



SOUTH AFRICAN HERITAGE RESOURCES AGENCY
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FOR ATTENTION: **PHRA: Northern Cape and Heritage Western Cape**

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REVIEW COMMENT ON HERITAGE IMPACT ASSESSMENT

BY THE 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.

- A. PROVINCIAL HERITAGE RESOURCES AUTHORITY: **Northern Cape**
- B. AUTHOR(S) OF REPORT: **Mr T. Hart and Dr L. Webley**
- C. ARCHAEOLOGY CONTRACT GROUP: **ACO Associates**
- D. CONTACT DETAILS: **8 Jacobs Ladder, St James, email: ACOassociates@gmail.com, Tel: 0731418606**
- E. DATE OF REPORT: **March 2011**
- F. TITLE OF REPORT: **Heritage Impact Assessment: Proposed Wind Energy Facility**
- G. Please circle as relevant: Heritage component of **EIA** / EMP / HIA / CMP/ Other (Specify)
- H. REPORT COMMISSIONED BY (CONSULTANT OR DEVELOPER): **ERM, Ms Linda Slabber**
- I. CONTACT DETAILS: **Silverwood House, Block A, Silverwood Close, Steenberg Office Park, Steenberg, 7945 Cape Town. T: 021 702 9100, C: 082 941 5005, Email: lina.slabber@erm.com**
- J. COMMENTS:

Please see comment on next page

REVIEW COMMENT ON HERITAGE IMPACT ASSESSMENT

Mr T. Hart and Dr L. Webley (with palaeontological assessment by Dr D. Miller and the assistance of Dr J. Almond)

Dated: March 2011, Received: October 2011

Heritage Impact Assessment: Proposed Wind Energy Facility

INTRODUCTION

G7 Renewable Energies applied for the environmental authorization to establish a wind energy facility on the border between Northern and Western Cape, about 20 km north of Matjiesriver and 50km south of Sutherland.

The project will entail the establishment of a wind energy facility with up to 250 turbines with a total energy generating capacity of 750MW. Amongst the associated infrastructure there will be six substations for the 132kW line and one substation for the 400kW line. As much as possible, existing access roads will be used, however, it is expected that new access roads, with a width of up to 12m, will be necessary.

SAHRA will only comment on the archaeology and palaeontology of the Northern Cape, whereas decisions on heritage resources identified in the Western Cape are responsibility of Heritage Western Cape, which has already submitted an ROD on the 7th November 2011. HWC recommended that no turbines should be located on the mountain ridgelines of the Western Cape because of the high visual impact these would have on the Karoo landscape.

DISCUSSION

The Northern Cape section of the wind energy facility is proposed on two mountainous ridges and it will be distributed over the farms Ekkraal, Wilgebosch Rivier, Rietfontein, Karreebosch and Klipbanks.

Despite visibility and access being an issue for some of the sections of the area proposed for the development, the archaeologists identified many archaeological resources. However, from the survey it was clear that the high ridges of the project possibly will not bear any archaeological material since, as the authors of the report explained, the dwelling conditions are here too inhospitable compared to the bottom of the valleys, where most of the identified heritage resources were located.

In the Northern Cape the archaeologists recorded one formal cemetery older than 60 years, which will not be affected by the development. The fenced off graveyard contains 20 graves.

Close to Farm Ekkraal Valley, a series of stone piles were located, these may be graves sites, but its identify is not clear, therefore, it is suggested that the piles of stones be considered as graves. No development should occur within a 25m line from the graves themselves. It is recommended that the possible graves are fenced temporarily to avoid any possible damage during construction activities (see Appendix 1).

Evidence of historical occupation is scattered in the valleys between the two ridges. Evidence of threshing floors, ruined stone and mud-brick homesteads, stone walled kraals, walling and disused dams are remnants of the historical occupation of this Valley. According to the archaeologists, the pristine historical landscape is a reason for its protection: even if the turbines themselves will not affect the archaeological material, access roads and associated infrastructure may impact on the archaeological resources.

Palaeontologically the area is underlain by formations of the Karoo Supergroup. More specifically, the Northern Cape is fully underlain by the Abrahamskraal Formation, where the richest assemblage of Permo-Triassic tetrapod fauna from Pangea and Gondwana and evidence for the evolution of mammal-like reptiles (therapsids) has been found. During the survey, only the fossil of a sand-filled vertical burrow was recorded in the rocks from this formation.

RECOMMENDATIONS

In the light of what discussed above SAHRA, recommends that:

- the request from HWC of the turbines not to be located on the top of the ridgelines be supported. In this regard, according to the information available to SAHRA, at least another four wind energy facilities are proposed to be located in the adjacent 130km along the border of Western and Northern Cape. Considering this, a similar recommendation should be extended to all wind energy facilities in the area, if the visual impact on the same landscape is going to be similar.
- Once the final layout for substations, power lines and access roads is decided, the archaeologists must be informed and if necessary an additional survey for this infrastructure must be undertaken. The report from the archaeological consultation and/or a micro-siting survey must be submitted to SAHRA for further comments.
- Preservation of heritage sites is here the preferred option, however, if during construction disturbance of an archaeological or palaeontological site of some significance is indispensable, a Phase 2 mitigation must be undertaken. SAHRA will require that, in terms of s. 38(4)(b&c) of the National Heritage Resources Act, the provisions of section 35 apply. The specialist will require a mitigation permit from the relevant Heritage Resources Authority. On receipt of a satisfactory mitigation (Phase 2) permit report from the archaeologist, the heritage authority will make further recommendations in terms of the site. Very often permission is given for the destruction of the remainder of the archaeological or palaeontological sites. Very rarely, if a site has high heritage significance the authority may request that it be conserved, that mini-site management plans, interpretive material and possibly protective infrastructure be established.
- A palaeontologist should investigate all fresh bedrock exposures of fossiliferous formations, namely in the Northern Cape, the Abrahamskraal Formation. A report should be then submitted to SAHRA for comments.
- No development should occur within 20m from the perimeter of the graveyard and the fenced off stone piles. See Appendix 1 for further information on gravesites management.
- Decisions on Built Environment (e.g. structures over 60 years, including all farm infra-structures) and 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 Review Comment will be copied.

CONCLUSION

SAHRA will make further recommendations in terms of the sites once the micro-siting reports are received.

If any new evidence of archaeological sites or artefacts, palaeontological fossils, graves or other heritage resources are found during development and construction, SAHRA (Mariagrazia Galimberti/ Colette Scheermeyer, tel: 021 462 4502) and a professional

archaeologist or palaeontologist according to the finding, must be alerted immediately.

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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.

APPENDIX 1

Protection of Graves

In terms of the National Heritage Resources Act (No. 25 of 1999) graves older than 60 years (not in a municipal graveyard) are protected. Human remains younger than 60 years should be handled only by a registered undertaker or an institution declared under the Human Tissues Act.

Anyone who wishes to develop an area where there are graves older than 60 years is required to follow the process described in the legislation (section 36 and associated regulations). The specialist will require a permit from the heritage resources authority:

1. Determine/ confirm the presence of the graves on the property. Normally the quickest way to proceed is to obtain the service of a professional archaeologist accredited to undertake burial relocations. The archaeologist will provide an estimate of the age of the graves. There may be a need for archival research and possibly test excavations (permit required).
2. The preferred decision is to move the development so that the graves may remain undisturbed. If this is done, the developer must satisfy SAHRA that adequate arrangements have been made to protect the graves on site from the impact of the development. This usually involves fencing the grave(yard) and setting up a small site management plan indicating who will be responsible for maintaining the graves and how this is legally tied into the development. It is recommended that a distance of at least 5 m is left undisturbed between the grave and the fence around the graves and another 15 m between the fence of the grave and the development.
3. If the developer wishes to relocate or disturb the graves:
 - a. A 60-day public participation (social consultation) process as required by section 36 (and regulations), must be undertaken to identify any direct descendants of those buried on the property. This allows for a period of consultation with any family members or community to ascertain what their wishes are for the burials. It involves notices to the public on site and through representative media. This may be done by the archaeologist, who can explain the process, but for large or sensitive sites a social consultant should be employed. Archaeologists often work with undertakers, who rebury the human remains.
 - b. If as a result of the public participation, the family (where descendants are identified) or the community agree to the relocation process then the graves may be relocated.
 - c. The archaeologist must submit a permit application to SAHRA for the disinterment of the burials. This must include written approval of the descendants or, if there has not been success in identifying direct descendants, written documentation of the social consultation process, which must indicate to SAHRA's satisfaction, the efforts that have been made to locate them. It must also include details of the

exhumation process and the place to which the burials are to be relocated. (There are regulations regarding creating new cemeteries and so this usually means that relocation must be to an established communal rural or formal municipal cemetery.)

- d. Permission must be obtained before exhumation takes place from the landowner where the graves are located, and from the owners/managers of the graveyard to which the remains will be relocated.
- e. Other relevant legislation must be complied with, including the Human Tissues Act (National Department of Health) and any ordinances of the Provincial Department of Health). The archaeologist can usually advise about this.