style="list-style-type: none"> – Identification of stakeholders / IAPs – Disclosure of planned project activities; – Identification of concerns and grievances from stakeholders; – Harnessing of local expertise and knowledge from IAPs; – Ongoing disclosure of project activities and monitoring results; and – Response to grievances and enquiries of stakeholders (via a Grievance Mechanism). 	PC	The mining project has not commenced. The SEP should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	1
113	<p>It is recommended that NKGm establish a Community Engagement and Security Forum (CESF) to ensure that stakeholders are notified and consulted throughout the LoM:</p> <ul style="list-style-type: none"> – Ensuring that the authority and IAP contact details are updated; – Informing IAPs of the establishment of the CESF and providing them with the opportunity to join the forum, attend meetings, and receive any relevant information; – Facilitating meetings during construction and operation, taking minutes of these meetings, and distributing meeting minutes prior to the next meeting (it is recommended that these meetings be held every second month); – Distributing information relevant to community health and safety to stakeholders (including environmental monitoring data, the Emergency Preparedness and Response (EPR) Plan, Grievance Mechanism (GM), issues and concerns raised); – Maintaining communication channels throughout the life of the project; – Drafting an action plan to enable the affected communities and relevant government agencies to understand the potential safety and security impacts, and disseminating the plan to IAPs prior to construction; – Timeously communicating any changes to the proposed project, impacts and/or mitigation and monitoring methods, and ensuring that proper legal procedures will be followed; and – Maintaining an accident register and compiling accident reports (for the haul route). This accident register should be submitted to the CESF on a monthly basis 	PC	The mining project has not commenced. The CESF should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	1
114	<p>In order to prevent conflict between the mine and the surrounding community, a security policy must be compiled. Keys aspects of this policy include:</p> <ul style="list-style-type: none"> – Security personnel must be thoroughly vetted, to ensure that none of the individuals hired have been involved in past human rights abuses; – Roles of security personnel must be limited to protecting the work force and safeguarding physical assets; – Security personnel must be encouraged to have as little interaction with the community as possible; and – Security personnel need to be properly trained in the use of armed force and violence, as well as conduct towards community members. 	NA	The mining project has not commenced. The security policy should be developed before construction commences. This is relevant because the residents of the Holfontein Community living in the unused mine houses and informal dwellings are close to the site.	-
115	<p>An In-Migration Management Plan must be developed to reduce the in-migration of job-seekers into the area, and to mitigate the negative impacts associated with this potential in-migration. The In-Migration Management Plan must encompass the following:</p> <ul style="list-style-type: none"> – Information dissemination, recruitment and supply chain transparency; – The lack of employment and formal procurement opportunities available for this particular project needs to be clearly communicated to all IAPs and general public to ensure that there is no expectation of employment or procurement; – The policy of using existing employees from ME Operations must be maintained and no exceptions made; 			

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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	– Contractors must be encouraged to provide transport for their employees, and / or to discourage settlement within the Holfontein area;	NA	The mining project has not commenced. The in-migrationmanagement plan should be developed before construction commences.	-
	– Contractors must apply a similar policy for employment in that no employment will be provided at the gate (at the project area);			
	– While the need for project security is understandable, such security measures (such as fencing and/or patrols) can have further implications on the surrounding residents’ safety and mobility. A mechanism needs to be implemented to allow free access to their community, while still restricting the uncontrolled influx of job seekers into the area; and			
	– Regular engagements with the local residents of the Khomponi Community and the security personnel through workshops and meetings should build a relationship between these parties.			
	– It is recommended that this Plan be compiled in collaboration with the EMM, local authorities and residents of the area.			-
Construction, Operation and Decommissioning				
116	NKGM personnel and contractors must be familiar with relevant environmental and social commitments within the authorised EMPr. Managers will need to be appropriately trained and familiarised with respect to the EMPr in order to possess the skills necessary to impart EMPr requirements to their subordinates. All personnel involved in the construction and operation of the project must undergo a training and awareness programme on health, safety, environmental and social requirements and obligations prior to commencing activities.	PC	The mining project has not commenced. Activities were being undertaken for the dewatering project. No evidence was provided that awareness training has been undertaken on site. Relevant training material must be compiled and training must be undertaken with personnel and contractors responsible for managing the site.	1
117	Community Health and Safety training must be conducted to assist NKGM in raising awareness with the local community (Holfontein Community and Welgedacht SH) regarding project-associated risks. The objectives of the community health and safety training will be:	PC	The mining project has not commenced. Community Health and Safety training material must be compiled and implemented for the dewatering project. The material can be updated as needed for the mining project prior to construction.	1
	– Raising awareness associated with all project activities;			
	– Identification of health concerns and associated behaviour, including HIV/AIDS awareness, hygiene, related to potential sewage / chemical toilet spills; water quality and use;			
	– Encouraging the use of safety initiatives undertaken by NKGM, including fencing and creation of a pedestrian walkway; and			
	– Identification of dangerous / hazardous site activities, including haul roads, PCD, discharge point and pipeline, and the shafts.			
118	The measures in the CDP must be implemented. Maintenance must be provided for the measures implemented throughout the LoM.	NA	The mining project has not commenced.	-
119	The SEP must be implemented. Ongoing stakeholder engagement will play a key role in monitoring socio-economic impacts and the effectiveness of mitigation and management strategies. Remedial actions must be taken where the mitigation and management strategies are ineffective.	PC	The mining project has not commenced. The SEP should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	1
120	The Grievance Mechanism should be monitored on an ongoing basis and any grievances should be adequately responded to in a timeous fashion.	PC	The mining project has not commenced. The Grievance Mechanism should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	1
121	The CESF should be engaged with on an ongoing basis and remedial actions taken in response to any issues raised through this avenue.	PC	The mining project has not commenced. The CESF should be formed and engaged with during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	1
122	The security policy must be adhered to and updated with remedial actions for any security issues which arise.	PC	The mining project has not commenced. The security policy should be developed and implemented for use during the dewatering project. It can be updated specifically for the mining project as needed before construction commences.	1
123	The In-Migration Management Plan must be adhered to.	NA	The mining project has not commenced.	-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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124	The Khomponi Community and Welgedacht SH will need to be monitored in order to ensure that potential socio-economic impacts associated with the Holfontein Project) are recorded and documented, which will facilitate effective mitigation and management, as per the Socio-economic Monitoring Programme.	NA	The mining project has not commenced.	-
125	The SLP Human Resources Development (HRD) Programme must be effectively implemented.	NA	The mining project has not commenced.	-
Decommissioning Phase				
126	The measures provided as per the CDP must be handed over to EMM to maintain post-closure.	NA	This is not relevant to this phase of the project.	-
Soil management measures				
Construction and Operation Phase				
127	Vegetation and soil must be retained in position for as long as possible and removed immediately ahead of construction / earthworks in that area to avoid erosion.	NA	The mining project has not commenced. There was been no soil stripping, soil stockpiling, vegetation clearing taking place at the time of the audit however small stockpiles from minor excavations were observed which should be protected. Soil management and protection measures must be implemented prior to construction.	-
	– In the case of the proposed project area there will be little topsoil to stockpile as most of the topsoil layer will be stripped during vegetation clearing. Subsoil (30-100 cm) must be stripped prior to excavation and construction. Each soil horizon must be stripped and stored separately.	NA		
	– Ensure subsoil stripping and stockpiling for future rehabilitation purposes are conducted correctly under supervision.	NA		
128	Soils must be stockpiled preferably according to soil type and natural horizon sequence (Hu 1, Ms 4 and Av 3 should all be stockpiled individually). The topsoil / subsoil stockpiles must be relocated to a flat area where erosion and contamination of the stockpile will not occur.	NA		-
129	Any soil storage stockpiles must be restricted where possible to heights of less than 4-5 m so as to avoid damage to the soil seed bank.	NA		-
130	The stockpile side slopes must be stabilised at a slope of 1:6, this will promote vegetation growth (use locally adapted perennial or annual seed mixture of grasses) and reduce runoff related erosion.	NA		-
131	Once stockpiled, indigenous grass cover must be implemented (either through natural propagation if the seed bank is sufficient or through seeding) as soon as possible and remain covered until required for rehabilitation.	NA		-
132	Equipment, human and animal movement on the soil stockpiles must be limited to avoid soil damage to the soils and seed bank.	NA		-
	– If soil is contaminated, measures as described in the Hydrocarbon Management Plan or Hazardous Substances / Waste Management Plan must be implemented, based on the source of contamination.			
	– Periodic soil contamination assessments, entailing soil analyses for pH, EC and the metals, metalloids, hydrocarbons and anions listed in in terms of the “Soil Screening Values from GNR 331 of 2014 National Norms and Standards for the Remediation of Contaminated Land and Soil Quality” must be carried out.			
133	Stormwater management measures must be put in place according to the Water Management Plan to attenuate stormwater volumes and decrease velocity.	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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134	Stabilise exposed (bare) areas with vegetation and/or erosion control blankets. Establishing and maintaining vegetation as a soil cover is the most common practical technique for controlling erosion on disturbed soils. Water flow inhibiting grasses such as Vetiver or biodegradable Jute mesh erosion control blanket must be established on undeveloped (open) areas and along the lower ends of the site, in order to retard overland water flow and erosion. These are suitable for short to medium term erosion protection. The effect of the Jute mesh can be enhanced by putting it over a loose blanket of thatching grass or reeds, if locally available. A 70 % dead grass or reed cover will slow down flow, minimise wind erosion and suppress weed growth. The open weave nature of the Jute mesh blankets helps retard water flow velocity, while allowing sunlight infiltration to encourage vegetation growth. Alternatively, strips of instant turf can be planted a few meters apart during spring or late summer, with tuft runner grasses in between.	NA		-
135	Erosion control of all banks must take place so as to reduce erosion and sedimentation. Eroding embankments need to be sloped to a gradient of not more than 1:3 and appropriately re-vegetated.	NA		-
136	All areas susceptible to erosion (including roads, bare areas and drainage channels) must be monitored on a monthly basis to ensure that there is no undue soil erosion resultant from activities. If erosion is identified, it must not be allowed to develop on a large scale before effecting repairs.	NA		-
137	Areas within the surface infrastructure area where vegetation has not been cleared must be mowed as grasses which are not mowed for a period of three years become moribund and die off, resulting in its place being usurped by poorer grasses.	NA		-
Decommissioning Phase				
138	A representative sampling of the stockpiled soils must be analysed prior to rehabilitation to determine the nutrient status and chemistry of the utilisable materials. As a minimum the following elements will be tested for: EC, CEC, pH, Ca, Mg, K, Na, P, Zn, Clay% and Organic Carbon.	NA	The decommissioning, rehabilitation and closure of the site has not commenced.	-
139	Stockpiled soil must be used to rehabilitate disturbed sites. The utilisable soil removed during the construction phase, must be redistributed in a manner that achieves an approximate uniform stable thickness consistent with the approved post development end land use, and will attain a free draining surface profile. A minimum layer of 50 mm must be replaced over the project area to return the area to a pre-mining state.	NA		-
140	Soil contaminated with hydrocarbons must be moved to an allocated area where it will be rehabilitated and soil that cannot be rehabilitated must be disposed of at an appropriate landfill facility.	NA		-
141	The fertility remediation requirements need to be verified at the time of rehabilitation, and informed by the results of sampling. Input from a soil specialist must be obtained regarding fertility remediation requirements, which must be adhered to prior to re-vegetation. The chemical soil composition must be ameliorated to closely match the baseline values as far as possible, particularly for pH and EC.	NA		-
142	Rehabilitated areas must be cordoned off to limit equipment, human and animal movement on the rehabilitated areas.	NA		-
143	Re-vegetation must be carried out according to the Holfontein Interim Closure Plan.	NA		-
Post-Closure Phase				
144	Monitor the recovery of vegetation according to the Biodiversity Monitoring Programme.	NA	The decommissioning, rehabilitation and closure of the site has not commenced.	-
	– All areas susceptible to erosion must be monitored annually and repair, maintenance and prevention measures implemented (if erosion is noted) until a closure certificate is awarded.	NA		

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
Biodiversity management measures				
Prior to Construction Phase				
145	Relocation permits for any plant species of conservation concern to be impacted (i.e. <i>Hypoxis hemerocallidea</i> present in the dry grassland adjacent to the proposed haul road and <i>Kniphofia typhoides</i> present in the moist grasslands associated with the Blesbokspuit crossing) -and demarcation permits for alien invasive species which are to remain on site (i.e. the blue gum trees on the site where the Holfontein shaft is to be located) are to be obtained from DAFF prior to the commencement of construction activities.	NA	Clearing and grubbing has not commenced. Construction timeframes must be confirmed, and relevant activities and documentation planned, including obtaining the relocation and demarcation permits prior to construction of the mining project.	-
146	The Blesbokspuit crossing is likely to be a hotspot for amphibian movement and it is therefore recommended that the road is raised by at least 1 m to prevent amphibians from traversing the road. To further discourage amphibian crossing, the road verges must be steeply sloped so amphibians can't climb onto the road.	NA	Construction at the Blesbokspuit crossing has not commenced and no permanent roads or culverts have been established. Specialist recommendations regarding design of culverts and underpasses must be incorporated into the designs before construction commences.	-
147	Culverts used in the Blesbokspuit should furthermore make provision for semiaquatic and terrestrial species. This can be achieved by constructing sufficient culverts on the edges of the moist grassland (which is not permanently inundated).	NA		-
148	All underpasses and/or culverts must be constructed as far as practically possible according to GDARD's recommendations for pipelines which include the following:	NA		-
	– Underpasses must be at least 1.5 m high and 1.0 m wide and dressed with a minimum of 10 cm sand layer;	NA		-
	– Underpasses must be provided with small grates in the road surface to allow light penetration into the underpass; and	NA		-
	– Accumulated material must be cleared at least once annually, at the start of the rainy season.	NA		-
Construction Phase				
149	At the commencement of construction, prior to clearing activities, a qualified botanist is to be commissioned to identify and relocate plant species of conservation concern which may be impacted.	NA	The mining project has not commenced. A survey must be undertaken prior to site establishment to identify species of conservation concern and to take appropriate action for their rescue / relocation.	-
150	It is recommended that temporary construction barriers are erected to prevent construction vehicles and workers from entering areas containing natural vegetation (dry and moist grasslands). The area associated with the Holfontein shaft must be fenced to prevent vehicles and workers from impacting on natural areas immediately north-west of the shaft.	NA	The mining project has not commenced. No permanent roads or culverts have been established. Specialist recommendations regarding design of culverts and underpasses must be incorporated into the designs before construction commences.	-
151	The road culverts proposed for the Blesbokspuit crossing could impact in faunal movement. However, to encourage faunal species to use the culverts, the culverts must be built as per the recommended design and the following is also recommended: – Vegetation disturbed during the construction of the culverts must be rehabilitated with indigenous, moist grassland species to ensure sufficient cover, which will encourage faunal species to enter the culverts.	NA		-
152	Construction materials should not be stored within areas which contain natural vegetation (and classified as medium to high sensitivity).	C	The mining project has not commenced however, activities for the the dewatering project were underway. Salvage and laydown areas were starting to be established within the site boundaries at the time of the audit. The area within the site boundaries is not considered medium to high sensitivity. It is recommended that at the commencement of construction, prior to clearing activities, a qualified botanist is to be commissioned to identify and relocate plant species of conservation concern which may be impacted during the growing season (see condition 149).	2
153	Construction materials (concrete, topsoil, tar, etc.) used to widen the road and/or construct culverts should not be spilled into the moist grasslands as this will not only pollute the immediate areas, but pollutants will be transported to sensitive areas such as the Blesbokspuit IBA downstream.	NA	No permanent roads or culverts have yet been constructed.	-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
154	Vegetation adjacent to the Carnation Road which was disturbed during any of the construction activities must be rehabilitated to prevent erosion and contamination of lower laying areas (moist grasslands).	NA	The construction and operational phases near Carnation road have not commenced. A survey must be undertaken prior to site establishment to identify species of conservation concern and to take appropriate action for their rescue / relocation.	-
155	Speed bumps must be constructed between the Holfontein shaft and Pansy Road (adjacent to the disturbed moist grassland) as well as where Carnation Road crosses the moist grasslands to prevent speeding that would otherwise result in increase in faunal strikes in these high risk areas.	NA		-
156	All areas which have been disturbed during the construction phase including the widening of the haul road must be rehabilitated with indigenous species to prevent alien invasive vegetation species from colonizing these areas.	NA	The construction phase is not complete.	-
157	During construction (including construction of culverts over moist grasslands associated with the haul road), the areas containing natural vegetation (which have been classified as being of medium to high ecological sensitivity), must be protected and no vehicles or workers must be allowed to enter these areas as this will disturb the natural vegetation, making the area vulnerable to infestations by alien plants already present in the vicinity.	NA	Construction for the mining project has not commenced and the relevant areas therefore have not been demarcated.	-
158	Rehabilitation must take place at the end of construction at initial disturbed areas along the pipeline route, at the upgraded Blesbokspruit crossing, along the verges of widened roads, and potentially at the pipeline discharge point.	NA		-
Construction and Operation Phase				
159	Environmental awareness training must be implemented as per the environmental awareness plan educating personnel and contractors on how to interact with the environment.	PC	The mining project has not commenced. Activities were being undertaken for the dewatering project. No evidence was provided that awareness training has been undertaken on site. Relevant training material must be compiled and training must be undertaken with personnel and contractors responsible for managing the site.	1
160	Hydrocarbons must be managed according to the Hydrocarbon Management Plan to avoid contamination of the environment.	PC	Hydrocarbons are stored and handled on site. The storage areas are temporary but not all storage areas were bunded at the time of the audit (Appendix 3, Photos 4 and 14). It is recommended that hydrocarbons must be managed according to the Hydrocarbon Management Plan and the hydrocarbon management plan be audited internally on a regular basis.	1
161	Waste must be managed according to the Waste Management Plan to avoid contamination of the environment.	NA	See assessment of the Hazardous Substances / Waste Management Plan measures below	-
162	Hazardous substances and hazardous waste must be managed according to the Hazardous Substances / Waste Management Plan to avoid contamination of the environment.	NA		-
163	An ecologically sound stormwater management plan must be implemented during construction and appropriate water diversion systems put in place. Refer to the Water Management Plan.	NA	See assessment of the Water Management Plan above.	-
164	Monitor water quality on a regular basis. Refer to the Water Management plan.	NA		-
165	The development of new electrical infrastructure poses a collision risk to avifauna and volant (flying) mammals (i.e. bats). A possible high collision risk area within the Holfontein study area could be where the lines cross the Blesbokspruit as it is possible that this area is used as a flight corridor for water fowl moving to and from the Blesbokspruit IBA. It is recommended that that an ECO monitors the newly constructed power lines once a week for bird collisions associated with the overhead lines. It is important to identify which bird species are affected by the collisions in the long term to ensure that wires are marked appropriately (in response to the collision data) and all the data which has been collected on bird collisions must be submitted to the Endangered Wildlife Trust and Birdlife South Africa.	PC	Power transmission lines to the site have been installed and the risk to flying avifauna and mammals has therefore been realised. No monitoring of bird or mammal strike data has been provided for review. It is recommended that the power line route is monitored once a week for bird collisions and the affected bird species recorded.	1
166	It is recommended that the road verges of the road between the Holfontein shaft and Pansy Road is mowed in autumn and winter. This will make the area less suitable to small prey species favoured by owls to minimise the likelihood of vehicle collisions with fauna.	NA	The site visit was undertaken during the summer months. It is recommended the grass on road verges is maintained short throughout autumn and winter months.	-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
167	Road related faunal mortalities must be recorded to identify any additional high collision risk areas. Mitigation measures recommended in this report should then also be adapted to these areas.	PC	No records of road kill were provided for review. Additional high collision risk areas have not been identified or addressed. Records of collisions must be maintained.	1
168	Alien invasive vegetation eradication and monitoring must be conducted throughout the construction and operation phases as detailed in the Biodiversity Monitoring Programme.	PC	Biodiversity monitoring data was not provided for review. The Biodiversity Monitoring Programme must be implemented and invasive vegetation controlled.	1
169	Biodiversity monitoring must be conducted as per the Biodiversity Monitoring Programme.	PC		1
170	The dry grasslands associated with the project (i.e. dry grassland adjacent to the proposed haul road) must be burned every second year to remove moribund plant material.	PC	Evidence that some of the grassland alongside the site had been burned however, it is unclear if this was a scheduled burn or not. Fires in the vicinity of the project should be monitored to ensure that the burning rotation is maintained.	1
Decommissioning Phase				
171	Environmental awareness training must be implemented as per the environmental awareness plan educating contractors on the measures in this plan giving an indication on how to interact with the environment.	NA	Decommissioning has not yet commenced. This is not relevant to this stage of the project.	-
172	Alien invasive vegetation eradication and monitoring must be conducted throughout the decommissioning phase as detailed in Biodiversity Monitoring Programme.	NA		-
173	The mine should consider placing bat roosting sources such as bat boxes or bat houses at the rehabilitated site.	NA		-
174	Rehabilitation must be carried out according to the Holfontein Interim Closure Plan.	NA		-
Post-Closure Phase				
175	Alien invasive vegetation eradication and monitoring must continue post-closure as per the Biodiversity Monitoring Programme.	NA	Decommissioning has not yet commenced.	-
176	The recovery of vegetation must be monitored as per the Biodiversity Monitoring Programme.	NA		-
Traffic management measures				
Construction, Operation and Decommissioning				
177	The mine in conjunction with the Gautrans must maintain the haul road surface to ensure transportation of materials and to accommodate mine trucks at all times.	NA	Construction has not commenced on the proposed roads. NKGM must bear in mind the requirements for intersection and road upgrades, which should be designed in conjunction with the road authorities.	-
178	Provide dedicated right turn lanes where heavy vehicles are expected to make turning movements;	NA		-
179	Detailed investigations must be conducted in conjunction with Gauteng Department of Roads and Transport (Gautrans) in terms of the existing quality and potential life span of the existing road surface layers of the route along which excavated ore, consumables and workers will be transported; and	NA		-
180	Ensure that the necessary approval (if any) has been obtained for the upgrades from Gautrans prior to construction and consultation with a design engineer would be required.	NA		-
181	From visual inspection the tarred section of Carnation Road is failing and requires repairs/ upgrades. The extent of repairs must be determined as part of detail design phase by pavement specialist. This would be advisable to ensure that mine related traffic can transport ore and workers at all times.	NA		-
182	The short section of gravel road along Carnation Road must be upgraded and tarred.	NA		-
183	The road section from the railway underpass to the ME Operations must be widened to accommodate the passing of haul trucks and construction vehicles.	NA		-
184	Proper road markings, reflective road studs (LED) and road signs must be provided and maintained at intersections under investigation as well as the proposed haulage route to ensure visibility during night time, proper visibility of intersection lane geometry and sufficient information to road users;	NA		-
185	Introduce speed limit signage, limit speed to 60 km/ hr;	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
186	Construct speed humps if required; and	NA	Construction has not commenced on the proposed roads. NKGM must bear in mind the requirements for road and intersection upgrades, as well as relevant pedestrian crossings.	-
187	A road maintenance plan needs to be prepared in conjunction with Gautrans on public roads where trucks will operate.	NA		-
188	To reduce the safety risks for workers along roads at intersections, it is recommended that a loading and off-loading area is constructed if workers are no longer going to be transported to site by bus.	NA		-
189	Proper road markings, reflective road studs (LED) and road signs must be provided and maintained at intersections under investigation as well as the proposed haulage route to ensure visibility during night time, proper visibility of intersection lane geometry and sufficient information to road users;	NA		-
190	Provide acceleration lanes to allow heavy vehicles to gain speed and enter main traffic flow along Pansy Avenue;	NA		-
191	Detailed investigations must be conducted in conjunction with Gautrans in terms of the existing quality and potential life span of the existing road surface layers of the route along which excavated ore, consumables and workers will be transported;	NA		-
192	Ensure that the necessary approval (if any) has been obtained for the upgrades from Gautrans prior to construction; and	NA		-
193	A road maintenance plan needs to be prepared in conjunction with Gautrans on public roads where trucks will operate.	NA		-
194	To reduce the safety risks for pedestrians and livestock, it is recommended that a gravel sidewalk is constructed on at least one side of the haul road.	NA		-
Visual management measures				
Construction Phase				
195	The extent of the areas to be disturbed must be limited in area to only that which is essential.	NA	Tasks on site have been limited to within the layout; no excessive disturbance of the areas was observed during the site visit.	-
196	Keep the mine layout to the smallest possible footprint.	NA		-
197	Avoid the unnecessary removal of vegetation, especially trees (i.e. the blue gum trees on site), where these partially or totally screen infrastructure.	NA	The clearing and grubbing activities have not commenced. The ECO should ensure they are familiar with the requirement to ensure that large trees remain on site.	-
198	Make use of the space between sensitive visual receptors and the mine to create a visual buffer. Existing agricultural activities on this land must be continued or these fields must be rehabilitated to a natural state using indigenous vegetation.	NA	The mining project has not commenced. The existing agricultural areas have not been disturbed. The need for a visual buffer should be considered prior to construction due to the time taken for trees to grow, should they be used to create the screening.	-
199	The associated infrastructure to be built will be partially screened by the topography and surrounding vegetation. To screen the proposed infrastructure from the adjacent residences which will have an unobstructed view, the acoustic barrier suggested in the Noise Management Plan must be constructed.	NA	The mining project has not yet commenced. Once construction timeframes are known, screening commitments such as planting of trees must commence as soon as possible.	-
200	Keep vertical dimensions of tall infrastructure at minimum heights.	NA	Construction, operational and decommissioning activities associated with the mining project have not commenced, therefore visual intrusion, dust and artificial lighting are not a concern. Lighting used for the dewatering project must be kept at a minimum - it is noted that dewatering activities are kept to daylight hours.	-
201	Signage related to the proposed development is to be discrete.	NA		-
202	Avoid the use of highly reflective materials in construction. If this cannot be avoided reflective materials must be painted a colour to allow it blend in with the landscape as much as possible. The colour is to be carefully selected, and is to be in the dark grey, brown or green range, to minimise visibility and avoid reflectivity.	NA		-
203	Due to the height of the proposed headgear (approximately 50 m) and ventilation shaft (approximately 30 m) it would not be possible to screen the shafts from view. To lessen the visual intrusion, camouflage must be utilised i.e. painting it a colour to allow it blend in with the landscape as much as possible. The colour is to be carefully selected, and to be in the dark grey, brown or green range, to minimise visibility and avoid reflectivity.	NA		-
204	Avoid unnecessary illumination.	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
205	Provide lights with cover fittings that limit lateral and upwards “light spill”, and position lights to shine towards the intended areas of illumination rather than using floodlights.	NA		-
206	Limit the heights at which lights are positioned where possible will reduce “light spill”.	NA		-
207	Motion sensor activated lighting may be used instead of lights that illuminate continuously.	NA		-
Construction, Operation and Decommissioning				
208	The dust suppression measures as per the Air Quality Management Plan must be implemented.	NA	Construction, operational decommissioning activities have not commenced, therefore dust and artificial lighting are not a concern.	-
209	The operations must be kept in a tidy state i.e. prevent litter, to minimise further visual impact. Waste must be managed as per the Waste Management Plan.	NA		-
210	Make use of Low Pressure Sodium lighting or other types of low impact lighting.	NA		-
211	Low wattage bulbs can be used to further reduce the impact.	NA		-
212	Any complaints received regarding visual impacts must be investigated and measures implemented to address the complaint as per the Socio-economic Management Plan.	NA		-
Decommissioning Phase				
213	Completely remove all structures during decommissioning.	NA	The closure and decommissioning phases have not commenced.	-
214	Rehabilitate all disturbed areas, to reflect the pre-mining state or better as per the Holfontein Interim Closure Plan.	NA		-
Wetland management measures				
Prior to Construction Phase				
215	The design of the attenuation, soil profile rewetting and diffuse infrastructure should take place as per the Water Management Plan.	NA	Refer to assessment of Water Management Plan	-
Construction Phase				
216	No construction activities must commence within 500 m from a wetland prior to authorisation thereof by DWS in the form of an authorised WUL.	C	Construction has not commenced. The Licensee does however have an authorised WUL allowing for construction within 500 m of a wetland.	2
217	The footprint of the haul road (including culverts) and associated construction activities must be kept to an absolute minimum within the direct vicinity of wetlands.	NA	Construction of the haul road and culverts has not yet commenced. Construction timeframes must be confirmed, and relevant activities and documentation planned.	-
218	Avoid unnecessary construction activities in identified wetlands and in the direct vicinity of the wetland (i.e. within 50 m of identified wetland boundaries) at all cost through proper demarcation and appropriate environmental awareness training. These buffers must be demarcated with red tape / fencing under guidance of the ECO.	NA		-
219	Make use of existing roads and tracks where feasible, rather than creating new routes through vegetated areas.	NA		-
220	Vegetation and soil must be retained in position for as long as possible, and removed immediately ahead of construction / earthworks in that area.	NA	Clearing, grubbing and soil stripping has not commenced therefore soil and vegetation has mostly been retained in place to date.	-
221	Where construction in proximity to sewer lines is unavoidable then excavations must be done by hand while at all times ensuring that the soil beneath the sewer lines is not destabilised.	NA	Construction, in proximity to sewer lines, has not commenced.	-
222	The contractor has a responsibility to inform all staff of the need to be vigilant against any practice that will have a harmful effect on wetlands habitat. This information shall form part of the Environmental Education Programme to be effected by the Contractor, including the following:			
	– No construction shall take place in areas of high sensitivity such as wetlands or 50 m buffer zone;			
	– Any proclaimed weed or alien species that germinates during the contract period shall be cleared by hand before flowering;			

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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	– Infilling, excavation, drainage, dumping of building material and hardened surfaces (including buildings and asphalt) should not occur in any of the wetland, riparian or within the 50 m buffer zone as a minimum, but should preferably be done as far away as practically possible from these areas;	PC	The contractor is on site for implementation of the dewatering project. Evidence of an Environmental Education Programme to be effected by the Contractor was not provided for review. It is recommended that the Environmental Education Programme be developed and implemented on site as soon as possible.	1
	– Imported fill material must be monitored during and after construction for the presence of any alien species. Any such species must be removed immediately;			
	– Emergency plans and spill kits must be in place in case of pollutant spillages;			
	– All stockpiles must be protected from erosion, stored on flat areas where runoff will be minimised, and be surrounded by bunds. It should also only be stored for the minimum amount of time necessary;			
	– Erosion control of all banks must take place so as to reduce erosion and sedimentation into drainage channels or wetland areas;			
	– Silt traps and culverts must be regularly maintained and cleared so as to ensure effective drainage;			
	– Littering and contamination of water sources during construction must be mitigated by effective construction camp management;			
	– All construction materials including fuels and oil must be stored in a demarcated area that is contained within a bunded impermeable surface to avoid spread of any contamination. The storage areas must be constructed as far away as practically possible outside of wetlands, riparian and buffer zones; and			
	– Cement and plaster should only be mixed within mixing trays. Washing and cleaning of equipment should also be done within a bermed area, in order to trap any cement or plaster and avoid excessive soil erosion. These sites must be rehabilitated prior to commencing the operational phase.			
223	Wetland vegetation and soil must be retained in position for as long as possible and removed immediately ahead of construction / earthworks in that area.	NA	Construction in the wetland areas has not commenced. No roads or culverts have been constructed. Discharge is occurring into the wetland associated with the Holfontein stream, which is approved in the dewatering WUL.	-
224	Work procedures must be carefully planned in wetland areas to avoid impacts to wetland habitat. Runoff from roads must be managed to avoid erosion and sedimentation of wetland areas. Where excessive loose sediment is created, attenuation swales and / or soils screens must be installed.	C		2
225	Culverts must be constructed as per the design detailed in the Water Management Plan.	NA	Refer to assessment of Water Management Plan	-
226	Stormwater drainage systems must be constructed as per the design detailed in the Water Management Plan to ensure that there is no contamination, eutrophication or increased erosion of the wetland areas.	NA	Refer to assessment of Water Management Plan	-
227	Any wetland areas disturbed due to construction activities must be rehabilitated at the cessation of construction activities. Re-vegetation of disturbed areas must be undertaken with site indigenous species and areas where soil compaction or ruts developed must be rehabilitated.	NA	There has been no construction in wetland areas.	-
Construction and Operation Phase				
228	Water to be discharged must be treated as per the Water Management Plan to ensure wetlands are not contaminated.	PC	Refer to assessment of Water Management Plan. The discharge water is monitored regularly but no measures are in place to treat the water should it not comply with the discharge quality standards. To date the water quality has been largely compliant with these standards. This is being managed and monitored in terms of the dewatering WUL. Measures must be put in place to allow for the treatment of non-compliance water prior to discharge.	1
229	It is recommended that a continuous water quality monitoring station be installed to monitor water quality from the treatment plant. Refer to the Water Management Plan.	NA	The mining project has not commenced and the treatment plant has not yet been installed. Water discharged from the dewatering project is monitored on a regular basis.	-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
230	Stormwater runoff must be managed as per the Water Management Plan to ensure wetlands are not impacted.	NA	Refer to assessment of Water Management Plan	-
231	Water must be discharged as per the Water Management Plan to ensure wetlands are not impacted.	PC	Water is currently being discharged to the wetland associated with the Holfontein stream (Appendix 3, photos 15 and 16), as approved by the dewatering WUL. Specialist studies have been undertaken to determine whether there are any impacts associated with the discharge and measures are in place to address these.	1
232	Hydrocarbons are to be managed according to the Hydrocarbon Management Plan to avoid contamination of wetlands by hydrocarbons.	NA	See assessment of the Hydrocarbon Management Plan measures	-
233	Runoff from roads must be adequately managed, as per the Water Management Plan, to avoid contamination.	NA	No permanent roads have been constructed.	-
234	Sufficient care must be taken when handling hazardous substances/wastes, as per the Hazardous Substance/Waste Management Plan to prevent pollution of wetlands.	NA	The mining project has not commenced on site. Stormwater management and water separation has been catered for in the design drawings .	-
235	Clean and dirty water must be managed as per the Water Management Plan to ensure wetlands are not contaminated.	NA		-
236	Monitoring must be carried out as per the Wetland Monitoring Programme.	PC	No wetland monitoring is taking place. Monitoring must be carried out as per the Wetland Monitoring Programme and a wetland specialist must be consulted regarding the mitigation of any specific problems or issues identified.	1
237	The ECO must be briefed by a wetland specialist on specific monitoring issues during the construction phase. Appropriate mitigation needs to be implemented after consultation with relevant specialist should any problems or issues be identified.	PC		1
Decommissioning Phase				
238	Hydrocarbons are to be managed according to the Hydrocarbon Management Plan to avoid contamination of wetlands by hydrocarbons.	NA	Decommissioning and Closure Plan is not relevant to the current phase of the project.	-
239	Runoff from roads must be adequately managed, as per the Water Management Plan, to avoid contamination.	NA		-
240	Sufficient care must be taken when handling hazardous substances/wastes, as per the Hazardous Substance/Waste Management Plan to prevent pollution of wetlands.	NA		-
241	Monitoring must be carried out as per the Wetland Monitoring Programme.	NA		-
242	Refer to the Holfontein Interim Closure Plan, detailing the rehabilitation management measures.	NA		-
Hydrocarbon management measures				
Construction, Operation and Decommissioning				
243	All generators will be placed on drip trays to catch spills and leaks, while all maintenance work on equipment, vehicles, machinery, etc. will be done over a plastic tarpaulin or steel drip trays situated within dirty water catchment areas.	PC	Generators, vehicles, and machinery required for the dewatering project are on site. The generator has been placed on hardstand however, no facility has been provided to contain spills or leaks that may arise from generator operation. No maintenance work was observed. Precautionary spill management should be implemented.	1
244	Any pumps, machinery or other equipment that require oil, diesel, etc., that are to remain in one position for longer than two days will be placed on drip trays which are to be emptied regularly. Any effluent from the drip trays and any spilled oils and fuels will be collected and stored in 210 litre drums within the service-bay area before being collected and disposed of by a licensed waste removal company.	PC		1
245	The servicing of vehicles and equipment will only be permitted at designated areas such as the workshop which have impermeable surfaces.	NA	All servicing of vehicles and equipment is undertaken at Modder East in appropriately designated areas.	-
246	Store fuel, oils and other lubricants in a bunded storeroom with a capacity to contain 110% of the total volume thereof.	PC	The hazardous substances store and fuel containers were not appropriatly bunded (Appendix 3, Photos 4 and 14). It is recommended that all hazardous liquids are stored in a bunded facility.	1
247	Storage of hydrocarbons must be outside of the 100-year flood line of surrounding watercourses.	C	Diesel and hazardous substances were stored outside the flood line.	2
248	Ensure that all mechanical equipment and vehicles used are kept in good working order to prevent any leakage of oil, petrol, diesel, hydraulic and other associated fluids.	C	No hydrocarbons were observed leaking from mechanical equipment.	2





No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
		2024		
249	Vehicles used during the construction phase must be parked in a designated area and containers must be used to prevent any oil leaks	C	A parking area had been designated on site, leaks ere not observed.	2
250	The Mine must keep copies of all disposal certificates on-site.	PC	Although BJB Scrap (an external contractor) has been appointed to remove the waste from the site, the disposal certificates were not kept on site. It is recommended that copies of all disposal certificates are kept on-site.	1
251	The fuel storage facility and associated bund walls will be maintained according to the SANS for the “storage and distribution of petroleum products in above ground bulk installations” (SANS 10089-1:2003, edition 4.1).	PC	The temporary fuel facilities on site do not comply with the requirements of SANS 10089 (Appendix 3, Photos 13 and 14). It is recommended that fuel storage facilities comply with SANS 10089.	1
252	The contractor(s) supplying fuel and lubricants to the Mine are required to have an emergency management system in place in order to deal with possible vehicle accidents or accidental spillage. This would typically involve emergency teams that would have the capacity to neutralise spills and begin rehabilitation of the affected area within hours.	NA	The mining project has not commenced and only small volumes of fuel are being transported to site. The requirement for an emergency management system should be taken into account when appointing a supplier of fuel.	-
253	Keep spill kits or soap materials on hand to clean up hazardous hydrocarbon spills. Once used, this material will be treated as hazardous waste and disposed of accordingly at a permitted hazardous waste site.	C	Spill kits were observed on site.	2
254	Should an oil spill occur as a result of leaking equipment, machinery or vehicles, it is to be cleaned utilising oil remediation solvents or commercial hydrocarbon spill kits of which the Mine is to maintain a supply on site.	NA	No oil spills were observed and no such incidents were recorded.	-
255	A 210 litre drum for the collection of spilled oils and fuels, together with a drip tray to catch spills and leaks before they can contaminate soil and underlying groundwater, must be available on-site at all times.	NA	Containers to collect spilt oil were on site if the need arose. It is recommended that drip trays and facilities to store hydrocarbon contaminated material be installed.	-
256	Implement a spill response plan and train personnel to react efficiently to address any spillage.	PC	No evidence was provided of a spill response plan or associated training being implemented on site. It is recommended that a spill response plan be compiled and personnel are trained to react efficiently to address any spillage.	1
257	The catchment berms demarcating the dirty water catchment will be maintained at a minimum height of 0.5 m to ensure that any spilled hydrocarbons transported by stormwater will not enter the clean water catchment.	NA	Catchment berms have not been installed.	-
258	Surface water draining off areas where it may be contaminated by hydrocarbons must be channelled towards a sump and oil trap which will remove hydrocarbons. Oil residue shall be treated with oil absorbent such as Drizit or similar and this material removed to a licensed landfill facility.	NA	Construction for the mining project has not commenced. Minimal hydrocarbons are currently stored on site for the dewatering project.	-
Decommissioning Phase				
259	Fuel storage facilities must be removed immediately upon completion of decommissioning phase.	NA	Closure and decommissioning activities have not commenced.	-
260	Soil contaminated with hydrocarbons must be moved to an allocated area where it will be rehabilitated and soil that cannot be rehabilitated must be disposed of at an appropriate landfill facility.	NA		-
261	In the case of pollution of any surface or groundwater, the Regional Representative of the DWS must be informed immediately.	NA		-
General waste management measures				
Construction, Operation and Decommissioning				
262	The mine will ensure that an adequate number of waste drums / bins / skips are available within the dirty water catchment area on site, upon a suitably hardened surface surrounded by trenches / berms and reporting to the PCD. Waste must be stored in a manner that it cannot be washed or blown into the environment.	C		2





No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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263	Waste drums / bins / skips will be collected regularly and disposed of by the appointed contractor at the nearest landfill facility which is suitably licensed in terms of legislative requirements. Domestic waste includes, but is not limited to plastics, cans, food remains and glass.	C	The mining project has not commenced. Small volumes of waste are being generated and contained during the dewatering project. Separate waste bins are stored on a concrete hard stand on site. An external contractor (BJB Scrap) removes the waste from the site on a regular basis.	2
264	No waste is permitted to be buried or burned on site.	NA		-
265	The site must be cleaned daily and litter removed and stored in the bins provided.	NA		-
266	The washing of clothing, lunch dishes or vehicles is prohibited on site, except within specifically demarcated areas.	NA		-
267	Waste streams must be recycled or re-used (where possible) before disposal is considered. Recyclable material must be collected by a licensed recycling contractor.	NA		-
268	The volumes being temporarily stored must be monitored on a continuous basis and the relevant contractor contacted to clear the temporary facilities on a regular basis or on an ad-hoc basis if it is evident that the facilities are reaching capacity. Storage must be carried out as per the norms and standards should storage thresholds (100 m3 of general waste) be exceeded.	NA		-
269	In such instances, new storage containers should not be placed on-site as this will only serve to increase the storage capacity on-site, thereby requiring a license in terms of NEMWA. If, however, it becomes evident that 100 m ³ is insufficient in terms of required capacity, the relevant licensing process must be initiated.	NA		-
270	Waste must be collected and disposed of at a licensed landfill facility on a monthly basis.	NA		-
271	In order to avoid waste blowing away or falling while stored or transported, the following must be implemented:	NA		-
	<ul style="list-style-type: none">Ensure that the waste is loaded securely for transport when it leaves the site;			
	<ul style="list-style-type: none">Waste transported off site must be covered; and			
	<ul style="list-style-type: none">Skips must be constructed of steel and possess a sealable drain outlet.			
Hazardous waste/hazardous substances management measures				
Construction, Operation and Decommissioning				
272	The mine will comply with the Hazardous Substances Act, No. 15 of 1973 and apply for the necessary permits from the Department of Health if required.	NA	Assessing compliance with the Hazardous Substances Act, No. 15 of 1973 is beyond the scope of this audit. It is recommended that the ECO / Safety Officer identifies the requirements of the Act and undertake an internal audit.	-
273	The mine will keep Material Safety Data Sheets (MSDS) on site for all hazardous substances kept on site and comply with the requirements of all MSDS.	PC	MSDSs were not available for review during the site visit. It is recommended that Material Safety Data Sheets (MSDS) are kept on site for all hazardous substances.	1
274	Include effective and relevant information regarding the handling and storage of hazardous substances / waste into environmental awareness training provided to personnel and contractors during induction.	PC	No training material and training registers were provided to the auditor. It is recommended that awareness training is provided to personnel and contractors regarding the handling and storage of hazardous substances / waste.	1
275	The loading areas must be impermeable to water and runoff must be diverted to a PCD.	NA	No loading areas are on site.	-
276	Trucks may not be overloaded and the ore load must be spread evenly within the truck to prevent spillage from the trucks. Trucks must be covered with a tarpaulin to prevent or limit spillage; and	NA	The mining project has not commenced, and ore is not being loaded and hauled.	-
277	Regular inspection along haul roads and loading areas must be undertaken to initiate removal of spillage quickly.	NA		-
278	Explosives must be handled at the designated explosives handling facility under the conditions stated in the MSDS.	NA	The mining project has not commenced; explosives are not being used on site.	-
279	Old explosives and the explosives packaging will be dealt with as legally required by industry practice, in an explosive destruction facility (this should form a condition of contract for any blasting contractors utilised).	NA		-

No.	EMPr commitments	C/PC/NC/NA	Comments / Actions	Audit Score
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280	A walled concrete platform, dedicated store with adequate flooring or bermed area must be used to accommodate substances such as paint, herbicide and insecticides etc., as appropriate according to their specific MSDS, in well-ventilated areas.	PC	Such a facility has not been installed on site but the volumes of hazardous materials currently being stored on site are low. It is recommended that an appropriate hazardous store be installed on site - having berms, adequate flooring and roofing.	1
281	Storage areas for of potentially hazardous materials must be outside of the 100-year flood line of surrounding watercourses.	C	All hazardous materials are stored outside the flood line.	2
282	Cement must be stored- and cement batching must be undertaken on an impermeable surface.	NA	Cement was not stored on site.	-
283	Any large spills of hazardous substances will initially be controlled by on-site emergency response personnel, who will be aided by professional contractors depending on the nature of the material spilled. Hydrocarbon spills must be managed as per the Hydrocarbon Management Plan.	NA	No bulk spills have occurred.	-
284	Surface water draining off contaminated areas must be channelled towards a sump which will separate these substances and oils.	NA	No contaminated areas were present on site.	-
285	Portable septic toilets are to be provided and maintained for construction crews until permanent facilities are available. Maintenance must include their removal without spillage. Sewage infrastructure must be inspected and maintained to ensure no leaks. Under no circumstances may ablutions occur outside of the provided facilities.	NA	There are 5 toilets on site, 3 that will connected to conservancy tank, and 2 chemical toilets. At the time of the site visit, construction of the installation of the conservancy tank was still underway.	-
286	The bund walls for all storage facilities containing any industrial or related hazardous substances / wastes will have sufficient storage capacity of 110% from the combined storage capacity.	PC	Not all hazardous substances were stored in banded facilities (Appendix 3, Photos 13 and 14). All storage facilities containing any industrial or related hazardous substances / wastes are to be appropriately banded.	1
287	Temporary storage of hazardous waste on site is limited to 80 m ³ at any given time. Greater capacity requires a licence in terms of NEMWA. The waste must be monitored on a continuous basis and the relevant contractor contacted to clear the temporary facilities on a regular basis or on an ad hoc basis if it is evident that the facilities are reaching capacity. Should the mine require a hazardous waste storage capacity greater than 80 m ³ a licence must be obtained.	NA	Hazardous waste was not observed on site therefore.	-
288	In order to avoid waste or hazardous substances being exposed while stored or transported, the following must be implemented:	NA	No exposed hazardous substances or waste was observed during the audit	-
	- Ensure that the waste is loaded securely for transport when it leaves the site; and			
	- Skips must be constructed from steel and possess a sealable drain outlet.			
289	Any other hazardous waste generated on-site for disposal will be collected by a licensed hazardous waste contractor for disposal at a licensed landfill facility.	NA	Small volumes of waste are generated by the site. An external contractor (BJB Scrap) removes the waste from the site on a regular basis.	-
290	The mine will request a safe disposal certificate for all hazardous waste streams removed by external contractors that will be kept on-file for the life of the mine.	PC	No safe disposal certificates were available a the time of the audit. Records regarding the waste volumes generated, and removed should be maintained.	1
291	The sewage treatment plant and associated sewage infrastructure must be monitored and maintained regularly to prevent any blockages, leaks or spillages. If infrastructure does fail, it must be repaired as soon as possible.	NA	A permanent sewage treatment plant has not been installed on site. A conservancy was under construction at the time of the audit. When operational the conservancy tank must be checked reguly to ensure there is no overflow or spillage.	-

APPENDIX 3

Photo Sheet

	<p>Photo 1. Security and access control at the entrance to the site</p>		<p>Photo 2. Holding tank for water prior to discharge (part of dewatering project)</p>
	<p>Photo 3. Workshop with roof and concrete hardstand</p>		<p>Photo 4. Chemical store on concrete hardstand with an accessible spill kit</p>

	<p>Photo 5. Bins with lids placed on concrete hardstand for waste separation and collection</p>		<p>Photo 6. Pooling stormwater within material storage area.</p>
	<p>Photo 7. Installation of sewage conservancy tank</p>		<p>Photo 8. Scrap storage area and chemical toilets</p>

	<p>Photo 9. Containerised ablutions and potable water storage tank</p>		<p>Photo 10. Signage indicating potential noise risks on site</p>
	<p>Photo 11. Winder installed in the winder house</p>		<p>Photo 12. Not yet commissioned dosing plant in preparation to treat dewatered water prior to discharge when required</p>



Photo 13.
Diesel storage
on existing
bund



Photo 14.
Diesel storage
tanks placed on
concrete
hardstand



Photo 15.
Pipeline
conveying
abstracted
water to the
settling tank



Photo 16.
Discharge point



Photo 17. Material being stored in the salvage area on site.



Photo 18. Signage prohibiting unauthorised access.



Photo 19. Signage prohibiting unauthorised access to the substation. Note also the site is equipped with fire extinguishers.