

Our Ref:



an agency of the
Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za
South African Heritage Resources Agency | 111 Harrington Street | Cape Town
P.O. Box 4637 | Cape Town | 8001
www.sahra.org.za

Enquiries: Natasha Higgitt
Tel: 021 462 4502
Email: nhiggitt@sahra.org.za
CaseID: 11179

Date: Friday July 14, 2017
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Interim Comment

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

Attention: Mystic Pearl 157 (Pty) Ltd.

The activity entails Bulk Sampling by excavating 50 trenches with an average 3m depth of overburden (calcrete and soil) removed before accessing the gravel layer (average width 2 – 4m) which is host to the diamonds. The trenches will be 25m x 15m x 0.5 – 7m deep. This constitutes the Prospecting Right application on a Portion of Portion 1 of the Farm Vooruitzicht No 81, Kimberley District, Northern Cape

Wadala Mining and Consulting (Pty) Ltd has been appointed by Mystic Pearl 157 (Pty) Ltd to conduct an Environmental Impact Assessment (EIA) Process for a proposed Prospecting Right Application on a Portion of Portion 1 of the farm Vooruitzicht 81, Kimberley Magisterial District, Northern Cape Province. A Basic Assessment Report (BAR) has been submitted in terms of the National Environmental Management Act, 1998 (NEMA) and the EIA Regulations 2014 for activities that trigger the Mineral and Petroleum Resources Development Act, 2002 (MPRDA)(As amended). A total area of 253.6919 ha will be subjected to prospecting activities inclusive of 50 trenches measuring 25 m x 15 m 0.5-7 m deep and associated stockpiles.

A Heritage Impact Assessment (HIA) and a Palaeontological Impact Assessment (PIA) were conducted as part of the project.

Matenga, E. 2017. Phase I Heritage Impact Assessment (including Palaeontological Assessment) requested in terms of Section 38 of the National Heritage Resources Act No 25/1999 for Mining Right on a Portion of Portion 1 of the Farm Vooruitzicht 81, Kimberley District, Northern Cape Province.

Two industrial/domestic middens were identified within the proposed development area, however there are not worthy of protection. If heritage resources are discovered during the proposed mine operations, the heritage resources authorities must be informed and a heritage expert called.

Chikumbirke, J. 2017. Palaeontological Assessment (Desktop) requested in terms of section 38 of the National Heritage Resources Act No 25/1999 for Mining Right on Portion of Portion 1 of Farm Vooruitzicht 81, Kimberley District, Northern Cape Province.

The proposed development area is underlain by the Allanridge Formation which is igneous and therefore unfossiliferous. The Dwyka Group tends to overlies the Allanridge Formation, though appears to be absent from

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the area. Associated glacial tillites of the Dwyka Group are considered to be of medium to low significance. The Prince Albert Formation, known for its fossil marine deposits has been rated as highly significant in the area. The western outskirts of the farm are covered with large areas of unconsolidated, reddish-brown to grey aeolian sands of the Quaternary Gordonia Formation which may overlie a calcrete layer that may contain calcretised ostrich egg shells, land snail shells, rare mammalian and reptile bones, stromatolites etc. Overall the impact of the proposed development on fossil resources is expected to be minimal.

Recommendations provided in the report include the following:

- The Environmental Control Officer (ECO) must put in place a contingency plan to rescue chance finds and where possible preserve them in situ;
- It is further advised that the recommendations made here should also be incorporated into the Environmental Management Plan (EMP) for the proposed mining operations;
- A standard Fossil Finds Procedure (FFP) is appended to the report to provide field guidance to the ECO.

Interim Comment

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit has no objection to the proposed development in terms of heritage resources and accepts the recommendations of the heritage specialist reports.

However, the following must be noted:

The SAHRA APM Units accepts the PIA and recommendations therein. However, it was noticed that the attached Fossil Finds Procedure (FFP) shows close similarities with a FFP written by Dr John Pether. In most sentences, the wording was changed slightly, often sentences are unchanged and the overall structure is the same. No acknowledgement was given to the original author, which makes this a serious incident of plagiarism. Therefore, the SAHRA APM Unit does not accept the presented FFP. It should be noted that it has been reported to the Palaeontological Society of South Africa (PSSA) Executive Committee and notification of the EAP of this unprofessional, unethical incident is being considered.

The SAHRA APM Unit opposes to some contents in the FFP, in particular:

Chapter 3:



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Exposed material, unless it already lies on the spoil heap, should not be retrieved by a worker or ECO. All work must cease and the ECO must inform SAHRA and a professional palaeontologist, who will then decide if avoidance or mitigation are preferred. Only a professional palaeontologist may excavate uncovered fossils with a valid mitigation permit from SAHRA.

Chapter 4: (There are three options to consider for corrections)

Option 1: "Avoidance [...] ensures minimal impact to the site and is the preferred option from a conservation perspective." While this is true for archaeological heritage resources, this is not the preferred option for palaeontology, as fossils, as soon as exposed, are being affected by erosion and destroyed in the process unless being excavated by a professional palaeontologist and curated in a museum.

If excavation of the find will be delayed the exposed finds can be stabilised and the site capped after consultation with a palaeontologist only (not with the wider heritage and scientific communities as they may not have palaeontological expertise).

Option 2: The Chapter must be omitted. This will give the developer an excuse to excavate the finds without input by a specialist.

Option 3: It must be noted that the removal can only be done by a specialist/palaeontologist with a valid mitigation permit from SAHRA.

Chapter 5:

See chapter 3. Especially step 3 is unacceptable.

Chapter 6:

A few examples could be brought up here, detailing that fossils are not just bones but come as impressions, trace fossils, burrows, insects in amber etc.

The FFP should not be too general, but should help identify, and give procedures for, fossils that may potentially be found in rocks of the proposed development footprint.

The recommendations in the heritage specialist reports and the following conditions must be incorporated into the draft and Final EIA report and Environmental Management Programme (EMPr) for the project:

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- The Fossil Finds Procedure must be amended to address the issues raised above. The amended FFP must be submitted to SAHRA for approval;
- The Final Scoping, draft EIA, Final EIA and all appendices associated with the reports must be submitted to SAHRA for record purposes;
- 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/John Gribble 021 462 5402) must be alerted. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG) Unit (Mimi Seetelo 012 320 8490), must be alerted immediately. A professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings. 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; and
- If the development receives an Environmental Authorisation (EA), SAHRA must be informed and all documents pertaining to the EA must be uploaded to the SAHRIS Case file.
- Further comments will be issued upon receipt of the above environmental reports.

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

John Gribble

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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/399139>
(DMR - NC, Ref: (NC) 30/5/1/1/2/11750 PR)