Proposed North Hydroelectric Power Site, Orange River, Siyancuma Local Municipality, Northern Cape

Our Ref: 9/2/038/0001

Enquiries: Jenna Lavin Edit view Tel: 021 462 4502

Edit view Email: jlavin@sahra.org.za

CaseID: 3264

Date: Monday October 28, 2013

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Interim Comment

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

Attention: Mr Mark Day Enviroworks Edit view Suite 338 Private Bag X15 Somerset West

7129

Sidala Energy Solutions (Pty) Ltd is proposing the construction of a hydroelectric power scheme, to be located on the Orange River between farms, Remainder of Tullochgorum 158 and Kameeldrift 285, Siyancuma Local Municipality, Northern Cape Province.

van Ryneveld, K. September 2013. *P1 AIA - North Hydroelectric Power Site, Orange River, Siyancuma Municipality, NC.*

Rossouw, L. September 2013. P1 PIA - North & South Hydroelectric Power Sites, Orange River, NC.

Two sites, North Site and South Site, have been identified with the potential to generate 40MW of power along the Orange River. It is intended that the flows released from the Vanderkloof Dam will be utilised to generate power by moving through a proposed hydro-electric facility. the above studies were submitted in support of the proposed development of a hydro-electric facility at the North Site.

The proposed facility will comprise of a weir in the river, a small dam, a short canal with headrace, powerhouse and tailrace, as well as a proposed access road and a 132kV power line to feed-in to the National Grid.

The submitted AIA only assessed the approximately 50ha footprint of the proposed development area, and excluded an assessment of the proposed access road, 132kV power line and the inundation area. The AIA identified a few MSA and LSA lithic artefacts, however these were mostly out of context.

The AIA identified two sites. NHS1 describes two rectangular stone built livestock enclosures situated approximately 80m east of the expected maximum inundation level. This resource was determined to have low heritage significance. NHS2 describes an area on higher ground with an increased artefact density. Construction and inundation levels are likely to impact on a portion of the area around NHS2. This resource was determined to have moderate heritage significance and requires mitigatory intervention.

Insufficient reason is provided as to why the submitted AIA did not assess impacts of the proposed development of the access road, the 132kV power line and the inundation area. As such, the AIA is considered incomplete. In addition, the AIA recommends that a survey for rock art be completed on the property. Rock art may be impacted by the proposed development and as such, this survey for rock art should have been completed as part of the AIA.



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an agency of the Department of Arts and Culture

According to the submitted PIA, the affected areas are underlain by Precambrian Ventersdorp Supergroup lavas. These are unconformably overlain by Dwyka Group tillites of the Mbizane Formation. Localised outcrops of the Early Permian Prince Albert Formation Formation mudrocks have been mapped on the western site of the river. North Site is underlain by Allanridge Formation lavas. The PIA identified no alluvial deposits within the demarcated footprint area. According to the PIA, the proposed powerline options traverse unfossiliferous glacial tillites. As such, the proposed development is unlikely to impact on significant palaeontological resources.

Interim Comment

Based on the submitted information, SAHRA is unable to issue a Final Comment on the proposed development as the alternatives proposed for the 132kV powerline and the proposed access road have not been assessed for impact to archaeological resources. As such, SAHRA requires that;

- The AIA be updated to include an assessment of the proposed alternatives for the 132kV powerline and for the proposed access road for impact to heritage resources other than palaeontology. In addition, this updated AIA must include evidence of the recommended rock art survey.
- Site NHS2 must be mitigated through accurate recording and sampling as recommended in the submitted heritage assessment. A permit in terms of Section 35 of the NHRA is required before the sampling can take place.
- 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

Jenna Lavin Heritage Officer

South African Heritage Resources Agency



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Colette Scheermeyer SAHRA Head Archaeologist South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/127659

Edit view (DEA, Ref: 14/12/16/3/3/2/507)

