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To whom it may concern

**Palaeontological Impact Assessment for the proposed rolling strip mining on
farm Elandsfontein 309 JS, in the eMalahleni Local Municipality of Mpumalanga
Province
SAHRA Case 11478**

Digby Wells Environmental (Pty) Ltd have been appointed by Anka Coal and Mineral Holdings (Pty) Ltd to undertake an Environmental Impact Assessment (EIA) process in terms of the National Environmental Management Act, 107 of 1998 (NEMA) and the NEMA Environmental Impact Assessment (EIA) 2014 Regulations, as amended. Their in-house heritage specialist has undertaken a Heritage Impact Assessment (HIA) to inform the heritage component of the EIA application. A HIA report inclusive of a palaeontological exemption letter have been submitted to SAHRA for comments in terms of the National Heritage Resources Act, no. 25 of 1999 (NHRA).

The Project is located between Ogies and eMalahleni in the eMalahleni Local Municipality (ELM), Mpumalanga Province. Anka Coal and Mineral Holdings is proposing to expand their mining operations on the Elandsfontein Mine, located on the farm Elandsfontein 309 JS, in the eMalahleni Local Municipality of Mpumalanga Province. The mine will be using rolling strip mining method and rehabilitating the open cast pit strips. Associated infrastructure will be the topsoil heaps, spoil heap and haul road.

Palaeontology

As noted in the report by Digby Wells Environmental (SAHRIS Case ID: 11478, SAMRAD Ref: MP30/5/1/2/2/10132MR: Project No: ANK3784, prepared for: Elandsfontein Colliery (Pty) Ltd; August 2017) the area is potentially rich in fossils of the Glossopteris flora of the Ecca Formation. The fossils however, would be associated with the coal seams and especially the adjacent shales. These will not be exposed until excavations and rolling strip mining commences. A site visit by a palaeontologist at this stage would not be productive.

Recommendation

It is recommended that the geologist/responsible person/ environmental officer frequently check the rocks being removed and dumped for fossils, and rescue any fossil plant material recognised. A chance find protocol is included here and should be added to the EMPr. If important fossils are found they should be recovered.

Yours sincerely



Prof Marion Bamford
Palaeobotanist

Monitoring Programme for Palaeontology – to commence once the mine section is operational.

1. The following procedure is only required if and when underground mining commences. The surface activities would not impact on the fossil heritage as the coal and any associated fossil plants are below ground.
2. When mining operations commence the shales and mudstones (of no economic value) that will be cut through in order to reach the coal seam must be given a cursory inspection by the mine geologist or designated person before being added to the waste rock dump used by the mine. Any fossiliferous material should be put aside in a suitably protected place. This way the mining activities will not be interrupted.
3. Photographs of similar fossil plants must be provided to the mine to assist in recognizing the fossil plants in the shales and mudstones (for example see Figure 5.3 in HIA report). This information will be built into the mine's training and awareness plan and procedures.
4. On a regular basis, to be agreed upon by the mine management and the qualified palaeontologist/palaeobotanist sub-contracted for this project, the person should visit the mine to inspect the selected material and check the dumps where feasible. Alternatively, photographs of the fossils can be sent to the palaeontologist for assessment.
5. Fossil plants that are considered to be of good quality or scientific interest by the palaeobotanist must be removed, catalogued and housed in a suitable institution where they can be made available for further study. Before the fossils are removed from the mine property a SAHRA permit must be obtained. Annual reports must be submitted to SAHRA as required by the relevant permits.
6. If any mine inspection is deemed necessary then the normal safety procedures that the mine management endorses, must be followed by the palaeontologist and associated mine employees.
7. If no good fossil material is recovered then no site inspections by the palaeontologist would be necessary. If fossils are found a report by the palaeontologist must be sent to SAHRA.