



De Beers Consolidated Mines (Pty) Ltd: Venetia Mine

Environmental Audit Report contemplated in regulation 34 of the EIA Regulations, 2014 published in terms of the NEMA

Report date: 20 September 2022

Reference No.: 12/1/9/2-V9

SHANGONI
Management Services (Pty) Ltd



Stewards



Problem Solvers



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Influencing decisions since 2000 through identification, quantification and mitigation of environmental, safety, health and compliance risks

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1. Introduction and Legal Framework

De Beers Consolidated Mine (Pty) Ltd: Venetia Mine (“Venetia Mine”) is located on the farm Venetia 130 MS, approximately 80 km to the west of the town of Musina, within the Musina Local Municipality of the Vhembe District Municipality in Limpopo Province. Venetia Mine is an existing open pit diamond mine and commenced with operation in 1992. The extent of the Mining Right boundary is approximately 3 000 ha and includes three main kimberlite ore reserves, namely K1, K2 and K3 kimberlite pipes. As the depth of open pit mining increases, the amount of waste rock increases and open pit mining becomes economically and environmentally unviable. Accordingly, the open pit will be developed to a depth of approximately 450 m, whereafter, the K1 and K2 reserves will be mined from underground as part of the Venetia Underground Project (“VUP”).

On the 13th of July 2012, Venetia Mine was issued with an Environmental Authorisation (“EA”) (Ref: 12/1/9/2-V9) for the proposed Underground Operations and Environmental Management Plan (EMP) Consolidation for Existing Operations at De Beers Consolidated Mines, Venetia Mine within Musina Local Municipality of Vhembe District in the Limpopo Province. The July 2012 issued EA was then amended and the new amended EA was issued to Venetia Mine on the 6th of February 2015 by LEDET.

Shangoni Management Services (Pty) Ltd (“Shangoni”) was appointed by Venetia Mine to undertake the compliance assessment of the above-mentioned amended EA, issued by the LEDET.

During the audit, all conditions of the EA and amended EA (Ref: 12/1/9/2-V9, dated 06/02/2015) were assessed, action to be taken was noted and any exceptional or additional impacts in terms of compliance and current deficiencies in the approved EA were listed. This report details the findings and aspects to consider for these results.

2. Regulatory Requirements for Audit and Reporting

In terms of section 24N of the *National Environmental Management Act* 107 of 1998 (“NEMA”) the holder of an environmental authorisation “*must manage all environmental impacts in accordance with his or her approved environmental management programme*” and “*monitor and audit compliance with the requirements of the environmental management programme*”.

Regulation 34 of the Environmental Impact Assessment (“EIA”) Regulations (GN R982 of 4 December 2014 as amended) provides as follows “*Auditing of compliance with environmental authorisation, environmental management programme and closure plan:*”

- 34 (1) *The holder of an environmental authorisation must, for the period during which the environmental authorisation and EMP, and where applicable the closure plan, remain valid-*
- (a) *ensure that the compliance with the conditions of the environmental authorisation and the EMP, and where applicable the closure plan, is audited; and*
 - (b) *submit an environmental audit report to the relevant competent authority.*
- (2) *The environmental audit report contemplated in sub regulation (1) 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) *the level of performance against and compliance of an organization or project with the provisions of the requisite environmental authorisation or EMPr and, where applicable, the closure plan; and*
 - (ii) *the ability of the measures contained in the EMPr, and where applicable the closure plan, to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity;*
 - (c) *contain the information set out in Appendix 7; and*
 - (d) *be conducted and submitted to the competent authority at intervals as indicated in the environmental authorisation.*
- (3) *The environmental audit report contemplated in sub regulation (1) must determine-*
- (a) *the ability of the EMPr, and where applicable the 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 to sufficiently provide for the avoidance, management and mitigation of environmental impacts associated with the closure of the facility; and*
 - (b) *the level of compliance with the provisions of environmental authorisation, EMPr and where applicable the closure plan.*
- (4) *Where the findings of the environmental audit report contemplated in sub regulation (1) indicate-*
- (a) *insufficient mitigation of environmental impacts associated with the undertaking of the activity; or*
 - (b) *insufficient levels of compliance with the environmental authorisation or EMPr and, where applicable the closure plan;*
- the holder must, when submitting the environmental audit report to the competent authority in terms of sub regulation (1), submit recommendations to amend the EMPr or closure plan in order to rectify the shortcomings identified in the environmental audit report.*
- (5) *When submitting recommendation in terms of sub regulation (4), such recommendations must have been subjected to a public participation process, which process has been agreed to by the competent authority and was appropriate to bring the proposed amendment of the EMPr and, where applicable the closure plan, to the attention of potential and registered interested and affected parties, including organs of state which have jurisdiction in respect of any aspect of the relevant activity and the competent authority, for approval by the competent authority.*
- (6) *Within 7 days of the date of submission of an environmental audit report to the competent authority, the holder of an environmental authorisation must notify all potential and registered interested and affected parties 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 environmental audit report must contain all information set out in Appendix 7 to these Regulations.”*

3. Objectives of the environmental audit

The objectives of this environmental audit are to determine Venetia Mine's compliance with the EA conditions and to:

- (a) report on the level of compliance with the conditions of the EA;
- (b) identify and assess any new impacts and risks as a result of undertaking the activity;
- (c) evaluate the effectiveness of the EA; and
- (d) identify shortcomings in the EA conditions.

4. Scope and purpose the environmental audit

Shangoni was appointed by Venetia Mine to undertake the audit on their Environmental Authorisation, as well as the EMPr which is also audited in conjunction with this audit. The purpose of the audit is to determine the level of compliance with the conditions of the EA associated with the undertaking of the activity on an on-going basis.

Venetia Mine is currently operating in accordance with the *Amendments of the Environmental Authorisation for the proposed Underground Operations and Environmental Management Plan (EMP) Consolidation for Existing Operations at De Beers Consolidated Mines, Venetia Mine within Musina Local Municipality of Vhembe District in the Limpopo Province* (Authorisation reference number: 12/1/9/2-V9).

This Regulation 34 audit report accordingly serves the purpose of fulfilling the requirements of the NEMA and the conditions of the EA.

The audit review period relevant for this EA Audit is from 30 June 2021 to 01 July 2022.

The audit team is not aware of any information requested by the Competent Authority for purposes of this environmental audit.

5. Methodology adopted for the environmental audit

The audit was conducted by reviewing and abstracting the conditions from the EA and including it in the commitment tables as contained in Chapter 6 of this audit report.

In addition to assessing the compliance to conditions of the EA, the information was also assessed through evaluating site activities and verifying such against the conditions provided in the EA.



5.1 Audit team

Team Member	Company	Responsibilities
Olwethu Mungwe	Shangoni Management Services (Pty) Ltd	Desktop documentation review, interviews, site verification and audit report compilation.
Renate Steffens	Shangoni Management Services	Desktop documentation review, and interviews.
Ashley Miller	Shangoni Management Services	Technical and Quality reviewer

Olwethu Mungwe is an environmental consultant. He obtained his B.Sc. Environmental Science degree, with Environmental Science and Biology as his two majors from the University of KwaZulu-Natal. He is a registered Cand.Sci.Nat in the field of Environmental Science, and is a registered Candidate Environmental Assessment Practitioner (EAP). Olwethu assists with the compilation of various reports required as part of Environmental Authorisation processes, including amongst other; Environmental Impact Assessments, Scoping Reports, Basic Assessments, Environmental Management Plans and Environmental Management Programmes. Olwethu assist in conducting Environmental Audits, such as General Authorisation Audits, Environmental Authorisation audits and Environmental Management Programme Audits and Water Use Licence Audits. He also has experience in water sampling, public participation and translating public documentation.

Renate Steffens is a Senior Environmental Scientist with more than 7 years' experience in drafting Basic Assessment Reports, Scoping Reports, Environmental Impact Assessments (EIA), Environmental Management Programme Reports (EMPr), Integrated Water and Waste Management Plans (IWWMP) and Integrated Water Use Licence Applications (IWULA). Renate also has the following experience in auditing: External Water Use Licence audits, Environmental Authorisation audits and Environmental Management Programme audits. Renate has also gained valuable experience in Geographic Information Systems (GIS) in compiling regional, locality and infrastructure maps and mine plans.

Ashley Miller obtained his B.Sc (Honours) degree in Environmental Analysis and Management through the University of Pretoria. Ashley is part of the Environmental Authorisations Department at Shangoni Management Services (Pty) Ltd. and has experience in drafting Basic Assessment Reports, Scoping Reports, Environmental Impact Assessments (EIA), Environmental Management Programme Reports (EMPr), Integrated Water and Waste Management Plans (IWWMP) and Integrated Water Use Licence Applications (IWULA). Ashley is also the Product Lead of Environmental Assurance and has the following experience in auditing: Due diligence audits, External Water Use Licence audits, Environmental Authorisation audits, Environmental Management Programme audits, Waste Management Licence audits and Atmospheric Emissions Licence audits. Ashley has also gained valuable experience in Geographic Information Systems (GIS) in compiling regional, locality and infrastructure maps and mine plans.









5.2 Audit execution

The environmental audit comprised of:

- A site visit was undertaken, 12 - 14 July 2022 for site observation purposes; and
- Interviews were conducted with relevant mine personnel and where relevant contract personnel for the purpose of assessing documented evidence of compliance with the auditing criteria.

5.3 Rating of findings

Compliance category	
Condition/mitigation measure/commitment has been achieved with evidence provided in the form of a document or site verification.	 Compliant
A statement made on an objective basis that does not relate to compliance to the condition/mitigation measure/commitment but relates to the identification and assessment of any new risk or impact.	 Observation
The failure to comply with, or fulfil the requirements of an applicable condition, commitment and/or mitigation measure.	 Non-Compliant
The condition, commitment and/or mitigation measure is not applicable. A "not applicable" finding is also noted in event where such condition, commitment and/or mitigation measure is not yet relevant but is still relevant for future activities or, relates to activities that are complete and compliance thereto can no longer be assessed (e.g. Construction Phase activities).	 Not Applicable
Compliance has been assessed but could not be determined or could not fully be determined due to the absence of documentary evidence or confirmation as to the status of compliance from the client.	 Undetermined
The condition, commitment and/or mitigation measure that does not require any specific action.	 Noted

5.4 Assumptions, uncertainties and gaps in knowledge

Although all reasonable attempts were made to verify comments made during interviews held through further record/documentation assessments, it is assumed that such comments provided are a true and accurate reflection, unless otherwise indicated in the report. In an event where insufficient information was provided to support compliance, the auditors' general approach was to indicate that such commitment could not be verified. Such detail is provided in Chapter 6 of this report.

Observations made represent the status quo, although where applicable and supported through records and interviews, commitments for further actions planned by the mine have been considered.









6. Environmental Authorisation audit







The content of this Chapter aims to indicate the conditions that were provided for within the EA, to minimise the significance of the impacts identified, and to indicate the progress made by the operation with regards to the implementation of and compliance to the conditions. Objective evidence as requested and reviewed, in conjunction with observations made during the site audit, were used to determine the operation's implementation of and compliance to the conditions.





6.1 Environmental Authorisation, dated February 2015, reference no: 12/1/9/2-V9

Ref No	CONDITIONS	Compliance review and rating	Recommendations	Timeframe for implementation of recommendation
1	SCOPE OF AUTHORISATION			
1.1	This EA applies only to the above mentioned activity, i.e., the establishment of underground operation at an existing open cast Venetia mine, located on the farm Venetia 103 MS, as indicated in the amended Environmental Impact Assessment Report (EIAR) received by the Department on 15 June 2012.	The holder of the authorisation is aware of this condition and the requirements thereof are noted.		
1.2	Amended: Should the authorised development trigger activities that are listed in section 21 of the National Environmental Management: Air Quality Act, an Atmospheric Emissions Licence must be obtained prior the commencement of such activities;	The holder of the authorisation is aware of this condition and the requirements thereof are noted. Also, the Venetia Mine was issued with the Atmospheric Emissions Licence ("AEL") for the activities undertaken on site that triggered the activities that are listed in National Environmental Management: Air Quality Act (AEL Ref:12/4/12L-V7).		
1.3	Amended: Condition removed.	This condition was amended and removed from the authorisation, thus, the condition is no longer applicable.		
1.4	The holder of the EA shall be responsible for ensuring compliance with the conditions contained in this EA. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the EA.	The holder of the authorisation is aware of this condition and the requirements thereof are noted.		
1.5	Any changes to, or deviations from, the project description set out in this EA must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the EA to apply for further authorisation in terms of the Regulations.	No evidence was observed during the site inspection and audit process that the project description has changed, as further confirmed by the mine personnel. It is further noted that Venetia Mine has recently received an Environmental Authorisation for the infrastructure associated with the Venetia Storm Water Management Project ("VSWMP"). The authorisation was issued by the DMRE on 03 August 2022 with reference number LP 30/5/1/2/3/2/1 (58) EM. The VSWMP includes for the construction of additional water management infrastructure to contain water as removed from the Venetia Underground Project ("VUP") as well as to contain potentially mine affected surface water runoff.		
1.6	This EA does not negate the holder of the EA's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity;	The holder of the authorisation is aware of this condition and the requirements thereof are noted.		




Ref No	CONDITIONS	Compliance review and rating	Recommendations	Timeframe for implementation of recommendation
1.6.1	<p>Amended to insert Mine Health and Safety Act, 1996 (Act 29 of 1996) Relevant legislation that must be complied with by the holder of this EA includes, inter alia:</p> <ul style="list-style-type: none"> • The National Heritage Resource Act (Act 25 of 1999); • The Occupational Health and Safety Act, 1993 (Act 85 of 1993); • The National Water Act, 1998 (Act 36 of 1998); • The National Environmental Management: Waste Act, 2008 (Act 59 of 2008); • The National Heritage Resource Act (Act 25 of 1999); • The Mine Health and Safety Act, 1996 (Act 29 of 1996); • The National Water Act, 1998 (Act 36 of 1998); • The National Environmental Management: Waste Act, 2008 (Act 59 of 2008); • The Limpopo Environmental Management Act, 2003 (Act No. 7 of 2003); • The Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965); and • The Minerals and Petroleum Resources Development Act., 2002 (Act 28 of 2002). 	The holder of the authorisation is aware of this condition and the requirements thereof are noted.		
2	Appeal of authorisation			
2.1	The holder of the EA must notify all registered interested and affected party, in writing and within 12 (twelve) calendar days of receiving notice of the Department's decision to authorise the activity.	On 20 July 2012, Venetia Mine sent the notification (in an email format) to the registered interested and affected parties ("I&APs") to notify the I&APs regarding the Department's decision on the approval of the application submitted. The evidence of the email sent to the I&APs was also provided by the mine for review.		
2.2	The notification referred must -			
2.2.1	Specify the date on which the EA was issued;	The requirements stipulated in these conditions were addressed in the notification that was sent to the I&APs.		
2.2.2	advise all the interested and affected party that request;			
2.2.3	give the reasons for the decision; and			
2.2.4	inform all the interested and affected parties of the appeal procedure provided for in Chapter 7 of the Regulations.			





Ref No	CONDITIONS	Compliance review and rating	Recommendations	Timeframe for implementation of recommendation
3.	MANAGEMENT OF THE ACTIVITY			
3.1	The Environmental Management Programme (EMPr) compiled by Environmental Resources Management (ERM) and submitted as part of the application for an EA is hereby approved by the Department and must be adhered to throughout the lifecycle of the activity.	The approved EMPr amendment; <i>Environmental Management Programme for the proposed Underground Operations and EMP Consolidation for Existing Operations at De Beers Consolidated Mines, Veneta Mine, Limpopo Province</i> , compiled by Environmental Resources Management and dated February 2012, was and is implemented throughout construction and operational phases. Annual external environmental compliance audits are undertaken against the commitments of the approved EMPr amendment.		
3.2	The contents of the EMPr and its objectives must be made known to all contractors, subcontractors, agents and other people working on the site, and any updates or amendments to the EMPr must be submitted to the Department for approval.	Discussions with the mine personnel confirmed that the EMPr is shared with the contractors and subcontractors to make them aware of the mitigation measures stipulated in the EMPr as part of the activities undertaken on site. Mine personnel further confirmed that the Green Files (inclusive of the aspect register) are provided to the contractors and subcontractors before undertaking work, to assist them with understanding the risks as a result of the activities conducted on site, and such are checked monthly by the Environmental Manager.		
3.3	Construction activities must be limited to the current mining lease area as applied for, biodiversity features occurring on the outskirts of the operation footprint must not be encroached upon.	Site observations and the review of the aerial imagery confirmed that the current construction activities related to the VUP are conducted within the mine boundary. No disturbance of the biodiversity features is taking place on the outskirts of the operation as confirmed by the mine personnel and site observations. Venetia Mine also has the Biodiversity Action Plan in place as part of its operation, and such is updated every year.		
3.4	Should a need arise to upgrade the existing wastewater treatment facility, an application for an amendment of the approved Waste Management licence (WML) must be lodged with the Department of Environmental Affairs.	Discussions with the mine personnel confirmed that the mine currently utilise the existing sewage treatment plant to treat the sewage generated at Venetia Mine. Accordingly, a "Not applicable" finding is recorded.		
3.5	The recommendations and mitigation measures recorded in the amended EIAR received by the Department on 15 June 2012 must be adhered to and incorporated as part of the EMPr where applicable,	The recommendations and mitigation measures stipulated in the EIAR are incorporated in the EMPr. Further thereto, Venetia Mine conducts both internal and external audits on compliance to the provisions of the EMPr with the latest external audit conducted in conjunction with this audit.		
3.6	Amended: Condition removed	This condition was amended and removed from the authorisation, thus, the condition is no longer applicable.		
3.7	The applicant shall note that in terms of Section 19 (1) of the National Water Act, 1998 (Act 36 of 1998), an owner of land, a person in control of land or a person who occupies or uses the land on which - (a) any activity or process is or was performed or undertaken, or (b) any other situation exists, which causes, has caused or is likely to cause pollution of a water resource must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring." Therefore any pollution incidents(s) associated with the proposed development must be reported to the Regional Office of the Department of Water Affairs within 24 hours.	Venetia has been operating in accordance to the Water Use Licence ("WUL") (License No.: 14/A63E/ABCGIJ/5111) that was issued in August 2017, however, DWS granted the mine with the new WUL (License No.: 14/A63E/ABCGIJ/5111) 06 July 2022, which then supersedes the August 2017 WUL. As part of the Venetia Mine's operation, the mine then adheres to the conditions stipulated in the WUL to prevent and manage any activity that might cause pollution of a water resource from occurring. Discussions with the mine personnel further confirmed that the incidents occurring on site are recorded in the Isometrix and reported to the DWS within 24 hours. Evidence of reported incidents to the Department was provided by the mine in the form of the letters and emails that were sent to the Department. The mine has also developed and implemented the <i>Venetia Mine Emergency</i>		







Ref No	CONDITIONS	Compliance review and rating	Recommendations	Timeframe for implementation of recommendation
		<p><i>Preparedness and Response Procedure Rev 10.0, DOC NO VEN-00001566, dated 2021/02/12 to manage the incidents that have occurred.</i></p> <p>The auditors were provided with information relating to 5 reportable incidents for the audit review period, that may cause water pollution, as reported to the DWS. A review of the incident investigation reports and the notification to DWS confirmed that the incidents were reported to the DWS within 24 hours. The incidents are summarised as follows:</p> <ul style="list-style-type: none"> • Burst process return water pipeline: <ul style="list-style-type: none"> ○ Date of occurrence – 23 July 2021; and ○ Date of DWS notification – 23 July 2021 • Broken sewage pipe adjacent to storm water control dams: <ul style="list-style-type: none"> ○ Date of occurrence – 25 May 2022; and ○ Date of DWS notification – 26 May 2022. • Dirty water spillage from northern compartment of Return Water Dam (“RWD”) 1: <ul style="list-style-type: none"> ○ Date of occurrence – 26 May 2022; and ○ Date of DWS notification – 27 May 2022. 		
		<p>The following incidents were not reported within 24 hours:</p> <ul style="list-style-type: none"> • Spillage of slurry from open ended slurry pipeline: <ul style="list-style-type: none"> ○ Date of occurrence – 21 July 2021; and ○ Date of DWS notification – 23 July 2021 • Slime spillage at transfer station (Pachuca 2): <ul style="list-style-type: none"> ○ Date of occurrence – 04 August 2021; and ○ Date of DWS notification – 06 August 2021 <p>It is noted, that although the notifications to the DWS were not submitted within a 24-hour period, the following:</p> <ul style="list-style-type: none"> • For both incidents, the notifications to DWS were undertaken within 48 hours; and • The incidents occurred within the affected water management system of Venetia Mine and were contained, in terms of both incidents, by the affected water trenches and the RWD 1. <p>Considering the above, it is the auditor’s opinion (based on the investigation reports provided), that no water pollution occurred or would have had the potential to occur (containment within the affected water system) from these two incidents. Accordingly, an “Observation” finding is recorded.</p>		









Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
3.8	The mitigation measures as contained in the "surface water input to EIA for planned underground mining and EMP consolidation" report must be implemented. This includes amongst others:				
3.8.1	In order to ensure sustainable rehabilitation of all the mine residue deposit and stormwater runoff must be contained on top of these facilities. The trenches on the outer slope of the residue deposits and/or along the outer toe-line. This will increase the moisture regime in the profile which will enhance vegetative growth and also contains all sediment wash-off which normally impact the stormwater control system and the environment.	<p>Site observations confirmed that all the stormwater control dams are functioning properly, including the Fine Residue Deposit ("FRD") 1 and 2 Return Water Dams ("RWD") that collect water from the FRDs. Currently on site; water from the FRD1 is pumped to the FRD1 RWD to prevent overflow of the FRD1 using the mine's newly implemented water management system for the FRDs. Site observations did not reveal any concerns regarding the overflow of the FRD1. Site observations also noted some vegetation growth in some sections of the FRD slopes, and no concerns were noted regarding the stormwater runoff management system currently in place in this regard. The mine also has in place the <i>Venetia Mine Rehabilitation - Monitoring and Maintenance Procedure Rev 2 Doc no DBG01135, dated 2018/07/13</i> to ensure that the quality aspects of every activity in the rehabilitation life cycle are met as practical as possible to guarantee that the post-mining land use objectives are being met.</p> <p>Discussions with mine personnel and site observations confirmed that, during high rainfall/flood event, there is a potential for possible mine affected surface water runoff to leave the site on the western side of the mine. Such water would flow towards the Van Zyls Dam. It was confirmed by Venetia Mine that such event has occurred in the past and was reported to the DWS as an incident, however, no such event has occurred during the audit review period. Venetia Mine has also established a network of earthen berms and trenches (fitted with pumps) in this area to prevent any possible mine affected water from leaving the site.</p> <p>Venetia Mine is currently undertaking construction activities related to the VSWMP and such will include for the construction of the Pollution Control Dam 3 ("PCD3") which will collect affected water runoff from the upstream catchments inclusive of runoff from the CRD, FRDs and potential overflow from the other upstream water containment facility. The WUL issued by the DWS on the 6th of July 2022 (License No.: 14/A63E/ABCGIJ/5111) authorises the undertaking of such activity as part of the mine's updated Stormwater Management Plan.</p> <p>As no such incident has occurred during the audit period and due to the infrastructure in place as well as the future infrastructure to be constructed as part of the VSWMP, an "Observation" finding is recorded.</p> <p>Discussions with the mine personnel and site observations also confirmed that FRD2 is currently not operational as no deposition is taking place. Also, site personnel confirmed that there is ongoing maintenance on the dam.</p>			
3.8.2	To limit the runoff volume to the on-site pollution control dam infrastructure must be put in place to control potentially contaminated stormwater runoff at source, such as along the toe of the waste rock deposit, coarse residue deposit and the fine residue deposit.	<p>Site observations confirmed that the FRD1 RWD and FRD2 RWD collect all the affected water from the FRD's, including the seepage arising from the FRD's. Mine personnel further confirmed that runoff from the plant area is collected and transported via the trenches towards the FRD1 RWD for containment. Discussions with the mine personnel and site observations revealed that the affected water emanating from the Course Residue Deposit is collected via the berms and trenches (fitted with pumps) around this area to prevent any possible mine affected water from leaving the site through the western side of the mine. In the instances of heavy rainfall/flood events, there is a possibility of the mine affected surface water runoff to leave the site on the west. Such water would flow towards the Van Zyls Dam where it would be collected.</p>			











Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
		<p>Discussions with mine personnel confirmed that seepage emanating from the WRDs is leaving the mine premises through the remanent portion of Paleo Channel to the north, with seepage also identified on the eastern side of the WRDs.</p> <p>A review of the <i>De Beers Group, Venetia Mine, Annual Compliance Water Quality Assessment Report 2021</i>, compiled by Aquatico confirmed that the average water quality for January to December 2021 for monitoring locality VD2 (Waste Rock Dump seepage), exceeds the WUL limits for pH, Electrical conductivity and total alkalinity. The analysis further indicated high levels of nitrate, chloride and sulphate.</p> <p>It is, however, noted that as part of the VSWMP, Venetia Mine is planning to construct a seepage cut-off trench across the Paleo Channel to contain the mine affected seepage and pump such water to FRD 2 RWD for containment and reuse. The plans for the cut-off trench were provided for review with construction planning to commence within the year 2022. Further thereto, Venetia Mine has also appointed a service provider (Jones & Wagener) to conduct investigations relating to the potential seepage identified to the east of the WRDs.</p> <p>Venetia Mine has identified possible seepage water emanating from the WRDs to the east of the mine. Venetia Mine has appointed a contractor (Jones & Wagener) to conduct an assessment, including geohydrological assessments, in this area to determine the source of the water as well as to determine the quality of such water. The draft report <i>Venetia Mine Hydrogeological Assessment Report</i>, dated June 2022 and compiled by Jones & Wagener was provided for review. Discussions with mine personnel confirmed that the report is currently under review for finalisation, with the outcome of such assessment to determine the strategies to be undertaken. It is expected that such assessments will be completed in 2022.</p>		<p>Investigate and implement the stormwater management measures to contain the affected water emanating from waste rock dumps.</p>	<p>As soon as possible</p>
		<p>Venetia Mine has an updated Storm Water Management Plan (“SWMP”) that was authorised by the DWS as part of the recently issued WUL (License No.: 14/A63E/ABCGIJ/5111), and the WUL authorises the construction, and upgrading, of several pollution control dams including PCD3. The purpose of PCD3 is to collect all the affected runoff from the CRD, FRDs and potential overflow from the other upstream water containment facility, as well as to contain water as removed from the VUP. The mine proposes to commence with construction of this dam by the end of August 2022.</p> <p>Also, Venetia Mine is planning to construct a seepage cut-off trench across the Paleo Channel to contain the mine affected seepage and pump such water to FRD 2 RWD for containment and reuse. The plans for the cut-off trench were provided for review with construction planning to commence within the year 2022.</p>			
3.8.3	<p>Additional water control structures are required to redirect runoff from catchment 2 and 3 in order to contain most of the runoff in the proposed pollution control dam or the existing pit storm water control dam, etc.</p>	<p>Refer to the above discussions regarding the approved VSWMP with the proposed construction of the PCD3 to contain affected stormwater runoff generated on site.</p>			
3.9	<p>Accidental spillages of hazardous substances must be reported to Department of Water Affairs (DWA) within 24 hours and the polluted areas must be remediated or cleaned as stated in section 20 of the National Water Act (NWA), 1998 (Act No 36 of 1998).</p>	<p>Discussions with the mine personnel confirmed that the spillages of the hazardous substances on site are managed in accordance to the following:</p> <ul style="list-style-type: none"> <i>Venetia Mine EMS Hazardous Materials, Application and Management Procedure</i>, Rev 2.0, DOC NO VEN-00000196, dated 2020/09/18, 			









Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
		<ul style="list-style-type: none"> Venetia Mine EMS Spill Management Procedure, Rev 9.0, Doc No Ven-00000212, dated 2020/08/28, and Venetia Mine Waste Management Facility Emergency Response Procedure, Rev 2.0, DOC NO VEN-00001233, dated 2021/09/24. <p>Further discussions with the mine personnel confirmed that no hazardous substance spillages have occurred during the audit review period. All the incidents (levels 1, 2, and 3 incidents) on site are recorded and reported to the Department of Water and Sanitation, and the evidence of reported incidents to the DWS was provided by the mine in the form of the letters and emails.</p>			
		Site observations confirmed the spillages at the Decline workshop, and inadequate stormwater management measures in place (i.e., trenches, sump, and Drizit) to manage affected water generated in the area. It should be noted that this workshop is currently under construction, and such will be utilised as a part of the VUP.		Investigate on the measures to effectively manage the spillages and the affected water at the Decline workshop.	On-going
3.10	Section 28 of the NEMA places a duty of care on De Beers Consolidated Mines (Pty) Limited to ensure that reasonable measures are taken to prevent pollution or degradation of the environment from occurring, continuing or recurring. Should any environmental damage result from this development or the operation thereof De Beers Consolidated Mines (Pty) Limited must within 14 days of the damage being caused, rectify the situation at his/her own expense.	The holder of the authorisation is aware of this condition and the requirements thereof are noted.			
3.11	The noise impact study conducted by F le Malherbe and dated October 2011 revealed that there is no noise management program in place. In this regard the following must be done:				
3.11.1	Regular maintenance schedules, especially for diesel - powered equipment, must include the checking of the functional state of all intake and exhaust noise attenuators, the effectiveness of enclosures or any other noise control measures;	Discussions with the mine personnel confirmed that the noise monitoring on the vehicles and equipment is conducted monthly on site, and the evidence of the noise assessment conducted was provided for review. Site observations also noted that all the equipment and machinery utilised on site (both for surface and underground) are serviced on the mine's workshops, namely; Barloworld, Basil Read, IOT Workshop, Dewatering Workshop, Decline Workshop, and the Plant workshops (workshop 1, 2 and 3).			
3.11.2	Monthly noise audits must be conducted on all diesel powered equipment. A change in the noise emission characteristics of equipment must serve as a trigger for maintenance inspection;				
3.11.3	A noise complaint register must be developed and an effective follow-up procedure be implemented;	Complaints reporting at Venetia Mine is done as per the mine's Isometrix system. A complaints register is available on site. All environmental related complaints (including noise) are sent to the Environmental Department for investigation and actioning. Complaints are recorded on Isometrix and assigned a responsible person for corrective action / investigation.			
3.11.4	A yearly survey of ambient noise levels at the boundary of Venetia Mine must be conducted, using procedures specified in SANS 10103,	As per the discussions with the mine personnel, the noise survey is conducted at the boundaries of the Venetia Mine, and such is undertaken every year. The report titled <i>Baseline noise survey along the boundaries of the Venetia Mine, Environmental Impact Report Noise Impact Assessment</i> , dated October 2021 and compiled by dBAcoustics was provided for review, and in the mentioned report confirmed that the survey of ambient noise levels is conducted, using procedures specified in SANS 10103.			









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3.11.5	Amended: Condition removed	This condition was amended and removed from the authorisation, thus, the condition is no longer applicable.			
3.11.6	Records all audits and actions must be kept on site for monitoring purposes.	Discussions with the mine personnel confirmed that the Environmental Department keep all the records of audits and monitoring on site, and such are provided upon request during the external audit.			
4.	MONITORING				
4.1	The applicant must appoint a suitably experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation / rehabilitation measures and recommendations referred to in this EA are implemented and to ensure compliance with the provisions of the approved EMPr.	Discussions with the mine personnel confirmed that the ECO is appointed on site as part of the current development taking place for the VUP. Proof hereof was further provided in the form of letter to DMRE dated 19 August 2016 that further indicates that Mr Gavin Anderson, as the Environmental Manager, has been appointed as the ECO..			
4.2	The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.	It should also be noted that Venetia Mine's Environmental Officers conducts monthly inspections on the different operational areas on site (i.e., workshops, production shaft, etc), and evidence of such report was provided for review. Also, each construction contractor on site has its own Environmental Officers which conduct inspections to enhance the management of impacts as a result of activities undertaken.			
4.3	The holder of the EA must notify the Department, in writing and within 48 (forty eight) hours, if any condition of this EA cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this EA may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.	The holder of the authorisation is aware of this condition and the requirements thereof are noted.			
4.4	Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.	As previously mentioned, discussions with the mine personnel confirmed that the Environmental Department keep all the records of audits and monitoring undertaken on site, and such were provided upon request during the external audit.			
4.5	The Department reserves the right to monitor and audit the development.	The holder of the authorisation is aware of this condition and the requirements thereof are noted.			
5.	RECORDING AND REPORTING TO THE DEPARTMENT				
5.1	Amended: De Beers Consolidated Mines Limited must prepare and submit compliance monitoring or environmental audit report as stipulated in an EMP on an annual basis. The report must indicate the applicant's compliance status with regard to the conditions of the EA and must be submitted to the Department.	Discussions with the mine personnel confirmed that the environmental audit report is submitted annually to the Department. The submitted previous year's environmental audit report (<i>Environmental Authorisation: Proposed Activities for Establishment of Underground Mining operations at an existing Opencast Venetia Mine Conditions Compliance Audit Report 2021, Reference nr.: 12/1/9/2-V9</i> , dated December 2021 and compiled by Mervyn Taback Incorporated Trading as Andersen) indicates Venetia Mine's compliance status regarding the condition stipulated in this licence. Venetia Mine conducts external audits on compliance to the provisions of the EMPr with the latest external audit conducted in conjunction with this audit. Proof of submission of the report to DMRE was provided in the form of the submission letter signed and stamped by the DMRE on 28 February 2022.			







Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
5.2	The environmental audit/ compliance monitoring report must include, inter alia -				
5.2.1	Specifically state whether the conditions of this authorisation are being adhered to;	The review of above-mentioned audit report confirmed that such is indicated in the report.			
5.2.2	Contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of recommendations; and	As part of this audit, recommendations regarding the non-compliances are provided as indicated in this condition.			
5.2.3	Include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment.	The review of above-mentioned audit report confirmed that such is indicated in the report.			
5.3	Amended: The applicant must ensure that an up-to-date emergency log is kept during both construction and operational phases. The emergency log must be made available upon request by the Department;	The emergency log is available at the mine, and such is updated regularly as confirmed by the mine personnel. The emergency log was also provided by the mine for review.			
6.	NOTIFICATION TO AUTHORITIES				
6.1	Seven days written notice must be given to the Department prior to the commencement of the construction activities. Commencement for the purposes of this condition includes site preparation. A notice must include a date on which it is anticipated that activities will be commenced with and must include the name and contact details of the appointed ECO.	Discussions with the mine personnel confirmed that this condition was discussed with the DRME during the meeting that was held on the 9 th of September 2019, as the mine was seeking guidance from the Department regarding certain conditions stipulated in the EA. During this meeting, Venetia Mine raised this condition with the Department to also indicate that based on the previous audits conducted, this condition has always been noted to be non-compliant. With that being the case, the mine further required guidance if whether the mine should amend this condition as construction on site commenced many years ago. The DMRE's response was that this condition should be noted as "Not Applicable" going forward as construction has already commenced on site. The above mentioned thus concluded that this condition is deemed "Not applicable", and the above mentioned was verified through the review of the Minutes of the meeting held between Venetia Mine and DMRE; <i>Signed Minutes DMR EA & WML 09.09.2019 Signed March 2020.pdf</i> .			
7.	COMMENCEMENT OF THE ACTIVITY				
7.1	This activity must commence within a period of three years from the date when the EA was issued. If commencement of the activity does not occur within that period, the EA lapses and a new application for EA must be made in order for the activity to be undertaken. Any request for extension of the validity period of the EA must be lodged with the Department at least 60 days before the expiry date of the EA.	During the discussions with the mine personnel, it was revealed that the construction activities related to this EA commenced in October 2013, with such being within the three period as stipulated in this condition as the first EA was issued on 13 July 2012.			
7.2	According to the Soil and Land Capability Study undertaken by Terra-Africa Consult cc dated November 2011 and attached as Appendix 5 in volume 1 of the EIAR, routine fertility analysis must be conducted prior to planting or seeding to create growing conditions that are suitable for plant growth. Furthermore, gradient of slopes should be planned in such a way that the runoff water will not cause wash ways after rehabilitation.	Discussions with the mine personnel confirmed that the vegetation surveys and rehabilitation monitoring is conducted annually on the rehabilitated areas, with the vegetation surveys undertaken every year during the winter and summer seasons. Mine personnel further indicated that a land use and capability study is conducted annually on site with monthly inspections taking place. The mine also implements the awareness regarding the land degradation and			






Ref No	CONDITIONS	Compliance review and rating	Recommendations	Timeframe for implementation of recommendation
		<p>rehabilitation as part of the monthly Environmental Topics shared at the mine to inform the Venetia Mine workers of the mine's rehabilitation goals.</p> <p>The mine also has in place the <i>Venetia Mine Rehabilitation - Monitoring and Maintenance Procedure Rev 2 Doc no DBG01135, dated 2018/07/13</i> to ensure that the quality aspects of every activity in the rehabilitation life cycle are met as practical as possible to guarantee that the post-mining land use objectives are being met. The Topsoil Management procedure is also implemented on site to manage the available topsoil as such is critical during the rehabilitation process.</p> <p>The following documents were also provided for review to verify the above mentioned:</p> <ul style="list-style-type: none"> • <i>Venetia Mine Topsoil Management Procedure Rev 1 Doc NO DBG03968, dated 2018/02/09</i>; and • <i>Venetia Mine Rehabilitation - Monitoring and Maintenance Procedure Rev 2 Doc no DBG01135, dated 2018/07/13</i>. 		
7.3	Amended: Condition removed	This condition was amended and removed from the authorisation, thus, the condition is no longer applicable.		
7.4	Unless the necessary permission is granted by the Department of Agriculture, Fisheries and Forestry (DAFF) in terms of the National Forests Act, 1998, (Act no. 84 of 1998), protected plant species such as <i>Sclerocarya birrea</i> must not be removed.	As per the discussions with the mine personnel, Venetia Mine conducts the surface disturbance assessment internally before the clearing of the site takes place. Thereafter, a tree count follows to acquire the correct information as to the number of protected tree species to be removed before the disturbance and the mine then submits the application to the Department to acquire a permit in this regard, and such is undertaken as per the <i>Venetia Mine EMS Surface Disturbance Management Procedure Rev 12.0 Doc no VEN-00000217, dated 2020/09/18</i> .		
7.5	Trees that are protected in terms of the Limpopo Environmental Management Act, 2003 (Act No 7 of 2003) and in terms of the National Forest Act, 1998 (Act No 84 of 1998) may not be removed or damaged without a permit in that regard.	Venetia Mine provided proof of the permits obtained from the Department of Forestry, Fisheries, and Environment, for the removal of the tree species such as <i>Adonsonia digitata (Baobab)</i> and <i>Boscia albitrunca (Shepered)</i> .		
7.6	All animals such as birds protected under the Limpopo Environmental Management Act, 2003 (Act no. 7 of 2003) are not allowed to be killed or trapped on site unless a permit is obtained from this Department.	Discussions with the mine personnel indicated that no trapping or killing of animals is taking place on site without a permit. Mine personnel also confirmed that the Leopards are present on site where the mining operation is taking place, and such is problematic to the mine workers and disturbs the progress of the activities taking place on site. The mine then received a permit from the Department of Economic Development, Environment, and Tourism ("LEDET") (<i>Ordinary permit: Permit number No. 02511</i>), for the removal and relocation of the leopards adjacent Venetia-Limpopo Nature reserve ("VLNR").		
7.7	Construction activities must be suspended and a representative of the South African Heritage Resources Agency (SAHRA) be contacted immediately in the event of finding or uncovering any subterranean features / resources such as graves, beyond features indicated in the report.	Site observations and discussions with the mine personnel confirmed that no heritage resources have been found on site during the mining activities and as part of construction currently taking place for the Venetia Underground Project ("VUP"). The mine has implemented the <i>Venetia Mine EMS Heritage Resources Procedure Rev 6.0 Doc no VEN-00000197, dated 2021/11/19</i> to ensure that any heritage resources found within the scope of Venetia Mine's EMS are protected and conserved according to the legislative requirements to notify the SAHRA immediately. Accordingly, a "Not Applicable" finding is recorded.		
7.8	All heritage resources found on site, i.e. the Iron Age remains, the middle Stone Age site and the graveyard must not be affected (altered, removed or demolished) by any activities before a permit which authorises such an impact has been issued by SAHRA.			











Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
7.9	Dust and nuisance to existing residents must be minimised through dampening of un-surfaced roads, and construction vehicles must avoid travelling unnecessarily through private land.	Site observations confirmed that dust suppression is taking place on site on the haul roads. Water that is used for dust suppressions is collected from the Storm Water Control Dams by the vehicles that facilitate the suppressions process. Mine personnel indicated that Dust Fallout Monitoring is conducted monthly with reporting of the results undertaken quarterly. A <i>Quarterly Ambient Air Quality Monitoring Report for Venetia Mine Limpopo Province, Reporting Period: November 2021 – January 2022</i> , compiled by Skyside was provided for review. The mentioned report doesn't indicate any concerns of dust related to the nearest sensitive receptors.			
7.10	An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate avoidance, reduction, recycling, re-use and disposal where appropriate. Uncontaminated builders' rubble generated during the construction can be re-used as back filling material on site. Ensure that no refuse or builders rubble generated on the premises is placed, dumped or deposited on adjacent properties or public places and open spaces during or after construction.	Venetia Mine has a waste management procedure in place (<i>Venetia Mine EMS Waste Management Procedure Rev 15.0 Doc No VEN-00000927, dated 2021/09/24</i>), to control the waste and prevention of pollution at Venetia Mine through reduction, recovering, re-using, recycling and the safe disposal of waste in an environmentally responsible manner that complies with legislation. Site observations and discussions with the mine personnel confirmed that the building rubble generated on site as a result of construction will be used as part of the backfilling. Site observations did not reveal any building rubble placed or dumped on the adjacent properties or public places and open spaces.			
7.11	Amended: The applicant, contractors and sub-contractors working on the site must ensure that oil, fuel, and chemicals are confined to specific and secure areas throughout the construction period. These materials must be stored in a bunded areas that comply with legislation and standards governing aboveground storage of petroleum products.	Site observations confirmed that oil, fuel, and chemicals used on site are stored at the mine workshops. The workshops were also noted to be bunded, with the trenches that collect the affected water arising from the area towards the sump, which then reports to the main Drizit. Spillages on site are managed in accordance with the following: <ul style="list-style-type: none"> • <i>Venetia Mine Bulk Hydrocarbon Spill Management Procedure, Rev 1, DOC NO DBG09316, dated 2019/09/16,</i> • <i>Venetia Mine EMS Hazardous Materials, Application and Management Procedure, Rev 2.0, DOC NO VEN-00000196, dated 2020/09/18,</i> • <i>Venetia Mine EMS Spill Management Procedure, Rev 9.0, Doc No Ven-00000212, dated 2020/08/28,</i> • <i>Venetia Mine Waste Management Facility Emergency Response Procedure, Rev 2.0, DOC NO VEN-00001233, dated 2021/09/24,</i> • <i>Venetia Mine EMS Requirements for Bund Walls Procedure, Rev 8.0, DOC NO VEN-00000207, dated 2022/06/24.</i> 			
7.12	Construction vehicles must be serviced and maintained in a manner whereby excessive smoke and noise production is reduced to acceptable levels, and to prevent oil leaks. Contaminated soil must be remediated or removed to an authorised landfill site such as Holfontein.	Discussions with the mine personnel and site observations confirmed that the construction vehicles for the VUP are serviced and maintained at the IOT workshop and Decline Workshop, to prevent the excessive smoke, noise, and oil leaks of the vehicles, and no concerns of such were noted on the vehicles during the site inspection. Site observations further noted the spill kits to remove any contaminated soil as a result of spillages occurred, and such is disposed at the hazardous waste bins. EnviroServ is the appointed contractor that is responsible to remove the contaminated soil on site and dispose it at the licenced offsite facility.			










Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
		<p>Site observations noted the spillages at the Decline parking area as a result of oil leaks from the vehicles, as such poses a risk to contamination of soil taking into consideration that the area is no bunded.</p>		<p>Investigate on the measures to effectively manage the spillages emanating from the vehicles at the Decline parking area, and the bunding of the area to prevent soil contamination.</p>	<p>As soon as possible</p>
7.13	<p>Residents on the property and surrounding area must be informed if any unusually noisy activities are planned. Noise impacts must be reduced over distance at a rate of 1db (decibel) per 13 metres.</p>	<p>Venetia Mine has the Public Cooperate Affairs (“PCA”) that is responsible for establishing communication between the surrounding communities and the mine. PCA also records all the complaints raised by the surrounding residents, and such complaints are then shared with the responsible departments within the mine to address the complaints. The mine provided evidence of the external complaints register used by the mine to record all the external complaints. The review of the <i>Baseline noise survey along the boundaries of the Venetia Mine, Environmental Impact Report Noise Impact Assessment</i>, dated October 2021, did not reveal any concerns regarding the nearest communities being affected by the noise generated at the mine, and the report further indicated that the noise levels at the measuring points along the boundaries of the mining area were in line with the recommended noise levels as prescribed in SANS 10103 of 2008.</p>			
7.14	<p>Outdoor lighting must point inward towards the facility except for nocturnal aviation lights. It must be low and yellow intensity globes used.</p>	<p>The physical structures on site are deemed as barriers to prevent lighting from going outward. Mine personnel indicated that the illumination survey is conducted twice a year, and the review of the <i>De Beers Group Venetia Mine, Illumination Survey-Wet Season 2021-Wet Season 2021, dated January 2022 and compiled by Digby Wells Environmental</i> indicated that the study focused on the three sensitive receptors: Mopane Bush Lodge, Kaoxa Bush Camp, and Tuli Safari Lodge. No concerns were noted regarding the outdoor lighting in respect of the surrounding receptors. Also, the following findings for each of the sensitive receptors are indicated in the above mentioned study:</p> <ul style="list-style-type: none"> • Mopane Bush Lodge <ul style="list-style-type: none"> ○ The impact is minimal, and the main source of visible light is a result for the sky glow; ○ The screening from the increased height and footprints of the Waste Rock Dumps (WRD’s)has assisted in minimising any additional impact from expanded activities; and ○ No significant increase in light exposure was observed from the 2020 summer survey. • Kaoxa Bush Camp <ul style="list-style-type: none"> ○ The proximity and direct view of this receptor is the most intense amongst all the three receptors; and ○ The main house at the camp has a direct view of all the main lighting from the Mine, however during the summer survey this is partially screened by overgrown vegetation. • Tuli Safari Lodge 			










Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
		<ul style="list-style-type: none"> The distance of the Mine from the lodge is significant and the larger impact on the receptor is from the lights at the South African National Defence Force (SANDF) base; and The Mine is directly visible; however, the distance between the Mine and the receptor means individual lights cannot be seen, and the impact is more as a result of the glow from the Mine. 			
7.15	Removal of vegetation must be restricted to the mining area, especially where mining infrastructure will be located. This vegetation must be used to reduce visual scarring of the landscape and potentially reduce visual impact of the mined area.	As previously indicated, no clearance or disturbance of vegetation is taking place before the permit is acquired from the Department. Discussions with the mine personnel indicated that some vegetation cleared during the disturbance taking place is used to vegetate the topsoil on site. As mentioned previously, the mine is conducting Vegetation Surveys and Rehabilitation monitoring is conducted annually on the rehabilitated areas, with the vegetation surveys undertaken every year during the winter and summer seasons.			
7.16	Chemical sanitation facilities or systems such as "toilets" that do not rely on seepage of liquids must be provided with a ratio of one for every 15 workers. These must be placed such that they prevent spills or leaks to the environment and must be maintained according to operating instructions and the contents thereof must be disposed of at an authorised sewage works.	Site observations confirmed the chemical toilets on site that are utilised by some of the workers. It should be noted that not all contractors utilise the chemical toilets as there are different contractors currently present on site in different areas. The sewage from these facilities is removed by the responsible person and placed at the sewage treatment facility.			
7.17	Amended: Condition removed	This condition was amended and removed from the authorisation, thus, the condition is no longer applicable.			
8.	OPERATION OF THE ACTIVITY				
8.1	Hauling routes for construction vehicles and machinery must be clearly marked and appropriate signalling must be posted to that effect. Further, movement of construction vehicles and machinery must be restricted to areas outside of the drainage line/wet area.	Site observations confirmed that the haul roads have appropriate signages in place as indicated in this condition.			
8.2	Appropriate notification signs must be erected at the construction site, warning the residents and visitors about the hazards around the construction site and presence of heavy vehicles and machinery.	Appropriate warning and notification signs were noted on site, at construction area to warn residents and visitors about the hazards around area where construction is currently taking place.			
8.3	Appropriate training and protective clothing and/or equipment must be provided and worn and/or used at all time within all operational areas of the project. Should the clothing and or equipment need to be disposed, there should be disposed at an authorised registered landfill.	As mentioned previously, the workers on site are subjected to induction where the importance of wearing the appropriate personal protective clothing is emphasised when conducting the activities on site. Site observations further confirmed that workers were wearing the appropriate personal protective clothing as required.			
8.4	The hydraulic fluids or hazardous chemicals required 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.	Refer to the findings provided above in condition 7.11 regarding the storage of the hydrocarbons on site.			
8.5	Amended: Condition removed	This condition was amended and removed from the authorisation, thus, the condition is no longer applicable.			






Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
8.6	The stockpiles must not be compacted in any way and must be vegetated with an indigenous grass seed to maintain fertility.	Site observations confirmed that stockpiles are well managed with some vegetation noted on some parts of the stockpiles. The mine also has in place the Topsoil Management Procedure (<i>Venetia Mine Topsoil Management Procedure Rev 1 Doc no DBG03968, dated 2018/02/09</i>) to manage the available topsoil at the Venetia Mine.			
8.7	Waste asphalt material produced during operational phase must be recycled and/or made available to the local communities for upgrading of private roads.	Discussions with the mine personnel indicated that waste asphalt material produced is collected and kept at the mine for any future uses in respect of the road upgrade on site. Further discussions with the mine did not reveal that the material is provided to the communities for upgrading of the private roads as Venetia Mine is involved in several community projects related to the infrastructural developments, thus such is deemed as not required to be undertaken.			
8.8	Ensure that no refuse generated on the premises is placed, dumped or deposited on adjacent properties or public places and open spaces during or after construction.	Site observations confirmed that no waste generated at the mine is dumped on the adjacent properties or public places and open spaces. All the waste is collected and placed in the appropriate bins, thereafter, it is removed on site by the appointed contractors (EnviroServ, North West Recycling, and Buhle Waste) and disposed at an offsite licenced facility.			
8.9	The current dust fallout monitoring network must be maintained, and a monthly monitoring system must be implemented in order to outputs of the monitoring system to be able to provide accurate data for the enhanced acceptable levels of dust emission.	Discussions with the mine personnel confirmed that dust monitoring is conducted monthly on site, with quarterly reporting also taking place. A <i>Quarterly Ambient Air Quality Monitoring Report for Venetia Mine Limpopo Province, Reporting Period: November 2021 – January 2022</i> , compiled by Skyside was provided for review.			
8.10	The hydraulic fluids must be placed such that they prevent spills or leaks to the environment and must be maintained according to operating instructions and the contents thereof must be disposed of at an authorised area.	Site observations confirmed that the hydraulic fluids are stored at the mine workshops where mine equipment and machinery are serviced. The workshops were also noted to be bunded, with the trenches that collect the affected water arising from the area towards the sump, which then reports to the main Drizit. Spillages on site are managed in accordance with the <i>Venetia Mine Bulk Hydrocarbon Spill Management Procedure, Rev 1, DOC NO DBG09316</i> , as well as the <i>Venetia Mine EMS Requirements for Bund Walls Procedure, Rev 8.0, DOC NO VEN-0000207</i> , dated 2022/06/24.			
		During the site inspection, it was noted that the decline workshops had concerns regarding the spillages and containment of affected water. Spillages were noted in some areas of the workshop, and no spill kits were observed to clean the spillages that occurred. However, in some areas of the workshop, sawdust was noted to have been used to contain the spillages that previously occurred. Site observations further confirmed the current construction to upgrade the overall workshop stormwater management system (i.e., construction of the Drizit, trench, and sump) to contain the affected water arising from the workshop area.		Investigate on the measures to effectively manage the spillages and the affected water at the Decline workshop.	On-going
8.11	Amended: Regular training as per Mine Health and Safety Act, 1996 (Act No. 29 of 1996) should be conducted to ensure that all staff are aware of the safety measures as well as the potential environmental hazard associated with the daily activities.	Discussions with the mine personnel indicated that, at the Venetia Mine, workers (including contractors and sub-contractors) are subjected to compulsory induction to ensure that all workers at the mine are aware of the potential environmental risks associated with the mine activities. The mine also implemented the distribution of the monthly Environmental Topics that are shared with the workers, to also make them aware of the potential environmental hazards, and evidence of Environmental Topics was provided.			
9.	SITE CLOSURE AND DECOMMISSIONING				



Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
9.1	Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.	Site observations confirmed that rehabilitation has been undertaken in some areas within the mine. However, the mine is currently operational and has not reached the closure phase. Accordingly, a "Not applicable" finding is recorded.			
9.2	All future waste rock produced during the underground operations must be utilised during concurrent rehabilitation of the coarse residue deposit and fine residue deposit.	Site observations confirmed that the waste rock dumps on site were generated as part of the opencast mining, with discussions with the mine personnel confirming that underground mining has not yet commenced, as construction of the underground structures required to accommodate underground mining is currently taking place. Further thereto, there is potential to re-work the Course Residue Deposit ("CRD") in the future, hence concurrent rehabilitation of the CRD is deemed not yet feasible. Accordingly, a "Not applicable" finding is recorded.			
9.3	Removal and management of the alien vegetation must form part of the concurrent rehabilitation activities and occur on a regular basis throughout the life of the mine.	Venetia mine appointed the Babiotsuwa Limpopo to manage and remove the alien and invasive species on site. The mine has also implemented the <i>Venetia Mine EMS Weeds, Pests, Alien and Invasive Plant Species Management Procedure, Rev 9.0, Doc NO VEN-0000092, dated 2020/08/21, and Eradication and Control of Alien and Invasive Plant Species as well as Vegetation Management through Chemical Treatment at Venetia, dated December 2020</i> , as part of managing the alien invasive species on site.			
10	ENVIRONMENTAL COMMITMENT BY DE BEERS CONSOLIDATED MINES				
10.1	De Beers Consolidated Mines must contribute to the development of Strategic Environmental tools programmes and projects within the Local Authorities adjacent to the mine. This contribution could be in different forms e.g. financial, technical and provision of information as agreed upon with the Department.	The review of the <i>De Beers Group Business Integrity Audit, Venetia Mine Social and Labour Plan Presentation, dated November 2021</i> ; this document indicates several mine community development projects in the Musina and Blouberg Municipal areas. Discussions with the mine personnel further confirmed that PCA at the mine is responsible for the development of Strategic Environmental tools programmes and projects within the Local communities.			
11.	GENERAL				
11.1	A copy of this EA must be kept at the property / on-site office where the activity (ies) will be undertaken. The EA must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the EA who works or undertakes work at the property.	A copy of the EA is available on site, at the Environmental Department, and such was provided by the mine upon request as part of this audit.			
11.2	Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, the applicant. must notify the Department as soon as the new details become known to the applicant.	No changes have been undertaken as stipulated in this condition, also confirmed by the mine personnel.			
11.3	National government, provincial government, local authorities or committees appointed in terms of the conditions of this EA or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his successor in title in any instance where construction or operation be stopped for reasons of non-compliance by the applicant with the conditions of the EA as set out in this document.	The holder of the authorisation is aware of this condition and the requirements thereof are noted.			
Amendment extra conditions					



Ref No	CONDITIONS	Compliance review and rating		Recommendations	Timeframe for implementation of recommendation
3.	All other conditions in the EA already issued for this project on 13 July 2012 are still legitimate and must be adhered to.	The holder of the authorisation is aware of this condition and the requirements thereof are noted.			
4.	All the interested and/or affected parties registered for this project must be notified about the amendment and the conditions it is subject to, within 14 days of signature of this letter.	Proof of notification of I&APs of the approval of this EA was provided in the form of an email (with a notification letter attached) dated 26 February 2015. It is noted that the notification occurred 20 days post signature of the amendment. However, the EA was only received by Venetia Mine during a meeting held with the Competent Authority on 10 February 2022. Although this notification was done 16 days post receiving the amended EA, a "Compliant" finding is recorded considering that the I&APs were notified, and the low risk associated with such notification being 2 days late.			
5.	In light of the above, the Department is satisfied that, subject to compliance with the conditions contained in this letter and the EA issued on 13 July 2012, the proposed activity will not conflict with the general objectives of Integrated Environmental Management laid down in Chapter 5 of National Environmental Management Act, 1998 (Act 107 of 1998) and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The request is accordingly granted.	The holder of the authorisation takes note of this condition.			



7. Discussion of results

7.1 Compliance to the EA conditions

Chapter 7 provides the non-compliances as recorded against the specific condition. A summary of the key concerns is provided below:

- Discussions with mine personnel confirmed that seepage emanating from the WRDs is leaving the mine premises through the remanent portion of Paleo Channel to the north, with seepage also identified on the eastern side of the WRDs, and the possible seepage water emanating from the WRDs to the east of the mine was also identified.
- Site observations noted the spillages at the Decline parking area as a result of oil leaks from the vehicles, as such poses a risk to contamination of soil taking into consideration that the area is not bunded.
- Site observations confirmed the spillages at the Decline workshop, and inadequate stormwater management measures in place (i.e., trenches, sump, and Drizit) to manage affected water generated in the area.

8. Conclusion

This environmental audit report was compiled to comply with the relevant legislative requirements of the NEMA and satisfy the requirements of the environmental authorisation. It is the main purpose of this document to report on the compliance with the conditions of the environmental authorisation as applicable.

Veneta Mine is committed to continual improvement to meet the requirements of the prevention/containment of pollution. Such commitments are demonstrated through the high level of compliance against the EA conditions.



9. Disclaimer

This report has been produced by Shangoni Management Services (Pty) Ltd., (“Shangoni”) with the skill and care ordinarily exercised by a reasonable Environmental Consultant at the time the services were performed. Further, and in particular, the Services were performed by Shangoni taking into account the limits of the scope of works required by the Client, the time scale involved and the resources, including financial and manpower resources. None of the work performed during this project shall constitute or be represented as a legal opinion of any kind or nature, but shall be a representation of the findings.

No warranties or guarantees, expressed or implied, are included in or intended by the report, except that it has been prepared in accordance with the current generally accepted practices and standards consistent with the level of care and skill exercised under similar circumstances by professional consultants or firms that perform the same or similar services. Any reference to legislation in this report should not be perceived as a substitute for the provisions of such legislation. In the event of any inconsistency between this document and such legislation, the latter would prevail.

Whilst every endeavour has been made by the Shangoni to ensure that information provided is correct and relevant, this report is, of necessity, based on information that could reasonably have been sourced within the time period allocated to the assessment, and is, furthermore, of necessity, dependent on information provided by management and/or its representatives. It should, accordingly, not be assumed that all possible and applicable findings, observations and/or measures are included in this report as this report represents a sample of assessable parameters. As a subsequent event, should additional information become available, Shangoni reserves the right to amend its findings, observations, measures and executive summary.

10. Declaration of independence

Shangoni hereby declares that it is an independent auditor in that it has no business, financial, personal or other interest in this project in respect of which Shangoni is appointed. Furthermore, no circumstances exist that may compromise the objectivity of Shangoni, excluding fair remuneration for work performed in connection with this environmental audit.

**Report compiled
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