



## Final Comment

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

Attention: Ms Marietjie Eksteen  
Jacana Environmental cc  
P.O. Box 31675  
Superbia  
0759

### PROPOSED MAKHADO COLLIERY

Roodt, F., April 2012, Proposedmakhado Colliery Integrated Report For The: 1. Opencast Mine& Infrastructure 2. Bulk Power Supply 3. Off Site Transport – Railway Line & Siding Vhembe District Municipality Limpopo Province

Coal of Africa (CoAL) is proposing the establishment of the Makhado Colliery on several farms north of Makhado, Limpopo Province. The project will occur on the farms Windhoek 649 MS, Tanga 648 MS, Fripp 645 MS, Lukin 643 MS, Boas 642 MS and Salaita 188 MT. Associated infrastructure includes the development of bulk electricity supply to the Paradise substation at Ha-Rabali and a new railway line to Huntleigh near Mopane.

Three open cast pits will be mined, East, West and Central Pits. The East Pit will be 500 ha, the Central Pit 250 ha and the West Pit 280 ha. The specialist team noted the following limitations during the survey:

- Dense vegetation limiting visibility in some areas.
- Dangerous game such as lions, which prohibited access to the lion camp on Salaita.
- Access denied on properties for the power line and railway line surveys such as on Boas and Rissik

A significant number of heritage resources were identified although not all of these can be defined as sites. Within the mining area, 127 heritage locations were identified. These range from archaeological, historical and cemeteries.

#### *Archaeological*

Iron Age material were identified at locations, 2, 3, 6, 5, 8, 9, 10, 11, 12, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38, 39, 41, 42, 43, 44, 45, 46, 47, 50, 51, 52, 53, 54, 55, 56, 59, 64, 70, 71, 73, 74, 75, 78, 79, 80, 82, 83, 85, 91, 92, 93, 94, 95, 96, 99, 100, 101, 103, 105, 106, 109, 110, 111, 112, 113, 118, 119, 121, 123, 124, and 125.

Stone age material were identified at locations, 7, 21, 25, 37, 54, 55, 76, 77, 81, 84, 90, 102, 104, 108, 114,





---

115, 116, 117, 120, 122, 126, 127.

#### *Historical finds*

A number of historical finds were recorded in the area earmarked for mining. These include GPS locations 1, 4, 60, 62, 68, 69, 72, 86, 89. Some of the sites are fountains which hold significance to the local community. The author indicated that there may be a possibility of finding graves at sites 1 and 4.

#### *Impact on Heritage Resources*

The following heritage resources will be directly impacted by the proposed mining development: 4, 13a, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 51, 53, 61, 62, 63, 64, 66, 67, 68, 69, 70, 71, 72, 75, 76, 85, 80, 81, 105, 111, 114, 116.

#### **Decision:**

A number of locations containing heritage resources were identified in the project area, however not all heritage resources identified are regarded as sites by the specialist. (Since you mentioned this above, I would delete his first sentence). The author requested Phase 1b test excavations at a number of locations to determine their archaeological significance. SAHRA APM Unit supports the general recommendations contained within the specialist report. However, the following site specific recommendations must be implemented:

#### *Open Cast Areas/Stockpiles*

#### *Cemeteries/Graves*

Seventeen sites indicating the presence of cemeteries/graves were identified during the survey. A number of these sites needs further investigation to verify if they are indeed graves. Sites 1, 14, 15, 16, 40 are not currently going to be affected by mining. However, the recommendation for grave verification if mining will have an impact on the site is supported. In the meantime the sites will need to be clearly marked on all construction maps, and contractors informed about the sensitivity of heritage resources and that it is legally protected.

The graves identified at Sites 62, 65, 66, and 67 will be impacted by the proposed mining activities and conservation will not be possible. Relocation is dependant on the results of the mandatory 60-day public participation process and a permit in terms of section 36 of the NHRA (Act no. 25 of 1999) will need to be sought from SAHRA Burial Grounds and Graves Unit before relocation may proceed.

The following graves must be retained in situ, Site 48, 49, 57, 58, 87, and 88. For this purpose a proper fence with access gates must be erected around them to allow visits from relatives and friends. The graves must be





restored where these are in a poor state of preservation. The perimeter of the fence must be at least two meters from the graves. An appropriate buffer of at least 20-15 meters must be maintained where no development is allowed. Since this is a mining operation the developer must ensure that blasting activities will not have a negative impact on graves.

Site 13a and 13b is a formal graveyard of the Fripp village. SAHRA supports the recommendation of author that the full consultation process must be undertaken if this cemetery is affected by the development in the future. However, it is strongly recommended that any development that might have an impact on the cemetery be avoided.

A possible grave was identified at Site 8 which is related to material culture dating to the Iron Age. It is recommended that the area be temporarily fenced and avoided during mining.

All cemeteries and areas of possible graves that will not be relocated will need to be marked on construction maps and the ECO and contractors need to be aware about the sensitivity of heritage resources that is legally protected under the NHRA.

#### Stone Age Material

The author recommended that Sites 21, 37, 76, 81, 102, 114, 116, and 127 which contains Stone Age material must be assessed by a Stone Age specialist. SAHRA supports this recommendation. However, it would have been ideal if the results of the assessment formed part of this report. As such SAHRA will make further recommendations upon submission of the assessment report.

The following sites/locations with Stone Age material will not be affected by the current mining activities, Sites 7, 54, 77, 84a & 84b, 90, 104, 107, 117, 122, and 127. Site 55 is an overhang with Iron Age and Stone Age material; measures will need to be put in place to protect the site. All these sites will need to be properly assessed by an experienced Stone Age archaeologist if they are threatened by mining operations in the future. Currently, their location will need to be recorded and the ECO and contractors notified about their presence. These areas should be avoided as far as possible to minimise impacts on them.

#### Iron Age

A number of Iron Age sites were identified in areas that will be impacted by the proposed mine. The author requested further assessments on a number of sites in the form of Phase 1b assessments. SAHRA supports this recommendation which will provide better descriptions of Sites 18, 20, 21, 23, 24, 25, 26, 27, 30, 32, 33, 38, 39, 42, 43, 47, 53, 64, 70, 71, 80, 85 and 111. SAHRA will make further recommendations regarding these sites upon receipt of the Phase 1b Assessment Report.

Phase 2 Impact Assessments is supported for Sites 19, 22, 34, 35, 36, 41, 68, 75 and 105. The Phase 2 will need to include detailed sites descriptions, scaled drawings and photographic record. The specialist will require a permit in terms of section 35 of the NHRA (Act no. 25 of 1999). SAHRA will make further



The South African Heritage Resources Agency

Street Address: 111 Harrington Street, Cape Town 8000 \* Postal Address: PO Box 4637, Cape Town 8000  
\* Tel: +27 21 462 4502 \* Fax: +27 21 462 4509 \* Web: <http://www.sahra.org.za>



Enquiries: Phillip Hine  
Tel: 021 462 4502  
Email: phine@sahra.org.za  
CaseID: 95

Date: Tuesday September 04, 2012

Page No: 4

---

recommendations upon receipt of the Phase 2 mitigation report.

#### Bulk 22Kv Power Line

Please refer to the recommendation made in the Review Comment and permit issued on the 23rd of August 2012 by SAHRA for the test excavation of Site 6 in the report for the Makhado Paradise power line.

#### Railway Line and Siding

SAHRA recommends that the identified Stone Age material/sites (1, 2, and 3, in section 7.2 of the report) be assessed by a qualified Stone Age archaeologist. SAHRA APM Unit will make further recommendations regarding these once a report has been submitted to the SAHRA APM Unit.

The farm school ruin will not be affected by the proposed railway. However, Decisions in terms of Built Environment (structures older than 60 years) must be referred to the Limpopo Provincial Heritage Authority (Mr. Donald Lithole, [litholek@sac.limpopo.gov.za](mailto:litholek@sac.limpopo.gov.za)).

A number of Iron Age sites, 91, 92, 93, 94, 95, 96, and 98 (section 7.4 of the report) may also be affected. The author requested monitoring for Sites 92 and 95 during construction. The author recommended Phase 2 assessments on the Iron Age site 91 and 98 if they are going to be affected by the proposed mine. Sites 93, 94 and 96 will not be affected by the mine and no further action is required. These recommendations are supported.

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

Yours faithfully

---

Phillip Hine  
Heritage Officer

---

Colette Scheermeyer  
SAHRA Head Archaeologist





Enquiries: Phillip Hine  
Tel: 021 462 4502  
Email: phine@sahra.org.za  
CaseID: 95

Date: Tuesday September 04, 2012

Page No: 5

---

South African Heritage Resources Agency

---

**ADMIN:**  
(DMR, 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.



The South African Heritage Resources Agency

Street Address: 111 Harrington Street, Cape Town 8000 \* Postal Address: PO Box 4637, Cape Town 8000  
\* Tel: +27 21 462 4502 \* Fax: +27 21 462 4509 \* Web: <http://www.sahra.org.za>