BLACK-WATTLE COLLIERY PTY Ltd

STATUS QUO AND PRE-MITIGATION HERITAGE IMPACT ASSESSMENT REPORT FOR BURIALS IDENTIFIED IN AN AREA EARMARKED FOR MINING EXPANSION AT BLACK-WATTLE COLLIERY IN MIDDELBURG, MPUMALANGA PROVINCE.

October 2022

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REPORT DETAILS

- PROJECT NAME: PROPOSED RELOCATION OF ESTIMATED 55 (FIFTY FIVE) GRAVES LOCATED AT FARM VAALBANK 289 JS.
- REPORT TITLE: STATUS QUO AND PRE MITIGATION IMPACT ASSESSMENT REPORT FOR THE PROPOSED RELOCATION OF AN ESTIMATED FIFTY FIVE (55) GRAVES IDENTIFIED DURING SURVEY FOR PROPOSED EXPANSION OF A BLACK-WATTLE MINING DEVELOPMENT IN MIDDELBURG TOWN, MPUMALANGA PROVINCE.

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SYNOPSIS

STATUS QUO AND PRE-MITIGATION HERITAGE IMPACT ASSESSMENT REPORT FOR BURIALS IDENTIFIED DURING PHASE 1 IMPACT ASSESSMENT STUDY FOR BLACK-WATTLE COLLIERY, IN MPUMALANGA PROVINCE.

Authorship: This Report has been prepared by Mr. M. M. Mabuda (Professional Archaeologist) for Black-Wattle Colliery.

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Geographic Co-ordinate Information: Geographic co-ordinates in this report were obtained using a handheld Garmin Global Positioning System device. The manufacturer states that these devices are accurate to within +/- 5 m.

Disclaimer: The Author is not responsible for omissions and inconsistencies that may result from information not available at the time this report was prepared.

The survey was carried out within the context of tangible and intangible cultural heritage resources as defined by the SAHRA/DoH Regulations and Guidelines as to the authorisation proposed exhumation and reburial of graves affected by the mining development at Blackwattle Colliery.

Signed by: Field Survey Officer

Mabuda M. Moses

October 2022

ACKNOWLEDGEMENTS

The author acknowledges the assistance of Black-Wattle Colliery staff for identification of affected graves and tracing of legal custodians and descendants of the deceased.

MANAGEMENT SUMMARY

BACKGROUND

Black-Wattle Colliery commissions this study. The study focuses on graves and burial grounds identified during survey as part of the proposed expansion of Black-Wattle Colliery open-pit mine at Vaalbank 289 JS Farm Expansion Project in the magisterial district of Middelburg of Mpumalanga Province. Mulaifa Development Projects was commissioned by Black-Wattle Colliery to conduct Phase two (2) graves mitigation study for the affected burial grounds and graves recorded within the footprint of the proposed mining expansion. An archaeologists and physical cultural property specialists conducted field survey of the site for specific purpose of identify and verifying the existence of graves, and to facilitate their relocation thereof.

SUMMARY RESULTS

Mr. Mabuda M. Moses and Mr. Rudzani R Munyai (heritage specialists) surveyed the project area to confirm the location and distribution of burial grounds and grave sites and verify their condition and status *in situ* in context of proposed mining activities. A total of fifty five (55) graves were identified in two burial grounds. The first burial ground was registered as BW/02 (24) and the second site Is registered as BW/03 (31). The digit numbers in brackets referred to number of graves identified in the particular graveyard. Information gathered during graves verification and recording exercise, suggest that families of the deceased are known to the mine officials since they often visit the mine for rituals. All the graves in these burial grounds are on the direct path of the proposed mining expansion and should be exhumed and relocated to safer place.

RECOMMENDATIONS

- An estimated number of 55 graves were identified within the mining footprint.
- The survey confirmed that the affected landscape has a long history of human occupation making it an active cultural landscape where there is a possibility of encountering previously unknown graves in the project area during subsurface construction work.
- Custodians of the affected graves have lodged several inquiries. Therefore, a list of verified legal custodians is being compiled as part of the preparation for the Burial Grounds and Graves Permit applicant process.
- In the likely event that no custodians will come forward or will be identified for particular burials or graves, the graves will be treated as unknown graves and as such they fall within the jurisdiction of the National Heritage Resources Act (NHRA) 25 of 1999 under the assumption and observation that some of the graves have been confirmed to be older than 60 years.
- The proposed mining project will destroy all identified burial grounds on direct path of the development. As such these graves should be relocated to safe sites.
- Before any interference with the burial grounds and graves, a permit application should be lodged with South African Heritage Resources Agency (SAHRA) Burial Grounds and Graves Unit or with the Department of Health (DoH) in case of graves being younger than 60yrs, to secure the relevant permission for urgent intervention to rescue, salvage and relocate the burials to a safe and formal burial ground.

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ABBREVIATIONS

AIA	Archaeological Impact Assessment
HIA	Heritage Impact Assessment
EIA	Environmental Impact Assessment
EIAR	Environmental Impact Assessment Report
EMP	Environmental Management Plan
ASAPA	Association of South African Professional Archaeologists
CRM	Cultural Resource Management
NHRA	National Heritage Resources Act, Act 25 of 1999.
NEMA	National Environmental Management Act
EO / ECO	(Environmental Officer/ Environmental Control Officer)
PHRA	Provincial Heritage Resources Agency
SAHRA	South African Heritage Resources Agency

DEFINITIONS

Archaeological Material remains: resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures.

Burial site: the location of any human grave or remains that have been interred, cremated or otherwise placed, and include ossuaries, single burials, multiple burials; rock cairns; cave or cache burials etc. not situated within a cemetery.

Burial Site: defined as a place outside a recognized cemetery where the remains of a cultural ancestor of indigenous people have been interred or otherwise placed."

Chance Finds: Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

Cultural Heritage Resources: Same as Heritage Resources as defined and used in the South African Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and palaeontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or graves and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance: The complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

EO or ECO (Environmental Officer/ Environmental Control Officer) is BHP Billiton official or Agency responsible for the administration of the land on which the site is located.

Grave: A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery or burial ground.

Grave offering: any object or objects associated with the human remains that may reflect the religious practices, customs or belief system of the interred.

Historic Material remains: resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

Historic: under the NH Resources Act this generally means something older than 60 years.

Human remains mean the remains of a dead human body and include partial skeletons, bones, cremated remains and complete human bodies that are found outside a recognized cemetery" (adapted from NHR Act)

In Situ material culture and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Material: culture buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

Recognized cemetery a defined area of land that is set aside for the burial of human bodies.

Representative means a descendant of the interred or of the person whose remains are found, or where no descendant survives or is identified, an official representative of the appropriate custodians of the burial site or the closest culturally affiliated group, religious denomination, military or authority as evidenced by the location or mode of burial. Where no representative can be determined the Archaeologist shall act as the representative on unclaimed or unknown burials and the EO at Black-Wattle Colliery at the discretion and with the consent of the SAHRA, the custodian representative group. Site A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity.

Site disposition agreement: means a written agreement to be reached between the EO and the representative of the interred regarding the disposition of the remains, including any disinterment and reinterment, and management plan means a plan to identify the roles of the representative, Archaeologist and land owner or manager respecting the care and protection of the site, including a consideration of site records, site access, and ways to protect a site from disturbance until the proper exhumation, relocation and reburial is completed.

Heritage -That, which is inherited and forms part of the National Estate (Historical places, objects, fossils as defined by the National Heritage Resources Act 25 of 1999).

Heritage resources – This means any place or object of cultural significance.

1. INTRODUCTION

Mulaifa Development Projects was commissioned by Black-Wattle Colliery PTY Ltd to conduct Phase 2 graves mitigation for burials affected by the proposed expansion of mining development. An archaeologists and heritage specialist conducted a field and site condition survey of the mining footprint. The survey identified an estimated total of fifty five (55) graves located in two burial ground. The identified burial grounds are on the direct path of the proposed mining expansion footprint.

This report provides the results of the field study conducted on Friday the 21st of October, 2022 in order to confirm the status quo of the affected burial ground within the project area. The study was conducted within the framework of the legislations including the Section 36 of the National Heritage Resources Act (Act No 25 of 1999) and the Human Tissue Act (1983) (also see Appendix 1-4).

2. AIM OF THE STUDY

The study was commissioned as part of a Phase 2 graves mitigation exercise for the proposed Black-Wattle Colliery mining development expansion. The study is part of the proposed grave relocation mitigation process aimed at relocating identified graves from the mining development area to safer locations. In addition, the study sought to:

- Confirm the existence of the burial grounds and graves situated within the proposed mining development site.
- Conduct site condition survey of all identified burial grounds and gravesite in the project's primary footprint impact zone. The primary impact zone being the direct path of the mining development.
- Make further recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the affected burial sites.

- Identify and discuss with potential custodians (where applicable) on potential impacts of the mining on graves and make the necessary recommendations on how to handle the matter.
- Take responsibility for communicating with SAHRA/DoH and other related authorities in order to obtain the relevant burial relocation permits and authorization.

3. SPECIALIST QUALIFICATIONS

Mr. M.M Mabuda and Mr. R.R Munyai are leading the heritage mitigation program and has a combined experience of more than 15 years in the heritage and cultural resources management consulting and development industry. Mr. M Mabuda is a project Heritage Specialists and professional field archaeologists registered with the Association of Southern African Professional Archaeologists. (Reg No. 407)

4. ASSUMPTIONS AND LIMITATIONS

It is necessary to indicate that the heritage resources identified during the fieldwork were limited to visible graves and burial grounds for the 55 graves recorded within the mine plan map. Other classes of heritage resources in the area were covered under the Phase 1 HIA study conducted during the EIA and EMP phases of the project. This study was restricted to physically identifiable burial grounds and graves. This means surficially unidentifiable graves and burial grounds, for example those covered by dense vegetation or have no visible signature are not accounted for herein. Should any burial/grave site (or any protected heritage features and/or objects for that matter) not included in the present inventory be located or observed, a heritage specialist should immediately be contacted.

Such accidentally or chance finds heritage features and/or objects may not be disturbed or removed in any way until such time that the heritage specialist had been

able to make an assessment as to the significance of the site (or material) in question. This applies to graves and cemeteries as well. In the event that any graves or burial places are located during the development the procedures and requirements pertaining to graves and burials will apply as set out below.

5. HERITAGE LEGISLATION

The present study was conducted in line with applicable legislations and regulations. The identification, evaluation and assessment of any cultural heritage site, artefact, physical cultural properties, burial grounds and graves, intangible heritage or find in the South African context is required and governed by the following legislations:

- 1. National Environmental Management Act (NEMA) Act 107 of 1998
- 2. National Heritage Resources Act (NHRA) Act 25 of 1999
- 3. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
- 4. Development Facilitation Act (DFA) Act 67 of 1995

This present study is equally covered under the following sections in each Act, which refer directly to the identification, evaluation and assessment of cultural heritage resources.

- 1. National Environmental Management Act (NEMA) Act 107 of 1998
 - a) Basic Environmental Assessment (BEA)– Section (23)(2)(d)
 - b) Environmental Scoping Report (ESR)–Section (29)(1)(d)
 - c) Environmental Impacts Assessment (EIA)–Section (32)(2)(d)
 - d) EMP (EMP)–Section (34)(b)
- 2. National Heritage Resources Act (NHRA) Act 25 of 1999
 - a) Protection of Heritage resources-Sections 34 to 36; and
 - b) Heritage Resources Management Section 38
- 3. Minerals and Petroleum Resources Development Act (MPRDA) Act 28 of 2002
 - a. Section 39 (3)

- 4. Development Facilitation Act (DFA) Act 67 of 1995
 - a) The GNR.1 of 7 January 2000: Regulations and rules in terms of the Development Facilitation Act, 1995. Section 31.

The NHRA stipulates that cultural heritage resources may not be disturbed without authorization from the relevant heritage authority. Section 34(1) of the NHRA states that "no person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority..." The NEMA (No 107 of 1998) states that an integrated EMP should (23:2(b))"...identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage". In accordance with legislative requirements and EIA rating criteria, the regulations of SAHRA and ASAPA have also been incorporated to ensure that a comprehensive legally compatible HIA report is compiled.

As highlighted in introductory sections of this report, the study specifically focuses on burial ground and graves affected by the planned Black-Wattle Colliery mining development. All burial grounds and individual graves are protected by law irrespective of their age. Furthermore, there are regulations, which control handling and management of human remains and grave goods. Specifically, in terms of the Section 36 (3) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) no person may, without a permit issued by the relevant heritage resources authority:

(a) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves;

(b) destroy, damage, alter, exhume or remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority; or (c) bring onto or use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment, which assists in the detection or recovery of metals.

Therefore, in addition to the formal protection of culturally significance graves, all graves which are older than 60 years and which are not already located in a cemetery (such as ancestral graves in rural areas), are protected. Communities, which have an interest in the graves, must be consulted before any disturbance can take place. The graves of victims of conflict and those associated with the liberation struggle will have to be included, cared for, protected and memorials erected in their honour where practical. Regarding graves and burial grounds, the NHRA distinguishes between the following:

- Ancestral graves
- Royal graves and graves of traditional leaders
- Graves of victims of conflict
- Graves of individuals designated by the Minister by notice in the Gazette
- Historical graves and cemeteries
- Other human remains, which are not covered in terms of the Human Tissue Act, 1983 (Act No.65 of 1983).

All human remains are also protected under the Human Tissue Act, 1983 (Act No.65 of 1983). In addition, Municipal Ordinances provide for both burial grounds/cemetery and gravesites within certain localities.

6. GRAVES OUTSIDE NHRA PROTECTION

Graves younger than 60 years fall under Section 2(1) of the Removal of Graves and Dead Bodies Ordinance (Ordinance no. 7 of 1925) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the National Department of Health and the relevant Provincial Department of Health and must be submitted for final approval to the Office of the relevant Provincial Premier.

This function is usually delegated to the Provincial MEC for Local Government or in some cases the MEC for Health. Authorisation for exhumation and reinterment must also be obtained from the relevant local or regional council where the grave is situated, as well as the relevant local or regional council to where the grave is being relocated. All local and regional provisions, laws and by-laws must also be adhered to. In order to handle and transport human remains the institution conducting the relocation should be authorised under Section 24 of Act 65 of 1983 (Human Tissues Act).

Graves older than 60 years, but younger than 100 years fall under Section 36 of Act 25 of 1999 (National Heritage Resources Act) as well as the Human Tissues Act (Act 65 of 1983) and are the jurisdiction of the South African Heritage Resource Agency (SAHRA). The procedure for Consultation Regarding Burial Grounds and Graves (Section 36(5) of Act 25 of 1999) is applicable to graves older than 60 years that are situated outside a formal cemetery administrated by a local authority. Graves in the category located inside a formal cemetery administrated by a local authority will also require the same authorisation as set out for graves younger than 60 years over and above SAHRA authorisation.

If the grave is not situated inside a formal cemetery but is to be relocated to one, permission from the local authority is required and all regulations, laws and by-laws set by the cemetery authority must be adhered to.

7. PREVIOUSLY UNIDENTIFIED BURIAL SITES/GRAVES

The proposed mining development is situated in an historic and contemporary cultural landscape with prehistoric, historic and contemporary human settlements and homestead remains. Given the history of human occupation of the affected area, there is a possibility that previously unknown burials may be discovered during subsurface construction work. Should burial sites be accidentally found, they must be reported to the nearest police station to ascertain whether or not a crime has been committed and a heritage expert should be called in to establish whether the burial is covered under the NHRA.

If there is no evidence for a crime having been committed, and if the person cannot be identified so that their relatives can be contacted, the remains must be kept in an institution where certain conditions are fulfilled. These conditions are laid down in the Human Tissue Act (Act No. 65 of 1983). In contexts where the local traditional authorities give their consent to the unknown remains to be re-buried in their area, such re-interment may be conducted under the same regulations as would apply for known human remains.

8. SOCIAL CONSULTANCY

The research team has been liaising with Mr. Takalani Sandani (Mine Manager) and Mr. Paulos Lukhele (Social Facilitation Coordinator) from the project area to trace families that were relocated from the affected project area. In this case, the direct descendants of the deceased has been communicating with the mine officials showing the willingness to exhume and relocate the said graves to a safer area. As part of public consultation and social facilitation, focus group meeting will be called upon in which direct descendants of the deceased will be briefed of the intention to exhume and relocate the graves, and their consents will be sort.

Consultation will be an on-going process, until such time that the window period as prescribed by the law has lapse.

Methodology

The methods in this study followed an HIA process that consisted of three steps: Step I – Literature Review: The background information to the field survey leans

greatly on the information provided by the mine officials.

Step II – Physical Survey: A physical survey was conducted on foot through the proposed mine expansion project area by qualified archaeologists (October, 2022), aimed at locating and documenting graves and burial ground sites falling within and adjacent to the proposed mining development footprint.

Step III – The final step involved the recording and documentation of relevant burial grounds and gravesites, as well as the assessment of sites in terms of the heritage impact assessment and Human Tissue Act (1983) criteria and report writing.

8.1. SITE SIGNIFICANCE

All fifty five (55) graves covered by this report fall under the Human Tissue Act (1983) sites category and they all retain a High and Medium Significance. However, should there be no family coming forward to claim ownership of some of these graves, they will be classified under NHRA as unknown graves. Therefore, all fifty five graves, since they are located on the direct path of the development should be relocated to a safer place.

8.2. METHODOLOGY FOR IMPACT ASSESSMENT

Impact Rating

The impact of the planned mining development on graves is considered **VERY HIGH** from both a heritage and developmental perspectives.

These impacts would be considered by society as constituting a major and usually permanent change to the (natural and/or socio-cultural) environment, and usually result in severe or very severe effects, or beneficial or very beneficial effects.

Certainty

DEFINITE: More than 90% sure of a particular fact. Substantial supportive data exists to verify the assessment.

PROBABLE: Over 70% certainty of a particular fact, or of the likelihood of an impact occurring.

POSSIBLE: Only over 40% certainty of a particular fact or of the likelihood of an impact occurring.

UNSURE: Less than 40% certainty of a particular fact or likelihood of an impact occurring.

Mining development impacts are considered certain on any graves or burial ground on its direct path. The grave and burial grounds sites within 100m of the mining site fall within the probably and possible impact region given the fact observation that the mining development will be associated with auxiliary developments such as canals and access roads, servitude demarcation fence lines and boundaries as well as potential temporary construction camps and material storage sites during the proposed development.

Duration

SHORT TERM: 0 to 5 years MEDIUM: 6 to 20 years LONG TERM: more than 20 years PERMANENT: site will be demolished or is already demolished

The Black-Wattle Colliery Expansion development project falls under the Long Term and Permanent category. The grave and burial grounds on the direct path of the mining development will permanently be affected or destroyed if mitigation is not implemented prior to the development commencing.

9. RESULTS: BURIAL GROUNDS AND GRAVES

The field survey identified two (2) burial sites with an estimated number of 55 graves located between 0-100m of the mine expansion and associated infrastructure. As highlighted in previous sections, burial grounds and gravesites are accorded the highest social significance threshold. They have both historical and social significance and are considered sacred. Wherever they exist they may not be tempered with or interfered with during any proposed development. It is important to note that the possibility of encountering human remains during subsurface earth moving works anywhere on the landscape is ever present.

9.1 SUMMARY OF GRAVES RECORDED.

BURIAL SITE	NUMBER OF GRAVES RECORDED
BWC-BG002	24
BWC-BG003	31



Plate 1: Showing graveyard marked as BW/GY02 with an estimated 24 graves.



Plate 2: Reflect graveyard marked as BW/GY03 with Black-Wattle Colliery staff member confirming the graves during field survey. This graveyard has a total of 31 graves

The table below reflect names of deceased as per the headstone on site. The rest of the graves do not have headstone but are marked with stone cairns.

NAME AND SURNAME	Gender	Date of Death	Grave No	Grave Age
Johanna Sibanyoni	Female	1988	BW/GY02/14	34
Tshabangu Abie	Female	1972-10-05	BW/GY02/19	50
Skosana Nurse Gugu	Female	1982-02-04	BW/GY02/22	40
Zimu Mavis Zanele	Female	1982-07-19	BW/GY02/21	40

Table 1.2. Significance Rating

Impact	Impact	Heritage	Certainty	Duration	Mitigation
	Significance	Significance			
Permanent	High	General	Definite	Permanent	Required should
		Protection for			there be any
		all graves and			physical
		Burial Grounds			interference
					during
					development

10.2 BURIAL GROUND BWC-BG002 & 003

The burial ground is located less than 100m within the mining area. A eucalyptus tree is used as a landmark for the existence grave. All three graves were recorded at this burial site. The burial site currently been well taken care of by the mine official, this is evidenced by the nature of the ground in which they are located, reflected as cleaned always as there is no growing trees or tall grass over the grave. There is a possibility of encountering more graves, which were not identifiable due thick vegetation cover and also previous road construction works adjacent to the grave.

11. GENERAL APPLICABLE HERITAGE MANAGEMENT GUIDELINES

This study has confirmed that there are burial grounds located on the direct path of the mine development. There are no other sites identified within close proximity or on the direct path of the development. In addition to mitigation measures recommended herein, it is advisable that an information section on cultural resources be included in the SHEQ training given to contractors involved in surface earthmoving activities. These sections must include basic information on:

- Graves;
- Archaeological finds; and
- Historical Structures.

This module must be tailor made to include all possible finds that could be expected in that area of construction.

In the event that human remains are uncovered or previously unknown graves are discovered in the course of the proposed development a qualified archaeologist needs to be contacted and an evaluation of the finds made. If the remains are to be rescued, salvaged, exhumed and relocated, the relocation procedures as accepted by SAHRA need to be followed. This includes an extensive social consultation process.

12. SUMMARY RECOMMENDATIONS AND CONCLUDING REMARKS

This report is limited to survey and confirmation of location of burial ground and gravesite in relation to the Black-Wattle Colliery Vaalbank 289 JS expansion project. No other physical cultural properties are discussed herein. The burials grounds and graves are classified as of high cultural significance. All three graves should be mitigated prior to the mining expansion commencing.

The burials that are directly affected by the mining expansion or by its associated activities should be relocated.

i. All graves identified within the servitude are under threat in one way or the other from the proposed mining expansion. Such recorded graves directly affected should be rescued or salvaged by exhumation and relocated as soon as the necessary permits are obtained.

- ii. An urgent Burial Ground and Graves heritage permit from SAHRA should be obtained to allow all affected graves that fall under the NHRA to be exhumed and relocated as stipulated by applicable laws and SAHRA regulations.
- iii. All graves that do not fall under the NHRA will be treated and relocated within the Human Tissue Act of 1983 and the local municipality graves and human burial ordinances.
- iv. Should any link be established between the burials and any community or families, consent should be secured from the custodians of the burials before the relocation exercise in conducted.
- v. The relocation exercise will be overseen by the accredited heritage professional and a professional Undertaker from Diggers Funeral Services will conduct the actual exhumation and re-interment.

Should additional previously unidentified graves be identified within the development path or buffer zones during construction works, the following measures must be taken.

- i. Mitigation of graves will require a fence around the cemetery with a buffer of at least 10 meters.
- ii. If graves are accidentally discovered during construction, activities must cease in the area and a qualified archaeologist be contacted to evaluate the find. To remove the remains a rescue permit must be applied for with SAHRA and the local South African Police Services must be notified of the find.

13. GRAVE RELOCATION PROCESS

Where the graves are to be relocated, a full grave relocation process that includes comprehensive social consultation must be followed.

The grave relocation process must include:

- i. A detailed social consultation process, that will trace the next of kin and obtain their consent for the relocation of the graves, that will be at least 60 days in length;
- ii. On-Site notices indicating the intent of the relocation
- iii. Newspaper Notice indicating the intent of the relocation
- iv. A permit from the local authority;
- v. A permit from the Provincial Department of health;
- vi. A permit from the South African Heritage Resources Agency if the graves are older than 60 years or unidentified and thus presumed older than 60 years;
- vii. An exhumation process that keeps the dignity of the human remains and cultural rights intact;
- viii. An exhumation process that will safeguard the legal implications towards the developing company;
- ix. The actual exhumation and reburial process will be done by Diggers Funeral Services, reputable company that are well versed in relocations;
- x. The process must be conducted in such a manner as to safeguard the legal rights of the families as well as that of the developing company.

Given the long history of human occupation in the affected project area, it is highly likely that more previously unidentified graves may be discovered on the subsurface during the on-going construction work. Should previously unknown or unidentified graves be discovered during the construction phase, they should be reported to heritage authorities to allow for their rescue before work proceeds on affected site. (See Appendixes 1 and 2 for additional applicable conditions, guidelines and procedures for handling human remains relocation programmes). BICKFORD, A AND SULLIVAN, S. 1977. "Assessing the research significance of historic sites" in S Sullivan and s. Bowdler (eds), Site Surveys and Significance assessment in Australian Archaeology. Canberra: ANU.

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SAHRA. What to do when Graves are uncovered accidentally

15. APPENDIX 1: BURIAL RELOCATION PROJECT METHOD STATEMENT

15.1. DISCOVERY AND NOTIFICATION

If human burial remains are accidentally discovered during development at mining expansion site the following guidelines apply:

 a) The finder will immediately cease any further activity at the site and report the site to the BHP Billiton ECO. The ECO will notify the heritage expert (Archaeologist) and authorities.

15.2. SITE PROTECTION AND IDENTIFICATION

- a) The ECO and the Archaeologist and the permitting authority shall take reasonable measures to protect the site from environmental factors and any form of unauthorized interference or disturbance.
- b) Based on the evidence reported at the scene, the Archaeologist will investigate the site and make a preliminary determination as to the nature of the remains.
- c) Existing site inventories, land use records, and community, and authorities, should be consulted as soon as possible about possible identification of the remains. Some examination of the site/remains may be required to determine its cultural affiliation and age, and whether or not the site is modern or historic.
- d) The Archaeologist shall apply and acquire relevant exhumation and rescue Permit from SAHRA Graves and Burial Unit.

15.3. INVESTIGATION AND REPORTING

a) The ECO will direct the Archaeologist to carry out an investigation under any required permits, in consultation with the affected custodians (if available) and other affected parties, to make an initial report citing, if possible, the cultural affiliation of the human remains.

b) Within a reasonable time to be specified by the EO, and the affected parties, the Archaeologist shall deliver a written report and any notification not yet made, to:

• the ECO, and the affected custodians if appropriate;

• the SAHRA;

- the permitting authority of SAHRA Graves and Burials Unit
- any other representative of the interred, if known.

c) The written report shall attempt to identify:

- the representative group of the interred;
- the geographic boundaries of the site;

• the grave offerings or other heritage resources that may be associated with the remains or the site.

d) The Archaeologist may, with the agreement of the proper authority and the representative of the interred, if known, remove all or part of the human remains for temporary custody where the remains may otherwise be at risk prior to their re-burial at a safe site.

15.4 REPORTING

a) If the site is determined to be a contemporary burial site, the appropriate representative will be contacted in writing to provide further direction on the disposition of the remains.

b) Black-Wattle' contractors carrying out authorized activity where a historic or archaeological burial site is discovered can continue that activity with the consent of the EO, where appropriate. The activity must stay 150 meters away from the grave while further arrangements are made by the Archaeologist to rescue and relocate the remains to a safe cemetery.

d) The Archaeologist may publish notice of the discovery in a newspaper or other public notice seeking information on the remains and alerting members of the public about

the impending relocation of the remains to a predetermined formal cemetery or burial ground.

15.5. SITE DISPOSITION AGREEMENT (MANAGEMENT PLAN)

 When the site or remains are identified

a) The site shall not be disturbed and the EO, if on direct path of mining development work, shall initiate discussions towards entering into a site disposition agreement with the representative of the interred where applicable.

b) If the site is a historic or archaeological burial site, there must be joint approval of the site management plan on reburial as stated in the scope of services in terms of contract between Black-Wattle colliery and Mulaifa Development Projects.

c) Decisions regarding reburial, relocation or other disposition should be determined on a case by case basis in consultation with those concerned and in a timely manner.

4 Site disposition agreements shall determine such things as:

1. the interim care of the human remains;

2. the scope and extent of analysis to be performed on the human remains, if any;

3. the exact location of the place where the human remains are to remain or to be interred;

4. the style and manner of disinterment, if applicable;

5. the style and manner of reinterment, if applicable;

6. the time period in which disinterment and reinterment is to take place;

7. the procedures relating to, and the final disposition of any grave offerings discovered with the human remains and any additional analysis of them;

8. the provision for future maintenance of the cemetery or site where the human remains are to be located;

9. access to the site and ways to prevent disturbance;

10. any other issue agreed upon.

When no representative is identified or no disposition is specified:

If disposition is not specified by a representative, or the remains are not claimed or no affiliation is established within a reasonable time, the Archaeologist shall with the necessary SAHRA permits and approvals provide for the following disposition:

a) cover and leave the remains where they were found and have the site recorded as a burial site/heritage site, if on land suitable for a burial site; or

b) have the remains disinterred and reinterred in the nearest appropriate cemetery; or c) remove the remains from the site for analysis and may have them reinterred in a recognized cemetery or;

d) may act as the temporary repository of the remains until they are re-located for reburial at designated cemetery.

RECORDS KEEPING

a) A record of the site and a report of the discovery and disposition plan shall be kept by the Archaeologist, for future reference to protect the site or identify the re-burial site.

b) Access to information about discovered sites will be addressed in any site management plan developed under these guidelines, and will be protected under the Access to Information and Protection of Privacy legislations, and the NHRA.

4 BURIAL RELOCATION & REBURIAL

 Burial Relocation involves the identification of each grave and the manual excavation of the interred remains. Human remains, coffin features, and grave goods are exposed, their positions in the grave are carefully recorded, and maps and photographs of each grave are made following standard archaeological recovery techniques.

- Once excavation and examination are completed, the interred along with their grave goods are inventoried and carefully wrapped in acid-free tissue. Human remains are arranged anatomically and all materials are placed in specially designed containers, specified by the laws and regulations governed by the state where the re-interment location has been determined. The goal of re-interment is to restore as much of the original mortuary meaning as possible.
- Burial relocation is extremely culturally sensitive and Black-Wattle Colliery and contractors/service provider staff understands that the utmost respect must be shown to the interred, as well as the descendant communities. We advocate respectful involvement of descendent communities in the relocation process, whenever possible, and have an excellent reputation for communicating with descendant groups.
- Mulaifa Development Projects and Mafu Funeral Homes have extensive experience conducting cemetery relocations for government agencies, other cultural resource firms, developers and private citizens in South Africa. We assure our clients as well as the descendent communities that the greatest amount of respect and care is taken when excavating and relocating these cemeteries.

16. RISKS

16.1. Legal Risks

Black-Wattle Colliery is exposed to a myriad of legal requirements on the local and national level when having to relocate burials. Burial relocation can infringe a number of human rights enshrined in the Constitution and legislations such the NHRA. If not carried out properly, grave relocation can impact the right to burial and dignity. Community opposition may result in protests and delays on development. Mitigation When human remains are identified during the development, all measures must be taken to ensure the law an applicable regulations are enforced including mandatory public notifications.

2. Reputational risk

Relocation of human burials in particular also brings with it high risks for the Black-Wattle Colliery's reputation which is exacerbated by the instantaneous spread of news across the world via the Internet. Lack of proper planning and management may lead to negative consequences, which in turn may affect the mine's reputation. As part of mitigation plans, human remains identified in development contexts should be handled with utter most care to ensure the exhumation and relocation takes place in accordance with the law.

3. Operational risks

Legal action arising from the inadequate planning and implementation of burial relocation procedures may result in permission to expand the mine being revoked via preliminary injunctions.

Operational risks may also arise from community protests directly. Cases of community opposition and protests, has previously disrupted work for days and weeks, involving, for example, the blockage of construction sites and vital roads and infrastructure. Construction may be delayed or disrupted.

Protests may be violent and impact on the health and safety of mine staff perpetuating work delays in construction and operations. The mine facilities, machinery, housing and other assets may be damaged and rendered unusable.

As part of mitigation plans, all burial related matters must be handled by the professional heritage team and reburial specialists. Human remains discovered during development should be reported to the ECO urgently and the Archaeologist notified in time to avoid any delays with the remains exposed on site. All exhumations and reburial exercises should be handled or schedule in a manner that does not require the remains to be stored elsewhere temporarily.

4. Financial risks

Legal, reputational and operational risks may also lead other financial costs to the project. Moreover, costs may arise from legal action or disruptions in operations and work delays. Additional costs may be incurred when public protests require work to stop on site as a result of human remains discovery on site.

5. Human Remains Handling Risks

Exhumation, handling, transportation and reburial of human remains also pose a threat to public health if not handled to strict protocols. This risk is particularly highest in contemporary burials.

17. APPENDIX 2: GENERAL PRECAUTIONS

The following precautionary measures can help employers and employees remain safe and healthy whilst handling human remains. The transportation, handling and storage of human remains must also be carried out in a manner that preserves public safety and maintains the dignity of the deceased person.

PERSONAL PROTECTIVE EQUIPMENT

Hand Protection:

When handling potentially infectious materials, use appropriate barrier protection including latex and nitrile gloves (powder-free latex gloves with reduced latex protein content can help avoid reaction to latex allergies). These gloves can be worn under heavy-duty gloves which will, in turn, protect the wearer from cuts, puncture wounds, or other injuries that break the skin (caused by sharp environmental debris or bone fragments). A combination of a cut-proof inner layer glove and a latex or similar outer layer is preferable.

Foot Protection:

Footwear should similarly protect against sharp debris.

Hygiene:

- Wash your hands with soap and water or with an alcohol-based hand cleaner immediately after you remove your gloves.
- Give prompt care to any wounds sustained during work with human remains, including immediate cleansing with soap and clean water. Workers should also be vaccinated against hepatitis B, and get a tetanus booster if indicated.
- Ensure disinfection of vehicles and equipment.

- In general, personnel involved in the recovery and handling of human remains from a burial site can limit risk from potential exposure by following the guidelines below.
- Vinyl or Latex gloves should be worn.
- Masks and protective eyewear or face shields should be worn during procedures that are likely to generate fluids to prevent exposure of mucous membranes of the mouth, nose, and eyes.
- Gowns or aprons should be worn during procedures that are likely to generate splashes of blood or other body fluids.
- Hands and other skin surfaces should be washed immediately and thoroughly if contaminated with blood or other body fluids. Hands should be washed immediately after gloves are removed.
- Ensure universal precautions for blood and body fluids.
- Ensure use of body bags.
- Ensure disinfection of vehicles and equipment.
- Bodies do not need to be disinfected before disposal (except in case of cholera).
- Vaccinate workers against hepatitis .