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30 November 2021

Dr Ragna Redelstorff
Heritage Officer Archaeology, Palaeontology & Meteorites Unit
South African Heritage Resources Agency
111 Harrington Street
Cape Town 8001

Dear Dr Redelstorff

RE: Request for Exemption of any Palaeontological Impact Assessment for the proposed Siyanda Bakgatla Platinum Mine - Van der Berg (VDB) open cast pit.

In my capacity as a professional palaeontologist, I am requesting exemption for palaeontological impact assessment in terms of the National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998) which requires that the proposed development must be preceded by the relevant impact assessment, in this case for palaeontology.

Project Background:

Siyanda Bakgatla Platinum Mine (SBPM) proposes to undertake several developments on its approved mining right footprint, to extend the current life of mine and ensure the sustainability of its mining operations (Fig 1). The proposed development of relevance here is the development of the Van Der Berg (VDB) Open Pit Mine (referred to as Mega Pit in the plan). The area to be developed is approximately 40 ha and will involve clearing of vegetation, relation of some buildings and mining will be conducted using the box-cut method and later by use of the roll-over method with concurrent rehabilitation.

The entire mining area lies on non-fossiliferous rocks of the Bushveld Igneous Complex that comprise gabbro, ferro-gabbro, norite and pyroxenite and are rich in the platinum group elements (Fig 2; Cawthorn et al., 2006). These rocks are coarse-grained intrusive igneous rocks and do not preserve any fossils of any age. Their non-fossiliferous nature is confirmed by the grey colouration in the SAHRIS palaeosensitivity map (Fig 3)

indicating insignificant to zero sensitivity. We therefore request that no palaeontological impact assessment be required, and that as far as the Palaeontological heritage is concerned, the project may be authorised.

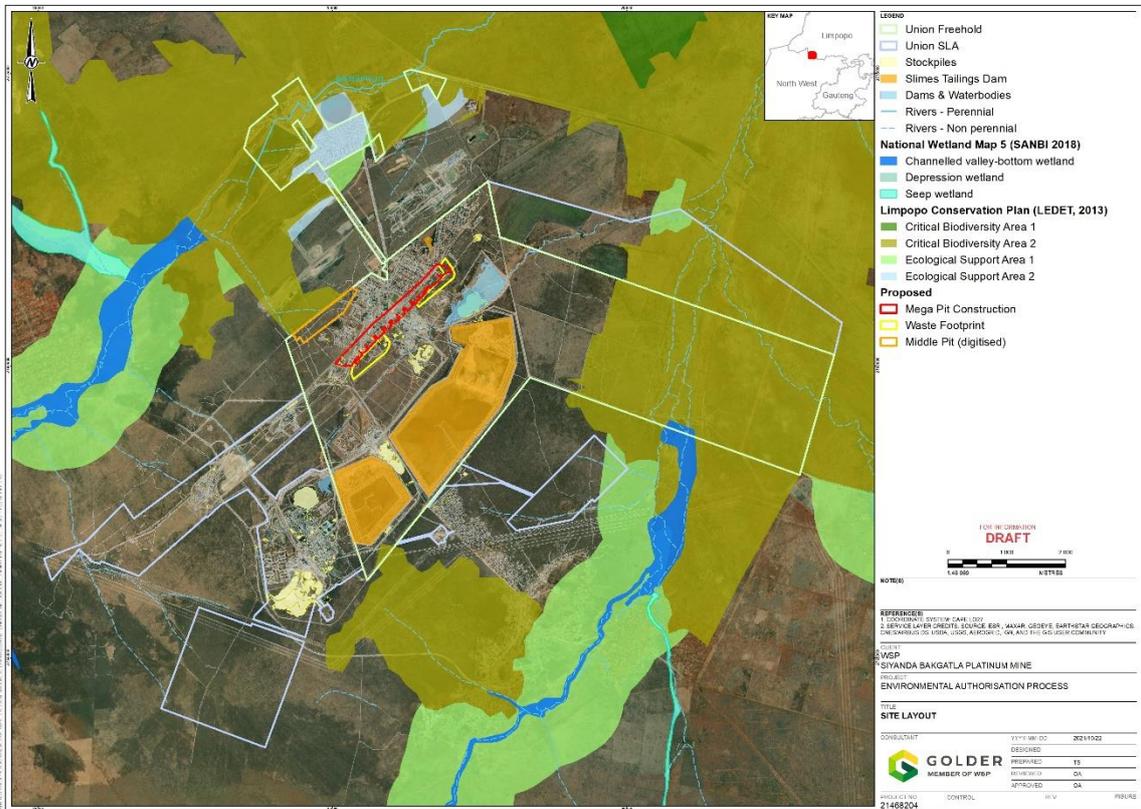


Figure 1: Annotated Google Earth site map to show the location and extent of the proposed van der Berg open cast pit (or mega pit = red outline)



Figure 2: Geological map of the area around the SBPM, with the VDB pit indicated within the yellow rectangle. Abbreviations of the rock types are: All belong to the Bushveld Igneous Complex. 3Ng1 – gabbro, noritic at base; 3Ng2 – ferro-gabbro with magnetite bands; 3up – pyroxenite; 3N – norite. Map enlarged from the Geological Survey 1: 250 000 map 2426 Thabazimbi.



Figure 3: SAHRIS palaeosensitivity map for the site for the proposed VDB pit on the SBPM shown within the yellow rectangle. Background colours indicate the following degrees of sensitivity: red = very highly sensitive; orange/yellow = high; green = moderate; blue = low; grey = insignificant/zero.

Yours faithfully

Prof Marion Bamford
Palaeobotanist; PhD (Wits 1990)

Reference cited:

Cawthorn, R.G., Eales, H.V., Walraven, F., Uken, R., Watkeys, M.K., 2006. The Bushveld Complex. In: Johnson, M.R., Anhaeusser, C.R. and Thomas, R.J., (Eds). The Geology of South Africa. Geological Society of South Africa, Johannesburg / Council for Geoscience, Pretoria. pp 261-281.

Declaration of Independence

This letter has been compiled by Professor Marion Bamford, of the University of the Witwatersrand, sub-contracted by Golder, South Africa. The views expressed in this report are entirely those of the author and no other interest was displayed during the decision making process for the Project.

Specialist: Prof Marion Bamford

Signature:

A handwritten signature in blue ink, appearing to read 'MKBamford', with a horizontal line underneath.