

The Evolutionary Studies Institute



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Tel: +27 11 717 6690 Marion.bamford@wits.ac.za 01 April 2015 Your ref: 9/2/253/0003

Mr Phillip Hine SAHRA P O Box Cape Town 8000

Dear Mr Hine

RE: CaseID: 2195 Matimba Ash Disposal Facility Palaeontological Impact Assessment

As requested by Royal Haskoning DHV, I have completed a Phase 2 PIA for the proposed Matimba Ash Disposal Facility. There are two alternatives for this project: Alternative 1 (blue polygon to the southeast of Matimba) is deemed by SAHRA (CaseID 2195) to be moderately sensitive and they request a desktop study; Alternative 2 (red polygon to the northeast of Matimba) and the conveyor route are considered to have a high to very high sensitivity and a site visit is requested by SAHRA.

Site visits:

<u>The Southern site</u> (blue polygon – Alternative 1 – medium sensitivity) was visited on 18 December 2014.

The area has very little relief, no outcrops and no river cuttings. The soil is deep Kalahari sand with large, mature trees. Areas that had had the topsoil and vegetation removed revealed more deep sand and some patches of small gravel. No rocks and no fossils were found. According to the engineer and based on drill core, the ash dump sites are not over coal deposits.

The Northern site (red polygon – Alternative 2 – high sensitivity) was visited on 16 January 2015. Five farms were surveyed: Vooruit 449 LQ, Appelvlakte 448 LQ and Nelsonskop 445 LQ, Droogeheuvel 447 LQ and Ganzepan 446 LQ. All farms have little to no relief, deep Kalahari sands and either large trees when not cleared for agriculture or secondary grassland or shrubland where the natural vegetation has been cleared. The kopje on Nelsonskop was also surveyed but is comprised of ancient rocks. No fossils and no coal were found on any of the farms.

Recommendation

There was no evidence of fossils on the southern site (Alternate 1) and no fossils on any of the farms of the northern site, including the boundary where the

conveyor belt is planned to run (Alternate 2). There were no rocks, no rocky outcrops, shale or sandstones, only deep loose sand which is not suitable for the preservation of fossils.

Although the areas have been recorded as sensitive or very sensitive on the SAHRIS map, there were no fossils at all. As far as the palaeontological assessment is concerned BOTH alternates are suitable for the proposed continuous ash disposal facility for the Matimba power plant. If fossils are discovered during any excavations then a palaeontologist should be called to review and possibly rescue them.

Yours sincerely

Prof Marion Bamford

Millamfus

Palaeobotanist

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