

Our Ref:



an agency of the
Department of Arts and Culture

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South African Heritage Resources Agency | 111 Harrington Street | Cape Town
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Enquiries: Natasha Higgitt
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CaseID: 18917

Date: Friday September 22, 2023
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Final Comment

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

Attention: Savannah Environmental (Pty) Ltd

PO Box 148
Sunninghill
2157

The Applicant, **Voltaia South Africa (Pty) Ltd**, is proposing the construction of a photovoltaic (PV) solar energy facility (known as the Kiara PV 1 facility) located on a site approximately 16km north east of the town of Lichtenburg in the North West Province. The solar PV facility will comprise several arrays of PV panels and associated infrastructure and will have a contracted capacity of up to 100MW. The development area is situated within the Ditsobotla Local Municipality within the Ngaka Modiri Molema District Municipality. The site is accessible via an existing gravel road which provides access to the development area. The development area for the PV facility and associated infrastructure will be located on Portion 2 of the Farm Hollaagte No. 8. Six additional PV facilities (Kiara PV 2, Kiara PV 3, Kiara PV 4, Kiara PV 5, Kiara PV 6, Kiara PV 7) are concurrently being considered on the project site (within Portion 2 of the Farm Hollaagte 8 and the Remaining Extent of the Farm Hollaagte No. 8) and are assessed through separate Environmental Impact Assessment (EIA) processes. A facility development area (approximately 165ha) as well as grid connection solution have been considered in the Scoping phase. The infrastructure associated with this PV facility includes: PV modules and mounting structures Inverters and transformers Battery Energy Storage System (BESS) Site and internal access roads (up to 8m wide) Site offices and maintenance buildings, including workshop areas for maintenance and storage. Temporary and permanent laydown area Grid connection solution will include: Facility Substation Eskom Switching Station A 275kV powerline (16.6km in length) (either single or double circuit), to connect the PV facility to the Watershed MTS. The 132kV powerline from the on-site substation to the collector substation is approximately 1.2 km long.

Savannah Environmental has been appointed by Voltaia South Africa (Pty) Ltd to conduct an Environmental Authorisation (EA) Application for the proposed Kiara PV 1 facility and associated infrastructure on Portion 2 of the Farm Hollaagte No. 8 near Lichtenburg Ditsobotla Local Municipality, Ngaka Modiri Molemela District Municipality, North West Province.

A draft Scoping Report (DSR) has been submitted in terms of the National Environmental Management Act, no



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107 of 1998 (NEMA) and the NEMA Environmental Impact Assessment (EIA) Regulations. The proposed development will entail the construction of a Solar PV facility with associated infrastructure that includes solar PV array comprising PV modules and mounting structures, inverters and transformers, cabling between the panels 132kV onsite facility substation/ 132kV power line from onsite substation to the switching collector substation, Battery Energy Storage System, site internal access roads (up to 8m wide), site offices and maintenance buildings, including workshop area for maintenance and storage, temporary and permanent laydown areas.

CTS Heritage have been appointed to provide heritage specialist input as part of the EIA process as required by section 24(4)b(iii) of NEMA and section 38(3) and 38(8) of the National Heritage Resources Act, Act 25 of 1999 (NHRA).

Lavin, J. May 2022. Heritage Screener: Proposed Development of the Kiara PV 1 Facility and Associated Infrastructure, North West Province.

The specialist undertook a desktop survey of the larger project area and development footprint through a literature review of previous heritage impact assessment studies (Van Schalkwyk 1995, 2021; Van der Walt 2014; Levin 2021). Some of these reports include field assessments such as the (1995, 2019, & 2021) reports detail the broad area of Lichtenburg as heavily disturbed by previous mining, historical and contemporary agricultural activities. No heritage resources were identified during the 2019 field survey. While the 2014 and 2021 field assessments identified lithic scatters which were interpreted as evidence of MSA and LSA factories on which mobile groups practicing trans-humanism may have been attracted to the area by the abundance of chert for the production of stone tools. It is also noted that in some areas burrowing animals brought MSA artefacts to the surface where the sand cover was more than a metre and half thick and the possibility of subsurface material cannot be excluded.

It is likely that a similar archaeological signature will be present within the area proposed for this development and as such, a field survey to assess impacts to archaeological heritage resources is recommended.

The heritage screener also notes that the proposed development area is located in a geological deposit belonging to the Monte Christo Formation of the Chuniespoort Group. The Monte Christo Formation is within the Malmani Subgroup. These deposits have a very high sensitivity for impacts to palaeontological resources. This group is known to contain a range of shallow marine to intertidal stromatolites (domes, columns etc) and organic-walled microfossils. In addition, it is within this group that fossiliferous Late Cenozoic cave breccias

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have been identified, such as within the Cradle of Humankind region. A development located approximately 15 km away within the same geology was surveyed on foot by Bamford et al. 2019 as part of the Heritage Impact Assessment completed for the Lichtenburg PV facilities. The conclusion and recommendations in the 2019 PIA by Bamford were that after a thorough assessment the impact of the development was found to be negligible to extremely low. The same conclusion is drawn for the proposed project.

In an Interim Comment issued on the 28/07/2022, SAHRA requested that a field-based archaeological impact assessment and palaeontological impact assessment be undertaken as part of the EIA phase. Since the issuing of the Interim Comment, an HIA inclusive of an AIA and PIA, with the Draft EIA have been submitted for review. It is noted that SAHRA missed the regulated timeframes to issue a comment as part of the EA process. The EA was issued on 03/07/2023.

Lavin, J. 2022. Heritage Impact Assessment in terms of Section 38(8) of the NHRA for the Proposed development of the Kiara PV 1 Facility and Associated Infrastructure, North West Province

The HIA has used the results of the Archaeological Impact Assessment (Fivaz, H and Lavin, J. 2022) and the Palaeontological Impact Assessment (Groenewald, G. 2022) which assessed the seven (7) Kiara solar facilities.

The proposed development is underlain by Monte Christon Formation. Stromatolites are known to be present in this formation. Four instances of palaeontological resources were identified which include cave breccia, small scale stromatolite structures and oolitic chert beds. One stone packed kraal of low heritage significance was identified within the development area.

Recommendations provided in the report include the following:

- A Chance Fossil Finds Procedure must be implemented for the duration of the construction phase;
- A Chance Finds Procedure must be implemented.

Final Comment

As the NEMA EA process has been concluded, SAHRA cannot impose additional conditions on the development. The applicant must take note of the following:

- The recommendations of the specialists are supported and must be adhered to. No further additional

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specific conditions are provided for the development:

- 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 DAU (Natasha Higgitt 021 202 8660 / nhiggitt@sahra.org.za) must be alerted as per section 35(3) of the NHRA. Non-compliance with this section of the NHRA is an offence in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- If unmarked human burials are uncovered, the SAHRA DAU (Natasha Higgitt 021 202 8660 / nhiggitt@sahra.org.za), must be alerted immediately as per section 36(6) of the NHRA. Non-compliance with this section of the NHRA is an offence in terms of section 51(1)e of the NHRA and item 5 of the Schedule;
- See section 51 of the NHRA regarding offences;
- The following conditions apply with regards to the appointment of specialists:
- 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 EIA and EMPr must be submitted to SAHRA 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

Natasha Higgitt
Manager: Development Applications Unit
South African Heritage Resources Agency

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ADMIN:

Direct URL to case: <https://sahris.sahra.org.za/node/600018>
(DFFE, Ref: 14/12/16/3/3/2/2171)

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.