



A 21st Century Research Institute at Wits

The Evolutionary Studies Institute



Private Bag 3, Wits, 2050, South Africa • Telephone +27 11 717 6682 • esi.research@wits.ac.za
University of the Witwatersrand, Johannesburg

Marion.bamford@wits.ac.za

Tel: +27 11 717 6690

06 September 2013

Mr Philip Hine
Mrs Colette Scheermeyer
SAHRA
PO Box 4657
Cape Town 8000

your ref: **9/2/225/0005**

Dear Philip and Colette

**RE: SAHRA's request for a Palaeontological Impact Assessment
for development of an opencast mine by Canyon Springs Investments 82
(Pty) Ltd, near Bela-Bela, Mpumalanga – on behalf of Prime Resources,
Parktown North, Johannesburg (Ms Zoë Gebhardt)**

As requested I have completed a Phase 1 or desktop study for the above project and my recommendation is below. In summary, there are unlikely to be important fossils in the proposed site so development can continue. However, if fossils are found then the developers must contact a palaeontologist and SAHRA to investigate and possibly rescue the fossils.

Canyon Springs Investments 82 (Pty) Ltd has proposed the development of an opencast coal mine in the Siyabuswa District of Mpumalanga, approximately 60km south-east of Bela-Bela. The site is located within the Dr JS Moroka Local Municipality surrounded by the towns Loding, Sehokho, Dihekeng and Moletsi. At the request of Prime Resources the environmental and heritage assessments have been completed but SAHRA has requested that a Palaeontological Impact Assessment (PIA) National Heritage Resources Act (Act 25 of 1999) be completed by a qualified palaeontologist (Case ID: 702; ref: 9/2/225/0005) in accordance with the national regulations.

Geologically the site is within the Early Permian Ecca Group of the Karoo Supergroup (approximately 270 to 260 million years old) with abundant coal deposits. Fossils have not been recorded from the area of the proposed Canyon Springs open cast coal mine but there is a chance that they may occur. Macrofossils will not have been recognized from the cores unless someone was specifically looking for fragments in the relatively narrow diameter cores. Since there is no outcrop or exposure in the area I strongly recommend that as part of the Environment Management Plan (EMP) the responsible person monitors the excavations and later the mining operation. If fossil plants, insects or vertebrates (unlikely to occur) are found then he must either remove the fossils to a safe

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place or preferably call a palaeontologist to collect and protect the fossils. In this way there will be no or minimal delay to operations but the fossils will be protected and collected for future research with a SAHRA permit.

Yours sincerely

Prof Marion Bamford
Palaeobotanist
ESI Executive Committee

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