



**SOUTH AFRICAN HERITAGE RESOURCES AGENCY**  
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FOR ATTENTION: **PHRA: Eastern Cape**

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SAHRA File No: **9/2/090/0002**  
 Date Received: **17 April 2012**  
 Date of Comment: **29 May 2012**  
 Sent to Peer Review: .....  
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 SAHRA Contact Person: **Dr Mariagrazia Galimberti**  
 DEA Ref. no: **14/12/16/3/3/2/2/477**

## **REVIEW COMMENT ON ARCHAEOLOGICAL AND PALAEOLOGICAL IMPACT ASSESSMENTS**

**BY ARCHAEOLOGY, PALAEOLOGY AND METEORITES UNIT OF THE SOUTH AFRICAN HERITAGE RESOURCES AGENCY**

*South Africa has a unique and non-renewable archaeological and palaeontological heritage. Archaeological and palaeontological sites are protected in terms of the National Heritage Resources Act (Act No 25 of 1999) and may not be disturbed without a permit. Archaeological Impact Assessments (AIAs) and Palaeontological Impact Assessments (PIAs) identify and assess the significance of the sites, assess the potential impact of developments upon such sites, and make recommendations concerning mitigation and management of these sites. On the basis of satisfactory specialist reports SAHRA or the relevant heritage resources agency can assess whether or not it has objection to a development and indicate the conditions upon which such development might proceed and assess whether or not to issue permission to destroy such sites.*

*AIAs and PIAs often form part of the heritage component of an Environmental Impact Assessment or Environmental Management Plan. They may also form part of a Heritage Impact Assessment called for in terms of section 38 of the National Heritage Resources Act, Act No. 25, 1999. They may have other origins. In any event they should comply with basic minimum standards of reporting as indicated in SAHRA Regulations and Guidelines.*

*This form provides review comment from the Archaeologist of the relevant heritage resources authority for use by Heritage Managers, for example, when informing authorities that have applied to SAHRA for comment and for inclusion in documentation sent to environmental authorities. It may be used in conjunction with Form B, which provides relevant peer review comment.*

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- A. PROVINCIAL HERITAGE RESOURCES AUTHORITY: **Eastern Cape**
- B. AUTHOR(S) OF REPORT: **Dr Lita Webley and Mr Tim Hart**
- C. ARCHAEOLOGY CONTRACT GROUP: **ACO Associates**
- D. CONTACT DETAILS: **8 Jacobs Ladder, St James, 7945, email: acoassociates@gmail.com, lita@webleyonline.com**
- E. DATE OF REPORT: **March 2012**
- F. TITLE OF REPORT: **Heritage Impact Assessment: Proposed Construction Of The Genoegsaam Photovoltaic Power Facility On The Farm Zeeven Fonteynen 254, Chris Hani District Municipality, Eastern Cape Province**
- B. AUTHOR(S) OF REPORT: **Dr Jennifer Botha-Brink**
- C. ARCHAEOLOGY CONTRACT GROUP: **National Museum, Bloemfontein**
- D. CONTACT DETAILS: **P.O. Box 266, Bloemfontein, 9300, email: jbotha@nasmus.co.za**
- E. DATE OF REPORT: **March 2012**
- F. TITLE OF REPORT: **Palaeontological Impact Assessment Of The Proposed Genoegsaam Solar Farm, Chris Hani District Municipality, Eastern Cape Province**

- B. Please circle as relevant: Palaeontological and Archaeological components of EIA / EMP / HIA / CMP/ **Other** (Specify) **BAR**
- C. REPORT COMMISSIONED BY (CONSULTANT OR DEVELOPER): **ERM Southern Africa (Pty) Ltd, Ms Claire Alborough**
- D. CONTACT DETAILS: **Silverwood House, Block A, Silverwood Close, Steenberg Office Park, Steenberg, 7945, Cape Town, South Africa, email: Claire.Alborough@erm.com**
- E. COMMENTS:

*Please see comment on next page*

## **REVIEW COMMENT ON ARCHAEOLOGICAL AND PALAEOLOGICAL IMPACT ASSESSMENTS**

**Dr Lita Webley and Mr Tim Hart**  
**Dated: March 2012, Received: April 2012**

**Heritage Impact Assessment: Proposed Construction Of The Genoegsaam Photovoltaic Power Facility On The Farm Zeeven Fonteynen 254, Chris Hani District Municipality, Eastern Cape Province**

**Dr Jennifer Botha-Brink**  
**Dated: March 2012, Received: April 2012**

**Palaeontological Impact Assessment Of The Proposed Genoegsaam Solar Farm, Chris Hani District Municipality, Eastern Cape Province**

### **INTRODUCTION**

A 10MW solar energy facility is proposed by Solaire Direct on Farm Zeeven Fonteynen 254. A 90MW facility (DEA reference: 14/12/16/3/3/2/2/305) is also proposed in the adjacent property, however, since the archaeologist has not surveyed the area where the bigger solar farm is proposed, this review comment will be only for the 10MW.

The project will entail the establishment of PV solar panels/modules, inverters and transformers, a new grid connection to the existing substation, underground cabling, where possible, to connect the solar panels, on site buildings and access roads.

It is expected that the solar energy facility will cover in total 20ha.

### **DISCUSSION**

The palaeontologist undertook a desktop study to understand the possible palaeontological sensitivity of the area. The proposed development is underlain by the Balfour Formation of the Beaufort Group, Karoo Supergroup, the fossil record of which is of international importance.

Besides the Balfour Formation, the area is intruded by the Jurassic Karoo Dolerite which is by its origin non-fossiliferous.

About 40% of the area is also overlain by superficial deposits of Quaternary alluvium which is also mostly non-fossiliferous.

Since the proposed solar energy facility is not expected to impact on gulley, exposed bedrocks and high relief area which are generally the most sensitive from a palaeontological perspective, it is expected that the impact on palaeontological resources will be insignificant.

Two archaeologists surveyed the area which is covered by dense grass with some exposed silty soil in patches. The two specialists identified an abundance of Stone Age stone tools covering from the Early to the Later Stone Age. Most of the tools are made of hornfels (indurated shale). According to the archaeologists, since all material recorded is not *in situ*, no mitigation measures are necessary for the pre-colonial material.

A series of buildings are located on the property of Zeven Fonteyn, amongst these the main farmhouse which has been extensively altered, a stone shed and a kraal. It is expected that they date to the mid 19<sup>th</sup> century. Since they are located about 1km to the south-east of the proposed facility, it is expected that the facility will have no impact on the structures.

### **RECOMMENDATIONS AND CONCLUSION**

As there is apparently no evidence of any significant archaeological material in this area, the SAHRA Archaeology, Palaeontology and Meteorites Unit has no objection to the development (in terms of the archaeological and palaeontological components of the heritage resources) on condition that, if any new evidence of archaeological sites or artefacts, palaeontological fossils, graves or other heritage resources are found during

development, construction or mining, SAHRA or an archaeologist must be alerted immediately.

Decisions on Built Environment (e.g. structures over 60 years) and Living Heritage (e.g. sacred sites) must be made by the Provincial Heritage Resources Authority of the Eastern Cape (Mr. M.L. Zote, mlzote@ecphra.org.za) to whom this Archaeological and Palaeontological Review Comment will be copied.

SIGNATURE OF ARCHAEOLOGIST PROCESSING REPORT: ..... *Mgalimberti* .....

EMAIL: mgalimberti@sahra.org.za .....

SIGNATURE OF SAHRA HEAD ARCHAEOLOGIST: ..... *pp Scheermeyer* .....

EMAIL: cscheermeyer@sahra.org.za .....

NAME OF HERITAGE RESOURCES AGENCY: SAHRA .....

PLEASE NOTE THAT THE COMMENT (ABOVE OR APPENDED) CONSTITUTES THE COMMENT OF THE HERITAGE RESOURCES AGENCY ARCHAEOLOGIST AND THAT ANY DEVELOPMENT THAT INVOLVES DESTRUCTION OF ANY ARCHAEOLOGICAL/PALAEONTOLOGICAL SITE IS STILL SUBJECT TO A PERMIT/PERMISSION FOR DESTRUCTION OF SUCH SITE GIVEN TO THE DEVELOPER BY THE RELEVANT HERITAGE RESOURCES AGENCY ARCHAEOLOGICAL AND PALAEONTOLOGICAL PERMIT COMMITTEE (THIS WILL BE SUBJECT TO APPROVAL OF THE PHASE 2 OR ARCHAEOLOGICAL/ PALAEONTOLOGICAL MITIGATION AS NECESSARY). THIS REPORT MAY BE TAKEN ONLY AS APPROVAL IN TERMS OF SECTION 35 OF THE NATIONAL HERITAGE RESOURCES ACT. THE PROVINCIAL MANAGER OF THE HERITAGE RESOURCES AUTHORITY MUST ADVISE AS TO APPROVAL IN TERMS OF HERITAGE ISSUES ENCOMPASSED BY OTHER ASPECTS OF THE LEGISLATION, SUCH AS ISSUES OF THE BUILT ENVIRONMENT (STRUCTURES (E.G. FARM HOUSES), OVER 60 YEARS), INDIGENOUS KNOWLEDGE SYSTEMS OR OF CULTURAL LANDSCAPES AS THIS IS NOT WITHIN THE SCOPE OF THE ARCHAEOLOGIST.

PLEASE NOTE THAT SAHRA IS NOW RESPONSIBLE FOR GRADE I HERITAGE RESOURCES (AND EXPORT) AND THE PROVINCIAL HERITAGE RESOURCES ARE RESPONSIBLE FOR GRADE II AND GRADE III HERITAGE RESOURCES, EXCEPT WHERE THERE IS AN AGENCY ARRANGEMENT WITH THE PROVINCIAL HERITAGE RESOURCES AUTHORITY.