

BPI for Palaeontological Research

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Email: bruce.rubidge@wits.ac.za 24 November 2012

Ms Suan Mulder SLR Consulting (Africa) Pty Ltd SLR Africa (Block 7) Fourways Manor Office Park Fourways, 2060

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Dear Ms Mulder

Sedibelo Platinum Mine – Palaeontological Impact Assessment

As requested, I have undertaken a desktop EIA to assess the possible affect on palaeontological heritage which will result from underground and open pit mining activities on portions of the neighbouring farms Wilgespruit 2 JQ, Legkraal 48 JQ, Koedoesfontein 42JQ and Rooderand 46 JQ) in the Rustenburg district (Figure 1, study area outlined in purple).

Following the 1:250 000 geological map (sheet 2526 Rustenburg 1981) the entire proposed development area is underlain by igneous rocks of the Rustenberg Layered Suite of the Bushveld Igneous Complex. This is an intrusive igneous body comprising a series of ultramafic-mafic layers and a suite of associated granitoid rocks. As these rocks are Precambrian in age and are of igneous origin it is highly unlikely that fossils will be affected by the proposed subsurface mining development.

To the west of the study area on the farms Wilgespruit 2 JQ, Legkraal 48 JQ, and Rooderand 46 JQ unconsolidated Quaternary deposits overlie the rocks of the Rustenburg Layered suite. These will be the only sedimentary deposits in the area which could be affected by the mining development, and as the deposits are not consolidated it is very unlikely that any fossils will be present.

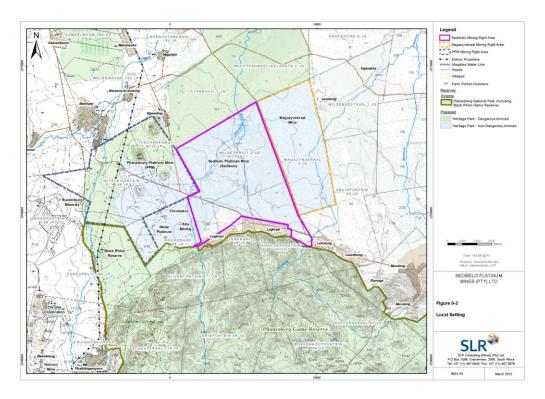


Figure 1: Map of the area north of Pilanesburg National Park showing the position of the proposed Sedibelo mine development.

In my opinion this development will not negatively affect palaeontological heritage. I suggest that, from a paleontological perspective, this mining development may proceed. However should any ancient bone or plant material be uncovered in the process of mining activities then a qualified palaeontologist must be contacted to assess the situation.

In the case of a chance find the following procedure should be included in your management plan:

- Contact a professional palaeontologist to assess the situation and decide on appropriate action.
- A list of accredited palaeontologists is available from South Africa Heritage Resources Agency (SAHRA) in Cape Town

Bibliography:

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Yours sincerely

Professor Bruce Rubidge PhD, FGSSA, FRSSA, Pr Sci Nat