Our Ref: 10852



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Final Comment

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

Attention: Ledjadja Coal (Pty) Ltd

P.O. Box 5384 Rietvalleirand 0174

Environmental Authorisation Process in support of the Ledjadja Coal Borrow Pits Mining Permit Applications

Ledjadja Coal (Pty) Ltd is proposing to mine aggregate sand from five borrow pits to supply construction sand for the approved Boikarabelo Mine infrastructure development plans (the railway line and road diversion). They will be located outside the existing Boikarabelo Coal Mine mine right area, on the farms Bitterfontein 272 LQ, Kamiesbult 291 LQ, Looplaagte 302 LQ; and Vlughtkraal 273 LQ in Lephalale Local Municipality of Limpopo Province. The total extents of the combined borrow pits will amount 20 hectares.

Digby Wells Environmental (Pty) Ltd have been appointed by Ledjadja Coal (Pty) Ltd to conduct an Basic Assessment process in support of an Environmental Authorisation and Mine Right, in terms of the National Environmental Management Act, 107 of 1998, as amended (NEMA) and section 22 of the Minerals and Petroleum Resources Development Act, 28 of 2002 (MPRDA), as amended. The assessment of heritage resources was conducted by their in house specialist and compiled into a Heritage Basic Assessment report with an assessment of palaeontological resources. The report has been submitted to SAHRA, in terms of section 38 (8) of the National Heritage Resources Act, 25 of 1999 (NHRA).

Du Piesanie, J. March 2017. Environmental Authorisation Process for the Establishment of Five Borrow Pits near Lephalale, Limpopo Province Heritage Basic Assessment Report.

The author undertook a field based assessment of the development area to determine whether potential heritage resources will be impacted by the proposed development. Four sites were identified during the field investigation, of which two of the sites (SA001 and SA002) are low density surface scatters of undiagnostic MSA stone tool flakes. One site (SA003) is a single isolated undiagnostic MSA stone flake and the fourth site (FC001) is a single isolated undiagnostic potsherd. Sites SA001; SA002 and FC001 will be directly impacts by borrow pit BP5 however, since the significance of these finds is low no further mitigation measures are recommended. Site SA003 will be directly impacted by borrow pit BRD 3 however, since the significance of

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these finds is low no further mitigation measures are recommended.

Additional sites which were first recorded by Witwatersrand archaeology department were found very close to some of the proposed borrow pit. The first site is (2327/RES901/009), a well preserved high density MSA stone tool site and is listed as being of medium cultural significance. The stone tool site is associated with a natural seep located within 100m of borrow pit BP 5. The other two sites with site numbers from the Witwatersrand archaeology database are 2327CA53; 2327CA54, they are MSA stone tool sites located just outside Borrow pit BRD 3 with a low cultural significance. They will be indirectly impacted as they are less than 100m away from the borrow pit and the author recommends no further mitigation for the latter two sites.

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The author recommends that before the mining of borrow pit 5 on farm Bitterfontein 272 LQ, the site (2327/RES901/009) must be mitigated. A section 35 permit needs to be applied for, to SAHRA by an archaeologist on behalf of the applicant, before mitigation may proceed.

Subsequent to SAHRA interim comments and letters from 31 July 2017, 18 September 2017, 21 December 2017 and 16 March 2018, respectively, a field-based PIA was submitted.

Bamford, M. 2018. Palaeontological Impact Assessment for the proposed borrow pits for Ledjadja Coal Mine, Limpopo Province: Site visit.

A field survey revealed that the proposed area is underlain by Quaternary Kalahari Sands and aeolian sands of the Clarens Formation, which is devoid of fossils in this region. Karoo-aged potentially fossiliferous deposits only occur deep below the surface, known as bore-hole cores only, and will not be impacted. There is no chance of finding fossils in the proposed borrow pit sites as these will only impact Kalahari sands, gravels, calcrete and ferricrete.

Final Comment

The SAHRA Archaeology, Palaeontology and Meteorites (APM) Unit accepts the field-based PIA and HBAR reports and recommendations therein. The following conditions must be included in the EMPr for implementation:

- A Fossil Chance Finds Procedure should be included in the EMPr for implementation.

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- The site RES901/009 occurs within a 100 m buffer from the development footprint of BP 5 on Bitterfontein 272 LQ. To mitigate against any potential negative impacts to this site, the following specific recommendations are made:
- A qualified and registered archaeologist must undertake surface sampling of the site with the necessary permits required in terms of Section 35 of the NHRA and Chapter III of GNR 548 prior to any earth moving activities associated with BP 5:
- A Watching Brief by qualified archaeologist must be undertaken during the establishment of BP 5 to record and collect any exposed lithic material to preserve the site through record;
- In the event that fossils are uncovered during construction then construction must cease within the immediate vicinity, a buffer of 30 m must be established and a palaeontologist called in to inspect the finds. The palaeontologist must obtain a section 35(4) permit in terms of NHRA and Chapter IV NHRA Regulations, before any fossils are collected.
- If there are any new heritages resources are discovered during construction and operation phases of the proposed development, then a professional archaeologist or palaeontologist, depending on the nature of the finds, must be contracted as soon as possible to inspect the findings at the expense of the developer.
- If the newly discovered heritage resources prove to be of archaeological or palaeontological significance, a Phase 2 rescue operation may be required at the expense of the developer. Mitigation will only be carried out after the archaeologist or palaeontologist obtains a permit in terms of section 35 of the NHRA (Act 25 of 1999). You may contact SAHRA APM Unit for further details: (Nokukhanya Khumalo/Phillip Hine 021 202 8652).
- If any unmarked human burials are uncovered and the archaeologist called in to inspect the finds and/or the police find them to be heritage graves then mitigation may be necessary and the SAHRA Burial Grounds and Graves (BGG) Unit must be contacted for processes to follow (Mimi Seetelo 012 320 8490).

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

Yours faithfully

Ledjadja Borrow Pit HBAR

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Nokukhanya Khumalo Heritage Officer

South African Heritage Resources Agency

Phillip Hine

Acting Manager: Archaeology, Palaeontology and Meteorites Unit

South African Heritage Resources Agency

ADMIN:

Direct URL to case: http://www.sahra.org.za/node/396894

(, Ref:)

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.