REF: 369HIA

13 February 2019

Att: Mr Andrew Salomon

Archaeological Heritage Impact Assessor South African Heritage Resources Agency PO Box 4637 Cape Town 8000

By email: asalomon@sahra.org.za

Dear Mr Salomon,

REQUEST FOR EXEMPTION FROM A HERITAGE IMPACT STUDY: MAMATWAN MINE WASTE ROCK DUMP EXTENSION, HOTAZEL, JOE MOROLONG LOCAL MUNICIPALITY, NORTHERN CAPE PROVINCE.

1 INTRODUCTION

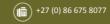
This letter constitutes a notification of intention to extend a mine waste rock dump at the Mamatwan Mine, Hotazel, Northern Cape Province.

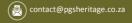
PGS Heritage has been contacted to evaluate the possible heritage impacts by the proposed waste rock dump extension and determine if a heritage impact assessment will be required.

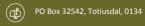
2 PROJECT DESCRIPTION

SLR Consulting (Pty) Ltd have been appointed by South32: Hotazel Manganese Mines (Pty) Ltd to conduct an EIA for their proposal to extend an existing waste rock dump to join with the neighboring waste rock dump of Tshipi Borwa Mine.









3 DESCRIPTION OF THE RECEIVING ENVIRONMENT

The study area is situated within a rural area, specifically designated as a mining area, on portion 0 of the farm Sinterfontein 748; portion 4 of the farm Adams 328; portions 5 & 9 of the farm Goold 329; portions 2, 3 & 19 of the farm Mamatwan; and portions 0 & 3 of the farm Moab. The proposed waste rock dump extension will be approximately 21km south of Hotazel, 37km north of Kathu and 56km west of Kuruman (**Figure 1**). The study area has been heavily disturbed due to the encroachment of both waste rock dumps on either side however, it does seem like the middle ground of the study area has also been disturbed by various forms of groundworks over the years (**Figure 2 & Figure 3**).

4 HERITAGE POTENTIAL

The site is heavily disturbed due to waste rock dumping and general mining activities in the area. Referring to **Figure 5**, **Figure 6 & Figure 7**, one can see that the area where the proposed waste rock dump extension will fall, remained undeveloped until at least the early 2000s with no indication of prior structural features. After which time, the area experienced intense development for mining purposes.

No historic, Iron Age or Stone Age heritage sites were noted during the site visit undertaken on 7th February 2019.

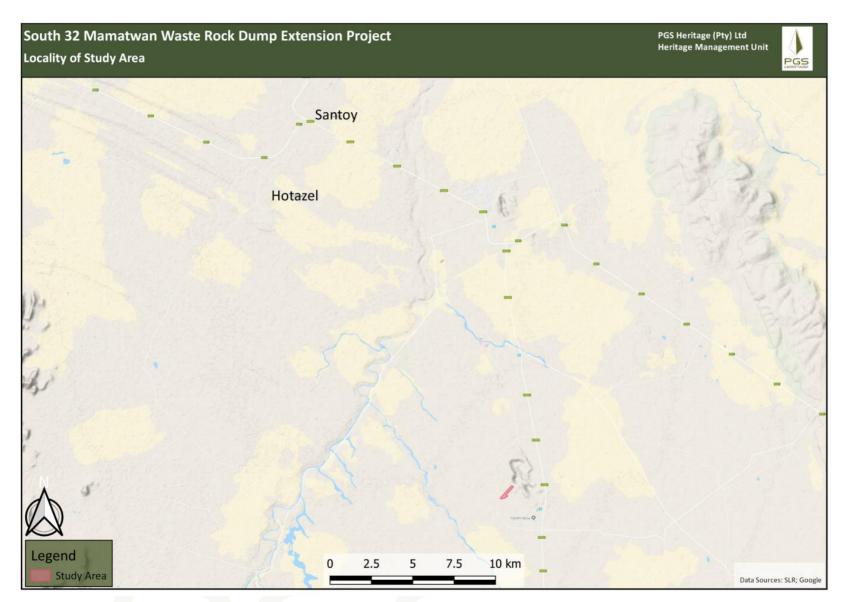


Figure 1 – Locality of study area



Figure 2 – View of remaining area between the two waste rock dumps, take note how disturbed the corridor is



Figure 3 – View of the current Mamatwan Waste Rock Dump in the background, with the small portion of 'undisturbed' study area in the foreground



Figure 4 – Track Logs from the site visit undertaken on 7th February 2019 and legacy track logs from a previous survey undertaken by PGS Heritage

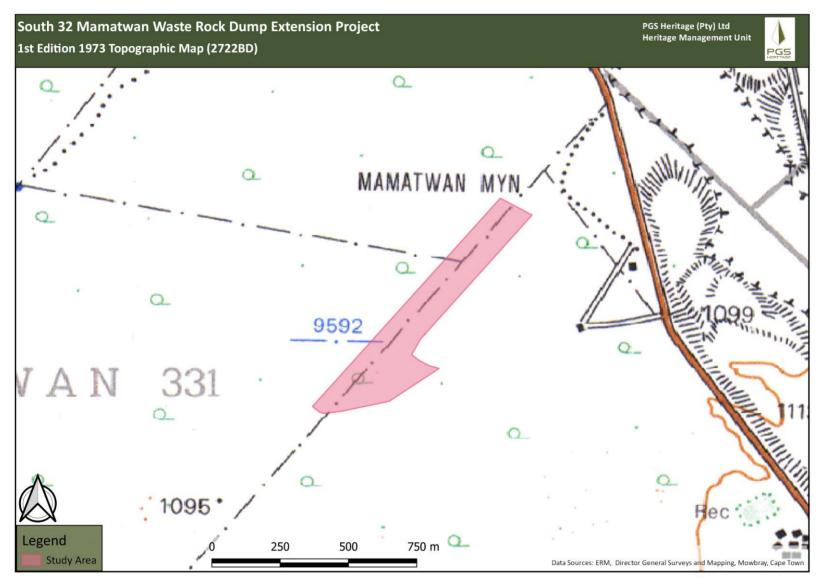


Figure 5 – 1st Edition 1973 Topographic Map (2722BD)

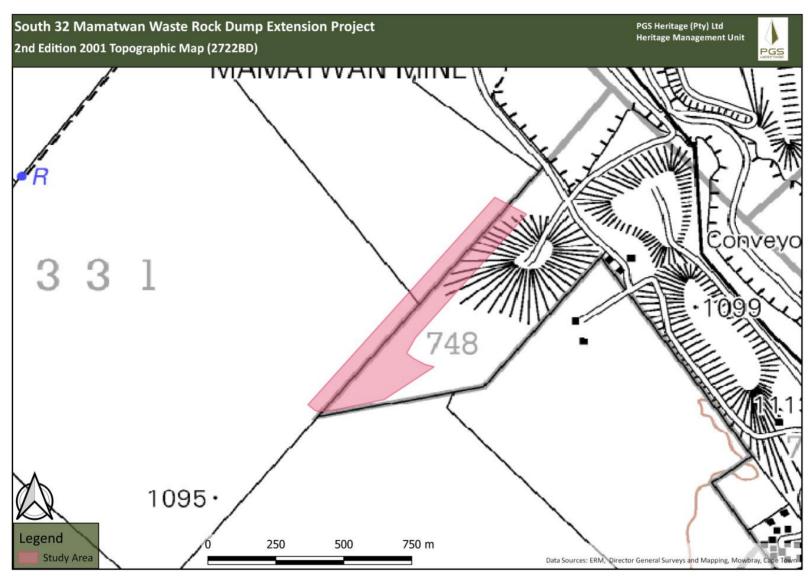


Figure 6 – 2nd Edition 2001 Topographic Map (2722BD)

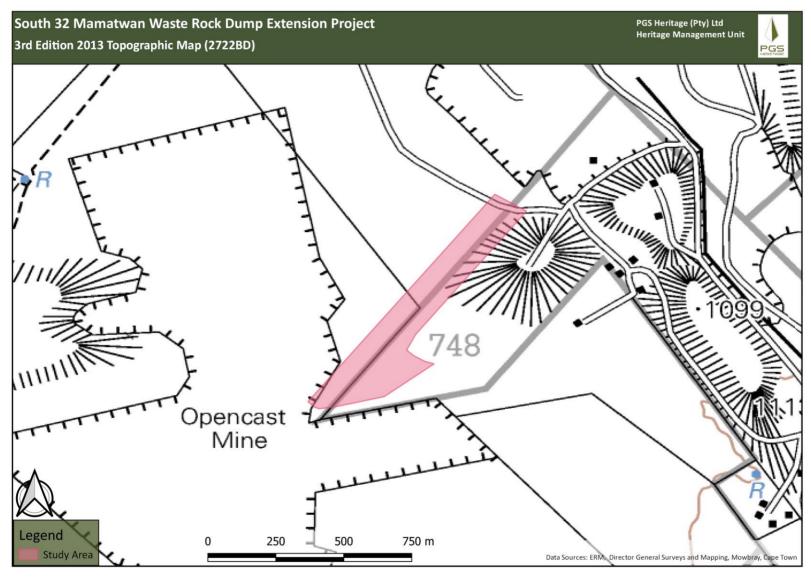


Figure 7 – 3rd Edition 2013 Topographic Map (2722BD).

5 PALAEONTOLOGY

A palaeontological desktop study, analysing the underlying geology of the study area, had been completed in fulfilment of a previous HIA for the neighbouring Tshipi Borwa waste rock dump. It read:

"In Palaeontological terms the impact significance is rated as low. The proposed development is thus unlikely to pose a substantial threat to local fossil heritage. However, should fossil remains be discovered during any phase of construction, either on the surface or exposed by fresh excavations, the Environmental Control Officer (ECO) responsible for these developments should be alerted immediately. Such discoveries ought to be protected (preferably in situ) and the ECO should alert SAHRA (South African Heritage Research Agency) so that appropriate mitigation (e.g. recording, sampling or collection) can be taken by a professional palaeontologist."

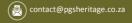
Considering that the present study area falls within the study area referred to in that report, it is recommended that no further palaeontological studies will be required.

For further information, please refer to "SMEYATSKY, I. 2018. Tshipi Borwa Mine Waste Rock Dump Project, on the Remaining Extent of Portion 8 & Portions 16-18 of the Farm Mamatwan 331 and the Remaining Extent of the Farm Moab 700, John Taolo Gaetsewe District Municipality, Northern Cape Province. *PGS Heritage Pty (Ltd).*"











6 CONCLUSIONS AND RECOMMENDATIONS

With regard to the proposed process, the following recommendations are made:

- No further heritage impact assessment of the study area is required.
- In the unlikely event of any unmarked human burials, burial pits, potsherds or stone
 tools being uncovered during earthworks for the proposed development, these must
 be reported immediately to the South African Heritage Resources Agency Burials
 and Graves Unit (Mrs Thinghangwi Thivhase 012 320 8490 / 4968).

Should you have any queries, please contact Ilan Smeyatsky (email: ilan@pgsheritage.co.za; Tel: (012) 332 5305).

Yours Sincerely

Ilan Smeyatsky

Accredited Professional Archaeologist (ASAPA)

Archaeologist - PGS Heritage

6 June 2019

The South African Heritage Resources Agency

PO Box 4637

Cape Town

8001

Attention: Ms Natasha Higgitt

AN 18M WIDE (ON SURFACE) BOUNDARY IS LOCATED BETWEEN THE MMT AND THE TSHIPI BORWA MINE. TSHIPI AND MMT HAVE APPROVAL TO MINE THE 18M WIDE BOUNDARY PILLAR, ADDITIONAL CAPACITY IS REQUIRED TO STORE WASTE ROCK GENERATED AS PART OF MINING THE BOUNDARY PILLAR. TO CATER FOR THE ADDITIONAL STORAGE. IT IS PROPOSED THAT THE MAMATWAN SINTERFONTEIN AND THE TSHIPI EASTERN WASTE ROCK DUMPS ARE MERGED TO FILL THE VOID BETWEEN THE TWO DUMPS. MMT IS PROPOSING ON AMENDING THEIR APPROVED EMP TO CATER FOR THE MERGING OF THE **WASTE ROCK DUMPS.- CASE ID: 13652**

This letter refers to the interim comments (dated 31 May 2019) on our original exemption application dated 11 February 2019 refers.

The interim comments indicates, "The assessment of palaeontological resources referred to in the motivational letter was not accepted as part of the application the report was submitted to i.e. SAHRIS Case ID 12573."

In collaboration with our appointed palaeontologist, Mrs. Elize Butler, a palaeontological desktop study was done for the area the proposed application is situated one. This study:

Palaeontological Desktop Assessment for the Establishment of a Diesel Farm and a Haul Road for the Tshipi Borwa Mine Near Hotazel, in the John Toalo Gaetsewe District Municipality in the Northern Cape Province. CaseID: 10997

This study found that:

The site is completely underlain by the Late Caenozoic Kalahari Formation (Cretaceous to Tertiary). No literature record could be found of fossils from the Kalahari Formation close to Hotazel. Palaeontological evidence is restricted to a few pseudo-bone structures that are preserved in the limestone (Kudumane EIA 2010). No proof of any fossil material was collected from the rest of the Kalahari Formation.











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The proposed development is thus unlikely to pose a substantial threat to local fossil heritage. In Palaeontological terms the significance is rated as low to very low negative. Consequently, pending the discovery of significant new fossil material here, no further specialist studies are considered to be necessary.

The desktop study for the above mention development was conducted in February 2017. According to the Interim Comment of 6 October 2017, SAHRA requested an amendment to the Desktop Study to include an official Council of Geoscience map of the geology of the development area. Refer to Figure 1.

CONCLUSION

It is our considered opinion that findings of the desktop are still relevant and valid for the proposed consolidation of the two dumps for the application under Case ID: 13652.

Any further comments or enquires can be refer to Wouter Fourie on +2712 332 5305 or wouter@pgsheritage.co.za

Regards,

Wouter Fourie

Accredited Professional Heritage Practitioner

(APHP)

PGS Heritage Pty Ltd

Professional Palaeontologist

Banzai Environmental

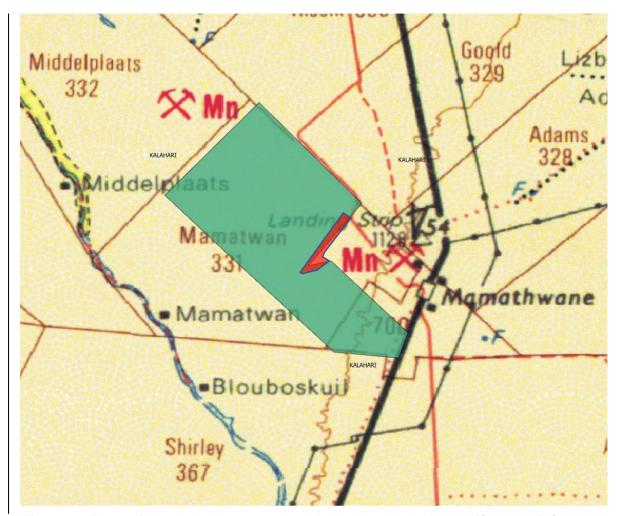


Figure 1. Extract from the 1: 250 000 2722 Kuruman geological map (Council of Geoscience, Pretoria). The surface geology of the proposed Tshipi é Ntle Manganese Mine (Case ID: 10997 – Green area). The area of the consolidation of the two dumps for the application under Case ID: 13652 is shown in red.