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CaseID: 2179

Date: Wednesday October 30, 2013

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## **Final Comment**

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

Attention: Aurecon - Cape Town  
1 Century City Drive, Waterford Precinct, Century City  
P.O Box 1347, Cape Town 8000

### **Proposed Construction of 10 PV plants on Hoekplaas Farm (Remainder of Farm No. 146), Copperton, Northern Cape**

Orton, J. and Webley, L. October 2013. *Heritage Impact Assessment for multiple Proposed Solar Energy Facilities on Farm Hoekplaas 146*

Almond, J. July 2013. *Palaeontological Specialist Assessment: Combined Desktop & Field Assessment Study for multiple Proposed Solar Energy Facilities on Farm Hoekplaas 146*

In January 2013, Environmental Authorisation was granted for the 100MW Hoekplaas PV1 Facility. The above studies were submitted in support of an additional 10 75MW PV facilities. Each proposed facility will consist of PV arrays, a 132kV transmission line, an onsite 132kV substation and a boundary fence. The proposed 10 PV facilities will share a central 132kV substation, access roads, water supply infrastructure, storm water infrastructure and buildings. An alternative of three PV facilities each with a capacity of 225MW, 290MW and 500MW respectively has also been proposed, known as Alternative 2.

The above HIA assessed all areas affected by Alternative 1, however not all of Alternative 2 was assessed due to dense vegetation cover. According to the HIA, archaeological resources were widespread across the study area with higher densities of archaeological material associated with the margins of pans and hills. Earlier, Middle and Later Stone Age material was identified, including a number of handaxes, however most of the background scatter is Middle Stone Age in origin. One significant Middle Stone Age site was identified at the Borrow Pit. This site has been excluded from the proposed layouts. Historical sites were absent from the project area except for two small fragments of glass and ceramic. No structures or graves were identified in the study area. In addition, the study area is essentially unmodified except for a few gum trees that are indicative of human intervention. The proposed development area straddles the R357, however the visual impact of the proposed development is low as this road does not have a heavy traffic load and therefore visual receptors are at a minimum.

According to the HIA, the well-defined pans have a 90m buffer zone of no development. The archaeological sites identified along the margins of the pans will therefore not be impacted by the proposed development. A number of archaeological sites were identified along an ephemeral watercourse in the PV3 project area. One Later Stone Age site was identified in a proposed lay-down area and a very dense background archaeological scatter was identified in the PV11 project area. In addition, construction in the northern-most section of the PV4 project area will likely impact on the Middle Stone Age site identified as (HKP 2011/002). Some of the identified sites fall within the proposed corridors identified for linear infrastructure. Finalisation of the layouts of



# PROPOSED PV2-11 PHOTOVOLTAIC ENERGY PLANTS ON FARM HOEKPLAAS NEAR COPPERTON, NORTHERN CAPE

Our Ref: 9/2/025/0001



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an agency of the  
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powerlines and roads will determine if these sites will be impacted.

According to the palaeontological impact assessment, the study area is largely underlain by Permo-Carboniferous glacial sediments of the Dwyka Group that overlie Precambrian granitoid basement rocks of the Namaqua-Natal Metamorphic Province. Upper Dwyka bedrocks in the study area are poorly exposed and do not contain trace fossil assemblages, petrified wood or other fossil material. Important fossil remains have been recorded from Bundu Pan in the vicinity of the proposed development area. According to the PIA, if these remains are present, they are likely sparsely distributed. Based on this information, it is unlikely that the proposed development will impact on significant palaeontological material.

## Final Comment

Alternative 1 is the preferred alternative. Based on the submitted information, SAHRA has no objection to the proposed development on condition that;

1. The 90m buffer zone around the pans is enforced.
2. PV 11 is not developed as it will negatively impact on significant archaeological resources. If this is not possible, the applicant must liaise with SAHRA as to the best way forward.
3. The two archaeological sites associated with the ephemeral watercourse in the PV3 development area must not be impacted by the proposed development. If this is not possible, the site must be mitigated as per the recommendations in the HIA.
4. The Later Stone Age site situated in the lay-down area must not be impacted by the proposed development. If this is not possible, the site must be mitigated as per the recommendations in the HIA.
5. The PV4 development area closest to the HKP2011/002 MSA site must be mitigation by means of test excavations. A permit from SAHRA in terms of Section 35 of the NHRA is required for this action.
6. Once the final layouts of the power lines and access roads have been established, it must be determined whether or not significant heritage resources will be impacted by the development. If significant sites are impacted, these must be mitigated as per the recommendations in the HIA.
7. Should any evidence of archaeological sites or remains (e.g., remnants of stone-made structures, indigenous ceramics, bones, **stone artefacts**, **ostrich eggshell fragments**, marine shell and charcoal/ash concentrations), unmarked human burials, **fossils** or other categories of heritage resources are found during the proposed activities, SAHRA APM Unit (Jenna Lavin/Colette Scheermeyer 021 462 4502) must be alerted immediately, and a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contacted 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 might be necessary.

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

Yours faithfully



The South African Heritage Resources Agency

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NEAR COPPERTON, NORTHERN CAPE**

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Jenna Lavin  
Heritage Officer  
South African Heritage Resources Agency

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Colette Scheermeyer  
SAHRA Head Archaeologist  
South African Heritage Resources Agency

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**ADMIN:**

Direct URL to case: <http://www.sahra.org.za/node/118444>

Edit view (DEA, Ref: PV2 14/12/16/3/3/2/493 DEA/EIA0001754/2013) (DEA, Ref: PV3 14/12/16/3/3/2/494  
DEA/EIA/0001755/2013) (DEA, Ref: PV11 14/12/16/3/3/2/502 DEA/EIA/0001763/2013) (DEA, Ref: PV4  
14/12/16/3/3/2/495 DEA/EIA/0001756/2013) (DEA, Ref: PV5 14/12/16/3/3/2/496 DEA/EIA/0001757/2013)  
(DEA, Ref: PV6 14/12/16/3/3/2/497 DEA/EIA/0001758/2013) (DEA, Ref: PV7 14/12/16/3/3/2/498  
DEA/EIA/0001759/2013) (DEA, Ref: PV8 14/12/16/3/3/2/499 DEA/EIA/0001760/2013) (DEA, Ref: PV9  
14/12/16/3/3/2/500 DEA/EIA/0001761/2013) (DEA, Ref: PV10 14/12/16/3/3/2/501 DEA/EIA/0001762/2013)

**Terms & Conditions:**

1. This approval does not exonerate the applicant from obtaining local authority approval or any other necessary approval for proposed work.
2. If any heritage resources, including graves or human remains, are encountered they must be reported to SAHRA immediately.
3. SAHRA reserves the right to request additional information as required.



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