

Our Ref:



an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
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Enquiries: Natasha Higgitt
Tel: 021 462 4502
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CaseID: 13463

Date: Friday June 21, 2019
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Final Comment

In terms of Section 38(4), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: South Africa Mainstream Renewable Power Developments (Pty) Ltd

P.O. Box 45063
Claremont
7753

South African Mainstream Renewable Power (Pty) Ltd, is proposing the development of an access road for the authorised Dwarsrug Wind Energy Facility (WEF), Northern Cape Province. The applicant is proposing two alternative access roads which will be assessed, including: » Alternative 1 - Gravel road from Granaatboskolk to the project site (approx. 11km); and » Alternative 2 - Gravel road from Granaatboskolk to the project site (approx. 8km). Project Location: The proposed access road is approximately 60km north of Loeriesfontein, in the Northern Cape Province. The proposed access road will fall within the jurisdiction of the Hantam Local Municipality and within the greater Namakwa District Municipality. The affected properties will include the following: » Remainder of the Farm Brakpan No. 212; » Stinkputs No. 229 » Portion 1 of the Farm Aan de Karee Doorn Pan No. 213 » Remainder of the Farm Sous No. 226 » Narosies No. 228

Savannah Environmental has been appointed by South Africa Mainstream Renewable Power Developments (Pty) Ltd to conduct an Environmental Authorisation (EA) Application for the proposed Dwarsrug Access Road, near Loeriesfontein, Northern Cape Province.

A draft Basic Assessment Report (BAR) process has been submitted in terms of the National Environmental Management Act, no 107 of 1998 (NEMA), NEMA Environmental Impact Assessment (EIA) Regulations. The proposed development includes the construction of a gravel road from the existing Granaatboskolk road to the authorised Dwarsrug WEF. Two alternatives are being considered i.e. 11 km or 8 km.

PGS Heritage (Pty) Ltd has been appointed to provide specialist heritage input as part of the BAR process in terms of section 38(8) of the National Heritage Resources Act, No 25 of 1999 (NHRA).

Smeyatsky, I. 2019. Heritage Impact Assessment: Proposed construction of an access road for the Dwarsrug Wind Farm, near Loeriesfontein, Northern Cape Province.



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A total of two (2) heritage resources were identified within the proposed development footprint. These include low density find spots of Stone Age lithics of low heritage significance.

The report cites a Palaeontological Impact Assessment conducted in 2014 which found that the proposed development footprint is underlain by the Tierberg Formation and the Whitehill Formation. Fossils located within the Tierberg Formation include events beds and trace fossils. Known fossils from the Whitehill Formation include trace fossils, aquatic reptiles, rare cephalochordates, palaeoniscoid fish, eocarid crustaceans, insects, palynomorphs, petrified wood and vascular plant remains. Large areas are covered in dolerite scree while small areas are covered by Quaternary aged alluvium and pan sediments. No fossils are located within the dolerite, and recent fossils are known to be found in the Quaternary alluvium.

Recommendations provided in the report include the following:

- Develop a chance finds protocol for the mitigation of possible heritage finds, to be implemented as part of the EMP for the construction phase of the project;
- If any artefacts are identified during construction the chance finds protocol must be implemented;
- The EAP as well as the ECO for this project must be made aware of the fact that the Ecca Group sediments contains significant fossil remains, albeit mostly trace fossil assemblages. Several types of fossils have been recorded from this Group in the Karoo Basin of South Africa, with special mention of the very important Whitehill Formation. The Whitehill Formation outcrops are however very restricted in this study area;
- 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);
- If significant fossil finds (e.g. vertebrate teeth, bones, burrows, petrified wood) are recorded during excavations for infrastructure such as road developments, the palaeontologist must apply for a collection permit to collect the fossils according to the SAHRA specifications;
- These recommendations should form part of the EMP of the project.

In an Interim Comment issued on the 24/05/2019, SAHRA requested that the 2014 Palaeontological assessment referenced in the HIA is to be uploaded to the case for review.

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Since the issuing of the comment, the HIA conducted in 2014 for the Dwarsrug Wind Energy Facility (WEF) of which the requested Palaeontological Assessment is an appendix, has been submitted.

Groenewald, G. 2014. Palaeontological Desktop Assessment for the construction of the Dwarsrug Wind Energy Farm on the farms Brakpan 212 and Stinkputs North 229, near Loeriesfontein, Namaqua District Municipality, Northern Cape Province.

The report notes that the WEF is underlain by the Tierberg Formation and two small outcrops of the Whitehill Formation (Ecca Group, Karoo Supergroup), as well as dolerite scree and Quaternary pan sediments and alluvium. The Whitehill Formation, which was noted to be present in two small areas in the development area, is considered to be highly sensitive for several types of fossils such as aquatic mesosaurid reptiles, insects, trace fossils, petrified wood and vascular plant remains.

Recommendations provided in the report include the following:

- The EAP as well as the ECO for this project must be made aware of the fact that the Ecca Group sediments contains significant fossil remains, albeit mostly trace fossil assemblages. Several types of fossils have been recorded from this Group in the Karoo Basin of South Africa, with special mention of the very important Whitehill Formation. The Whitehill Formation outcrops are however very restricted in this study area;
- 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);
- If significant fossil finds (e.g. vertebrate teeth, bones, burrows, petrified wood) are recorded during excavations for infrastructure such as road developments, the palaeontologist must apply for a collection permit to collect the fossils according to the SAHRA specifications;
- These recommendations should form part of the EMP of the project.

The current application (both road alternatives) is located in a much larger section of Whitehill Formation and therefore the impact to the formation is higher than that assessed in the report produced in 2014.

Final Comment

The following comments are made as a requirement in terms of section 3(4) of the NEMA Regulations and

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section 38(8) of the NHRA in the format provided in section 38(4) of the NHRA and must be included in the Final BAR and EMPr:

- 38(4)a – The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit has no objections to the proposed development;
- 38(4)b – Specific conditions for the development include:
 - i) on-site monitoring of the all deep excavation (1m<) by a qualified palaeontologist. A monitoring report detailing the results of the monitoring must be submitted to SAHRA once construction is completed;
 - ii) 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);
- 38(4)c(i) – If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Natasha Higgitt/Phillip Hine 021 462 5402) must be alerted as per section 35(3) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)c(ii) – If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Thingahangwi Tshivhase/Mimi Seetelo 012 320 8490), must be alerted immediately as per section 36(6) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)d – See section 51 of the NHRA;
- 38(4)e – The following conditions apply with regards to the appointment of specialists:
 - i) With reference to the monitoring work noted above, a qualified palaeontologist must be appointed to undertake the monitoring as noted above;
 - ii) If heritage resources are uncovered during the course of the development, a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the heritage resource. If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to permits issued by SAHRA;
- The Final BAR and EMPr must be uploaded to the SAHRIS application for record purposes;
- The decision regarding the EA Application must be communicated to SAHRA and uploaded to the SAHRIS Case application.

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

Yours faithfully

Natasha Higgitt
Heritage Officer
South African Heritage Resources Agency

Phillip Hine
Acting Manager: Archaeology, Palaeontology and Meteorites Unit
South African Heritage Resources Agency

ADMIN:

Direct URL to case: <http://www.sahra.org.za/node/520939>
(DENC, Ref:)

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.