### Proposed development of the Kiara PV 3 Facility and Associated Infrastructure, North West 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

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CaseID: 18919

Date: Thursday July 28, 2022

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#### **Interim Comment**

In terms of Section 38(3), 38(8) of the National Heritage Resources Act (Act 25 of 1999)

Attention: Savannah Environmental (Pty) Ltd

PO Box 148 Sunninghill 2157

The Applicant, Voltalia South Africa (Pty) Ltd, is proposing the construction of a photovoltaic (PV) solar energy facility (known as the Kiara PV 3 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 120MW. 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 1, Kiara PV 2, 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 195ha) 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 Voltalia South Africa (Pty) Ltd to conduct an Environmental Authorisation (EA) Application for the proposed Kiara PV 3 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 consruction 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 (upto 8m wide), site offices and maintenance buildings, including workshop area for maintenace and storage, temporary and permananet laydown areas etc...

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).

Levin, J. May 2022. Heritage Screener: Proposed Development of the Kiara PV 3 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 detailing 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 assessment identified lithic scatters which were intepreted as evidence of MSA and LSA factors on which mobile groups practicing trans-humanism may have been attracted to the area by the abondance 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 susurface 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 resourcs. This group is known to contain a range of shallow marine to intertidal stromatolites (domes, columns etc) and organc-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 recommended in the 2019 PIA by Bamford were that after a thorough assessment the impact of the development was found to neglible to extremely low. The same conclusion is drawn for the proposed project.

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#### **Interim Comment**

The SAHRA's APM Unit acknowledges reciept of the DSR and Heritage Screener and the recommendations contained therein. SAHRA supports the recommendations of the specialist and requests that the following is undertaken in terms of section 38(3) of the NHRA (25 of 1999):

The specialist has recommended a field-based archaeological impact assessment. A field-based assessment of the impact to archaeological resources must be conducted by a qualified archaeologist. The report must comply with section 38(3) of the NHRA and the SAHRA 2006 Minimum Standards: Archaeological and Palaeontological Component of Impact Assessments, and the 2012 Minimum Standards: Archaeological Component of Heritage Impact Assessments. The Minimum Standards provides allowance for a Letter of Recommendation for Exemption that can be submitted by a qualified archaeologist should they deem it appropriate

The proposed development footprint is located in an area of Very High sensitivity for palaeontological resources as per the SAHRIS PalaeoSensitivity map. As such, a field-based Palaeontological Impact Assessment (PIA) is required to be conducted as part of the EA process. The desktop PIA must be compiled by a qualified palaeontologist and must comply with the SAHRA 2012 Minimum Standards: Palaeontological Components of Heritage Impact Assessments.

Further comments will be issued upon receipt of the above requested report and the submission of the draft EIA with appendices.

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

Yours faithfully

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Elijah Dumisani Katsetse Heritage Officer

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/600020