



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

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REVIEW COMMENT ON ARCHAEOLOGICAL AND PALAEOLOGICAL IMPACT ASSESSMENTS

BY ARCHAEOLOGY/ PALAEOLOGY UNIT OF THE 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.

- A. PROVINCIAL HERITAGE RESOURCES AUTHORITY: **Northern Cape**
- B. AUTHOR(S) OF REPORT: **Mr David Morris**
- C. ARCHAEOLOGY CONTRACT GROUP: **McGregor Museum, Kimberley**
- D. CONTACT DETAILS: **PO Box 316, Kimberley, 8300. Tel: 082 2224777, Email: mmkarchaeology@yahoo.co.uk**
- E. DATE OF REPORT: **September or November 2010**
- F. TITLE OF REPORT: **Specialist Input for the Environmental Impact Assessment Phase and Environmental Management Plan for the proposed Pofadder Solar Thermal Plant, Northern Cape Province**
- B. AUTHOR(S) OF REPORT: **Mr John Pether**
- C. PALAEOLOGY CONTRACT GROUP: **Geological and Palaeontological Consultants**
- D. CONTACT DETAILS: **PO Box 48318, Kommetjie, 7976. Tel: 021 783 3023, Email: jpether@iafrica.com**
- E. DATE OF REPORT: **3rd December 2010**

TITLE OF REPORT: **Brief Palaeontological Impact Assessment (Desktop Study). Proposed Pofadder Solar Thermal Plant Portion 4 of the Farm Scuit-Klip 92, Kenhardt District, Northern Cape**

- F. Please circle as relevant: Archaeological component of **EIA** / EMP / HIA / CMP/ Other (Specify) DSR
- G. REPORT COMMISSIONED BY (**CONSULTANT** OR DEVELOPER): **Savannah Environmental**
- H. CONTACT DETAILS: **Ms Tammy Kruger, PO Box 148, Sunninghill, 2157. Tel: 011 234 6621, email: tammy@savannahsa.co.za**
- I. COMMENTS:
Please see comment on next page

REVIEW COMMENT ON HERITAGE IMPACT ASSESSMENTS

Mr David Morris

Dated: November 2010, received: November 2010

Specialist Input for the Environmental Impact Assessment Phase and Environmental Management Plan for the proposed Pofadder Solar Thermal Plant, Northern Cape Province

Mr John Pether

Dated: 3rd December 2010, received: 7th December 2010

Brief Palaeontological Impact Assessment (Desktop Study). Proposed Pofadder Solar Thermal Plant Portion 4 of the Farm Scuit-Klip 92, Kenhardt District, Northern Cape

INTRODUCTION

SavannahSA Environmental has undertaken an Environmental Impact Assessment on behalf of !KaXu CSP for the proposed establishment of a solar facility which should produce up to 350 MW of electricity. An archaeological and a palaeontological study were commissioned as part of the draft environmental impact assessment to Mr David Morris and Mr John Pether respectively.

The area considered for the development is 33 km², however, it is expected that only 11 km² of these 33 will be impacted by the development and therefore this is the extent that both specialists considered for the impact assessments. The footprint of the solar power facility and associated infrastructures will be restricted to this 11 km².

The terrain on which the solar power plant is planned is an arid mostly flat drainage plain with about 20 % of the property occupied by a hilly terrain and a ridge 200 m asl. The geology underlying the 33 km² of the development is composed by Aeolian sand, feldspathic gravelly sands and Koenap Formation.

It is possible that a series of carbonate fossils are found in the palaeodrainage as it is likely that freshwater clams and snails were active in the valley in the past. Evidence of this type of fossils are quite scarce in the literature of this area and this increase the importance of any findings in this context. However, despite this, it is the opinion of the palaeontologist specialist that a full palaeontological impact assessment on the field is undertaken.

Previous archaeological research and surveys had already identified possible archaeological resources in this area. Amongst these, mostly scattered stone tools.

SAHRA RECOMMENDATIONS

SAHRA supports the recommendations of the authors and requires that:

- The archaeologist undertakes a walk through when the Environmental Impact Assessment is finalised. A report on the outcome of this walk through must be sent to SAHRA.
- A palaeontologist must be present on site during bulk excavation
- If this is not deemed feasible, then the palaeontologist must assure the presence on site of a trained surveyor who is able to identify fossil material.
- The EMP must include a clause alerting on the possible presence of fossil and

archaeological material on sites and the procedures to follow in case these findings are identified.

CONCLUSION

If the recommendations made in the specialist report and in this comment are adhered to, the SAHRA Archaeology, Palaeontology and Meteorite Unit has no objection to the development (in terms of the archaeological and palaeontological component of the heritage resources). If any new evidence of archaeological sites or artefacts, palaeontological fossils, graves or other heritage resources are found during development, construction or mining, SAHRA and a professional archaeologist must be alerted immediately.

Decisions on Built Environment (e.g. structures over 60 years) and Cultural Landscapes and associated Living Heritage (e.g. sacred sites) must be made by the Provincial Heritage Resources Authority of the Northern Cape (Mr. Joas Sinthumule jsinthumule@ncpg.gov.za) to whom this Archaeological Review Comment will be copied.

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 NAME OF HERITAGE RESOURCES AGENCY: SAHRA

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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.