



an agency of the
Department of Arts and Culture

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CaseID: 9893

Date: Monday June 26, 2017

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Final Comment

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Mr Mark Myatt

Rietvlei Mining Company (Pty) Ltd

The proposed mining area lies within a farming area within the larger Witbank Coalfield and is bordered by private properties on all sides. The mine boundary covers an area of 2 225.30ha; of this approximately 800ha will be mined. The Proposed Project is located approximately 50km northeast of the town of eMalahleni and 22km northeast of Middelburg in the Mpumalanga Province on Farm Rietvlei 397 Remaining Extent and Portion 1, Mpumalanga.

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit issued an interim comment dated 15/12/2016, requesting the Palaeontological Impact Assessment (PIA) to be amended provide clear recommendations on the impacts to fossiliferous rock units and that there should be recommendations provided for any potential impacts to fossiliferous rock units with Fossil Finds Chance Procedures.

The project entails the establishment of an open cast coal mine by the Rietvlei Mining Company (Pty) Ltd located within the Steve Tshwete Local Municipality of Mpumalanga Province. Dr J.C.C Pistorius was appointed to carry out the Heritage Impact Assessment (HIA) in which SAHRA provided comments on dated 21/09/2016 and Dr H. Fourie who conducted the PIA.

The HIA was summarised as follows:

Pistorius, J.C.C. June 2014. A Revised Phase I Heritage Impact Assessment (HIA) Study for the Proposed Rietvlei Open Cast Coal Mining Operation between Middelburg, Belfast and Stofberg in the Mpumalanga Province of South Africa.

The author has conducted a survey in the proposed mine footprint on two separate occasions (2011 and 2013). It is noted that the detailed survey conducted in 2011 does not have any track logs, the survey was along informal roads between the pine trees, these roads/tracks were over grown with the trees in the second survey. The survey identified 5 cemeteries within the mine right area GY02, 04 and 05, which are located within the proposed open cast pit, and GY01 and 03, which are outside but will be impacted by the proposed overburden stockpile. There are a total of 94 graves that will be negatively impacted by the proposed development.



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The author recommends that the cemeteries should be mitigated following the section 36 of NHRA process.

The PIA report are summarised as follows:

Fourie, H. October 2016. Proposed Greenfields Rietvlei Opencast Coal Mining Operation, Steve Tshwete Local Municipality, Nkangala District Municipality, Mpumalanga Province. Palaeontological Impact Assessment: Phase 1 Field Study.

The rock unit underlying the Greenfields Opencast Coal Mine forms part of the mid-Permian sandstone, shaly sandstone, grit, coal, shale and conglomerate of the Vryheid Formation, Ecca Group (Karoo Supergroup). The Vryheid Formation has the presence of rich plant fossils of the Glossopteris Flora and is considered to be of moderate to very high palaeontological sensitivity, the likelihood of fossils being uncovered by mining operations are very high.

The report fails to provide clear recommendations on how to mitigate the any fossils that may be impacted during the construction phase and operational phase of the mine. The document reads as if a field assessment has yet to be done in some places, whilst in others the report mentions that a field assessment was conducted in mid October 2016. This report fails to put forth clear processes in the chance finds procedures which the ECO can use for monitoring processes.

Fourie, H. March 2017. Proposed Greenfields Rietvlei Opencast Coal Mining Operation, Steve Tshwete Local Municipality, Nkangala District Municipality, Mpumalanga Province. Palaeontological Impact Assessment: Phase 1 Field Study.

The submitted the amended PIA report to SAHRA for commenting, and concludes that the palaeontological sensitivity of the project area is VERY HIGH making the potential impacts to fossiliferous rocks VERY HIGH. The author provides the following recommendations:

1. Threats are earth moving equipment/machinery (for example haul trucks, front end loaders, excavators, graders, dozers) during construction, the sealing-in or destruction of the fossils by development, vehicle traffic, human disturbance and opencast mining.
2. Mitigation may be needed (Appendix 2). Permission is needed from SAHRA.
3. No consultation with parties was necessary. Shale cannot be blasted without being checked for plant fossils. It may be more economical for the mine to employ a full-time palaeobotanist for the Life of Mine depending on



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frequency of shale layers.

4. Alternatively, the Environmental Control Officer will have to familiarise him- or herself with the Vryheid Formation and check the shale layer for fossil plants.

Final Comment

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the HIA and amended PIA reports submitted to the case, as well as the recommendations provided in the HIA and amended PIA reports. The following additional recommendations must be provided:

The sites GY01 and GY03 are located close to the overburden stockpile area as seen in the maps provided in the HIA, although the distances of either cemeteries are not mentioned in the report. Impacts to the graves are most likely to happen and SAHRA recommends that the graves within these two sites are relocated to the other cemeteries location within the proposed mine right area that are far from the proposed activities.

The remainder of the graves identified in the HIA must be fenced, and a Conservation Management Plan (CMP) should be developed and submitted to SAHRA Burial Grounds and Graves unit for review.

The grave relocation process must be initiated if the mine goes ahead with the grave relocation, this will involve a consultation process in terms of sec 36 and Chapter XI of the NHRA. Once the consultation process has been completed and the relocation has been agreed to, a permit in terms of section 36 and Chapter IX must be applied for, to SAHRA Burial Grounds and Graves (BGG) Unit. Relocation will be dependent on the consent of the relatives, if consent is not obtained the mine should amend and monitor the overburden stockpile area and fence the graveyards in GY01 and GY03.

A suitably qualified palaeontologist, preferably a palaeobotanist, must be appointed to provide preliminary training to the ECO to identify fossils in exposed shale and sandstone layers, as well as to draw up the mining induction training presentations for employees of the mine to be able to identify fossils in the sandstone and shale layers.

The frequency of monitoring visits by the suitably qualified palaeontologist must be set up with the mine for the first year of mining operations.

An fossils identified by the ECO or the employees of the mine must be reported to the palaeontologist, and area cordoned off until the appointed palaeontologist is able to come on site and remove the fossils (with the necessary collection section 35 permit from SAHRA).

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A quarterly report must be submitted to SAHRA and, depending on the frequency of fossil finds, the monitoring by the palaeontologist may be re-evaluated after the first year of the mining operations.

This comment must be forwarded to the competent authority and when the decision regarding this Environmental Authorisation application is reached, the ROD must be uploaded to the case.

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Nokukhanya Khumalo
Heritage Officer
South African Heritage Resources Agency

John Gribble
Manager: Maritime and Underwater Cultural Heritage Unit / Acting Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/367615>
(DMR-MP, Ref: MP30/5/1/2/2/10105MR)

Terms & Conditions:

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for

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proposed work.

2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.