Our Ref: 10653



an agency of the Department of Arts and Culture

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Final Comment

In terms of Section 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Pembani Coal Carolina (Pty) Ltd

Pembani has an existing Mining Right (MP 30/5/1/2/2/112 MR) and would like to amend the Mining Right to incorporate Portions Re. and 1 of the Farm Zandvoort 10 IT, into the existing Mining Right. Furthermore, Pembani proposes to amend their existing mining works programme (MWP) (within the approved mining right boundary) to include the mining of additional coal resources. Carolina, Mpumpalanga.

Pembani Coal Carolina (Pty) Ltd is proposing to amend their mine right area to include Portion 1 and the remainder of the farm Zandvoort 10 IT in the New Order Mine Right and change the other existing open cast mining areas from the Old Mine Right licence to the New Order Mine Right. The farm Zandvoort 10 IT is being included in order to mine additional coal reserves from their existing underground mine operations. The section to be mined is named Pembani Section 102 which is 471 ha in extent and no additional infrastructure will be constructed. The mine is in the Albert Luthuli Local Municipality of the Mpumalanga Province. The other areas within the existing mine right area have already received their environmental authorisation with only Zandvoort 10 IT requiring environmental authorisation. However they will also be amending the mine works programme within the existing mine right area to include a new underground mining area and the new opencast mining area on the farm Kwaggafontein 8 IT, Groenvallei 40 IT and Paardeplaats 12 IT, Appeldoorn 38 IT.

EIMS has appointed PGS Heritage to conduct a Heritage Impact Assessment (HIA) for the proposed mine right amendment area on behalf of their client Pembani Coal Carolina (Pty) Ltd and Dr Elize Butler has been subcontracted by PGS Heritage to conduct a Palaeontological Impact Assessment, as part of the HIA in terms of Section 38(4) of the National Heritage Resources Act, Act 25 of 1999 (NHRA). SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit issued an Interim Comment dated 24/03/2017 requesting that the field based Palaeontological Impact Assessment to be submitted to SAHRA for commenting. PGS Heritage also submitted a new updated HIA for the EIA phase that assessed the farm Kwaggafontein.

Angel, J. February 2017. Proposed opencast mining on the farm Kwaggafontein 8 IT, near Carolina, Albert Luthuli Local Municipality, Gert Sibande District Municipality, Mpumalanga Province.

The author conducted a field assessment of the proposed mining activities on the farm Kwaggafontein, only a

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cemetery was identified located outside the development footprint. The cemetery is already fenced with an entrance gate. It is noted that ground clearance for the opencast mining area has already begun.

Butler, E. April 2017. Palaeontological Impact Assessment of the Proposed Development of the New Open Cast Mining Operations on the Remaining Portions of 6, 7, 8 And 10 of the Farm Kwaggafontein 8 in the Albert Luthuli Local Municipality, Gert Sibande District Municipality, Mpumalanga Province.

Butler, E. April 2017. Palaeontological Impact Assessment of the Proposed Mining of the Farm Zandvoort 10 in the Albert Luthuli Local Municipality, Gert Sibande District Municipality, Mpumalanga Province.

The underlying geology of the farm Kwaggafontein consists of Permian aged Vryheid Formation, Ecca Group, Karoo Supergroup. The underlying geology of the farm Zandvoort consists of sedimentary rocks of the Permo-Carboniferous Dwyka Group, Permian aged Vryheid Formation (Ecca Group) and Jurassic aged Dolerite of the Karoo Supergroup. The Vryheid Formation has a Very High fossiliferous potential, the Dwyka Group has a low fossiliferous potential and the Dolerite is not fossiliferous. The author inspected the current mining operations, mine dumps and the surfaces of the proposed opencast mining area but did not identify any outcrops of fossil bearing rocks or any fossils in the exposed coal B and E seams. Therefore a moderate palaeontological sensitivity has been allocated for the development footprint.

The author recommends the following:

- 1. The EAP as well as the ECO for this project must be made aware of the fact that the Ecca Group sediments contain significant fossil remains, albeit mostly trace fossil and plant fossil assemblages.
- 2. In areas that are allocated a Very High and High Palaeontological sensitivity and specifically where deep excavation into bedrock is envisaged (following the geotechnical investigation), or where fossils are recorded during the geotechnical investigations, a qualified palaeontologist must be appointed to assess and record fossils at specific footprints of infrastructure developments (Phase 1 PIA).
- 3. These recommendations should form part of the EMP of the project.

Final Comment

SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit agrees and endorses the recommendations within the PIA report. SAHRA has no objections to this project going ahead on the following conditions:

A palaeontologist must be appointed to review the geotechnical report and submit a letter concluding whether or not any monitoring should be carried out by a palaeontologist.

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The Status quo report with the photo template of sites identified in the HIA must be conducted by a suitably qualified archaeologist in conjunction with the ECO. In addition to the recommendations in the HIA, SAHRA requires that the fixed photo points for the Status Quo report must be represented on the building plans to make it visually clear where follow up monitoring photos must be taken. As the ECO may be appointed after the EA is granted, SAHRA requires the first report to be submitted to the case prior to construction phase for commenting.

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The HIA does not mention whether the cemeteries are fenced, if they are not they must be fenced with a 10 m buffer area between the fence and the perimeter of the graves. The fence must contain an entry gate in order for the family to be able to access the cemetery.

If any newly discovered heritage resources during construction and operation phases of the proposed development, then a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings at the expense of the developer.

If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required at the expense of the developer. Mitigation will only be carried out with a permit in terms of section 35 of the NHRA (Act 25 of 1999). You may contact SAHRA APM Unit for further details: (Nokukhanya Khumalo/John Gribble 021 202 8652).

If any unmarked human burials are uncovered and the archaeologist called in and the police find them to be heritage graves then mitigation may be necessary and the SAHRA BGG Unit must be contacted for processes to follow (Mimi Seetelo 012 320 8490).

Should you have any further queries, please contact the designated official using the case number quoted above in the case header.

Yours faithfully

Nokukhanya Khumalo

Heritage Officer

South African Heritage Resources Agency

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Jejubb)

John Gribble

Manager: Maritime and Underwater Cultural Heritage Unit / Acting Manager: Archaeology, Palaeontology and

Meteorites Unit

South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/386087

Terms & Conditions:

- 1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
- 2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
- 3. SAHRA reserves the right to request additional information as required.