

Proposed development of the Mutsho Solar PV 4 Energy Facility and associated EGI near Musina, Limpopo

Our Ref: 19160



an agency of the
Department of Arts and Culture

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CaseID: 19160

Date: Wednesday March 15, 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

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Savannah Environmental (Pty) Ltd has been appointed by Mutsho Power (Pty) Ltd to undertake an environmental assessment as part of a Scoping & Environmental Impact Assessment application process in support of an Environmental Authorisation (EA) in terms of the National Environment Management Act, Act 107 of 1998 (NEMA) for activities that trigger the NEMA EIA 2014 Regulations.

Mutsho Power is proposing four (4) Solar Photovoltaic (PV) Energy Facilities which will be 1285 ha in extent, and located on the farm farm Vrienden 589 MS. Each of the facilities will have a contracted capacity of up to 100MW, a single 100x100m BESS, and Electrical Grid Infrastructure comprising a 132kV onsite substation (for the entire 4 x 100MW project), and a 132kV double circuit overhead power line from the onsite substation to the Nzhelele Substation to enable the connection of the four (4) Solar PV Energy Facilities to the national grid for the evacuation of the generated power. This particular case is for the Solar PV 4 facility. This application is related to cases 19157, 19159, 19160.

A Background Information Document was been submitted to SAHRA in terms of section 38(8) of the National Heritage Resources Act, 25 of 1999 for commenting. The 2017 HIA and PIA studies for the Mutsho Coal Power Station (Case ID 11558, <https://sahris.sahra.org.za/cases/mutsho-power-project>) as well as the Heritage Screener by CTS Heritage.

Butler, E. July 2017. Palaeontological impact assessment of the proposed development of the new coal-fired power plant and associated infrastructure near Makhado, Limpopo province.

The author undertook a survey of the available geological literature of the region proposed for the Mutsho



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Power Project development. The development footprint on the farm Du Toit 563 is underlain by undifferentiated Permo-Triassic sediments of the Karoo Basin (Karoo Supergroup); Sediments of the Tshipise and Tuli Sedimentary Basin and Solitude Formation, which are of high to Very High palaeontological sensitivity. The farm Vrienden is underlain by undifferentiated Permo-Triassic Sediments of the Karoo Basin (Karoo Supergroup); Sediments of the Tshipise and Tuli Sedimentary Basin and Solitude Formation, which are of high to Very High palaeontological sensitivity. It is also underlain by Archaean Granite-Gneiss Basement rocks of the Beit Bridge Igneous Complex and unfossiliferous metamorphic rocks of the Malala Drift Suite, Gumbu Group, which are of Very Low palaeontological sensitivity. There were no fossiliferous rock outcrops observed in the field survey. Therefore, the author determines that the overall palaeontological sensitivity for this development can be considered low, and the impact the power station will have on the fossil heritage of the area is determined to be low. Furthermore the author recommended chance finds procedures to be included in the construction management plan.

Smuts, K. July 2017. Heritage Impact Assessment for the Proposed New Mutsho Power Project, near Makhado.

The author undertook a field survey of the proposed development area after a desktop analysis and they identified some isolated stone tools, and some lower and upper grinding stones in the area currently used for cultivation. All identified heritage resources on the surface are considered of low significance. The likelihood of further heritage resources apart from palaeontological resources being uncovered during construction is low.

Lavin, J. May 2022. Desktop Heritage Screening Assessment for the Cluster East PV Facilities near Makhado.

The study area has been surveyed 3 times (Silidi and Pikirayi, 2013 and CTS Heritage, 2016 and 2018) and identified 6 sites named (Vrienden 1-6) and another 13 sites named (Mopane 031 to 37; Mopane 011 to 015) that will not be impacted by the proposed development activities. Only site Vrienden 4 requires a bufferzone of 30m to prevent any damage to the site. The overall heritage sensitivity for the farm Vrienden 589 is considered to be low. The author further recommends that a field based Heritage Impact Assessment for the proposed Renewable Facilities.

An Interim Comment dated 21/09/2022 was issued by SAHRA noting the recommendation provided in the Heritage Screener. The HIA was submitted 23/01/2023.

Lavin, J. November 2022. HERITAGE IMPACT ASSESSMENT In terms of Section 38(8) of the NHRA for the

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Proposed development of the Mutsho Solar PV3, Limpopo Province.

The author undertook a field assessment September 2022 and did not identify any new heritage resources. The finalised Solar PV 3 area will have a direct impact on a structure named V03 however it is not of heritage significance. There will be an impact to the landscape on a local immediate level as there will be a reduction in the vegetation due to the solar panels however this is assessed as a low impact in the VIA report. The author assesses the overall heritage sensitivity including palaeontological heritage to be low in the local area and low to the Mapungubwe Cultural landscape, and recommends that Site V04, the Baobab Room, must not be impacted by any activity. Any proposed activity on this farm must adhere to a buffer area of 100m around site V04. Further recommendations include:

The recommendations in the VIA are implemented;

A 200m no-go buffer must be implemented around site V04;

A 100m no-go buffer must be implemented around sites MOP112 and MOP115;

The attached Chance Fossil Finds Procedure must be 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.

Final Comment

The following comments are made as a requirement in terms of section 3(4) of the NEMA Regulations and section 38(8) of the NHRA in the format provided in section 38(4) of the NHRA and must be included in the Final EIA and EMPr:

38(4)a – The SAHRA Development Applications Unit (DAU) and the Burial Grounds and Graves (BGG) Unit has no objections to the proposed development;

38(4)b – The recommendations provided by the heritage specialists are supported and must be adhered to. Additional further specific conditions are provided for the development as follows:

A fence with an access gate must be erected around the identified grave sites;

All heritage resources grading with a medium and high significance rating must be avoided with a buffer of 100 m;

If it is not possible to avoid the identified historical structures, and these resources are older than 60 years but younger than 100, permits in terms of section 34(1) of the NHRA and Chapter II and III of the NHRA regulations must be applied for from the Limpopo Heritage Resources Authority (LIHRA);

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If it is not possible to avoid the identified historical structures, and these resources are older than 100 years and are in ruin, permits in terms of section 35(4) of the NHRA and Chapter II and III of the NHRA regulations must be applied for from SAHRA;

If it is not possible to avoid the identified burial grounds, a consultation process in terms of section 36 of the NHRA and Chapter XI of the NHRA must be conducted;

If grave relocation is found to be feasible following the above-noted consultation, permits in terms of section 36 and Chapter II and IX of the NHRA regulations must be applied for from the SAHRA BGG Unit;

A Heritage Management Plan (HMP) must be compiled for all heritage resources that will remain in-situ to ensure they are managed in terms of the NHRA;

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 DAU (Nokukhanya Khumalo/Natasha Higgitt 021 202 8660) must be alerted as per section 35(3) of the NHRA. Non-compliance with section of the NHRA is an offence 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/Ngqalabutho 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 offence 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;

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 EIA and EMPr must be submitted to SAHRA for record purposes;

The decision regarding the EA Application must be communicated to SAHRA and uploaded to the SAHRIS Case application.

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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Nokukhanya Khumalo
Heritage Officer
South African Heritage Resources Agency

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

ADMIN:

Direct URL to case: <https://sahris.sahra.org.za/node/602218>

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.