Our Ref: 9/2/100/0001

Enquiries: Kathryn Smuts Tel: 021 462 4502

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CaseID: 2005

Date: Tuesday June 04, 2013

Page No: 1



### **Interim Comment**

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

Attention: Mr Bongani Khupe Savannah Environmental (Pty) Ltd PO Box 148 Sunninghill 2157 Gauteng

# Proposed establishment of a wind and photovoltaic energy facility on a site south of Victoria West, Northern Cape.

Booth, C. and Higgitt, N. November 2010. An Archaeological Desktop Study for the proposed Karoo Renewable Energy Facility on a site south of Victoria West, Northern and Western Cape.

Binneman, J., Booth, C. and Higgitt, N. March 2011. A Phase 1 Archaeological Impact Assessment (AIA) for the proposed Karoo Renewable Energy Facility on a site south of Victoria West, Northern and Western Cape Province on the farms Phaisantkraal 1, Modderfontein 228, Nobelsfontein 227, Annex Nobelsfontein 234, Ezelsfontein 235, and Rietkloofplaaten 239.

Rossouw, L. March 2011. Palaeontological desktop assessment of a commercial renewable energy facility site located approximately 34 km south of Victoria West in the Western Cape Province (and Northern Cape) Booth, C. December 2012. An archaeological ground-truthing walk-through for the proposed substation and associated overhead power line for the Nobelsfontein Wind Energy Facility situated on a site south of Victoria West on the Farm Nobelsfontein 227, Northern Cape Province

Booth, C. and Shankar, S. December 2012. An Archaeological Ground-Truthing Walk-Through For The Nobelsfontein Wind Energy Facility Situated On A Site South Of Victoria West On The Farms Nobelsfontein 227, Annex Nobelsfontein 234, Ezelsfontein 235, And Rietkloofplaaten 239, Northern Cape Province.

South African Renewable Green Energy (SARGE) (Pty) Ltd is applying for the establishment of a renewable energy facility in the Karoo area across the Northern and Western Cape. This facility will cover approximately 200 km² and will include a wind and a photovoltaic solar facility and associated infrastructure, such as access roads, two substations and two new 132 KW overhead power lines to connect the new substations to the existing grid. The preferred options for these two power lines are the shortest ones of 1 and 2.5 km respectively.

About 88 km of 5m wide access roads will be built, with 5.6 km of these to be temporary for the construction phase only. All access roads will need to be in place before all components for the facilities are brought in.

The wind energy facility will see the establishment of maximum 150 turbines with a total energy output of 450 MW (3MW/turbine), whereas the solar arrays will have an electricity output capacity of 50 MW.

#### Discussion:



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Page No: 2



A scoping report was compiled November 2010, followed by a Phase 1 Archaeological Impact Assessment, undertaken for the Environmental Impact Report Phase in March 2011, which was commissioned together with a palaeontological desktop study. The SAHRA Archaeology, Palaeontology and Meteorites Unit commented on 17 May 2011 on the archaeology and palaeontology of the Northern Cape section of the project, namely Modderfontein 228, Nobelsfontein 227 (including the Farms Annex Nobelsfontein 234, Ezelsfontein 235 and Rietkloofplaaten 239), while Ngwao-Boswa Jwa Kapa Bokone was the responsible commenting authority for Built Environment, Cultural Landscape and Viewscape for the Northern Cape.

Subsequently, SAHRA received and commented on a report on a walk through of the location of the proposed substation and alignments of the proposed power lines for this project. SAHRA has now received the micro-siting survey requested in the recommendations summarised above and this comment pertains to that report.

The walk through identified isolated Middle Stone Age artefacts, concentrated in the northern and southern sections of the development area. Higher densities of scatters were found to the west of the koppies that are proposed for Turbines 1-5; a new road is proposed for this area. Artefacts include flakes, broken flakes, blades, cores and facetted platform flakes on shale and hornfels. The study identified a new stone walling site comprising eight separate structures as well as the foundations of a dwelling to the north and west of the koppies earmarked for Turbines 1-5. The survey further identified a scatter of ostrich eggshell fragments in the middle of the development area. No Later Stone Age artefacts, rock paintings or engravings were recorded, although the author notes that engraving sites S47-ENG7 and S48-ENG5 are adjacent to a road proposed for upgrade and are likely to be negatively affected.

The author revisited the human remains identified in the first AIA and found them still *in situ* and progressively still eroding out of the donga. A further informal graveyard was identified during this survey. The graveyard consists of between 22 and 25 burials, possibly associated with the nearby railway siding. The graveyard currently lies adjacent to an existing farm road and a new road is planned for 200m east of the graves.

#### **Case Decision:**

SAHRA supports the recommendations of the author and requests that:

- The developer or archaeologist should apply to SAHRA for a destruction permit for sites S46 and GPS48;
- No construction activity is allowed within 100 m of the rock paintings, rock engravings and rock shelters
  where rock art material is preserved and sites with stone walls and kraals. If this distance cannot be
  maintained and development occurs within 100 m of any of these sites, a temporary fence must be
  erected around the site (in consultation with the archaeologist) and foremen and workmen educated
  about its significance;
- In no circumstance will development be allowed within 50 m from the stone walls and kraals and from rock art sites:
- A Heritage Management Plan for the rock engravings situated at S47-ENG7 and S48-ENG8 must be



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CaseID: 2005

Date: Tuesday June 04, 2013

Page No: 3



compiled and submitted to SAHRA for review;

- Relocation is requested for the exposed human remains. Provisions stipulated in section 36 of the National Heritage Resources Act (Act No 25 of 1999) and related guidelines are applicable (see <a href="http://www.sahra.org.za/sites/default/files/website/articledocs/SahraRegulations\_0.pdf">http://www.sahra.org.za/sites/default/files/website/articledocs/SahraRegulations\_0.pdf</a>);
- The graves should be restored where these are dilapidated, protected and conserved. For this purpose, a proper fence must be built around them, placed 5 meters away from the perimeter of the graves. No development is allowed within 15 meters from the fence line surrounding the graves. Alternatively, if the area where the burials are located fall within the development footprint, then provisions stipulated in section 36 of the National Heritage Resources Act (Act No. 25 of 1999) are applicable, and relocation of these might proceed provided that a public consultation process is followed;
- An alternative area/s for Turbines 1 -5 should be considered owing to the possible negative impact on the stone wall complex situated around the proposed footprint of Turbine 1, the historically significant remains situated to the east, recorded in the walk through for the substation and power lines, as well sites situated in the area proposed for Turbine 4 and 5;
- If any changes are made to the current layout for the Nobelsfontein Wind Energy Facility, additional archaeological investigation must be conducted to assess any newly included development areas;
- A Phase 1 Palaeontological Impact Assessment in the form of field survey of the area is requested, the
  assessment must be then submitted to SAHRA for comments. If deemed necessary after the survey, a
  Phase 2 rescue operation might also be requested;
- A palaeontologist must inspect fresh excavations undertaken in the fossil-bearing Teekloof Formation.

A final comment will be issued upon receipt of the palaeontological assessment.

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

Yours faithfully

Kathryn Smuts

Heritage Officer: Archaeology

South African Heritage Resources Agency



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CaseID: 2005

Date: Tuesday June 04, 2013

Page No: 4



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Colette Scheermeyer SAHRA Head Archaeologist South African Heritage Resources Agency

**ADMIN:** 

Direct URL to case: http://www.sahra.org.za/node/117263

(DEA, Ref: 12/12/20/1993)

