13 March 2019

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Pages: 9

ARCHAEOLOGICAL MITIGATION OF SITES TCHR 2 AND TCHR 3 LOCATED ON A PORTION OF THE FARM GOUDMYN 337 KT, STEELPOORT, FETAKGOMO TUBATSE LOCAL MUNICIPALITY, SEKHUKHUNE DISTRICT MUNICIPALITY, LIMPOPO PROVINCE

#### 1. INTRODUCTION

PGS Heritage has been appointed by Tubatse Chrome (Pty) Ltd to undertake the mitigation of two archaeological sites (TCHR 2 & TCHR 3), which includes graves, located on a portion of the farm Goudmyn 337 KT in the Limpopo Province (refer Figures 1 & 2 for Locality Plans). This property is owned by Samancor Tubatse Ferrochrome (refer Appendix A for Landowner Consent).

During construction activities undertaken by Tubatse Chrome (Pty) Ltd, skeletal remains were accidentally uncovered first at site TCHR 3, and subsequently also at TCHR 2. During subsequent site visits undertaken by PGS Heritage, it was found that human skeletal material was uncovered at site TCHR 3 in association with Iron Age ceramics. Furthermore, stonewalling was also abserved in close proximity to where the skeletal material was uncovered (see below for a more detailed site description). At site TCHR 2, the presence of the skeletal material was only identified once soil which had been mechanically excavated from the site had been discarded across a number of soil heaps. Before the discovery of the skeletal material, these soil heaps were discarded across a section of the proposed development footprint in an area referred to as site TCHR 1. Again, the skeletal material from site TCHR 2 was found with Iron Age ceramics.

The proposal is for sites TCHR 2 and TCHR 3 to be archaeologically mitigated by way of test excavations and for the skeletal material at TCHR 3 to be archaeologically excavated. Subsequently, the human remains previously recovered from site TCHR 2 (by way of archaeological screening of soil heaps at TCHR 1) as well as all human remains excavated from TCHR 3 will be reburied on the same farm. Sites TCHR 2 and TCHR 3 are both located within the development footprint of the





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construction activities undertaken by Tubatse Chrome (Pty) Ltd. Refer the locality plans below.

Once these sites had been archaeologically mitigated, destruction permits would be required from SAHRA to allow for the completion of the construction work.

Mosaic Funerals (MFG) will be responsible for the handling and reburial of the exhumed human remains. The reburial of skeletal material excavated from sites TCHR 2 and TCHR 3 is proposed to take place on the same farm (see details below).

### 2. BRIEF SITE DESCRIPTIONS

Three sites have been identified within the construction area, namely TCHR 1, TCHR 2 and TCHR 3. While this permit application deals with only sites TCHR 2 and TCHR 3, all three sites will be briefly discussed for contextual reasons.



Figure 1: Google Earth image providing a depiction of the distribution of sites TCHR 1, TCHR 2 and TCHR 3 within their wider surroundings. The positions of the town of Steelpoort and the Tubatse Ferrochrome Smelter are also shown.



Figure 2: Google Earth image providing a closer view of the distribution of the three sites.

# TCHR 1

TCHR 1A	TCHR 1B
S 24.749856	S 24.749139
E 30.189128	E 30.190008

TCHR 1 comprised a group of soil heaps which had been mechanically excavated from site TCHR 2. The presence of skeletal and cultural material in the soil from TCHR 2 was only identified once the soil had been deposited at TCHR 1. An archaeological permit was obtained from SAHRA to screen the

21 soil heaps located at the site (SAHRA Permit ID Number: 2806). While the permit report is still pending, it can be said that the screening of these soil heaps resulted in the identification of *inter alia* the following:

- human skeletal remains,
- a total of 125 potsherds (including a number of decorated fragments),
- one metal armband found wrapped around a human tibia,
- one Iron Age hoe, and
- a large number of animal bones.



Figure 3: One of the decorated potsherds from site TCHR 1. Scale in 1cm increments.



Figure 4: The Iron Age hoe from site TCHR 1.

Scale in 1cm increments.

The decorated potsherds from the site were identified as Kgopolwe ware (Van der Walt, personal communication). The Kgopolwe facies of the Kalundu Tradition has been dated to between AD 1030 – 1350 which falls within the Middle Iron Age period (Huffman, 2007).

Once the report is completed, no further site-specific mitigation measures would be required for TCHR 1. Mitigation measures are proposed for the site from where the material originated from, namely site TCHR 2 (see below).

# TCHR 2

S 24.749246 E 30.188254

TCHR 2 represents the site from where the soil and cultural material found at TCHR1 were mechanically excavated from by Tubatse Chrome (Pty) Ltd. The mining company was not aware that

an archaeological site was located here. As mentioned before, the presence of skeletal and cultural material in the soil from TCHR 2 was only identified once the soil had been deposited at TCHR 1.

Very little cultural material can still be seen on the surface of site TCHR 2. It seems likely that the archaeological deposit containing Kgopolwe pottery and human skeletal remains had almost entirely been removed from site TCHR 2 before their presence were identified in the soil heaps at TCHR 1. The mitigation measures proposed for site TCHR 2 would be aimed at confirming whether any intact and undisturbed archaeological deposit remains at the site.



Figure 5: General view of the surface of site TCHR 2 some time after the mechanical removal of soil from the site.



Figure 6: Another general view of the surface of site TCHR 2 some time after the mechanical removal of soil from the site.

# TCHR 3

TCHR 3A	TCHR 3B
S 24.753054	S 24.752527
E 30.188697	E 30.189176

A number of skeletal remains were accidentally uncovered at TCHR 3 by Tubatse Chrome (Pty) Ltd during construction activities. This was the first accidental discovery of skeletal material from the construction site. During the subsequent site visit by PGS Heritage, skeletal material from at least two individuals could be identified. This site where the human remains had been exposed by mechanical operations had some bones visible on the surface, while others had been covered by soil. The number and type of skeletal elements that were visible indicated that the remains could belong to at least two individuals. However, it is possible that this area could contain more than two sets of human remains. The remains were not buried very deep and were exposed during the mechanical stripping of topsoil at approximately 30 – 50cm. The construction activities had uncovered Iron Age pottery with the skeletal material. The shallow vertical placement of the burials as well as the associated Iron Age pottery suggest that these skeletons can be associated with the Iron Age.

A stonewalled site is located directly north of the area where human remains were uncovered. An assessment of the layout of the stonewalled site suggests that a Late Iron Age stonewalled site was likely located here. The layout of the stonewalling from the site include two parallel walled sections not unlike cattle tracks, as well as at least two stonewalled enclosures with attached walled sections. The stonewalling itself is not well preserved. Additionally, before the accidental discovery of the archaeological site, construction activities had disturbed presumably extensive sections of site almost on all of its sides. The poor preservation of the site may hinder the interpretation of the site.

On the north-eastern extreme of the site, in an area entirely enclosed by disturbance caused by the construction activities, what appears to be a collapsed oval structure with associated stones, were identified. A lower grinder was observed near the oval structure. The oval structure appears to have been a small oval-shaped stonewalled enclosure of which the walling had since largely collapsed. As the feature appears to have been a stonewalled enclosure associated with the Late Iron Age stonewalled site, it is not expected that a grave would be located here. This said, as part of the archaeological mitigation measures, this feature will also be excavated to absolutely confirm that no grave is located here.

Apart from the lower grinder observed near the oval stone enclosure, three other lower grinders and one upper grinder were also observed across the surface of the site. Archaeological deposits containing Iron Age pottery appears to have been disturbed in an area immediately south of the stonewalled site. With no archeological work yet undertaken at the site, no analysis of any pottery observed at site TCHR 3 had yet been done.

Three metal fragments, including a metal tin, were observed on the surface of the site. The presence of these more historic artefacts does not necessarily mean that the site was occupied during this more recent period. This is said as the site is located in an area containing vegetation, including trees. The shade from such trees may have been used during more recent times by for example people herding goats and cattle or more recently, construction workers. In fact, aerial photographs have revealed that nearby construction activities were already undertaken during the 1970s. The tangible evidence from the site, namely the potsherds uncovered by construction activities on its southern end as well as the general layout of the stonewalling, rather suggest that an Iron Age site was located here.

In an attempt to establish whether any historic to recent evidence for a site could be found, an assessment was made of the available historic topographical map sheets as well as older aerial photographs that are available. For this purpose, the First, Second and Third Editions of the 2430CC Topographical Map Sheet were obtained and studied. The First Edition was surveyed in 1963, the Second Edition in 1976 and the Third Edition in 1997. Not one of these maps depict any buildings or homesteads in proximity to site TCHR 3, with the nearest such homesteads depicted more than a kilometer from the present site. Similar results were found during the assessment of historic aerial photographs. Areal photographs taken in 1971, 1976, 1980, 1985 and 2002 were included in this assessment. Again, no homesteads are shown on any of these images within, or in proximity, to the site TCHR 3, with the nearest such homesteads depicted more than a kilometer from this site. The conclusion that can be drawn from this desktop study is that for at least the past 55 years no homesteads existed within or in close proximity to site TCHR 3. Additionally, the fact that no

evidence for such homesteads, or the remains of such homesteads, could be identified on the 1971 and 1976 aerial photographs, suggest that for even a longer period than the 55 years mentioned above, no homestead existed within or in close proximity to site TCHR 3.



Figure 7: General view of a section of the stonewalled site from TCHR 3 depicting what is believed to be a cattle track.



Figure 8: Another general view of the walling that is believed to form part of a cattle track at site TCHR 3.



Figure 9: General view of the site showing in the background on the right the area where human remains had been accidentally uncovered during construction activities. The start of the preserved stonewalled site can be seen in the middle left of this image.



Figure 10: The stone feature at TCHR 3 that is believed to be a small collapsed oval enclosure associated with the site. The lower grinder is visible in the foreground on the right.

### PROPOSED METHODOLOGY

# Proposed Methodology for Archaeological Mitigation at site TCHR 2

The methodology used for the archaeological mitigation of site TCHR 2, comprise the following:

The first step in the archaeological mitigation of the site will be to conduct a walkthrough
with the purpose of identifying and collecting all artefacts and related material which may

still be located on the site surface. This is to ensure that all artefacts exposed by construction activities are accounted for.

- A number of shovel test pits (STPs) will be excavated in various localities across the site. These STPs will be used to establish whether any archaeological deposit remain preserved at the site, and if so, what the depth of the cultural material located here is. Should it be required, some of the STPs may be expanded to Test Pits. The need for such Test Pits rather than STPs will be guided by the depth of cultural deposit, in situ features and the proper identification or recording of stratigraphy. All material excavated from the STPs and Test Pits will be archaeologically screened.
- Should the presence of undisturbed archaeological deposits be revealed during the
  excavation of the STPs and Test Pits, archaeological excavation of a number of Excavation
  Blocks or Excavation Trenches may be required. Excavations will be done in 10 cm spits or
  according to stratigraphy. All material excavated from the STPs and Test Pits will be
  archaeologically screened.
- All excavations, (STPs, Test Pits or Excavation Blocks) and features will be recorded on a site layout plan. The site layout will be mapped by using a Total Station.
- At the conclusion of the work at the site, all excavated pits will be back-filled.

# <u>Proposed Methodology for Archaeological Mitigation at site TCHR 3</u>

The methodology used for the archaeological mitigation of site TCHR 3, comprise the following:

- A number of shovel test pits (STPs) will be excavated in various localities across the site. These STPs will be used to establish whether any archaeological deposit remain preserved at the site, and if so, what the depth of the cultural material located here is. Should it be required, some of the STPs may be expanded to Test Pits. The need for such Test Pits rather than STPs will be guided by the depth of cultural deposit, in situ features and the proper identification or recording of stratigraphyShould the presence of undisturbed archaeological deposits be revealed during the excavation of the STPs and Test Pits, archaeological excavation of a number of Excavation Blocks or Excavation Trenches may be required. At least one of these Excavation Trences will be placed over the collapsed oval structure located on the north-eastern end of the site.
- It is expected that the excavation of the Excavation Blocks or Trenches will be undertaken by way of arbitrary spits of 10cm each, unless clear stratigraphic layers are discernible. All excavated soil will be archaeologically screened.
- Sorting will be done and retrieved artefacts and ecofacts will be bagged according to their type and provenience.
- All excavations, wether it be STPs, Test Pits or Excavation Blocks, will be recorded on a site layout plan. The site layout plan will be compiled by using a Total Station.

- At the conclusion of the work at the site, all excavated pits will be back-filled.
- Laboratory assessment and analysis of the excavated material will be done after the conclusion of the archaeological excavations. This include cleaning, recording and photographing of artefacts.

# Proposed Methodology for Exhumation of Graves

The scope of work is to exhume the skeletal material identified by PGS Heritage at site TCHR 3 and to relocate the burials from sites TCHR 1 and TCHR 3 to the chosen reburial site on the Tubatse Chrome property. The scope of work at TCHR 3 also entails extending the excavation work across a wider horizontal area to identify and exhume any presently unknown graves.

The methodology will comprise the following:

- The exhumation of the graves is scheduled according to a specific date.
- The graves will be dug by hand by manual labour until the first indications of cultural or human remains are observed.
- Exhumations will be conducted according to PGS standards and specifications; shoring and benching will take place where necessary especially where the soil texture seems to be prevalent for sidewall collapse. As the graves are located in very shallow positions, which is characteristic for Iron Age burials, shoring and benching may not be required.
- Once cultural or human remains are exposed, a specialist technician / archaeologists will clean the remains according to archaeological standards.
- Once cleaned, the remains will be photographed and fully documented.
- After documentation, the remains will be removed and assessed by a physical anthropologist.
- Once the assessment on a particular human skeleton has been completed, the human remains will be placed in an appropriate coffin provided by MFG.
- The excavated grave pits will be rehabilitated after the cultural and human remains have been removed and will include decontamination of grave pits and back-filling of top soil.
- Test excavations will be conducted in the area where the human remains were uncovered during construction activities. The purpose of these test excavations is not to specifically expose human remains, as this may cause damage to the grave, but to identify and locate graves by exposing the grave pit. The methodology to conduct test excavation in this context will be to carefully excavate the topsoil of the identified area to assess if the pit had been previously dug and back-filled. The exact location, extent and orientation of these possible pits can them be identified and assessed. This will be determined from the change / disturbance in the natural stratigraphy, as seen by the differing soil colour and textures.

 All exhumations will be done by hand (picks, shovels, trowels and brushes) and no heavy equipment will be used.

# **Proposed Place of Reburial**

Tubatse Chrome (Pty) Ltd has proposed two options located in proximity to sites TCHR 2 and TCHR 3 for the reburial of the graves from these two sites. Both proposed reburial options are located on the Remaining Extent of the Farm Goudmyn 337 KT. The coordinates for these two reburial options are provided below. Furthermore, the two reburial options are depicted on the map below as well. Due to the proximity of Proposed Reburial Option 2 to the existing graves at TCHR 3, it will be proposed to Tubatse Chrome (Pty) Ltd that this reburial option be used.

Option 1	Option 2
S 24.750750	S 24.753056
E 30.192722	E 30.189806

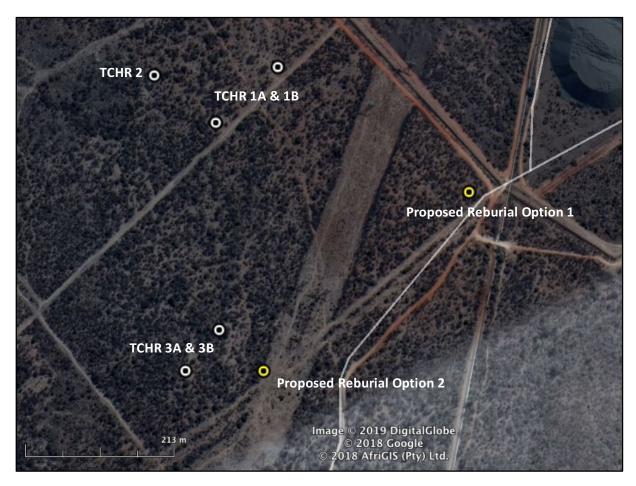


Figure 11: Google Earth image providing a depiction of the positions of the two reburial options proposed by Tubatse Chrome (Pty) Ltd. The position of these two burial positions are shown in relation to the position of sites TCHR 1, TCHR 2 and TCHR 3.

#### PERMITS AND PERMISSIONS

Since the graves are located inside an archaeological site, we are currently also in the process of applying for a permit from the following institutions:

The Sekhukhune District Health Municipality.

The South African Police Services (SAPS) were contacted by Tubatse Chrome (Pty) Ltd at the time that the first graves were originally accidentally unearthed. PGS Heritage (Pty) Ltd will also provide SAPS with a notification letter.

### STAKEHOLDER ENGAGEMENT

As indicated above, the human remains from both sites TCHR 1 and TCHR 3 are associated with archaeological sites and material. At site TCHR 1, the human remains were found in association with Iron Age pottery that has been identified as Kgopolwe ware which dates to be between AD 1030 and AD 1350 and which falls within the Middle Iron Age. The human remains from site TCHR 3 may very well be associated with the same period, although it is also located immediately adjacent to what appears to be a Late Iron Age stonewalled site. As a result, the human remains from both sites can be considered as archaeological graves. Therefore, no stakeholder engagement was undertaken.

To clarify matters we have allocated the affected graves to the following categories:

Graves older than 100 years (Section 35 of Act 25 of 1999):		
Graves older than 60 years (Section 36 of Act 25 of 1999):	None	
Graves of victims of conflict (Section 36 of Act 25 of 1999):	None	
Graves of individuals of royal decent (Section 36 of Act 25 of 1999):	None	
Graves younger than 60 years that are located outside a registered cemetery	None	
(Ordinance 7 of 1925, Section 36 of Act 25 of 1999, Ordinance 12 of 1980):	none	
Graves identified by the next of kin but of which the date of death is presently unknown	None	
Presently unknown graves/possible graves (Section 36 of Act 25 of 1999):	None	
Total	4	

#### **APPLICATION**

We hereby apply for permission to:

- Exhume and re-inter the remains from approximately three archaeological graves from site TCHR 3 as well as the re-internment of the remains from site TCHR 2. Since the remains from site TCHR 3 are located adjacent to an archaeological site, it is proposed that the remains would be reinterred back on the same property at one of two reburial options proposed by Tubatse Chrome (Pty) Ltd.
- Mitigate the archaeological sites at TCHR 2 and 3 according to the abovementionded mitigation.

Please do not hesitate to contact me if you need any additional information.

Yours sincerely,

Polke Birkholtz

Project Manager & Archaeologist

Tel: 012 332 5305 Cell: 082 717 6661

Jaco van der Walt

Archaeologist

Cell: 082 373 8491

APPENDIX A – Landowner Consent Letter

APPENDIX B – Undertaker Appointment Letter

# **APPENDIX A – Landowner Consent Letter**



## **Tubatse Ferrochrome**

A business unit of Samancor Chrome Limited

Registered Address: Block B, Cullinan Place, Cullinan Close Morningside, Sandton, 2196 PostNet Suite 803, Private Bag X9 Benmore; 2010 Telephone number: +27 (0) 11 245 1000 Facsimile number: +27 (0) 11 245 1200 www.Samancorc.com

Tubatse Ferrochrome

Address: R555, Main Road Steelpoort, 1133 Private Bag X504 Steelpoort, 1133 Telephone number: +27 (0) 13 230 8200 Facsimile number: +27 (0) 13 230 9401 www.Samancorcr.com

10 October 2018

To Whom It May Concern:

### LETTER OF PERMISSION FOR ARCHAEOLOGICAL SCREENING

On behalf of Samancor Chrome, the registered landowner of Goudmyn 337 KT potion 0, I hereby provide permission to PGS Heritage (Pty) Ltd to undertake archaeological screening activities on 15 soil heaps believed to contain human skeletal and cultural material. I hereby also provide permission for the human skeletal and cultural material recovered by this screening activity, to be stored in a safe locality on this property, until such time that the excavation of the archaeological graves has taken place.

Yours truly,

Johan Kleynhans

General Manager

# APPENDIX B – Undertaker Appointment Letter



CC 2009 / 112544 / 23 VAT NUMBER 4120255809

37 French Street, Ext 1, Witbank 1042 P.O. Box 150, Die Heuwel, eMalahleni 1042

Tell Nr. (013) 690-2081 Fax Nr: (013) 656-4270 Website: www.mfgr.co.za

Email: info@mfgr.co.za

24 Hour Emergency Number: 083 327 22 11

Health and Social Development Sekhukhune District Municipality Dilokong Hospital

22 January 2019

Dear Ms, B. Pilusa

### RELOCATION OF AFFECTED HUMAN REMAINS IN APPROXIMATELY 3 ARCHAEOLOGICAL GRAVES

I hereby confirm that our company has been appointed by PGS Heritage (Pty) Ltd to effect the relocation of the remains buried at the following sites:

TCHR 2 at GPS Coordinates: S 24.749246 E 30.188254

TCHR 3 at GPS Coordinates: S 24.753054 E 30.188697

Kind regards

Kobus Herbst General Manager 011 781 3966

kobus@mfgr.co.za