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South African Heritage Resources Agency (SAHRA)

111 Harrington Street
Cape Town
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Att: Natasha Higgitt

By Email: nhiggitt@sahra.org.za

15 September 2023

Dear Ms. Higgitt

RE: WATERBERG JV RESOURCES (PTY) LTD - FINAL HERITAGE MANAGEMENT PLAN

- 1 Waterberg JV Resources (Pty) Ltd ("**Waterberg JV Co.**") is a mining company that is the holder of a Mining Right and an Integrated Environmental Authorisation ("**IEA**") for its project in the Waterberg region since November 2020. Waterberg JV Co. is required to submit a Heritage Management Plan to the South African Heritage Resources Agency (SAHRA) for approval, after it has been reviewed by the Rock Art Research Institute (RARI) of the University of Witwatersrand. The Heritage Management Plan aims to mitigate and monitor any impacts on the heritage of the area, especially the Makgabeng Plateau and surrounding mountains, which contain valuable rock art sites.
- 2 Waterberg JV Co. has received feedback from RARI on the draft Heritage Management Plan, which was sent to them on 31 May 2023. The feedback included comments from Dr Sam Challis and Dr Catherine Namono, who are experts in rock art research. Waterberg JV Co. has considered the comments and provided responses in Appendix A attached hereto.
- 3 Waterberg JV Co. would like to point out that RARI had the opportunity to participate in the Environmental Impact Assessment ("**EIA**") process that was conducted from 31 August 2018 to 17 November 2020, in accordance with the NEMA Regulations. Dr Catherine Namono was registered as an Interested and Affected Party, and was invited to comment on the Scoping Report, the Environmental Impact Assessment Report and the Environmental Management Programme Report ("**EMPr**"). She was also given the chance to appeal the decision made by the Department of Mineral Resources and Energy ("**DMRE**"). However, RARI did not exercise any of these opportunities and did not provide any comments during this process.

- 4 The comments received on the Heritage Management Plan relates mostly to the EIA process which has been completed and authorised. Waterberg JV Co. has however, attempted to respond to the comments made by RARI and amended the Heritage Management Plan to incorporate relevant aspects. See comments and responses attached as Appendix A.
- 5 Waterberg JV Co. is committed to work with SAHRA to monitor potential impacts on heritage sites. We believe the attached Final Heritage Management Plan (attached as Appendix B) makes provision for the mitigation and monitoring of all expected impacts on known heritage resources, including the Makgabeng Plateau and surrounding mountains.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mlibo G. Mgudlwa', is written over a horizontal line.

Mlibo G. Mgudlwa
Director

No	Comment	Comment by	Response	Ref in HMP
1	Participation during the EA Application Process			
1.1	Thank you for the email. I acknowledge receipt and further note the proof of correspondence going back to 2018 – of which I was previously unaware (attached for colleagues information). Do you have any record of a response?	Sam Challis 5 June 2023	Dr Namono was registered as an Interested and Affected Party. All documents and notices were sent to her during the Environmental Authorisation Application process, but no comments or responses were received.	Not applicable to the HMP
2	Mitigation and Management of Potential Blasting Impacts on Heritage			
2.1	In the meantime, we note that the comments of Nokukhanya Khumalo, Heritage Officer at South African Heritage Resource Agency on 7th August 2019 were recorded and we find the responses to the queries about blasting particularly thin. Vibrations from blasting will damage heritage sites and cause spalling at rock art sites, and dust – contrary to the response – will be a problem. Vibrations from underground blasting will exacerbate the rock art spalling and flaking that is likely to eventuate from the drop in the water table. Blasting should not be permitted this close to the Makgabeng Hills. There is no guarantee that ‘minimum charge’ for explosives will be used as stated in the response.	Sam Challis 5 June 2023	The blasting assessment conducted was extended to include an assessment of possible vibrations from underground mining on the surface. An additional blasting assessment was also completed as part of the process to include the farms Bonne Esperance and Too Late into the Mining Right under section 102 of the Mineral and Petroleum Resources Development Act, 2002. Mining in this area is estimated to be in the order of 1 400 - 1 500 meters below surface. The independent specialist findings were that there is a very low to negligible risk of vibrations affecting heritage resources. This was also accepted in the approved IEA granted to Waterberg JV Co. A further commitment has been made to utilise the minimum charge to further lower the risk, and to also monitor blasting vibrations and sensitive receptors such as the heritage resources. We confirm that the RARI was invited to participate in the EIA process but failed to take up any of the opportunities provided.	Chapter 4 of the HMP

No	Comment	Comment by	Response	Ref in HMP
2.2	Will the 'minimum charge' for explosives argued in the plan, be implemented, and how is this to be guaranteed?	Dr Namono 3 July 2023	The minimum charge is a commitment in the approved EMPr. The compliance with these commitments must be audited on an annual basis and a report submitted to the DMRE.	Approved EMPr
3	Mitigation & Management of Groundwater Impacts on Heritage			
3.1	<p>The large local community living in the area rely on groundwater sources that are already under desertification pressure due to global warming. Significant excavation could lower the water table to such an extent that the surrounding environment will be uninhabitable. Changes in water table can also have substantial effect on the highly significant rock art heritage of the adjacent hills. As we have seen in many other places, changes in water table often cause previously stable rock surfaces to suddenly start spalling and flaking.</p> <p>Although the Environmental Authorisation (attached) states that no mining activities may take place on the areas discussed – Early Dawn, Ketting and Disseldorp – there is still a concern that mining will affect the water table. Water is a precious resource in this landscape and water usage – with their impact on cultural heritage - and water rights will be highly sensitive in this area. We are also aware of at least one unique plant species found at the Makgabeng that is endemic, found nowhere else, and that is riverine and so highly sensitive to changes in the water table.</p>	Sam Challis 5 June 2023	A Groundwater Assessment was conducted during the EIA process. Impacts were assessed and mitigation measures provided in the EMPr which was approved by the DMRE on 10 November 2020. Commitments were made to monitor the actual impacts during operation and the provision of alternative water supply if an impact is detected. This was accepted and approved.	Approved EIA and EMPr
3.2	With regards to environmental issues, water is a precious resource in this landscape. Water usage and water rights are a very sensitive matter in this area. The experiences from previous prospecting activities by the Waterberg Group on the Makgabeng plateau left the community without water and covered them in dust. A few water sources that were available became unpotable due to elevated salinity.	Dr Namono 3 July 2023	See response above. Waterberg JV Co. has also signed a Memorandum with the Capricorn District Municipality to assist and support the Water Services Authority in their efforts to provide water to the communities in the region. We deny the unsubstantiated allegations made by RARI re previous prospecting activities on the Makgabeng Plateau, especially those	Approved EIA and EMPr

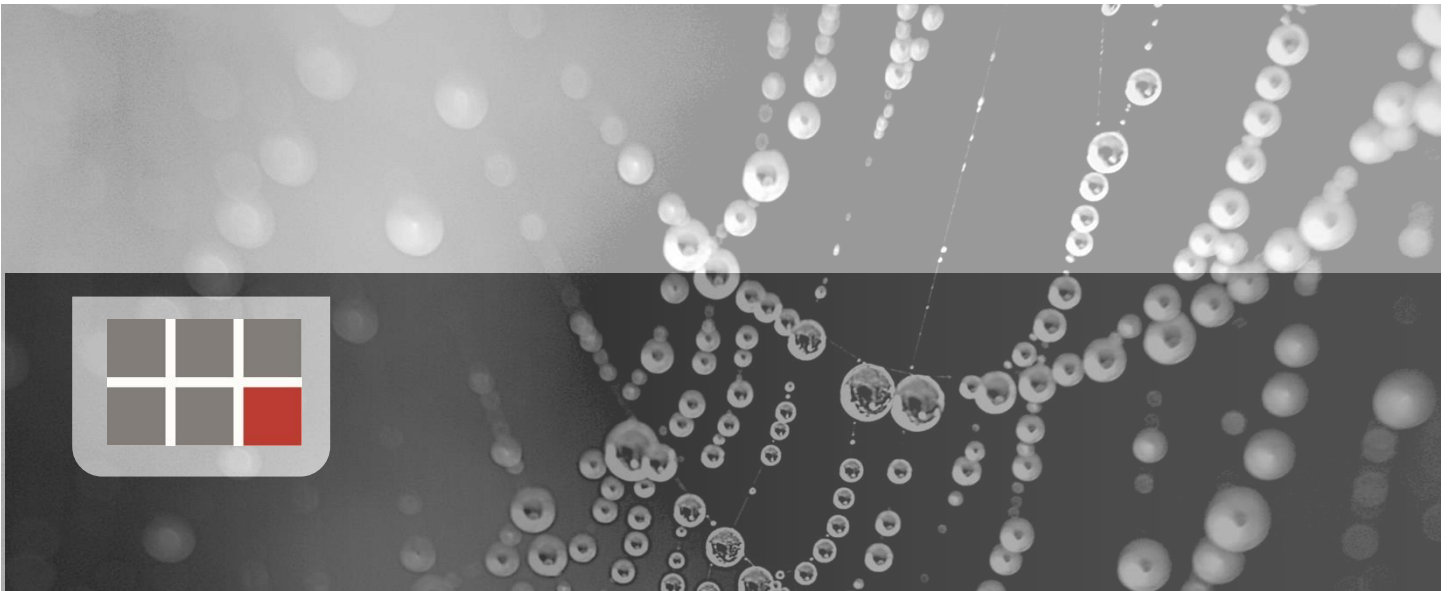
No	Comment	Comment by	Response	Ref in HMP
			suggesting communities being left without water, being covered in dust and water sources becoming unpotable.	
4	Mitigation & Management of Air Quality Impacts on Heritage			
4.1	Dust will be a massive issue in this dry landscape, where there are no paved roads, and no plans for paved roads, where vehicles and mining activity will cause significant aeolian action. Dust can have a devastating effect on rock art – much of which is connected culturally with local people. This is acknowledged in the Heritage Management Plan, but no adequate measures are listed to address the problem. ‘Monitoring’ the issue, will not solve it. We can predict already that any independent monitors (probably unlikely to be implemented) will raise major concerns with dust impact on the day any mine in this location begins its operations.	Sam Challis 5 June 2023	An Air Quality Assessment was conducted during the EIA process. Impacts were assessed and mitigation measures provided in the EMPr which was approved by the DMRE on 10 November 2020. Commitments were made to monitor the Air Quality impacts during construction and operation and mitigation measures such as dust suppression methods was provided and approved as part of the IEA approval.	Approved EIA and EMPr Chapter 4 of the HMP
4.2	The idea that there will be no dust or air quality impact on the rock-art sites is false. The aeolian facies is most abundant and with the widest distribution, stratigraphically and geographically on the Makgabeng Plateau, thus aeolian dust will definitely impact the heritage and the lives of the community and their livestock. Monitoring the dust will not prevent inhalation or deposition onto rock art panels.	Dr Namono 3 July 2023	As part of the EIA, an air dispersion model was development including baseline wind conditions. The model indicated that the area of potential impact was mostly within the Infrastructure Area, and to an easterly direction. The rock art is located west and north-west of the infrastructure area. Also see response above.	
5	Mitigation & Management of Heritage Impacts			
5.1	This is an area of exceptional cultural value, and it is highly fragile environmentally.	Sam Challis 5 June 2023	This has been acknowledged in the Heritage Management Plan.	Chapter 3 of the HMP
5.2	In addition to what was mentioned previously by Dr Challis and Prof Smith, the Makgabeng plateau is a culturally and environmentally fragile landscape.	Dr Namono 3 July 2023		
5.3	This mine is far too close to the Makgabeng Hills. A proper buffer needs to be put in place of at least a few kilometres in width to	Sam Challis 5 June 2023	As part of the EIA process, the sensitive areas were demarcated, and specialist assessments took cognisance of the Makgabeng Plateau and	Approved EIA and EMPr

No	Comment	Comment by	Response	Ref in HMP
	protect the heritage of the Makgabeng Hills from the inevitable damage that eventuates from subsoil mining.		its sensitive nature. These specialist assessments were included and interpreted as part of the Integrated Heritage Impact Assessment circulated for comments to RARI as part of the EIA/EMPr and submitted to SAHRA. It has subsequently been approved by both SAHRA and the DMRE with specific conditions included in the IEA.	
5.4	The Waterberg Group draft Heritage Management plan states on page 32 that “while there is no rock art that has been identified within the MIA, it would be necessary for a monitoring programme to be set up for rock art sites in the surrounding areas”. However, the mining right application area will impact over 529 rock art sites, collectively on the farms of Ketting, Rosamond, Disseldorp, Old Langsine, Langbryde, Millstream (see. Fig 20, report on an additional cultural heritage impact assessment), as well as Millbank, Groenpunt, Bonne Esperance, Too Late and Nieuwe Jerusalem. On Old Langsine there is Herder rock art and an Early Iron Age settlement site in the plains mining rights application area. The majority of these rock art sites (San, Herder and Northern Sotho) are on the edges of cliffs, some with very large, fragile overhangs. There are also several archaeological sites, and historical stone walling and grain bins in cliffs in the Masebe gorge (from Langbryde to De La Roche) and around the plateau especially on the farms Disseldorp, Millstream, Bonne Esperance and Millbank. Any vibrations around these areas poses a very big risk to the heritage, animals and people.	Dr Namono 3 July 2023	Please note that MIA refers to Mine Infrastructure Area, which is only located on the properties Goedetrouw and Ketting . The Integrated Heritage Impact Assessment did include an assessment of underground mining areas with specific reference to blasting vibrations. It is expected that mining depth for production blasting will be 370m up to 1 500m below surface. Monitoring points have been included in the Heritage Management Plan, but alternative or additional points can be proposed by RARI by providing coordinates to the closest and most sensitive sites.	Figure 2 of the HMP Paragraph 4.2 of the HMP
5.5	The plan proposes ‘immediate rectification of damage to any heritage sites’ but it is not clear how this will be done after rock art sites or grain bins have collapsed and are destroyed? In order for mitigation measures to be undertaken, there needs to be	Dr Namono 3 July 2023	The blasting impact assessment determined a very low risk to rock art sites due to the distance of the Mine Infrastructure from the Makgabeng Plateau. Therefore, a monitoring	Chapter 4 of the HMP

No	Comment	Comment by	Response	Ref in HMP
	systematic documentation of all archaeological sites BEFORE mining, to create a record so that any changes can then be observed and addressed, where possible. In addition, it will be a challenge to address flaking or spalling at sites for example, where it may happen gradually rather than immediately with the onset of mining. What heritage management strategies are proposed for the afterlife of mining?		programme has been proposed for air quality and blasting vibrations, as the purpose of the monitoring will provide an early warning system if the levels of particulate matter and blasting vibrations exceed the expected levels. This can be determined early on in the underground mining progress, before mining is anywhere close to the Makgabeng Plateau. The HMP has been revised to include "Where an impact is detected on a specific rock art site and it is anticipated by the appointed independent specialist that the impact is severe and there is a risk of permanent damage, Waterberg JV Resources will appoint the required specialists to conduct a comprehensive survey and documentation process which would include photography, tracing, pigment characterization and radiocarbon dating of the site". RARI is welcome to recommend further reasonable measures that can be undertaken if an impact is probable based on the monitoring results.	
5.6	The recommendation is that NO MINING should happen on and around the plateau.	Dr Namono 3 July 2023	The Mining Infrastructure Area is located at least 1km from the Makgabeng Plateau and underground mining is located 370m up to 1500m beneath the surface.	Approved EIA and EMPr Approved IHIA and appendices
6	Other Aspects			
6.1	Has an adequate social impact assessment been conducted? There are large villages nearby to this proposed mine. The Q&A recorded in the I-HIA (also attached) pertains only to the impact on graves, which the response states will be nil.	Sam Challis 5 June 2023	A Social Impact Assessment was conducted during the EIA process. Impacts were assessed and mitigation measures provided in the EMPr which was approved by the DMRE on 10 November 2020. A thorough Public Participation Process was also followed where	Approved EIA and EMPr

Appendix A

No	Comment	Comment by	Response	Ref in HMP
			communities residing on and surrounding the Mining Right were consulted with regards to the potential impacts and proposed mitigation measures. This process was detailed in the EIA/EMPr documentation and accepted and approved by the DMRE.	
6.2	Destruction to the environment and heritage due to excavation of roads and uprooting of trees, has had a negative impact on the heritage and the community. Mining will only exacerbate this negative trajectory.	Dr Namono 3 July 2023	Please note that the impacts on biodiversity and heritage was assessed and authorisation has been provided for mining in this area.	Approved EIA and EMPr
6.3	Community tourism in the area will be impacted due to safety concerns and air-pollution. As part of tourism and heritage conservation, the Makgabeng sites on the sites on farms Millstream, Bonne Esperance, Too Late and Niewe Jerusalem are nominated for National Heritage. These sites will be impacted by blasting and related mining activities in the area	Dr Namono 3 July 2023	Social impacts were assessed, and mitigation measures included in the approved EIA/EMPr as stated in the IEA granted on 10 November 2020. RARI was provided with opportunities to provide comments during the process. It is noted that a nomination for declaration of the Makgabeng cultural and natural heritage landscape as a National Heritage was submitted on 23 August 2019. The application for a mining right predates this application, and therefore Waterberg JV Co. should be consulted as a key stakeholder during this process.	Approved EIA and EMPr
6.4	Another complication is that a buffer zone must be instituted around the plateau, to protect the heritage and the communities, yet the mining rights application area includes the plateau.	Dr Namono 3 July 2023	SAHRA included the specific condition that no mining activities must occur on the Makgabeng Plateau and surrounding mountains. No infrastructure is located within these areas. The closest infrastructure is approximately 1km from the Plateau.	



**WATERBERG JV RESOURCES (PTY) LTD:
WATERBERG PGM MINE**

HERITAGE MANAGEMENT PLAN

Final

September 2023

Waterberg JV Company
Contact: Mr Mlibo Mgudlwa
Email: mMgudlwa@platinumgroupmetals.co.za

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1 INTRODUCTION AND BACKGROUND

Waterberg is the holder of A Mining Right (Reference: LP 30/5/1/2/3/2/1/10161 EM), Environmental Authorisation (reference number: LP 30/5/1/2/3/2/1/10161 EM) and an approved Environmental Management Programme ("EMPr") authorising the mining activities on the farms Disseldorp 369 LR, Goedetrouw 366 LR, Rosamond 357 LR, Lomonside 323 LR, Langbryde 324 LR, Old Langsine 360 LR, Millstream 358 LR, Ketting 368 LR and Early Dawn 361 LR, ("the Mining Area") situated in the Blouberg Magisterial District of the Limpopo Province.

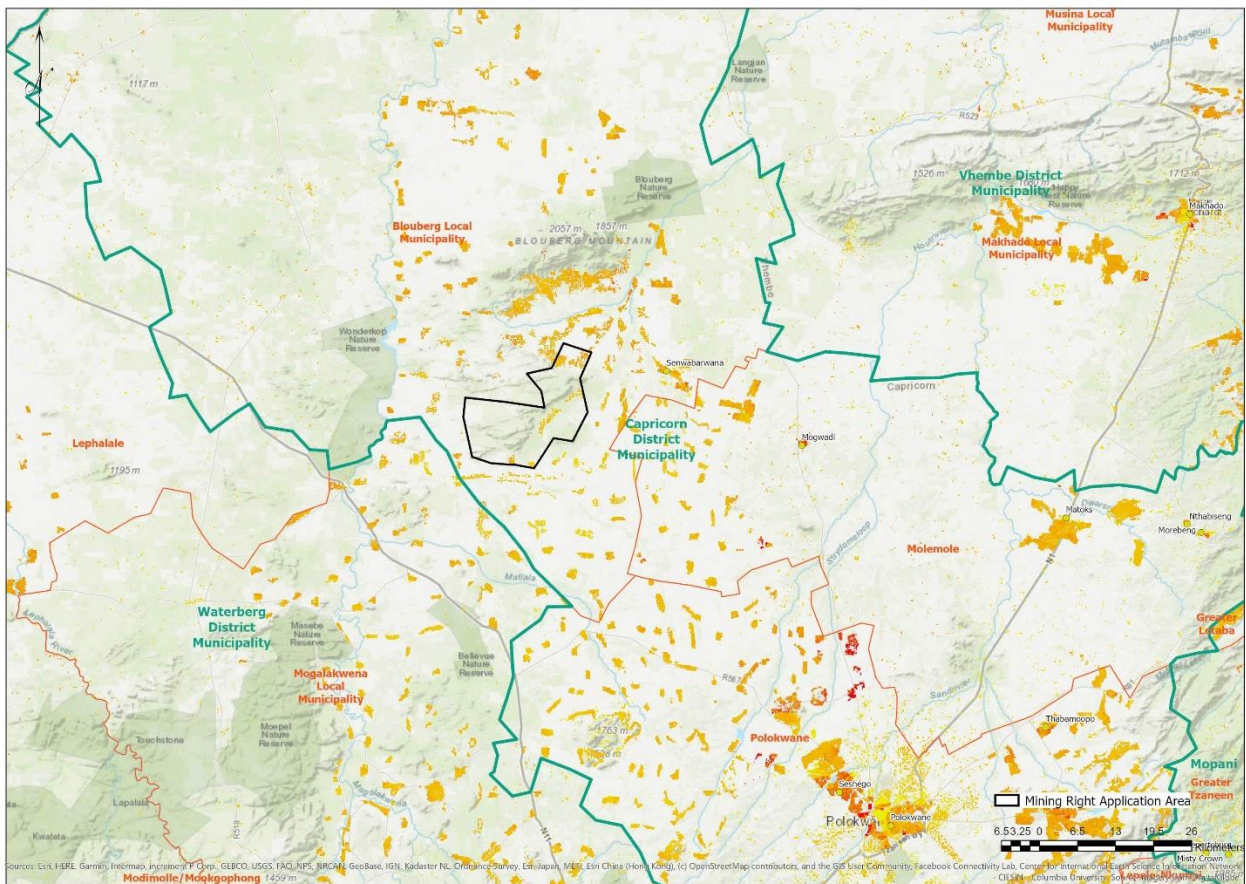


Figure 1: Locality Map

Archaetnos Culture & Cultural Resource Consultants conducted a Heritage Impact Assessment (HIA) in 2018 and again in 2019 for the Mining Right application area associated with the Waterberg Project.

An Integrated Cultural and Heritage Impact Assessment (IHIA) was submitted to SAHRA based on comments received on 7 August 2019 and a meeting held on 12 September 2019.

The approved integrated Environmental Authorisation stated the following conditions:

- No mining activities must occur on the Makgabeng Plateau and on the surrounding mountains on the farm Early Dawn, Ketting and Disseldorp;
- Access and management of these high-lying areas (Makgabeng Plateau and the surrounding mountains on Early Dawn, Ketting and Disseldorp) must be granted for conservation, research, indigenous and cultural practices;
- The heritage management plan must be submitted to the Rock Art Research Institute of the University of Witwatersrand (RARI) for review and thereafter submitted to SAHRA for approval; and
- SAHRA reserves the right to monitor conservation measures of heritage sites located within the Mine Right area of Waterberg JV Co.

The overall aim and purpose of the Heritage Management Plan is to:

- To provide a framework for ensuring a balance between legislative requirements, development and economic opportunities and sensitive and significant heritage resources in the project area;
- Ensuring the protection of heritage resources through risk management and mitigation;
- To provide a framework for monitoring risks to heritage resources in the project area.

2 LEGAL REQUIREMENTS

According to the National Heritage Resources Act (NHRA), 1999 (Act No. 25 of 1999) the following are protected as cultural heritage resources:

1. Archaeological artefacts, structures and sites older than 100 years
2. Ethnographic art objects (e.g. prehistoric rock art) and ethnography
3. Objects of decorative and visual arts
4. Military objects, structures and sites older than 75 years
5. Historical objects, structures and sites older than 60 years
6. Proclaimed heritage sites
7. Graveyards and graves older than 60 years
8. Meteorites and fossils
9. Objects, structures and sites of scientific or technological value

The national estate includes the following:

1. Places, buildings, structures and equipment of cultural significance
2. Places to which oral traditions are attached or which are associated with living heritage
3. Historical settlements and townscapes
4. Landscapes and features of cultural significance
5. Geological sites of scientific or cultural importance
6. Archaeological and paleontological importance
7. Graves and burial grounds
8. Sites of significance relating to the history of slavery
9. Movable objects (e.g. archaeological, paleontological, meteorites, geological specimens, military, ethnographic, books etc.)

2.1.1 Structures

Section 34 (1) of the NHRA states that no person may demolish any structure or part thereof which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.

A structure means any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith.

Alter means any action affecting the structure, appearance or physical properties of a place or object, whether by way of structural or other works, by painting, plastering or the decoration or any other means.

2.1.2 Archaeology, palaeontology and meteorites

Section 35(4) of the NHRA deals with archaeology, palaeontology and meteorites. The act states that no person may, without a permit issued by the responsible heritage resources authority (national or provincial):

1. destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite;
2. destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite;
3. trade in, sell for private gain, export or attempt to export from the Republic any category of archaeological or paleontological material or object, or any meteorite;
4. bring onto or use at an archaeological or paleontological site any excavation equipment or any equipment that assists in the detection or recovery of metals or archaeological and paleontological material or objects, or use such equipment for the recovery of meteorites; or
5. alter or demolish any structure or part of a structure which is older than 60 years as protected.

The above-mentioned may only be disturbed or moved by an archaeologist after receiving a permit from the South African Heritage Resources Agency (SAHRA). In order to demolish such a site or structure, a destruction permit from SAHRA will also be needed.

2.1.3 Human remains

Graves and burial grounds are divided into the following:

1. ancestral graves
2. royal graves and graves of traditional leaders
3. graves of victims of conflict
4. graves designated by the Minister
5. historical graves and cemeteries
6. human remains

In terms of Section 36(3) of the NHRA no person may, without a permit issued by the relevant heritage resources authority:

1. destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;
2. destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or
3. bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation, or any equipment which assists in the detection or recovery of metals.

All graves older than 60 years are called heritage graves and should be handled by an archaeologist. This includes archaeological graves, which are older than 100 years. Unidentified/unknown graves (which refers to date of death) are also handled as older than 60 until proven otherwise.

Human remains that are less than 60 years old are subject to provisions of the National Health Act, 2003 (Act 61 of 2003) and to local regulations.

Exhumation of graves must conform to the standards set out in the Ordinance on Excavations (Ordinance No. 12 of 1980) (replacing the old Transvaal Ordinance No. 7 of 1925). Permission must also be gained from the descendants (where known), the National Department of Health, Provincial Department of Health, Premier of the Province and local police. Furthermore, permission must also be gained from the various landowners (i.e. where the graves are located and where they are to be relocated) before exhumation can take place.

Human remains can only be handled by a registered undertaker or an institution declared under the National Health Act, 2003 (Act 61 of 2003).

3 CULTURAL HERITAGE RESOURCES

Heritage Assessments and Surveys were conducted for the Waterberg Project and Mine Infrastructure Area (MIA) in 2018 and 2019. Several heritage sites were identified, as indicated in Figure 2. None of these resources is directly affected but may be affected indirectly.

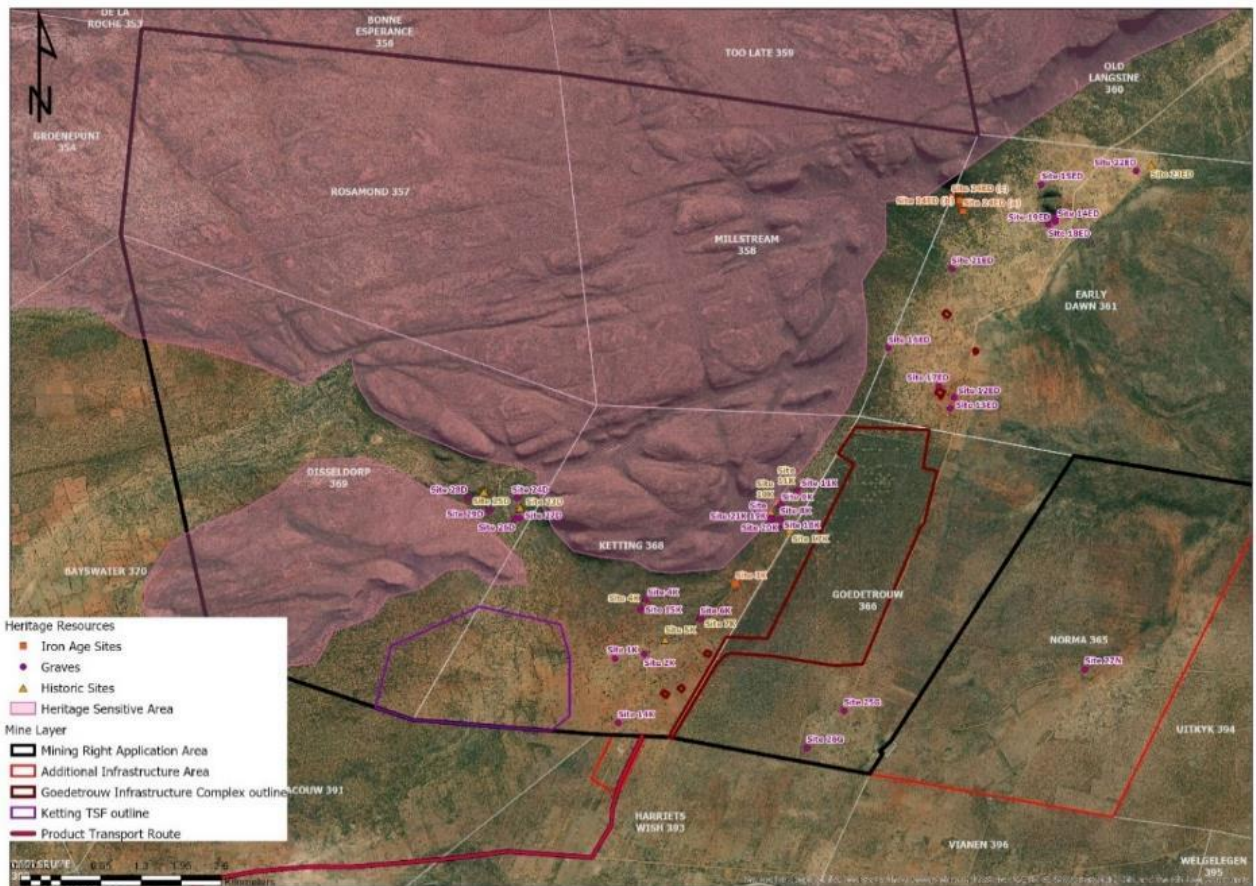


Figure 2: Heritage sites identified in the Waterberg Mine Infrastructure Area (MIA)

3.1 Cultural Landscape - Makgabeng Plateau and Rock art

The Makgabeng Plateau is about 45 km southwest of Vivo, at the western end of the Soutpansberg Mountain Range, and about 22 km southwest of the Blouberg Mountain. The Makgabeng is a rugged and bushed plateau rising about 200m above the surrounding plains. It covers approximately 400 km² and lies just south of the 23rd-degree parallel line. Villages and communities surround the plateau. One of the outstanding features of Makgabeng is the Khoisan and Bantu-speaking rock art paintings in the mountains. The fine paintings are evidence of traces of the earliest human occupation in the area. The Makgabeng Plateau is home to over 1000 San, Khoekhoe, Tswana and Northern Sotho rock art sites found hidden in sandstone outcrops and overhangs. The rock art at Makgabeng depicts the rich history of the indigenous people.

The Rock Art Research Institute from Wits University (RARI) has extensively researched the Makgabeng landscape. In 2012 RARI became involved in a community-based heritage tourism project in the Makgabeng region. The Blouberg Local Municipality commissioned RARI to undertake a project focusing on collecting ethnographic heritage, traditional folklore, the physical conservation of heritage resources, and strengthening the heritage tourism market in the region. The region's rich cultural background and heritage resources called for developing a heritage management and conservation report (RARI & Van Schalkwyk 2009b). The plan's purpose was to devise strategies for conserving the physical and intangible aspects of the heritage resources. The conservation plan was followed by a Tourism Management Plan that sought ways to utilise the heritage resources for sustainable tourism (RARI & Van Schalkwyk 2009a). RARI and Van Schalkwyk (2009a; 2009b) identified that the heritage resources in the Makgabeng landscape were under threat due to several factors, including natural deterioration, neglect and unplanned development. Therefore, the landscape has been nominated to be declared a National Heritage site. Regarding the Waterberg Project, the Makgabeng Plateau is a sensitive heritage area. It has been demarcated in Figure 3 below.

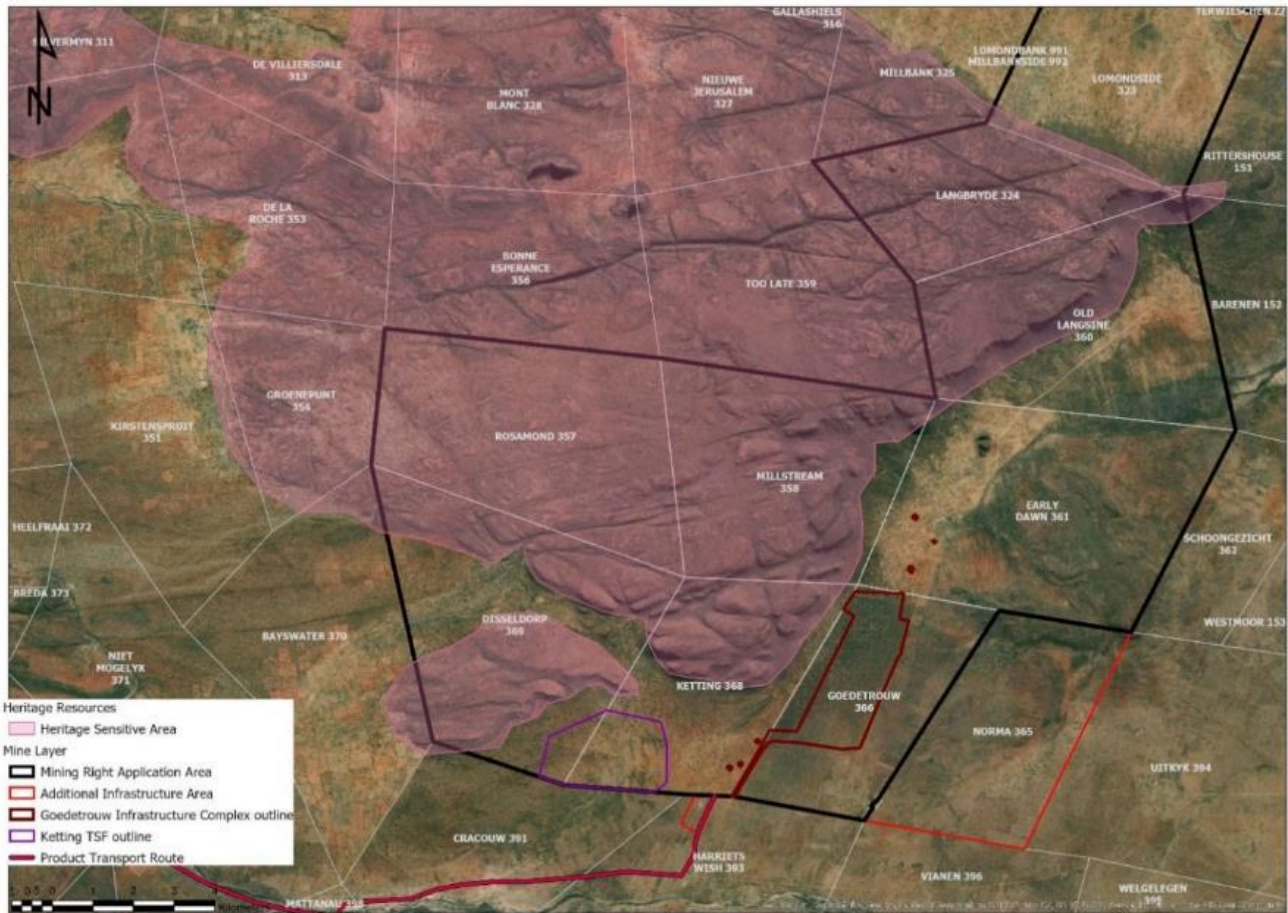





Figure 3: Heritage-sensitive area associated with the Makgabeng Plateau

3.2 Identified cultural heritage resources





A number of cultural heritage resources have been identified during these investigations, as listed in the table and indicated in the figure below.

3.2.1 Built Environment




Table 1: Built Environment Resources

Site ID	Description	Location	Sensitivity	Impact	Photograph
Site 4K	<p>Historical residential site</p> <p>This residential site contains various rectangular and circular remains, most likely dating to the early to the mid-20th century. The historical remains are built from cement and stone.</p> <p>It is not very old or unique and is in a very bad state of decay.</p> <p>A single grave is situated at the site Error! Reference source not found.</p>	<p>Ketting</p> <p>23°22'48.1' 'S; 28°52'42.3"E</p>	<p>Low General protection C (IV C)</p>	<p>No direct impact</p>	
Site 5K	<p>Historical residential site</p> <p>The site consists of rectangular, circular and square remains of buildings. These were originally built from stone and cement.</p> <p>The remains most likely date to the early to the mid-20th century. It is not very old or unique.</p>	<p>Ketting</p> <p>23°23'06.9" S; 28°52' 52.4" E</p>	<p>Low Local Grade IIIB</p>	<p>No direct impact</p>	
Site 7K	<p>Circular stone wall</p> <p>The site consists of at least two circular stone-built kraals. These are likely historical livestock enclosures and may be linked to any identified residential sites. There is a slight possibility that it may date back to the very last phase of the Late Iron Age. It is also most likely associated with Site 6K (graves). The site, therefore, most likely dates to between 1900 and 1950.</p>	<p>Ketting</p> <p>23°22'55.4" S; 28°53'10.9" E</p>	<p>Medium Local Grade IIIB</p>	<p>No direct impact</p>	

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HERITAGE MANAGEMENT PLAN**




Site ID	Description	Location	Sensitivity	Impact	Photograph
Site 10K	Historical residential site The site consists of rectangular remains of buildings. These were originally built from stone and cement. Some glass shards were also seen lying around.	Ketting 23°22'00.7" S; 28°53'51.6" E	Low Local Grade IIIB	No direct impact	
Site 11K	Historical residential site This residential site contains various rectangular and circular remains, most likely dating to the early to the mid-20 th century. The historical remains are built from cement and stone. A refuse midden may also be present with glass and ceramic shards lying around. The site is not very old or unique and is in a very bad state of decay. A graveyard is situated at the site.	Ketting 23°21'54.9" S; 28°54'01.6" E	Low General protection C (IV C)	Indirect impact	
Site 12K	Historical residential site The site consists of rectangular remains of buildings. These are mainly stone built.	Ketting 23°22'05.12" S; 28°53'47.69" E	Low Local Grade IIIB	No direct impact	
Site 17K	Historical residential site The site consists of rectangular and circular remains of buildings and walls. These are mainly stone built.	Ketting 23°22'13.92" S; 28°53'57.67" E	Low Local Grade IIIB	Indirect impact	

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Site ID	Description	Location	Sensitivity	Impact	Photograph
Site 25D	Historical residential site The site consists of rectangular remains of buildings and walls. These are mainly stone built.	Disseldorp 23°21'55.61" S; 28°51'17.55" E	Low Local Grade IIIB	No impact	
Site 23D	Historical residential site The site consists of rectangular and circular remains of buildings and walls. These are mainly stone built.	Disseldorp 23°22'03.34" S; 28°51'36.49" E	Low Local Grade IIIB	No impact	
Site 23ED (S10/201 6)	Historical residential site The site consists of various rectangular remains of structures. These were originally built from stone and cement. The remains most likely date to the early to the mid-20th century. It is not very old or unique.	Early Dawn 23°19'18.3" S; 28°57'06.9" E	Medium Local Grade IIIB	No impact	

3.2.2 Burial grounds and grave sites





Table 2: Burial grounds and grave sites identified during the HIA (Archaetnos, 2019)

Site ID	Description	Farm	Sensitivity	impact	Photograph
Site 1K	<p>Graveyard</p> <p>This is a site containing at least 14 graves. Most of the graves are stone packed, with or without headstones, but some also have granite headstones and borders. Surnames identified include Ramokgaba and Mantla.</p> <p>The oldest date of death identified is 1947, and the youngest is 1993.</p> <p>Graves from all three categories of graves were identified: those older than 60 years (heritage graves), those without a date of death (unknown graves) and those younger than 60 years.</p>	<p>Ketting</p> <p>23°23'16.0' 'S; 28°52'26.1" E</p>	High	No direct impact	
Site 2K	<p>Graveyard</p> <p>This is a site containing at least 91 graves. Most graves are stone packed, with or without headstones, but some have granite and borders. Surnames identified include Ngoepe and Senosha.</p> <p>Graves from all three of the categories of graves were identified.</p>	<p>Ketting</p> <p>23°23'13.9' 'S; 28°52'41.5" E</p>	High	No direct impact	
Site 4K	<p>Single grave at a historical residential site</p> <p>The surname of the person buried here is Rapheaga, and the date of death is 1930. It has a granite headstone and grave dressing. It, therefore, is older than 60 years and is regarded to be a heritage grave.</p>	<p>Ketting</p> <p>23°22'48.1' 'S; 28°52'42.3" E</p>	High	No direct impact	




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Site ID	Description	Farm	Sensitivity	Impact	Photograph
Site 6K	<p>Graveyard</p> <p>This is a site containing at least 15 graves. Most graves are stone packed, with or without headstones, but some also have granite or cement headstones and borders. Surnames identified include Mmakwena and Phukubje. The oldest date identified is 1966, and the youngest is 1995. Nine of the graves have an unknown date of death.</p> <p>Graves from two of the three categories of graves were identified – unknown graves and those younger than 60 years.</p>	<p>Ketting</p> <p>23°22'57.1' 'S; 28°53'10.9"E</p>	High	No direct impact	
Site 8K	<p>Graveyard</p> <p>This is a site containing at least 5 graves. All have granite headstones and borders. Only one surname was identified being Phukubje. The oldest date identified is 1904 and the youngest 1983.</p> <p>Graves from two of the three of the categories of graves were identified, one heritage grave and the rest younger than 60 years.</p>	<p>Ketting</p> <p>23°22'09.0' 'S; 28°53'52.8"E</p>	High	No direct impact	
Site 9K	<p>Graveyard</p> <p>This is a site containing at least 11 graves. Most of the graves have granite or headstones and borders, with 2 having cement borders. Only one surname could be identified, being Phukubje. The oldest date identified is 1966 and the youngest 1982.</p> <p>The graves are all younger than 60 years.</p>	<p>Ketting</p> <p>23°22'02.2' 'S; 28°53'52.6"E</p>	High	No direct impact	
Site 11K	<p>Graveyard at historical residential site</p> <p>At least 9 graves are present. No surnames or dates of death could be identified, but informants indicated that the grave are those of the Kgomo and Moremi families. The graves are all stone packed. The graves are therefore unknown and should be handled as heritage graves.</p>	<p>Ketting</p> <p>23°21'54.9' 'S; 28°54'01.6"E</p>	High	No direct impact	





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Site ID	Description	Farm	Sensitivity	Impact	Photograph
Site 14K	<p>Graveyard</p> <p>This is a site containing 4 graves. They all have granite dressing. The graves are also fenced in. The only surname available is Baloyi. The oldest date of death noted is 1954 and the youngest 1975.</p> <p>Graves from two of the three of the categories of graves were identified, heritage graves and graves younger than 60 years.</p>	<p>Ketting</p> <p>23°23'46.99"S; 28°52'27.94"E</p>	High	No direct impact	
Site 15K	<p>Graveyard</p> <p>This is a site containing at least 5 graves. All of the graves are dressed with granite with accompanying headstones. Only one surname was identified, being Mokwatedi.</p> <p>The dates of death vary between 1956 and 1983. One grave is older than 60 years and two younger. The remaining two have unknown dates of death. Thus, graves from all three of the categories of graves were identified.</p>	<p>Ketting</p> <p>23°22'52.48"S; 28°52'39.24"E</p>	High	No direct impact	
Site 18K	<p>Graveyard</p> <p>This is a site containing 2 graves. Both have granite headstones and borders and date to 1972. The only surname identified is Phukubje.</p> <p>Both graves fall within the category of those younger than 60 years.</p>	<p>Ketting</p> <p>23°22'13.25"S; 28°53'51.78"E</p>	High	No direct impact	
Site 19K	<p>Single grave</p> <p>This is a site containing only one grave. It has a granite headstone and border. The surname on the headstone is Phukubje.</p> <p>The date on the grave is 1956. It thus is regarded as being a heritage grave.</p>	<p>Ketting</p> <p>23°22'08.82"S; 28°53'48.35"E</p>	High	No direct impact	





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Site ID	Description	Farm	Sensitivity	Impact	Photograph
Site 20K	<p>Graveyard</p> <p>This is a site containing at least 10 graves. Five of the graves are stone packed, with or without headstones, and five have granite headstones and borders. Only one surname was identified, namely Phukubje.</p> <p>Those with dates range between 1982 and 2009. Graves from two of the categories of graves were identified, being unknown graves and graves younger than 60 years.</p>	<p>Ketting</p> <p>23°22'08.82"S; 28°53'47.47"E</p>	High	No direct impact	
Site 21K	<p>Graveyard</p> <p>This is a site containing at least 46 graves. Most of the graves are stone packed, with or without headstones, but some also have granite headstones and borders. The only surname identified is Phukubje.</p> <p>The site seems to consist of two sections as some of the graves are a few metres away from the others. This may have no significance.</p> <p>The dates of death range between 1918 and 1986. Graves from all three of the categories of graves were identified.</p>	<p>Ketting</p> <p>23°22'06.70"S; 28°53'38.09"E</p>	High	No direct impact	
Site 22K	<p>Graveyard</p> <p>This is a site containing at least 15 graves. One has a granite headstone and grave dressing whereas the rest are stone packed. The surname on the headstone is Phukubje.</p> <p>The date of death on the grave is 1929. The grave therefore is older than 60 years and therefore is a heritage grave.</p>	<p>Ketting</p> <p>23°22'02.94"S; 28°53'39.05"E</p>	High	No direct impact	




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Site ID	Description	Farm	Sensitivity	Impact	Photograph
Site 25G (S1/2016)	<p>Graveyard</p> <p>This is a site containing at least 34 graves. Two of these are stone packed and one has a granite dressing. The graves are also fenced in. The only surname available is Sepufa and this person died in 1951. The other two graves have no information.</p> <p>Graves from two of the three of the categories of graves were identified, heritage and unknown graves.</p>	Goedetrouw 23°23'41.2' 'S; 28°54'26.1''E	High	No direct impact	
Site 26G (S2/2016)	<p>Graveyard</p> <p>This is a very large site containing at least 60 graves. All of the graves are either dressed with cement or granite with accompanying headstones. The graves are also fenced in. Surnames identified include Masehela, Laka, Boshomane, Monkoe and Makgoka.</p> <p>Graves from two of the three of the categories of graves were identified, heritage graves and graves younger than 60 years.</p>	Goedetrouw 23°23'56.8''S; 28°54'07.4''E	High	No direct impact	
Site 14ED (S1/2016)	<p>Graveyard</p> <p>This is a site containing at least 60 graves. Most of the graves are stone packed, with or without headstones, but some also have granite headstones and borders. One of the surnames identified is Malebana.</p> <p>Graves from all three of the categories of graves were identified.</p>	Early Dawn 23°19'45.9' 'S; 28°56'16.8''E	High	No direct impact	
Site 15ED (S2/2016)	<p>Graveyard</p> <p>This is a site containing at least 50 graves. Most of the graves are stone packed, with or without headstones, but some also have granite headstones and borders. One of the surnames identified is Phuti.</p> <p>Graves from all three of the categories of graves were identified.</p>	Early Dawn 23°19'28.0' 'S; 28°56'09.4''E	High	No direct impact	





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Site ID	Description	Farm	Sensitivity	Impact	Photograph
Site 16ED (S3/2016)	Graveyard This is a site containing at least 44 graves. Most of the graves are stone packed, with or without headstones, but some also have granite headstones and borders. Some of the surnames identified are Sekgala and Ngoepe. Graves from all three of the categories of graves were identified.	Early Dawn 23°20'46.8' 'S; 28°54'49.3"E	High	No direct impact	
Site 17ED (S4/2016)	Graveyard This is a site containing at least 70 graves. Most of the graves are stone packed, with or without headstones, but some also have granite headstones and borders. Surnames identified include Ramoroka and Mojela. Graves from all three of the categories of graves were identified.	Early Dawn 23°21'05.0' 'S; 28°55'15.6"E	High	No direct impact	
Site 18ED (S5/2016)	Single grave This is a single grave with a granite headstone and dressing. The surname on the headstone is Ngoepe. The date of death on the grave is 1940. The grave therefore is older than 60 years and therefore is a heritage grave.	Early Dawn 23°19'47.3' 'S; 28°56'13.1"E	High	No direct impact	
Site 19ED (S6/2016)	Graveyard This is a site containing at least 8 graves. Four of the graves have brick borders and four granite borders and headstones. One surname was identified being Motlokwane. The oldest date of death is 1994 and the youngest 2000. This means that all the graves are younger than 60 years.	Early Dawn 23°19'43.8' 'S; 28°56'16.9"E	High	No direct impact	

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Site ID	Description	Farm	Sensitivity	impact	Photograph
Site 20ED (S7/2016)	<p>Graveyard</p> <p>This is a site containing at least 50 graves. The graves mostly have granite headstones and borders, but some have cement dressing or are just stone packed. Surnames identified include Ngoepe and Ngwepe.</p> <p>The oldest date of death is 1993 and the youngest 2009. Some have no information. This means that two of the three categories of graves are present being those with an unknown date of death and those younger than 60 years.</p>	Early Dawn 23°20'23.5' 'S; 28°55'102.6"E	High	No direct impact	
Site 21ED (S8/2016)	<p>Graveyard</p> <p>This is a large site containing at least 30 graves. The graves mostly have granite headstones and borders, but some have cement or brick dressing. A few are new graves only indicated by a heap of soil.</p> <p>Surnames identified include Ramoroka, Thou, Sekwadi and Setumu. All the graves are fairly recent meaning they are all younger than 60 years.</p>	Early Dawn 23°20'08.6' 'S; 28°55'22.5"E	High	No direct impact	
Site 22ED (S9/2016)	<p>Graveyard</p> <p>This is a site containing at least 30 graves. Four of the graves have granite headstones and borders and one have cement dressing. The remainder are all stone packed. Only one surname was identified namely Mosina.</p> <p>The oldest date of death is 1978 and the youngest 2008. Some have no information. This means that two of the three categories of graves are present being those with an unknown date of death and those younger than 60 years.</p>	Early Dawn 23°19'21.5' 'S; 28°56'59.1"E	High	No direct impact	

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Site ID	Description	Farm	Sensitivity	impact	Photograph
Site 12ED	<p>Graveyard</p> <p>This is a site containing 2 graves. Both have granite headstones and borders. Only one surname was identified namely Mpebe. The oldest date of death is 1963. This means that only one of the three categories of graves are present being those younger than 60 years.</p>	<p>Early Dawn</p> <p>23°21'10.5' 'S; 28°55'23.8"E</p>	High	No direct impact	
Site 13ED	<p>Graveyard</p> <p>This site was identified by a community member. Only two stones are present, apparently indicating two graves. No other information is available. This means that one of the three categories of graves are present being those with an unknown date of death.</p>	<p>Early Dawn</p> <p>23°21'15.6' 'S; 28°55'21.9"E</p>	High	No direct impact	
Site 27N	<p>Graveyard (site 36.19 from the Nel et.al, 2013 report)</p> <p>This is a site containing at least 140 graves. Most of the graves have granite headstones and borders. Some of the surnames identified is Ramaroka, Ngoepe, Mojela, Setumu and Masekoa. The oldest date of death identified is 1940. Unfortunately, Nel et.al. (2013) does not provide more information. For now, it is assumed that it is likely that graves from all three of the categories of graves are present</p>	<p>Norma</p> <p>23°23'21.2' 'S; 28°56'32.2"E</p>	High	No direct impact	
Site 24D	<p>Graveyard</p> <p>This is a site containing at least 40 graves. Most of the graves have granite headstones and dressing, but some are merely stone packed. Surnames that were identified include Ngwepe and Mautla. The dates of death range between 1918 and 1986. Graves from all three of the categories of graves were identified.</p>	<p>Disseldorp</p> <p>23°21'58.86"S; 28°51'34.78"E</p>	High	No direct impact	

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Site ID	Description	Farm	Sensitivity	impact	Photograph
Site 26D	Graveyard This is a site apparently containing 40 graves. It could however not be located, but information was provided by an informant. Surnames of people buried here include Mautla, Phukubje, Ngoepe and Moloto.	Disseldorp 23°22'08.7"S; 28°51'33.9"E	High	No direct impact	Not available.
Site 27D	Single grave This site was indicated on a list provided by the mine from information obtained from informants. The site could however not be located. It is indicated that it a single grave. The surname of the person buried here is Mautla.	Disseldorp 23°22'08.6"S; 28°51'36.3"E	High	No direct impact	Not available.
Site 28D	Graveyard This site was indicated on a list provided by the mine from information obtained from informants. The site could, however not be located. It is indicated that the site contains 22 graves. The surnames provided are Rapheega, Mojela, Maarala, Ngoepe and Phukubje.	Disseldorp 23°21'58.9"S; 28°51'08.9"E	High	No direct impact	Not available.
Site 29D	Graveyard This site was indicated on a list provided by the mine from information obtained from informants. The site could, however not be located. It is indicated that the site contains 11 graves. The only surname provided is Ngoepe.	Disseldorp 23°22'04.9"S; 28°51'20.2"E	High	No direct impact	Not available.

3.2.3 Iron Age Sites

Table 3: Iron Age sites identified during the HIA (Archaetnos, 2019)

Site ID	Description	Farm	Sensitivity	Impact	Photograph
Site 3K	Iron Age lower grinding stones This site consists of nothing more than a few broken lower grinding stones.	Ketting 23°22' 40.1" S; 28°53' 29.5" E	Negligible Local Grade IIIC	No direct impact	
Site 24ED (S11/2016)	Iron Age pottery This site consists of isolated pottery; only one decorated potshard was identified. One cannot really base a pottery analysis on only one potshard. This one however does look similar to Icon pottery, which forms part of the Moloko branch of the Urewe ceramic tradition. If so, it would relatively date to between 1300 and 1500 AD (Huffman 2007: 183-185).	Early Dawn 23°19'40.9" S; 28°55' 28.5" E 23°19'35.7" S; 28°55' 26.7" E 23°19'34.0" S; 28°55' 22.5" E	Negligible Local Grade IIIC	No direct impact	

4 MITIGATION, MANAGEMENT AND MONITORING OF IDENTIFIED HERITAGE SITES

The following management measures should be implemented prior to construction:

- All identified sites within and in proximity to the Mine Infrastructure Areas (MIA) should be demarcated (fenced in) and declared a no-go area.
- Buffer zones around any of the identified sites should be at least 20m. Depending on individual circumstances, e.g. blasting and dust pollution, such a buffer may have to be increased if a site is at risk.
- Monitoring of identified heritage sites to determine any damage from blasting or other mining-related activities.
- Immediate rectification of damage to any heritage sites.
- A qualified archaeologist shall monitor construction activities until completion thereof.
- Construction activities shall cease immediately upon any further discovery of cultural and heritage resources and the required assessment and reporting instituted – refer to Chance Find Procedures in paragraph 5.

4.1 Mitigation Measures

Table 4: Mitigation Measures

Impact	Mitigation Measures
Impact on the sensitive Makgabeng Plateau environment	<ul style="list-style-type: none"> • All personnel on-site must be informed of the conservation significance of the natural habitat and fauna of the Makgabeng Plateau and its foot slopes. • Regular (monthly) education and awareness meetings must be held to inform staff. Officials from the nature conservation services must be invited to some meetings.
Impact on rock art sites	<ul style="list-style-type: none"> • Rock art monitoring must be implemented in conjunction with a specialist in the field of rock art. • Ongoing air quality (dust fallout) monitoring must be conducted to determine the impact of dust on the sites. • Where an impact is detected on a specific rock art site and it is anticipated by the appointed independent specialist that the impact is severe and there is a risk of permanent damage, Waterberg JV Resources will appoint the required specialists to conduct a comprehensive survey and documentation process which would include photography, tracing, pigment characterization and radiocarbon dating of the site.
Impact on archaeological and historical sites	<ul style="list-style-type: none"> • All identified sites within the MIA should be clearly demarcated (fenced in) and declared as a no-go area. • Buffer zones around any of these sites should be at least 20m. Depending on individual circumstances, e.g. blasting and dust pollution, such a buffer may have to be increased.

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Impact	Mitigation Measures
	<ul style="list-style-type: none"> • Monthly monitoring of heritage sites to determine any damage resulting from blasting or other mining-related activities. • Immediate rectification of damage to any heritage sites.
Impact on burial grounds and grave sites	<ul style="list-style-type: none"> • All identified sites within the MIA should be clearly demarcated (fenced in) and declared as a no-go area. • Buffer zones around any of these sites should be at least 20m. Depending on individual circumstances, e.g. blasting and dust pollution, such a buffer may have to be increased. • Monthly monitoring of grave sites to determine any damage resulting from blasting or other mining-related activities. • Immediate rectification of damage to any grave sites.
Recovery of sub-surface archaeological sites during construction	<ul style="list-style-type: none"> • A qualified archaeologist must monitor excavation activities. • Any discovery of artefacts, graves or other remains of archaeological interest should be reported to SAHRA. • Activities must cease immediately upon any discovery of cultural or heritage resources, and a qualified archaeologist informed to do further assessment and reporting. • Identified sites of cultural and heritage significance must be demarcated until such time that an instruction to resume work is provided to the contractor, following consultation with the regulating authorities. • Implementation of Chance Find Procedure.
Exposure of paleontological material or fossils	<ul style="list-style-type: none"> • Implementation of Chance Find Procedure. • If discovered, a qualified palaeontologist must be appointed to confirm the presence of palaeontological material and/or fossils.
Impact on protected and medicinal species	<ul style="list-style-type: none"> • Minimise the area cleared for construction activities and retain indigenous vegetation where possible. • Site impact must be restricted to a radius of 20 m, preferably delineated and with a barrier erected. • Protected and medicinal plant species must be retained/protected where possible. • Individuals of these species must be identified and translocated before natural vegetation is cleared during the construction phase. • Do a count of the number of Marula trees to be affected by construction activities and document the traditional herbs to be affected. Negotiate workable solutions with the community, e.g.: <ul style="list-style-type: none"> ○ Plant/replace fruit trees and other plants that are being used by community members at suitable localities; ○ Where possible fruit trees and other medicinal plants should not be removed, and access granted at harvesting times; ○ Where trees are removed, community members be given permission to use and/or sell the wood.
Impact on sense of place	<ul style="list-style-type: none"> • Large trees surrounding the infrastructure footprint areas should remain intact as far as possible. • General housekeeping should receive priority to ensure operational areas are always neat and orderly. • Visually intrusive activities must be screened off or make use of local screening opportunities as far as is considered feasible. • Where screening opportunities from topography and vegetation are absent, natural-looking constructed landforms and vegetative or architectural screening may be used to minimise visual impacts.

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Impact	Mitigation Measures
	<ul style="list-style-type: none"> • Minimise use of earthmoving equipment, generators and any other equipment that results in noise and/or dust. • Vegetation growth on dumps and stockpiles should be encouraged, and if required facilitated through seeding with a locally indigenous seed mixture. • Disturbed areas and bare soils should be revegetated as soon as possible during the operational phase. • Vehicles should be restricted to existing roads and the speed of hauling and other vehicles should be limited to minimise dust generation. • Access roads must be suitably maintained to limit and prevent erosion and dust. • Off-site visual mitigation measure that should be considered could include reclaiming unnecessary roads, removing unnecessary fencing, signage and buildings that will not be repurposed, and rehabilitating and revegetating existing erosion or disturbed areas. • If required, additional screening vegetation may be planted at receptor sites from where a clear view towards mining infrastructure of increased height exists. • Continuous consultation with neighbouring landowners to ensure co-existence and collaboration on mitigation measures for impacts on noise and dust. • Implement a consultation programme with local stakeholders in the development of a closure plan and rehabilitation programme. • Determine the regional needs and characteristics to ensure post-mining land use enhances the regional characteristics. • Monitoring the impact on neighbouring properties. • Establish a complaint and grievance procedure.
Visual impacts from night-time lighting	<ul style="list-style-type: none"> • Existing vegetation will assist in screening surrounding receptors from night-time lighting at ground level, and therefore as much existing vegetation as possible surrounding the proposed infrastructure should be retained, and development footprints should remain as small as possible. • A lighting engineer should be consulted to assist in the planning and placement of light fixtures for the plant and all ancillary infrastructure in order to reduce visual impacts associated with glare and light trespass. • Placement of lighting outside of the project area should be avoided or strictly limited. • All outdoor lighting must be strictly controlled, and lighting shields installed where required. • The use of high light masts should be avoided to reduce sky glow. • Up-lighting of structures must be avoided, with lighting installed at downward angles that provide precisely directed illumination. • Localised and portable lighting should be used where and when the operations or maintenance work is occurring. Vehicle-mounted lights or portable light towers are preferred over permanently mounted lighting for night-time maintenance activities. • Censored and motion/movement-activated lighting should be installed for security purposes at offices and workshops to prevent use of lights when not needed. • Minimum wattage light fixtures should be used, with the minimum intensity necessary to accomplish the light's purpose.

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Impact	Mitigation Measures
	<ul style="list-style-type: none"> • The use of low-pressure sodium lamps, yellow Light Emitting Diode (LED) lighting, or an equivalent reduces skyglow and wildlife impacts. Bluish-white lighting is more likely to cause glare. • Off-site hauling of product should be limited to daylight hours.
Excessive quantity of noxious vehicle exhaust fumes	<ul style="list-style-type: none"> • Manage vehicle fleet and movement of vehicles on site and limit the use of vehicles in poorly ventilated areas. • Where possible/practical, plan vehicle travel routes in such a manner as to allow for exhaust fumes to disperse sufficiently and not to affect air quality to the extent whereby exceedance of standards could occur. • Consider alternative options to vehicles with combustion engines.
Increased Fugitive dust	<ul style="list-style-type: none"> • Manage site access and control movement on site. • Set the speed limit for hauling vehicles and vehicles in general to as low a speed as possible and enforce the speed limits specified. • Include speedbumps to control the speed limits where appropriate. • Include a program of wet suppression of the unpaved roads with major vehicle activity. The wet suppression can typically be grey water from the mine, or the water can contain a chemical that will increase the dust trapping capability once sprayed over a surface. • The material should be kept damp during crushing and screening. • Dust suppression should be installed along all conveyors and at conveyor transfer stations. • General traffic around the TSF areas must be limited. • Limit the load size of the vehicles to ensure the wind in transit does not pick up more dust than need be. • Vegetation growth on dumps and stockpiles should be encouraged, and if required facilitated through seeding with a locally indigenous seed mixture. • Disturbed areas and bare soils should be revegetated as soon as possible during the operational phase. • Windshields (barriers) can be implemented on the slopes and surface of the stockpile, these barriers are typically large trees with good foliage. The substitute for a wind barrier is a wind shield made from a porous material. • Establishment of a Complaint and Grievance Procedure. • Ongoing air quality (dust fallout) monitoring.
Secondary Tourism Impacts caused by Air Quality	<ul style="list-style-type: none"> • Discourage staff, contractors and suppliers to utilise the D3340 and D3440 roads to provide goods and services to the mine. • Engage Roads Agency Limpopo, CDM and BLM to explore possibilities of a) regular maintenance of the roads; and b) upgrading these roads to an improved status.
Increased ambient noise levels	<ul style="list-style-type: none"> • Dump (waste rock, TSF) shaping to create a noise berm around the perimeter on top of the dump, acting as a noise screen. • Restriction of dump operations to daytime hours (6:00 to 22:00). • Fitment of trucks and earthmoving equipment with buzzer type reverse alarms producing a "hissing" sound, rather than the tonal beeping of conventional alarms. • Ensure that equipment is well maintained and fitted with the correct and appropriate noise abatement measures. Engine bay covers over heavy equipment could be pre-fitted with

Impact	Mitigation Measures
	<p>sound-absorbing material. Heavy equipment that fully encloses the engine bay should be considered, ensuring that the seam gap between the hood and vehicle body is minimised.</p> <ul style="list-style-type: none"> • Establishment of a Complaint and Grievance Procedure. • Ongoing noise monitoring.
Blasting impacts	<ul style="list-style-type: none"> • Implementation of minimum charge during portal access. • During underground mining specific blast design is to be done with shorter, smaller diameter blast holes, using electronic initiation instead of shock tube systems to obtain single hole firing. • Ongoing blast monitoring.

4.2 Monitoring Programme

4.2.1 Noise monitoring

The initial plan is to monitor noise at locations in village areas on a monthly basis. This plan will be reviewed before and after each survey to optimise the selection of locations where noise should be monitored. The review will be based on factors such as changes in mining operations, responses or complaints from residents in the area and the outcomes of previous surveys.

If noise levels are found to be within acceptable limits, monitoring may be relaxed to an annual routine. If operations take place during the night, the surveys should be conducted over 24-hour periods, with a focus on night-time conditions.

The proposed noise monitoring points are indicated in Figure 4. Additional monitoring points to cover the sensitive Makgabeng Plateau should be identified prior to the implementation of the monitoring programme.

4.2.2 Air quality monitoring

Dust fallout monitoring will be implemented prior to the commencement of the Waterberg PGM Mine. The sampling of fallout will be undertaken within the neighbouring areas and on-site to assess the level of nuisance dust associated with both mining and process-related operations.

The air quality (dust fallout) monitoring points are indicated in Figure 5. Additional monitoring points to cover the sensitive Makgabeng Plateau will be identified prior to the implementation of the monitoring programme.

The particulate matter must be monitored on an annual basis. Should this monitoring indicate levels above that of the ambient air quality standards, the frequency of monitoring will be increased to monthly until the standards are met.

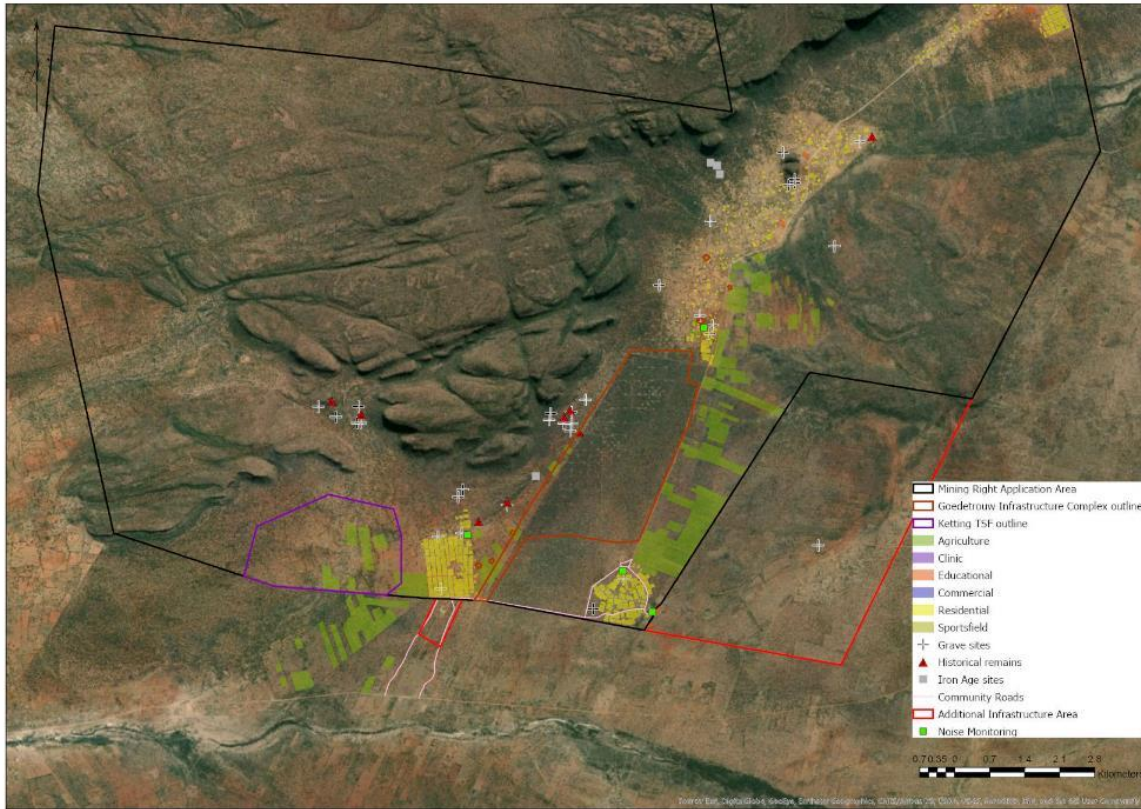


Figure 4: Noise monitoring points

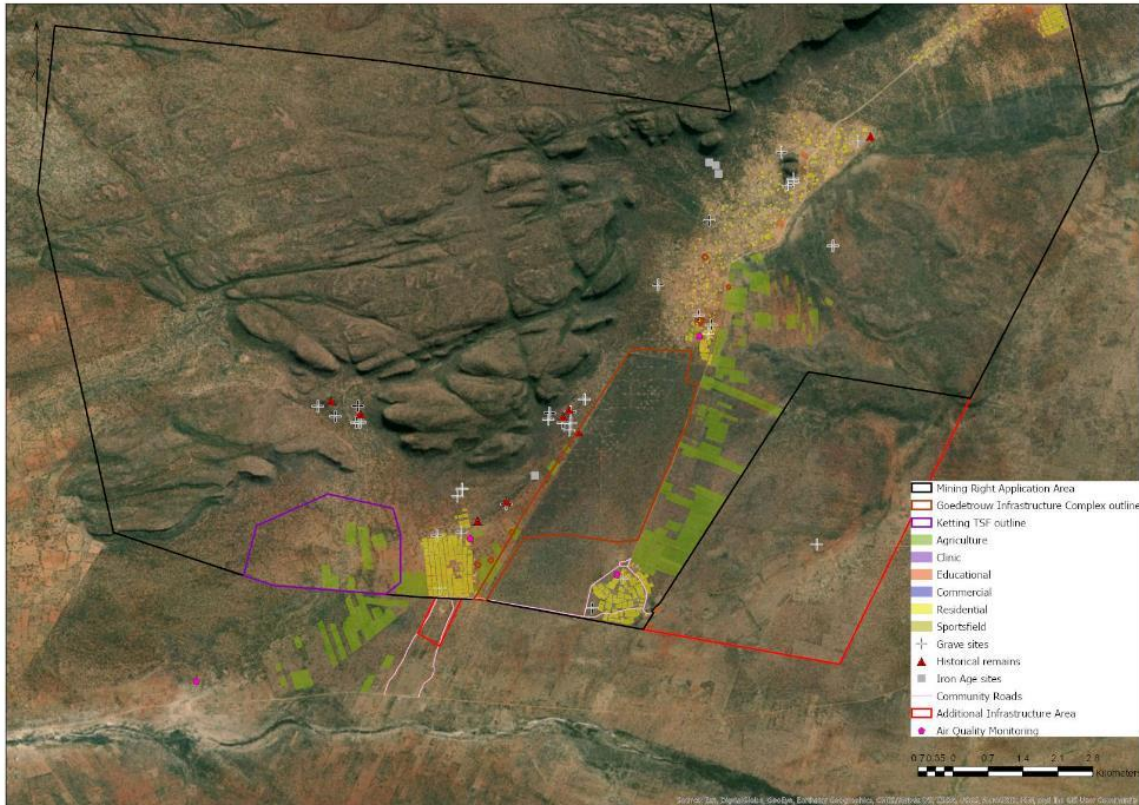


Figure 5: Air Quality Monitoring points

4.2.3 Blast monitoring

The following elements will be monitored in respect of blasting activities:

- Ground vibration and air blast results;
- Blast Information summary;
- Meteorological information at the time of the blast;
- Video Recording of the blast;
- Fly rock observations.

Most of the above aspects do not require specific locations for monitoring. Ground vibration and air blast monitoring require identified locations for monitoring. Monitoring of ground vibration and air blast is done to ensure that the generated levels of ground vibration and air blast comply with recommendations. Proposed positions were selected to indicate the nearest points of interest at which levels of ground vibration and air blast should be within the accepted norms and standards. The monitoring of ground vibration will also qualify the expected ground vibration and air blast levels and assist in mitigating these aspects properly. This will also contribute to proper relationships with the neighbours.

The proposed monitoring positions are indicated in Figure 6. These points will be reviewed after the first blasts are done and the blasting procedure is defined.

A once-off pre-blast photographic survey will be conducted in a 2 km radius around the portal development areas on all existing infrastructure prior to the portal development.

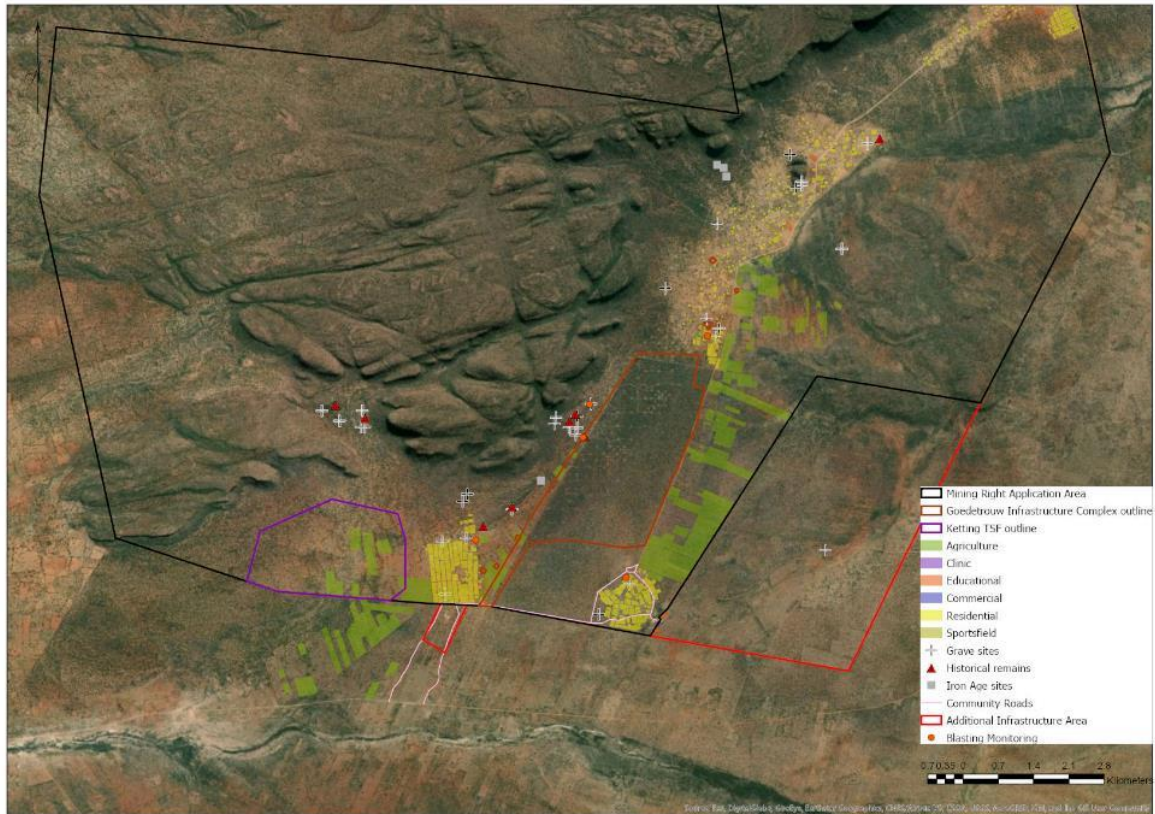


Figure 6: Blast monitoring points

4.2.4 Cultural and heritage resources monitoring

The identified cultural and heritage resources in proximity to the MIA must be fenced to protect them from construction activities and the movement of machinery on-site. A visual inspection of these sites must be conducted on a monthly basis to determine the integrity of the fencing, any damage to the sites and any fly-rock (during construction of the portal areas).

In addition, while there is no rock art that has been identified within the MIA, it would be necessary for a monitoring programme to be set up for rock art sites in the surrounding areas. A detailed monitoring programme will be developed in conjunction with a specialist in the field of rock art and appended to the HMP.

5 CHANCE FIND PROCEDURES

Most archaeological and palaeontological remains are subterranean, and there is always a chance that archaeological material (including burial sites) may be exposed during earthworks. The Chance Find Procedures below indicates the procedure that needs to be followed in such an event.

5.1 Archaeological or historical material

If any unidentified archaeological or historical material is identified and/or exposed during any of the developmental phases of the project, the following steps must be implemented subsequent to those outlined above:

- All work in the affected area must cease, and the find must be reported to the immediate supervisor and through their supervisor to the senior on-site manager.
- The area should be demarcated to prevent any further work there until an investigation has been completed.
- An archaeologist should be contacted immediately to provide advice on the matter.
- The archaeologist will decide on future action. Depending on the nature of the find, it may include a site visit.
- If needed, the necessary permit will be applied for with SAHRA. This will be done in conjunction with the appointed archaeologist.
- The appropriate action will be determined by the nature of the find and the possibilities given the restriction placed upon it by mining activities.
- Work on site will only continue after the archaeologist/ SAHRA has agreed to such a matter.

5.2 Human remains

If unidentified burial grounds, graves or human remains are identified and/or exposed during any of the developmental phases of the project, the following steps must be implemented subsequent to those outlined above:

- All work in the affected area must cease, and the find must be reported to the immediate supervisor and through their supervisor to the senior on-site manager.
- The area should be demarcated to prevent any further work there until an investigation has been completed.
- An archaeologist should be contacted immediately to provide advice on the matter.

- The archaeologist must confirm the presence of burial grounds, graves or human remains.
- If this is the case, the archaeologist must inform the local South African Police Services (SAPS) and traditional authority (if applicable). SAHRA's BGG Unit should also be notified in the case of human remains.
- The archaeologist, in conjunction with the SAPS and traditional authority, will inspect the possible graves and make an informed decision about whether the remains are of forensic, recent, cultural-historical or archaeological significance.
- Should it be concluded that the find is of heritage significance and therefore protected in terms of heritage legislation, the archaeologist will notify the relevant authorities and institute the grave relocation procedure.

5.3 Grave Relocation Procedure

If unidentified graves are identified and/or exposed during any of the developmental phases of the project, the following steps must be implemented subsequent to those outlined above:

5.3.1 Graves older than 60 years

- Application for a permit from SAHRA in terms of Section 36 of the NHRA for graves older than 60 years or that of a victim of conflict.
- Known graves: Proof of thorough consultative process:
 - Locate the next of kin and obtain a letter of consent from the next of kin.
 - Obtain a letter of consent or statement of no objection from the landowner or local Traditional Authority if in a rural area.
 - Determine a place for the reburial of each grave in consultation with the next of kin. In addition, also determine the arrangement of reburial, i.e. by the next of kin/community or a funeral undertaker.
 - Submit documentation of the above with the permit application to SAHRA.
 - Inform the SAPS of the intent to relocate the grave/s and submit a copy of the permit to SAPS.
 - The graves are to be exhumed by a funeral undertaker under the supervision of an archaeologist. Undertaker would also arrange all the formalities for the reburial.

- The specific requirements regarding ritual and ceremonial practices from next of kin and/or community for both the exhumation and reburial activity must be determined beforehand and facilitated by the developer.
- Unknown graves: Proof of thorough consultative process:
 - Place an advertisement in a local and national newspaper with a description and location of graves and full contact detail of the consultant and WaterbergJVCo. A waiting period of 60 days will apply.
 - If no reaction to the advertisement follows, then apply for a permit from SAHRA after a waiting period of 60 days with proof of advertisement and any other consultative process.
 - If in a rural area, obtain a letter of consent or statement of no objection from the landowner or local Traditional Authority and submit it with the permit application.
 - If an advertisement leads to a claim from the next of kin or from a community that, by tradition, has an interest, then written consent from the relevant party must be obtained.
 - Determine a place for the reburial of each grave.
 - Submit documentation of the above with the permit application to SAHRA.
 - Inform SAPS of the intent and process of reburial and submit a copy of the permit to SAPS.
 - The graves are to be exhumed by a funeral undertaker under the supervision of an archaeologist. Undertaker would also arrange all the formalities for the reburial.
 - The specific requirements regarding ritual and ceremonial practices from next of kin and/or community for both the exhumation and reburial activity must be determined beforehand and facilitated by the developer.

5.3.2 Graves less than 60 years old

- Locate the next of kin of the buried persons and obtain consent from the next of kin for the relocation of the graves.
- Determine a place for the reburial of each grave.
- Obtain a letter of consent or statement of no objection from the landowner or local Traditional Authority if in a rural area.
- Submit the above documentation to the Department of Health and obtain permission for the relocation of the graves, which process would most probably be regulated by the District Municipality.

- Inform the SAPS and provide the above-mentioned documentation.
- The graves are to be exhumed by a funeral undertaker under the supervision of an archaeologist. Undertaker would also arrange all the formalities for the reburial.
- The specific requirements regarding ritual and ceremonial practices from next of kin and/or community for both the exhumation and reburial activity must be determined beforehand and facilitated by the developer.

5.3.3 Exhumation and relocation methodology

Normally, after detailed documentation, each grave is opened by the undertakers up to the level of the burial or when the first skeletal material or coffin remnants are encountered. The archaeologist then opens the remains carefully using the required excavation equipment before detailed documentation commences. After documentation, the remains are removed and placed in new coffins supplied by the funeral undertaker and taken to a new cemetery to be re-interred.

The documentation normally comprises the following:

- Photographic Records - Photos of each site prior to excavation and exhumation, as well as of each grave, are taken. Each burial, with its contents in situ, is also photographically documented.
- GPS Data - A GPS reading for each site is taken in order to locate it on a map of the area.
- Burial Recording Forms - These forms are used to record all relevant details of each grave and burial, such as dimensions, position, contents, preservation of remains, cultural material found and all other observations regarding the skeletal remains.

5.4 Palaeontology

If any palaeontological material or fossils are exposed during any of the developmental phases of the project, the following steps must be implemented subsequent to those outlined above:

- All work in the affected area must cease, and the find must be reported to the immediate supervisor and through their supervisor to the senior on-site manager.
- The area must be fenced-off with a 30m barrier, and the area declared as a no-go area.
- A palaeontologist should be contacted immediately to confirm the presence of palaeontological material and/or fossils.

- If this is the case, SAHRA must be contacted for further investigation and mitigation.
- Three types of permits are available: Mitigation, Destruction and Interpretation. The specialist will apply for the permit at the beginning of the process.

5.4.1 Mitigation

Mitigation will involve recording, rescue and judicious sampling of the fossil material present and will include a Phase 2 Palaeontological Impact Assessment (PIA).

5.4.2 Phase 2 PIA

The study will entail reporting on the following:

- Recommendations for the future of the site.
- Description and purpose of work done (including the number of people and their responsibilities).
- A written assessment of the work done, fossils excavated, not removed or collected and observed.
- The conclusion reached regarding the fossil material.
- A detailed site plan and map.
- Possible declaration as a heritage site or Site Management Plan.
- Stakeholders.
- Detailed report including the Desktop and Phase 1 study information.
- Annual interim or progress Phase 2 permit reports as well as the final report.
- Methodology used.

5.4.3 Fossil excavation during Phase 2 (if necessary)

- Photography of fossil or fossil layer and surrounding strata.
- Once a fossil has been identified as such, the task of extraction begins.
- It usually entails the taking of a GPS reading and recording lithostratigraphic, biostratigraphic, date, collector and locality information.
- Use Paraloid (B-72) as an adhesive and protective glue for parts of the fossil to be kept together (not necessarily applicable to plant fossils).
- Slowly chipping away at the matrix surrounding the fossil using a geological pick, brushes and chisels.
- Once the full extent of the fossil/fossils is visible, it can be covered with a plaster jacket (not necessarily applicable to plant fossils).

- Chipping away sides to loosen the underside.
- Splitting of the rock containing palaeobotanical material should reveal any fossils sandwiched between the layers.
- Fossils excavated will be stored at a National Repository.

6 ROLES AND RESPONSIBILITIES

It is important to assign definite roles and responsibilities to ensure the success of the HMP.

6.1 Government Departments

As the responsibility for the protection of our natural heritage lies with the government departments, they have the power to conduct site inspections to ensure that the development complies with all legislation, regulations and standards. They may enforce penalties where non-compliance occurs.

6.2 Mine/Site Manager

The Mine/Site Manager will oversee all the activities. He/she will be responsible for the activities on site and see to the implementation of the HMP. He/she will establish a communication network between the different components conducting the work. All incidents and reports will be made to the Mine/Site Manager. Ultimate responsibility in terms of compliance with the HMP lies with the Mine/Site Manager.

6.3 Contractors

Where contractors are used during the LoM, the on-site responsibility for environmental and social matters lies with the Contractor Engineer. They will be responsible for the day-to-day direction and management of their particular activities on the site throughout the life of the project.

6.4 Environmental Officer

An Environmental Officer ("EO") or Health, Safety and Environmental ("HSE") Officer will be appointed by the Mine/ Site Manager. It will be the responsibility of the EO/ SHEQ Officer to:

- Oversee that the day-to-day activities that will take place on-site comply with the EMPr, HMP and the relevant legislation;
- Ensure that environmental sampling schedules are compiled and adhered to.
- To prepare a detailed communication strategy for liaison with I&APs, stakeholders and contractors;
- Manage and document forward, and backward information flows between the Mine/ Site Manager, the Contractors, the I&APs and Waterberg JVCo. This includes information pertaining to monitoring and evaluation;
- Assist Waterberg JVCo upon request, with daily Waterberg Project communication with I&APs;
- Ensure meaningful participation with the I&APs, including capacity-building exercises where the need is identified;
- Give induction and environmental awareness training;
- Ensure that a record-keeping system is maintained; and
- Promote co-regulation, shared responsibility and a sense of ownership amongst all parties involved.

6.5 Environmental Control Officer

To ensure full compliance with the EMPr, HMP, and in effect, the legislation, Waterberg JVCo must appoint an Environmental Control Officer ("ECO").

The responsibilities of the ECO will be:

- To monitor the construction activities through monthly site inspections to ensure compliance with the EMPr and HMP;
- To assess the EMPr and HMP as to their effectiveness in mitigating and preventing impacts;
- To assess compliance with the EA;
- To advise the Mine/Site Manager, Resident Engineer, Contractors and EO with respect to the activities and their associated impact on the environment and/or heritage resources;
- To identify any non-compliances and to advise with regards to the immediate action and remediation therewith;

- To compile reports every two weeks and communicate the findings to the Waterberg Project Manager and contractors;
- To write a monthly compliance report and submit it to the regulatory authority;
- To ensure monthly Waterberg Project meetings are undertaken with the contractors and the Mine Manager to discuss the findings made during the site visits;
- To ensure that the best environmental options are followed throughout;
- To ensure that a proper training, awareness and competence training programme is implemented; and
- To update, where necessary, the EMPr and/or HMP as new issues may arise.

7 ENVIRONMENTAL AWARENESS PLAN

The Environmental Awareness Plan, as contained in the approved EMPR, incorporates Cultural Heritage Aspects, and the HMP is aligned. For ease of reference, it is duplicated below.

7.1 Manner in which Waterberg JVCo intends to inform employees of any Environmental Risk which may result from their work

The purpose of the environmental awareness plan is to outline the methodology that will be used to inform the mine's employees of any environmental risks which may result from their work and the manner in which the risks must be dealt with to avoid contamination or environmental degradation. The environmental awareness plan is primarily a tool to introduce and describe the requirements of the range of environmental and social plans for the Waterberg PGM Mine during the life of the mine.

The environmental awareness plan ensures that training needs are identified, and appropriate training is provided. The environmental awareness plan communicates:

- Importance of conformance with the environmental policy, procedures and other requirements of good environmental management;
- The significant environmental impacts and risks of an individual's work activities and the environmental benefits of improved performance;
- Individual's roles and responsibilities in achieving the aims and objectives of the environmental policy; and
- The potential consequences of not complying with environmental procedures.

The objective of this Environmental Awareness Plan is to inform employees and contractors of:

- any environmental risks which may result from their work; and
- how the identified possible risks must be dealt with to prevent environmental damage.

In general, the purpose of implementing an environmental awareness plan is to optimise the awareness of those partaking in the mining and related activities which have the potential to impact negatively on the environment and, in doing so, promote the global goal of sustainable development.

Training and induction of employees, supervisors, sub-contractors, contractors and visitors will ensure that cooperation in terms of environmental management will occur. This contributes to the successful implementation of the conditions set out in the EMPr and EA and, thus, to the environmental sustainability of the Waterberg PGM Mine. In addition, it will ensure the success of the mine's compliance with legislation and avoid possible future liabilities and legal action due to a lack of environmental awareness.

7.2 Manner in which risks will be dealt with in order to avoid pollution or degradation of the environment

The effectiveness and efficiency of this plan are monitored by the performance of annual audits aimed at testing the environmental awareness of employees directly and the analysis of the root causes of environmental incidents, including non-conformance to legal requirements, to determine which incidents are caused by a lack of environmental awareness and training. The evaluation of the Environmental Awareness Plan is conducted by the SHEQ Department. This evaluation entails the auditing of the Waterberg PGM Mine during the construction and operation phases once the activity has commenced.

Management establishes and maintains procedures for the internal communication between the various levels and functions of the organisation and receiving, documenting and responding to relevant communication from external I&APs. Waterberg JVCo considers processes for external communication on its significant environmental aspects and records its decision. Communication is a management responsibility. All line supervisors are responsible for effective communication within their own sections.

Environmental risks are dealt with through training and communication to ensure minimal degradation of the environment.

The Environmental Awareness Plan is sufficient to make all those involved with the Waterberg PGM Mine aware of those risks that may occur and the necessary mitigation required to minimise these risks. Waterberg JVCo and its contractors take the Environmental Awareness Plan seriously in order to show that they are sensitive to the environment's well-being, empowering the local people and returning the land to appropriate use once the reclamation activities are completed.

Non-compliance is dealt with by the SHEQ and site manager on a case-to-case basis. Secondary offenders or serious offences are dealt with immediately, and where necessary disciplinary hearings and suspension are considered.

8 ENVIRONMENTAL COMMUNICATION STRATEGIES

The Environmental Communication Strategy, as contained in the approved EMPR, incorporates Cultural Heritage Aspects, and the HMP is aligned. For ease of reference, it is duplicated below.

8.1 Induction

All full-time staff and contractors are required to attend an induction session. Employees are inducted when they start on the Waterberg Project. Any contractor who works on the Waterberg PGM Mine is required to undergo the prescribed induction training. This induction will form part of the health and safety induction.

Environmental issues and aspects related to the Waterberg PGM Mine will be addressed in the induction sessions. All environmental impacts and aspects and their mitigatory measures will be discussed, explained and communicated to employees. The induction sessions will be modified according to the level of an employee attending the induction session so that all employees gain a suitable understanding of environmental issues and pollution.

The records of all individuals attending induction sessions are to be kept; the records to be kept include names, IDs, contact details, designation and signatures.

8.1.1 Hazardous Substances

Individuals dealing with potentially hazardous situations and risks that could lead to hazardous spills, pollution incidents, excessive dust or other forms of environmental damage should receive appropriate job-specific training on the risks and potential consequences of their appointment and work situation, how to avoid environmental impacts and how to respond during an environmental incident or emergency situation. All these actions will be done in accordance with the Waterberg PGM Mine procedures on the management of hazardous substances.

8.1.2 Delivery of Hazardous Substances

All hazardous substances are delivered directly to the Supply Chain management stores. Personnel responsible for the supervision of delivery, collection and transport of hazardous substances should receive appropriate job-specific training on the risks and potential consequences of their appointment and work situation, how to avoid environmental impacts and how to respond during an environmental incident or emergency situation. Material Safety Data Sheets of each hazardous substance delivered must be kept at the Supply Chain management stores as well as the point of distribution. Prior to any use of a new chemical, the Material Safety Data Sheet of each substance must be delivered to the SHEQ department of Waterberg JVCo for approval of use by the environmental specialist.

8.1.3 Dust mitigation

Individuals dealing with potential situations and risks that could lead to excessive dust should receive appropriate job-specific training on the risks and potential consequences of their appointment and work situation, how to avoid environmental impacts and how to respond during an environmental incident or emergency situation.

8.1.4 Fire Incidents

Individuals dealing with potentially hazardous situations and risks that could lead to fire incidents or emergencies should receive appropriate job-specific training on the risks and potential consequences of their appointment and work situation, how to avoid environmental impacts and how to respond during an environmental incident or emergency situation.

8.1.5 Pollution Incidents or Forms of Environmental Damage

Any incident or form of environmental damage must be dealt with in accordance with the Incident management procedure. Individuals dealing with potential situations and risks that could lead to pollution incidents or other forms of environmental damage are to receive appropriate job-specific training on the risks and potential consequences of their appointment and work situation, how to avoid environmental impacts and how to respond during an environmental incident or emergency situation.

8.1.6 Waste Management

Mining personnel and contractors responsible for the operation and safe handling of the various waste streams will receive appropriate job-specific training on the risks and potential consequences of their appointment and work situation, how to avoid environmental impacts and how to respond during an environmental incident or emergency situation. Waterberg JVCo must ensure that training and awareness programmes cover the safe transportation, handling, storage, transfer, handling, use and disposal of all waste streams and the location of waste receptacles for each waste stream. All waste management activities must be done in accordance with the Waterberg JVCo procedures and in terms of registers dealing with the storage of waste in specific areas. Staff awareness training programmes will accommodate training on which bin to use for organic waste and on sealing the lid on the bin once organic waste has been discarded.

8.1.7 Water Management

All persons responsible for active water management will receive appropriate job-specific training on the risks and potential consequences of their appointment and work situation, how to avoid environmental impacts and how to respond during an environmental incident or emergency situation.

8.1.8 Water Consumption and Use

All staff will receive training on minimising water consumption and how to use water sparingly.

8.2 Stakeholder Engagement Plan

A Stakeholder Engagement Plan ("**SEP**") must be developed to plan for engagement activities for the Proposed Project.

The plan must provide, but not be limited to:

- A description of the regulatory and other requirements for Stakeholder Engagement ("**SE**");
- A summary of the applicable South African legislation;
- A list of potential stakeholders identified for the project;
- Implementation plan for further consultation during the different phases of the project;
- A proposed grievance mechanism; and
- Management functions for the implementation of the SEP and grievance mechanism.

8.3 Internal Communication

To be conducted within the Administrative Sector.

8.4 On-the-Job Training

On-the-job training is an essential tool in environmental awareness. Employees will be given details of the expected environmental issues and concerns specifically related to their occupation. Employees will be trained on how to respond if an environmental problem or source of environmental pollution arises. The training will be ongoing, and all new employees will be provided with the same standard of training as existing employees. In addition, contractors working on the Waterberg Project will be subjected to Risk Conversancy Training ("**RCT**").

The records of all individuals receiving on-the-job training need to be kept. The records to be kept include names, employee numbers, contact details, designation and signatures.

8.5 External Communication Strategies

The following communication channels and media can be used to communicate environmental issues to individuals who are not employed by Waterberg JVCo or its subcontractors:

- **Environmental Stakeholder Engagement Forum:** An Environmental Stakeholder Engagement Forum is established and used to keep I&APs informed of the significant environmental aspects identified through the Environmental Impact Assessments and Management Plans. This is also the forum where I&APs get the opportunity to raise environmental concerns. Records are kept of all decisions and concerns. The Environmental Stakeholder Engagement Forum is chaired by the Mine Manager or another appropriately appointed competent individual.
- **Publications:** Selected publications should be produced and used to communicate environmental issues to outside parties. Examples include newsletters and Annual Reports.
- **Communication from External Parties and Employees:** A clear communication point is established within the company through the Waterberg JVCo communication procedure that determines who is responsible for liaison with the media in respect of any crisis that may arise. Communication from external interested and affected parties may be received by email, fax, telephonically or by mail. Where required, a written response will be sent, on receiving such communication, by the appropriately appointed individual, under the signature of the Mine Manager, to the respective I&AP. All telephonic or facsimile correspondence received on the mine must be forwarded to the relevant department for action. All events or concerns will be captured and actioned on an existing and/or future database.
- **Email:** Email communication received must be stored, with replies, in an appropriate folder on a server. Email messages relevant to environmental management should be kept for a minimum of two years before deletion.
- **Mail:** Correspondence received by mail must be filed, along with the response (where relevant), within the relevant department's filing system for a minimum period of two years. Paper correspondence will be archived in this department.
- **Storage of Correspondence:** All original correspondence must be retained by the Mine Manager for a minimum period of two years.
- **Environmental Reports:** Copies of relevant specialist study reports and Environmental Impact Assessments will be available on request from an external party by the Mine Manager.

- **Queries from Interested and Affected Parties:** Response to queries about environmental impacts and aspects will be addressed by the relevant department and approved by the Mine Manager.
- **Queries and Requests from the Media:** Requests for articles from the media on environmental issues regarding the road construction will be coordinated by the Corporate Communication manager according to the public communication strategy, with input from the relevant department, as approved by the General Manager, in line with the Waterberg JVCo Public and Community Communication and Liaison Strategy. Due to the environmental awareness generated by induction, on-the-job training etc., employees are able to identify environmental problems, issues, concerns and pollution timeously.

8.6 Evaluation of the Environmental Awareness Plan

The evaluation of the effectiveness of the environmental awareness plan is conducted by Waterberg JVCo management. This evaluation will entail the auditing of the operation in both the construction and operation phases. The environmental awareness plan described above is sufficient to make all those involved in the Waterberg PGM Mine aware of those risks that may occur and the necessary mitigation required to minimise these risks.

The environmental awareness plan indicates that Waterberg JVCo is serious about the environment's well-being and empowerment of the local people. Environmental issues are highlighted at monthly meetings scheduled at the mine.

8.7 Emergency Incident Reporting

Environmental incident reporting is a vital part of communication at the Waterberg PGM Mine operation. Employees are required to report any and all environmentally related problems, incidents and pollution so that the appropriate mitigatory action can be implemented. In the event of an Environmental Incident, the incident must be reported according to the Incident Reporting Procedure. An Emergency Incident Preparedness and Response Plan needs to be developed.