Proposed development of the 100MW Harmony Moab Khotsong Solar PV Facility, Vierfontein, Free State Province

Our Ref:



an agency of the Department of Arts and Culture

T: +27 21 462 4502 | F: +27 21 462 4509 | E: info@sahra.org.za South African Heritage Resources Agency | 111 Harrington Street | Cape Town P.O. Box 4637 | Cape Town | 8001 www.sahra.org.za

Enquiries: Sityhilelo Ngcatsha

Tel: 0212028663

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CaseID: 19413

Date: Monday November 07, 2022

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Final Comment

In terms of Section 38(8), 38(4) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Savannah Environmental (Pty) Ltd

PO Box 148 Sunninghill 2157

The development of a renewable energy facility, overhead powerline and associated infrastructure is proposed by HARMONY MOAB KHOTSONG OPERATIONS PTY (LTD). The project entails the development of three (3) separate solar PV facilities with a combined contracted capacity of up to 100MW over 280 ha of land and will be known as Harmony Moab Khotsong Solar PV Facility, each facility will include a grid connection and other associated infrastructure. The Solar PV facilities are based near Harmony Moab mining operations and fall within the Klerksdorp Renewable Energy Development Zone (REDZ) located ~10km North of the town of Vierfontein within the Moqhaka Local Municipality respectively, and within the Fezile Dabi District Municipality, Free State Province.

Harmony Moab Khotsong Operations (Pty) Ltd appointed Savannah Environmental to undertake the Environmental Authorisation (EA) Application for the proposed development of the Harmony Moab Khotsong Solar PV Facility, on various properties owned by the mined, Vierfontein, Free State Province.

The Basic Assessement Report has been submitted in terms of the National Environmental Management Act (NEMA Act 107) and the NEMA 2014 EIA regulations. The development footprint is about 900ha and the PV facility will have a generation capacity of of up to 100MW. The associated infrastructure for the development includes a grid connection and other associated infrastructure. The development area is located in the Klerksdorp Renewable Energy Development Zone (REDZ).

CTS Heritage and Prof Marion Bamford were appointed to provide heritage specialist input into the EA process as per section 24(4)b(iii) of NEMA and section 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA) that complies with section 38(3) of the NHRA.

Lavin, J. 2022. Heritage Screener: Proposed development of the Moab PV Facility

Heritage material of low significance were identified in the in the nearby PV facility. It is likely that burials may

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be located on the proposed solar PV areas as well as Stone Age material similar to the artefacts recorded, therefore an archaeological field survey is recommended. The development area is underlain by Vryheid Formation and Malmani Subgroup. The potential impact to fossil heritage resources is considered to be low since the site could be capped by Quaternary deposits and it is recommended that a Fossil Chance Find Protocol be implemented. It is recommended that a Heritage Impact Assessment which assesses likely impacts to archaeological and palaeontological heritage is undertaken by a heritage specialist.

Lavin, J. 2022. Heritage Impact Assessment: Proposed development of the Development of 100MW Harmony Moab Khotsong Solar PV Facility, Vierfontein, Free State Province

Three sites were identified which includes a site of isolated artefacts (CM1) of grade IIIC significance, a chert outcrop with evidence of hominin exploitation (CM2) along with a site of isolated chert arterfacts (CM3) that are of low heritage significance were identified during the survey and no impacts to significant archaeological heritage resources is anticipated.

Recommendations

The 30m bufffer area recommended around site CM1 is implemented.

The attached Chance Fossil Finds Procedure is implemented for the duration of construction activities Should any buried archaeological resources or human remains or burials be uncovered during the course of development activities, work must cease in the vicinity of these finds. The South African Heritage Resources Agency (SAHRA) must be contacted immediately in order to determine an appropriate way forward.

Bamford, M. 2022. Desktop Study: Palaeontological Impact Assessment for the proposed development of the Harmony Moab PV Facility, southeast of Orkney, Free State Province

The development site lies on the potentially fossiliferous Malmani Subgroup that could have stromatolites below the land surface. The southernmost part is on moderately fossiliferous Quaternary deposits that overlies the Vryheid Formation. The area has been disturbed by farming and mining activities and no potential rocky outcrops of dolomite or of traps for Quaternary fossils are visible from the satellite imagery. A Fossil Chance Find Protocol has been attached and must be implemented during development.

Final Comment

The following comments are made as a requirement in terms of section 38(8) of the NHRA in the format provided in section 38(4) of the NHRA and must be included in the Final BAR and EMPr:

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- 38(4)a The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit has no objections to the proposed development;
- 38(4)b The recommendations of the specialists are supported and must be adhered to. No further additional specific conditions are provided for the development;
- 38(4)c(i) If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit (Sityhilelo Ngcatshat/Phillip Hine 021 462 5402) must be alerted as per section 35(3) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)c(ii) If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves (BGG)
 Unit (Thingahangwi Tshivhase/Ngqabutho Madida 012 320 8490), must be alerted immediately as per
 section 36(6) of the NHRA. Non-compliance with section of the NHRA is an offense in terms of section
 51(1)e of the NHRA and item 5 of the Schedule;
- 38(4)d See section 51(1) of the NHRA regarding offences;
- 38(4)e The following conditions apply with regards to the appointment of specialists:
- i) If heritage resources are uncovered during the course of the development, a professional
 archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as
 possible to inspect the heritage resource. If the newly discovered heritage resources prove to be of
 archaeological or palaeontological significance, a Phase 2 rescue operation may be required subject to
 permits issued by SAHRA;
- The Final BAR must be submitted to the SAHRIS application for record purposes;
- The decision regarding the EA application must be submitted to the SAHRIS application for record purposes.

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

Yours faithfully

Sigead W

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Sityhilelo Ngcatsha Archaeology, Palaeontology, Meteorite Assistant South African Heritage Resources Agency

Phillip Hine

Manager: Archaeology, Palaeontology and Meteorites Unit

South African Heritage Resources Agency

ADMIN:

Direct URL to case: https://sahris.sahra.org.za/node/604279