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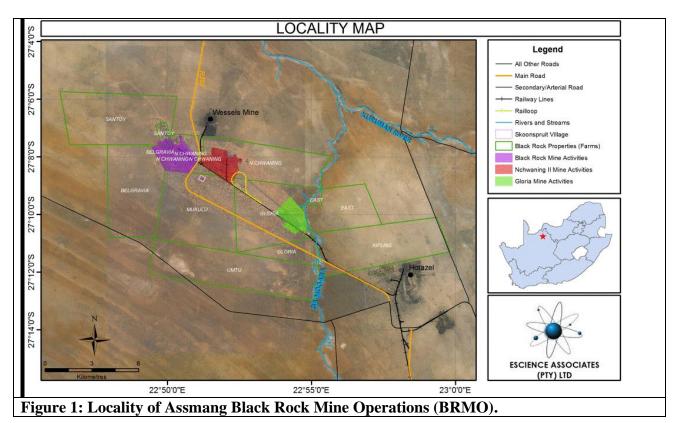
11 October 2022

To whom it may concern

LETTER FOR HIA EXEMPTION REQUEST: PROPOSED ASSSSMANG BLACK ROCK MINING OPERATIONS (BRMO) REHABILITATION OF AREA AT NCHWANING 3 MINE, NORTHERN CAPE PROVINCE

The above-mentioned project refers. Archaetnos CC was requested by E-Science Associated, on behalf of BRMO, to do an exemption request for the doing of an HIA for the project.

Assmang (Pty) Ltd mines manganese ore in the Black Rock area of the Kalahari, in the Northern Cape Province. The ore is mined from the Kalahari Manganese field. The Black Rock Mine Operations (BRMO) are approximately 80 kilometres north west of the town of Kuruman, and 12 kilometres north west of Hotazel. BRMO falls within the jurisdiction of the John Taolo Gaetsewe District Municipality (Figure 1).



The operations consist in the main of 3 mines and ancillary activities and developments related thereto. The three mines are:

- o Black Rock mine
- o Gloria mine, and
- Nchwaning mine

Black Rock mine consists mainly of supporting and ancillary services for the active mining and ore processing facilities at the Gloria and Nchwaning mines. Operations at Gloria were commissioned in 1975. Gloria complex is comprised of several mining and mining related activities. Operations at Nchwaning II were first commissioned in 1981. The Nchwaning II complex is comprised of several mining and mining related activities. Surface operations at Nchwaning III occur within the Black Rock operations.

Project proposal:

BRMO proposes to rehabilitate an area previously used as an ore plant at Nchwaning 3 Mine. The area is approximately 4 ha in size (Figure 2-3).

For this an HIA is needed, but since the area is entirely disturbed by past mining and infrastructure, it is believed that the project qualifies to be exempted from doing an HIA. Therefore, this exemption request was prepared.



Figure 2: Location of the study area at the BRMO (red rectangle).



Figure 3: Detailed view of the site indicating past disturbance.

Site study:

The site was physically visited to determine the nature thereof (Figure 4). It should also be noted that Archaetnos has done extensive surveys over the last 10 years in the Hotazel area, including some studies at BRMO and is therefore very familiar with the area. Although some Stone Age sites and two cemeteries were identified, these are outside of the perimeter of the study area.

A number of structures were identified during the site visit. These are all associated with the mine at Nchwaning. However, since the Nchwaning Mine only started operations in 1981, these structures are younger than 60 years of age.

It therefore is my opinion that the project may be exempted from doing a Heritage Impact Assessment (HIA). The following is applicable:

- The proposed development is within an area already entirely disturbed (Figure 5-6)
- Various HIA's was conducted between 2009 and 2022 in the wider area and although sites were identified these are not to be impacted on.
- There are no natural vegetation on the site.
- All buildings and structures on site are less than 60 years of age (Figure 7-21).



Figure 4: Track route made during site visit.



Figure 5: General view of the study area showing temporary structures.



Figure 6: General view of the study area showing temporary structures.



Figure 7: Another view of the study area.



Figure 8: Mining infrastructure in the study area.



Figure 9: Another structure in the study area.



Figure 10: Mining feature in the study area.



Figure 11: Brick built structure in the study area.



Figure 12: Old loading bay in the study area.



Figure 13: Old shoot in the study area.



Figure 14: Another view of the indicated shoot in the study area.



Figure 15: Old reservoirs in the study area.



Figure 16: Building, probably used as site office, when the plans was in operation.



Figure 17: Building used for power generation when the plant was in operation.



Figure 18: Another example of mining infrastructure in the study area.



Figure 19: Side view of the above structure.



Figure 20: Section of a bridge in the study area.



Figure 21: Another old mining building in the study area.

Due to the mentioned factors, the chances therefore of finding any heritage related features are indeed extremely slim. It is therefore believed that an additional Heritage Impact Assessment

(HIA) is not needed for this project and any of the alternatives can be used. This letter serves as an exemption request to the relevant heritage authority.

The developer should however note that due to the nature of archaeological material, such sites, objects or features, as well as graves and burials may be uncovered during construction activities on site. In such a case work should cease immediately and an archaeologist should be contacted as a matter of urgency to assess such occurrences.

Recommendation:

That the development be exempted from doing an HIA.

I trust that you will find this in order.

Yours faithfully

Prof AC van Vollenhoven: Director

References:

Archaetnos database.

Kruger, N. 2014. Sishen Iron Ore Mine: Stormwater infrastructure for the Sishen Mine, John Taolo Gaetsewe District Municipality, Northern Cape Province. Archaeological Impact Assessment. (Unpublished report, Pretoria, AGES).

Kruger, N. 2014. Sishen Iron Ore Company: proposed Sekgame Electricity Infrastructure Expansion Project on the farm Sekgame 461, Sishen Mine, Northern Cape Province. Archaeological Impact Assessment (Unpublished report, Exigo, Pretoria.)

Küsel, U., Van der Ryst, M. & Küsel, S. 2009. Cultural Heritage Impact Assessment of Manganese Mining Areas on the farms Belgravia 264, Santoy 230, Gloria 226 and Nchwaning 267, at Black Rock, North of Kuruman, Kgalagadi District Municipality Northern Cape Province. Unpublished Report, African Heritage Consultants.

Pelser, A.J. & Van Vollenhoven, A.C. 2010. A report on an archaeological impact assessment (AIA) for proposed mining operations on the remainder of the farm Paling 434, Hay magisterial district, Northern Cape. Unpublished report, Wonderboompoort, Archaetnos.

SAHRA's SAHRIS database.

Van Vollenhoven, A.C. 2012. A report on a heritage impact assessment for the proposed Main Street 778 (Pty) Ltd mining right application close to Hotazel, Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).

Van Vollenhoven, A.C. 2016. A report on a heritage impact assessment for the proposed Mukulu Manganese Mine close to Hotazel, Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).

Van Vollenhoven, A.C. 2017. A report on a walk down archaeological impact assessment for the proposed construction of 132kv distribution lines from Ferrum substation to the

- proposed new Sekgame switching station, Gamagara Local Municipality, Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).
- Van Vollenhoven, A.C. 2019a. A report on the assessment of Stone Age sites at the Black Rock Mining Operations, Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).
- Van Vollenhoven, A.C. 2019b. A cultural heritage management plan for the Black Rock Koppie and other heritage sites at the Black Rock Mining Operations, Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).
- Van Vollenhoven, A.C. 2020. Final report on a Phase II archaeological mitigation of Stone Age artefacts at Stone Age site number 1, Black Rock Mining Operations, Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).
- Van Vollenhoven, A.C. & Collins, Z. 2015. A report on a heritage impact assessment for the proposed Main Street 778 (Pty) Ltd mining right application close to Hotazel, Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).
- Van Vollenhoven, A.C. & Smit, J. 2019. A report on a heritage impact assessment for the proposed new Waste Treatment Water Works (WTWW) at the Assmang Black Rock Mining Operations (BRMO), Northern Cape Province. (Unpublished report, Groenkloof, Archaetnos).