Environmental Management Plan Report for Black Mountain Mine, Aggeneys, Northern Cape: Input with respect to Heritage Resources



compiled by **David Morris**

McGregor Museum, Kimberley March 2013

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SECTION 1: INTRODUCTION AND DEFINITIONS

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1.1 Background

The properties owned by Black Mountain Mining at Aggeneys (hereafter BMM) includes a unique combination of natural and cultural heritage. The purpose of this heritage input to a revised EMPR, including notes towards a Strategic Heritage Management Plan, is to ensure that this unique heritage is managed effectively and in accordance with legal requirements and international best practice. Mining (which is not sustainable in the longer term) poses major threats to resources that have the potential to leverage long-term economic benefits in terms of heritage appreciation (including tourism and education).

Not all of the total anticipated heritage resources of the properties in question have been documented: this report proposes procedures for on-going inventory data-capture:

- to identify and map heritage resources;
- to assess the significance of such heritage resources;
- to set out procedures for the effective, legally compliant and sustainable management of these resources; and
- to identify heritage management priorities.

This on-going programme for heritage management at BMM draws on insights from a document compiled for heritage resources management on the Cape Peninsula and adapted for sites in the Northern Cape. It covers pertinent issues as well as procedures and guidelines.

1.2 Legislation for heritage resources management

The National Heritage Resources Act (NHRA) regulates all South African places and objects of cultural significance or of other special value as part of the National Estate.

The Act (No. 25 of 1999, NHRA) specifically protects heritage resources which include archaeological and palaeontological objects/sites older than 100 years, graves older than 60 years, structures older than 60 years, as well as intangible values attached to places. The Act requires that anyone intending to disturb, destroy or damage such sites, objects and/or structures may not do so without a permit from the relevant heritage resources authority. This means that a Heritage Impact Assessment should be performed, resulting in a specialist report as required by the relevant heritage resources authority/ies to assess whether

authorisation may be granted for the disturbance or alteration, or destruction of heritage resources.

It is noted further that the integration of heritage resource management and biodiversity management has become a trend which should enhance the way in which natural and cultural conservation is approached in this country.

1.3 Terms of reference

The purpose of this study is to review known heritage resources on Black Mountain Mining property and to develop procedures for heritage in an EMPR for BMM that fulfils relevant legal requirements and reflects international best practice.

This reports provides summary reviews on:

- legal aspects;
- international best practice;
- inventory of heritage resources at BMM a summary of the status quo.

The objectives of the report are to:

- develop a framework and set of procedures for expanding a heritage inventory for BMM; including
- recommendations for the design, development and population of a spatially referenced digital database;
- develop an outline for a heritage component of the EMPR that can evolve.

1.4 The Author

The author of this report is an archaeologist (PhD) accredited as a Principal Investigator by the Association of Southern African Professional Archaeologists. I have previously carried out surveys in the vicinity of Aggeneys (Morris 1999a-b, 2000a-c, 2001, 2010). In addition, the author has received UCT-accredited training in Architectural and Urban Conservation: researching and assessing local heritage environments (S. Townsend, UCT), and is familiar with the broad history of the Northern Cape.

I work independently of the organization commissioning this specialist input, and I provide these preliminary scoping observations within the framework of the National Heritage Resources Act (No 25 of 1999).

The elaboration of the heritage management systems recommended should involve, in the longer term, a more substantial involvement of local people (the author is aware of a nature club in Aggeneys for instance) to input new findings into the heritage inventory.

1.5 Developing a heritage resources inventory

Development of a comprehensive heritage resources inventory for BMM would be a process involving greater input in time and effort than that allowed by the present commission. A database is recommended whose design should be aligned with, and should include input into, the SAHRIS database developed by SAHRA.

1.6 Involving stakeholders

It is crucial that internal and external stakeholders in heritage management be identified and that stakeholder capacity building should take place for long-term management. Hence, a stakeholder database needs to be developed.

Such stakeholders can have an important role for identification and mapping of heritage resources.

Environmental management personnel and any interested parties in Aggeneys (e.g. nature club members engaging in recreational walking for instance) or at BMM should be sensitized to the nature of heritage resources so that any new finds can be added to the database for significance evaluation.

1.7 Co-operative governance and management of heritage resources in the Northern Cape

The Provincial Heritage Resources Agency, Ngwao Bošwa ya Kapa Bokone, is the relevant decision-making authority for heritage resource management in most instances in the Northern Cape; however, until such time as its competence is extended to the full range of heritage resources, the South African Heritage Resources Agency (SAHRA) at national level handles all archaeology and palaeontology.

In addition to these levels of national and provincial governance, it is recommended that local government be engaged in the co-operative governance of heritage, as per the National Heritage Resources Act (25 of 1999) as well as in relation to tourism.

The McGregor Museum in Kimberley, provincial museum for the Northern Cape, has accumulated records for sites in the region over a number of years.

SAHRA has developed the SAHRIS database that would facilitate input by local individuals interested in documenting heritage.

1.8 Document structure

The purpose of this document is to highlight the range of heritage resources and management requirements for their conservation in BMM properties. It is hoped that it would spur the creation of a local GIS-based heritage resources inventory.

It provides a basis and guidelines for further detailed planning for physical management of heritage resources locally by way of a procedure and guideline template (and recommendation for the development of a manual of procedures and guidelines) for site-specific and landscape Conservation Management Plans for different heritage resources (from discrete objects to landscapes) and different scales of management.

Section 1 is an introduction (Chapter 1) with background to the heritage component of the EMPP. It provides a description of known heritage resource types which do or may occur in BMM (Chapter 2). It also indicates criteria for determining significance that could pertain to sites worthy of being declared as Provincial or National Heritage Sites.

Section 2 (Chapter 3) summarises the status quo in terms of known heritage sites, indicating something of the breadth of an eventual heritage resources inventory, which is a work in progress. It indicates inventory procedures and management strategies.

Section 3 presents an outline of parameters towards establishing a Strategic Environmental Management Plan for heritage resources, where Chapter 4 sets out legal requirements and assesses capacity and governance in relation to current policies and planning for heritage resource management at BMM; Chapter 5 outlines a proposal for a manual of procedures and guidelines for heritage resources management at BMM; and Chapter 6 presents priorities for heritage management at BMM for the next five years.

CHAPTER 2. DEFINING HERITAGE RESOURCES

2.1 Introduction

The cultural historical environment consists of all that is present to us as traces and evidence of past and continuing human activity, and its associations. It has a future dimension in terms of people's expectations as to what is yet to come. It consists of things that people can understand, see and/or feel in the present. It is the habitat that people have shaped in interaction – both in co-operation and conflict – with one another and with nature over thousands of years. It surrounds us as part of our daily experience. It is in continual, complex flux. It can be urban and rural. It is physical or tangible as well as intangible, remembered, or experienced in symbolic ways. It is places, evidence of movement, visible elements as well as invisible ones including buried features, whether graves or ancient sediments in archaeological or geological settings. It is the inhabited spaces where people live and work or where they experience affinities, historical or recreational. It is contested space, where there may be multiple meanings and interpretations – something to be argued about and debated, not simply passed on uncritically to future generations.

2.2 Heritage resources defined: The National Heritage Resources Act

The National Heritage Resources Act defines heritage resources for the affirmation of historical and cultural diversity amongst people in South Africa, encompassing the heritage of Africa as well as that of the colonial past.

Heritage resources form part of the national estate (i.e. they are of value to the nation and must be conserved for future generations) in relation to the cultural or historical significance(s) or value(s) which people perceive in them. They may be places or objects of aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value – as defined in the NHRA.

The Act provides a non-finite list of examples. These include both places and objects and encompass historical settlements and townscapes and archaeological, palaeontological and geological sites. South Africa's definition of heritage resources (in terms of the NHRA) is in line with international usage in that they include both natural and cultural heritage. The UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, 1972 ("the World Heritage Convention") uses the following definitions for cultural and natural heritage:

Cultural heritage: "monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of

outstanding universal value from the point of view of history, art or science; groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science; sites: works of man or the combined works of nature and of man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological points of view";

Natural heritage: "natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty."

2.3 Types of heritage resources defined in the NHRA

The NHRA listing (Section 3 (2) of the NHRA) is:

- buildings, structures and equipment of cultural significance.
- places associated with living heritage;
- historical settlements and townscapes;
- shipwrecks;
- landscape and natural features of cultural significance;
- graves and burials;
- archaeological and palaeontological sites;
- geological sites; and,
- sites relating to the history of slavery.

Heritage resources exist at different scales, from broad landscapes (both natural and modified by people, including towns and planted landscapes), to individual places, such as archaeological sites or buildings.

They may have significance in their own right, contribute to the heritage value of a broader area or have linkages to other places. Furthermore, heritage resources have different spatial manifestations. They may take the form of an area or region, such as a landscape, a point, such as an individual building or farm complex or the form of a line, such as an historic route. A heritage resource may also take the form of a defined space, such as a mission settlement.

Heritage resources include tangible resources, such as a historical structure, archaeological site or landscape feature. Heritage also includes intangible aspects of culture, such as cultural tradition, oral history, performance, ritual and popular memory, which may be associated with a place. In similar respects, a

heritage resource may provide physical evidence of the past or may have associations with an event, person or living heritage for which there is no remaining physical evidence, either visible or buried.

They may be identified and evaluated in terms of their ability to relate to various themes reflecting broad patterns and aspects of South African and Northern Cape history within the South African context.

Some databases exist for various aspects of heritage resource management in the Northern Cape. None of these databases is complete. It is also in the nature of heritage resources that such databases can never be complete. The present study begins a review of known sites at Black Mountain Mining and suggests a systematic identification of heritage resources. The resulting listing of heritage resources will constantly change as new information is uncovered. In addition, society's values and definitions as to what constitutes heritage resources may change and with this so would our listings change.

Some categories of heritage resources

<u>Landscapes and features</u> : Natural landscape; pre-colonial landscape; planted andscapes; □productive landscape; □townscapes and historical settlements; □battlefields; scenic landscape; □hills, mountains, plains, river courses; caves, sink-holes and other karst formations; exposed geological surfaces and intrusions
Routes: Footpaths; roads, historic routes (missionary and traveler routes)
Industrial settings: Mines; manufacturing sites; canals/furrows, dams and reservoirs and associated irrigation and water reticulation systems
Buildings and structures: Farm houses; stone walling; residential buildings; ndustrial buildings; commercial building; military/police buildings & forts; □institutional buildings; □public buildings; □religious buildings
Religious/spiritual and commemorative places: Churches, mission sites and places of worship of different faiths; □□graves and burial grounds relating to different faiths and precolonial/indigenous burial sites; memorials and plaques; symbolic places including landmarks and landscapes
Places of displacement: Sites associated with Group Areas implementation under Apartheid
Palaeontological and archaeological sites: Fossil sites; cave sites; □open sites stone walled settlements; □historical middens or structural remains

<u>Living heritage places</u>: Places to which oral history, rituals, performances and/or popular memory are attached

<u>Recreational and scenic sites</u>: Active recreational sites such as sports fields and parks; picnic sites and scenic routes or landscapes

2.4 Determining the significance of heritage resources

The significance of heritage resources is a function of the value ascribed to the resources:

Natural significance has been defined as

the importance of ecosystems, biological diversity and geodiversity for their existence or intrinsic value, or for present or for future generations in terms of the scientific, social, aesthetic and life support value.

Cultural significance is

the aesthetic, historic, scientific, social or spiritual value for past, present or future generations (as defined in the Burra Charter of 1999).

Cultural heritage values encompass both indigenous and introduced elements. Many places have both natural and cultural heritage values.

The heritage value of a place should include known and potential value. The heritage value of a place is often unknown. In the case of archaeological sites, these are largely hidden.

The fundamental purpose of cultural heritage management should be to preserve the values ascribed to a site by the public. Such places are defined by the values we attach to them. Value is what justifies their protection in the first place, and it is the basis of any public and funding support – or of the restrictions placed on them.

Advisors, experts and the public together assign values to heritage resources. The key outcome of this process is the development of a statement of significance.

2.5 Criteria for identification of heritage resources and determination of their significance

2.5.1 NHRA Criteria for assessing significance

The National Heritage Resources Act (NHRA; Act 25 of 1999) identifies criteria for assessing the significance of a place. A place has heritage significance because of:

(a) its importance in the community or pattern in South Africa's history;

- (b) its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage;
- (c) its potential to yield information that would contribute to an understanding of South Africa's natural or cultural heritage;
- (d) its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects;
- (e) its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group;
- (f) its importance in demonstrating a high degree of creative or technical achievement during a particular period;
- (g) its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons;
- (h) its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and,
- (i) sites of significance relating to the history of slavery in South Africa.

2.5.2 Kerr's criteria for characterising significance

Other sets of criteria for assessing significance that could be used are those developed by J.S. Kerr in 2000 with respect to conservation planning in New South Wales, Australia. (Kerr, J.S. 2000. *Conservation Plan.*, Fifth Edition. The National Trust of Australia (NSW).)

These assessment criteria are useful for understanding the heritage significance of a place in terms of its physical evidence, associational links, relationships and experiential/interpretative (non-visual and visual) qualities.

i) Ability for physical evidence to demonstrate or contribute to an understanding of a past design, style, period, technique, philosophy, belief, use or association with an event or person/s. The degree of significance of this physical evidence is determined by:

Age (how early); scarcity value (how rare); \square intactness (presence of original features, in situ evidence, preservation); \square representational value (outstanding, important or typical example); \square evidence for historical layering/archaeological sequence; and, \square significance of an association between an event or person/s and physical evidence.

ii) Associational links with a past event, person/s and activities for which ther	e is
no remaining physical evidence. The degree of significance of this association	n is
determined by:	

Significance of the person/s or event; □intimacy of the association;
□duration of the association; and □evocative quality of a place and its
setting relative to the period of association.

- iii) Qualities giving a place historical character, a sense of continuity or connectedness with the past, a sense of orientation and structure within the landscape. It encompasses the physical properties (scale, form, edges, materials, landscaping, texture, focal points, views, orientation) of a place and its setting. It also encompasses the non-visual qualities of a place (sounds, smells or any activity affecting the experience of a place).
- iv) The degree of significance of the experiential qualities of a place is determined by its:

Level of coherence of the landscape; \square level of interpretative qualities; relationship with its setting, which reinforces the qualities of both; and, evocative versus disruptive qualities of contrasting elements.

These sets of criteria would be useful for assessing the value of the heritage resources at Black Mountain Mine.

SECTION 2: ENVIRONMENTAL STATUS QUO: HERITAGE RESOURCES

CHAPTER 3. TOWARDS A BLACK MOUNTAIN MINING HERITAGE RESOURCES INVENTORY

3.1 Introduction

Existing heritage resource datasets for Black Mountain Mine are incomplete: various areas of the mining property have yet to be surveyed in detail.

This document gives no more than a preliminary indication of what resources are known, and an indication of what kinds of further sites may yet be found.

3.2 Towards a Heritage Resources Inventory for Black Mountain Mining property

3.2.1 Content and attributes of the database

An eventual database should be structured to allow the recording of key attributes of the heritage resources.

The summary statements below (3.3) indicate the range of heritage resources within or near to BMM properties. Ultimately the data should be able to be represented spatially for evaluation relative to other key data such as mining and urban and services development to ensure that these development and exploitation activities do not inadvertently degrade or destroy vulnerable sites.

3.2.1.1 Absence of evidence is not evidence of absence

It is to be stressed that any heritage distribution map at this stage must not be taken to represent any absolute presence or absence of resources. Existing data show chiefly where past research/survey work has been undertaken, *not* the total distribution of sites. Indeed, the heritage inventory will never stop developing. It will grow together with the discovery of new heritage resources, with the development of knowledge and with changing interpretation over time – since significance is not static.

3.2.2 Access, security and data sharing agreements

Due to the sensitive nature of heritage resources, information regarding the exact locality of most of the resources such as archaeological resources should not be openly available in order to protect the resources from unscrupulous

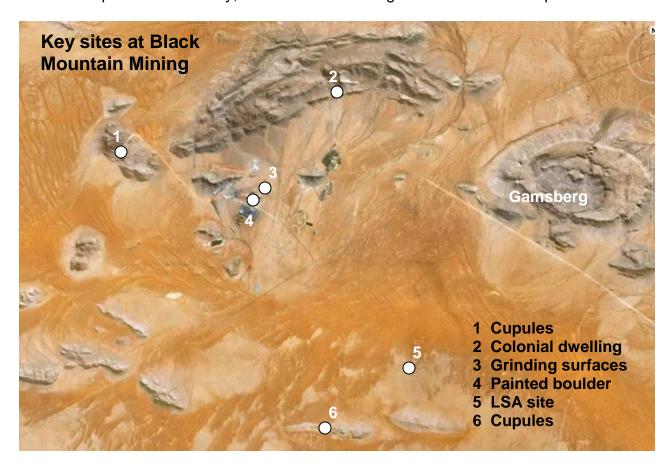
collectors/visitors or for safety reasons. Hence access to the heritage resources database should be controlled.

3.3 Summary of status quo understanding of the heritage resources of Black Mountain Mining

3.3.1 Overview

The archaeology of the Northern Cape is rich and varied, covering long spans of human history. Concerning Stone Age sites here, C.G. Sampson has observed: "It is a great and spectacular history when compared to any other place in the world" (Sampson 1985). Some areas are richer than others, and not all sites are equally significant.

Known sites on Black Mountain Mining property provide local glimpses of this broad sweep of human history, from Earlier Stone Age times to the recent past.



3.3.2 Long sequence sites

No long-sequence sites have as yet been documented on Black Mountain Mining property.

3.3.3 Earlier and Middle Stone Age sites

Isolated artefacts of Pleistocene age including handaxes have been documented at a few surface locales. It is possible that more substantial sites may yet be found.

In one example a single quartz biface (ESA) was found in a deflation area at 29.33123° S 18.74606° E. No other artefacts or notable features were found in association with it. Such completely isolated single-artefact finds could not be considered as constituting "sites" in a conventional archaeological or heritage sense.



Deflation hollow at Zuurwater - handaxe in foreground.

In the wider vicinity of Aggeneys, ESA material has been found in the Gamsberg basin at GI 4 and 5. These are amongst the very few known Acheuland sites in Bushmanland.

Beaumont et al. (1995:240-1) note a widespread low density stone artefact scatter of Pleistocene age across areas of Bushmanland to the south east, where raw materials mainly quartzite cobbles, were derived from the Dwyka till. Systematic collections of this material made at Olyvenkolk, south west of Kenhardt and Maans Pannen, east of Gamoep, could be separated out by abrasion state into a fresh component of MSA with prepared cores, blades and points, and a large aggregate of moderately to heavily weathered ESA. The latter included Victoria West cores on dolerite, long blades, and a very low incidence of handaxes and cleavers. The Middle (and perhaps in some instances Lower) Pleistocene occupation of the region that these artefacts reflect must have occurred at times when the environment was more hospitable than today. This is suggested by the known greater reliance of people in Acheulean times on guite restricted ecological ranges, with proximity to water being a recurrent factor in the distribution of sites. This must have been the case at Gamsberg, where clearly another draw-card, and undoubtedly the raison d'être for Sites GI 4 and 5, was the availability of suitable raw material for stone tool manufacture.

The artefacts found at these two Gamsberg sites include handaxes and Victoria West cores. The distribution of the rather specialised Victoria West technique of tool production in the Acheulean is known to be relatively restricted to the Karoo, western Free State, Transvaal and part of the Northern Cape Province – in short, a certain geographical spread within the interior of the subcontinent (Sampson 1974, Volman 1984). The method is not in evidence in the southern Cape; nor is it found north of the Limpopo. However, writing in the early 1970s, Sampson noted that "nothing is yet known of the (Acheulean) typology of the western and eastern regions of the subcontinent" (Sampson 1974:121), the western-most known occurrence of Victoria West then being the vast site of Nakop near the Namibian border (Brain & Mason 1955; Sampson 1974). The evidence from Gamsberg has the potential to shed important light on this question, and for now at least extends the known distribution of the Victoria West technique yet further westwards.

3.3.4 Middle Stone Age sites

Isolated artefacts of Pleistocene age probably attributable to the Middle Stone Age (MSA) have been documented at a few surface locales on BMM property. While Beaumont *et al.* (1995:241) find that "substantial MSA sites are uncommon in Bushmanland," it is possible that some bigger sites may yet be found, such as the MSA workshop site, identified as Site GI 1, at the top of the northern rim of the Gamsberg inselberg. This is a regionally exceptional feature. It appears that the site was focused on a form of raw material, gossan, apparently favoured locally in MSA times. The surrounding plains are strewn predominantly with gneiss and ubiquitous small surface nodules of quartz. In such an environment, something of a premium must have been placed in those rocks with good or suitable flaking qualities, and this no doubt accounts for the extensive use of this localised Gamsberg source. Artefacts from here were carried away at least as far as the Gamsberg basin and the eastern plateau, and regional surveys may well show a wider distribution.

The significance of the site can be gauged in part from the known distribution of MSA sites at a regional scale, Beaumont *et al.* having shown that "substantial MSA sites are uncommon" (1995:241): with those that have been documented thus far generally yielding only small samples (Morris & Beaumont 1991; Smith 1995).

It has been suggested that "the relatively few [sites] that have been discovered [in Bushmanland] appear to be largely confined to the MSA3 or late MSA1 phases of that technocomplex" (Beaumont *et al.* 1995:241). Volman's (1984) scheme places the MSA1 in Marine Isotope Stage 6 (cold with warm oscillations, ending at 128 ka BP), the MSA3 in Stage 5a-3 (late Last Interglacial through Last Glacial, cold with warm oscillations, c. 82-32 ka BP).

3.3.5 Later Stone Age Sites

The records of the early travellers are of value for interpreting the final Later Stone Age (LSA) traces in the area.

Late Holocene LSA sites are the predominant archaeological signature noted in surveys carried out in the Aggeneys-Poafadder region.

Known sites in the vicinity (including those documented at Aggeneys and Black Mountain and at places around Gamsberg and further afield) are dominated by quartz as raw material, but they also invariably have lithics made from exotic finegrained river pebbles. Moreover, fragments of ostrich eggshell from broken water flasks are usually present. Most of the known LSA sites in the region also have pottery.

The distribution of sites in the area show that late LSA inhabitants of the area preferentially occupied specific parts of the landscape, namely dune areas and alongside certain features including outcrops of bedrock or dry watercourses where water collects and might remain for a time in hollows after rains. Some of these sites have grinding grooves; and they all have stone artefacts, fine grittempered pottery and ostrich eggshell fragments. Another common feature of the sites is colonial era glass and porcelain, representing either interaction by LSA people with colonial farmers or the so-called Bastaards, or use of the sites by these frontiersmen themselves later one, or both. It is known that white farmers until as late as the 1930s practised transhumance, utilising the seasonal water sources known as !Gorras.

Aggeneys Goras site 1: 29.25362° S 18.80600° E

Situated at the eastern end of the hill where the Aggregate Quarry is, gently sloping bedrock bears numerous grinding surfaces near to hollows where water collects after rains (goras). Other similar sites are known in the area north west of Gamsberg and on the neighbouring farm of Bloemhoek (Morris 2010, in prep.).



Rock surfaces where water collects after rains (above) with localised grinding surfaces (below)



One of several grinding stone surfaces in the vicinity of 29.25362° S 18.80600° E



Location of Aggeneys Goras site 1 (white arrow)

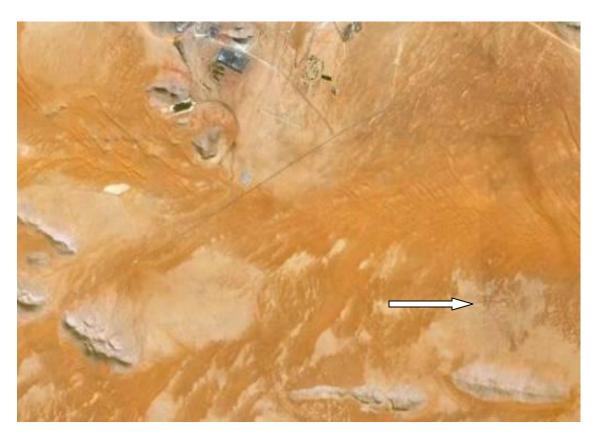
Aggeneys Goras Site 2: 29.33326° S 18.87979° E

This and a cluster of similar nearby sites on the farm Bloemhoek is situated on the plain south of the band of dunes that define the Koa Valley east of Aggeneys. It consists of an exposure of bedrock where Goras (water hollows) have formed, and is surrounded by surface scatters of Later Stone Age stone tools, pottery and ostrich eggshell fragments. There are also bits of broken frontier/historical era ceramics/porcelain and glass, reflecting either interaction and exchange of material culture, or later occupation of these sites by colonial stock farmers (who were reliant on temporary water supplies such as these places afford prior to the advent of bore hole drilling in the early twentieth century).



Bedrock exposure and hollow in which water collects after rain (above). Grinding groove in bedrock and examples of microlithic stone tools, pottery and ostrich eggshell.





Location of the goras in the Aggeneys game farm (white arrow)

Beaumont et al. (1995) have shown, with reference to the LSA, that "virtually all the Bushmanland sites so far located appear to be ephemeral occupations by small groups in the hinterland on both sides of the [Orange] river" (1995:263). This was in sharp contrast to the substantial herder encampments along the Orange River floodplain itself, which reflected the "much higher productivity and carrying capacity of these bottom lands." "Given choice," they add, "the optimal exploitation zone for foragers would have been the Orange River." The advent of herders in the Orange River Basin, Beaumont et al. argue, led to competition over resources and ultimately to marginalisation of hunter-gatherers, some of whom then occupied Bushmanland, probably mainly in the last millennium, and focused their foraging activities on the limited number of water sources in the region. "Surveys of large areas away from [such water sources] have failed to yield any signs of human occupation, except around the granite inselsberg extruding above the peneplain, ... the red dunes which produced clean sand for sleeping, or around the seasonal pans" (Beaumont et al. 1995:264). It is clear that, possibly following good rains, herders themselves moved into the hinterland. A further process attested by Thompson (1824) for herder groups settled at the stronger springs such as Pella, is that such groups will have dispersed during periods of drought. At such times competition between groups over resources, and stress within already marginalised hunter-gatherer society, must have intensified.

The 'Bushmen' ultimately exterminated at sites such as Gamsberg would have been probably the last stone tool makers and the last representatives of the Later Stone Age in this part of South Africa.

3.3.6 Rock art sites

Some of the most significant sites on BMM properties are rock art sites with those already recorded being a finger painting site near the Aggregate Quarry and two sites with cupules on Zuurwater (on the south side of Swartberg) and at the southern-most edge of the farm Aggeneys

Painted boulder site near Aggregate Quarry: 29.25644° S 18.80339° E

A report by Deacon (1995) describes rock paintings found on a boulder next to the Aggregate Quarry at Black Mountain Mine, Aggeneys (29.25644° S 18.80339° E). These are simple finger paintings including two "Star" motifs and an indented oval shaped image. Paintings similar to these are to be found over a wide area in the western half of the interior of South Africa, not infrequently on isolated boulders in the Karoo (sometimes along with rock engravings), and in rock shelters. Their age and context is not well understood, but they appear to be associated in this region with KhoeSan (and possibly Khoekhoe specifically) of approximately the last millennium, rather than with other groups regarded as the makers of finger paintings elsewhere in the subcontinent.

Archaeological traces on the floor of the shelter formed by this boulder, namely pieces of ostrich eggshell and flaked quartz, were recorded by Morris in 2011.



Faintly visible 'star' image finger painting.



Painted boulder with protective fence and reed roof (needs repairing). The site is situated at 29.25644 $^\circ$ S 18.80339 $^\circ$ E



Quartz flake and ostrich eggshell fragment from painted boulder site



Location of the paited boulder site (white arrow)

The painted boulder site is highly vulnerable in terms of its location near the edge of the Aggregate Quarry and hence there are critical management needs. A reed roof constructed to shield the paintings from direct sunlight also requires to be repaired.

Aggeneys cupule site: 29.36506° S 18.85160° E

This site is situated at the southern end of the game camp on the farm Aggeneys. It consists of a large boulder with a north-west facing concave surface making a small shelter, the wall of which is covered by cupules up to 1.5 cm in diameter.





Adjacent to the site is an extensive moderately dense surface scatter of Later Stone Age material including stone artefacts, pottery and ostrich eggshell pieces. It seems likely but not certain that these artefacts provide a context for the cupules.

A few hundred metres away are possible isolated graves.



Location of the cupule site (arrow)

Zuurwater cupule site: 29.23668° S 18.72809° E

This site is situated on the south side of Swartberg, a few hundred metres downslope from the mining operation. A drainage line plunges over a waterfall feature and creates a (usually dry) pool at the base of the cliff. On a rock to one side of the pool a vertical face of about 2 x 1.5 m is festooned with engraved cupules like the ones at the Aggeneys cupule site. Similar cupules, in addition to the above Aggeneys site, were recently identified further west near Kangnas. Their context is uncertain.

No stone artefacts or pottery were noted in the vicinity, but three lower grindstones with grinding grooves were found nearly.

This site is of high significance. Debris coming down the mountainside from the Swartberg mine would need to be managed in such a way that it does not encroach on this site.



Waterfall with cupules (indicated by arrow)



Cupules engraved/drilled into the face of the rock





Swartberg Mine and position of the cupule site (arrow)

Gamsberg

In his book, *The Bushman*, Dunn recalled "near N'Ghaums [Gams], I saw an engraving of a hippopotamus being dragged across the dry veldt by several Bushman people by means of a rope attached to its nose" (1931 : 46). Dunn offers an explanation suggesting that the hippopotamus, associated with water, was shown in this way on the engraving in order that "rain would necessarily follow…and an abundance of food be assured". Current understandings of Later Stone Age rock art suggest that images of large mammals such as the hippopotamus may well have served as metaphors for "rain animals". Dunn's hippo engraving has not as yet been located.

3.3.7 Iron Age sites

No Iron Age sites are expected to be found this far west since environmental conditions here would not have been suitable for Iron Age farmers. The closest documented presence of such farmers is the Upington area where they interacted with Khoekhoe herders in the late eighteenth century.

Iron Age sites have been located through the occurrence of characteristic pottery at sites abutting the Langeberg near Olifantshoek (east of Upington). Southern

Tswana settlement in the region in the last 500 years (and particularly from the end of the 18th century) was marked by a higher reliance on cattle-based pastoralism than was apparent in contemporary settlement further to the east on the southern High Veld (Maggs 1976).

3.3.8 Colonial frontier era including the history of genocide

From the colonial frontier era of the eighteenth and nineteenth centuries, written records include the travelogues of George Thompson (1827) and E.J. Dunn (1931, Robinson 1978) who visited the area in 1824 and 1872 respectively. Their observations (and see Penn 2005) shed some light on the local history of the nineteenth century. Place names were coming to be fixed in the colonial frontier period and these capture vestiges of indigenous sensibilities.

A much more prominent appreciation now exists concerning the history of genocide against the Bushmen in this area (Anthing 1863), with strong indications that a kloof on the south side of Gamsberg was one of the massacre sites, referred to by Dunn in 1872 (Robinson 1978), by Burger (1986) and, more obliquely, by Anthing (1863; Jose Manuel de Prada-Samper pers. comm. 2009). A call has already been made for massacre sites to be identified on the ground and declared as Provincial Heritage Sites (eg by the folklorist Jose de Prada-Samper in discussion with staff of the Northern Cape Struggle History Project and Ngwao Bošwa jwa Kapa Bokone – the Provincial Heritage Resources Authority). Such sites could ultimately form part of a /Xam and Khomani Heartland World Heritage Site, already on South Africa's Tentative List, although the main centre for the /Xam is likely to be further to the south east in the area between Kenhardt and Carnarvon.

Claims that archaeological traces relating to these incidents had been found within the Gamsberg basin (Dicey 2005:166-7) could not be substantiated (William Dicey pers.comm. – who uses an image from the rim of Gamsberg as the cover picture for his book, *Borderline*), but material which could well be relevant includes the Later Stone Age sites with ceramics and porcelain discussed in the next section.

Stone walling and kraals relating to the influx of colonial farmers to this landscape has been documented at Aggeneys and Gamsberg. Location near to springs reflects the significance of water as a resource before the introduction of drilling for water in the twentieth century.

3.3.9 Evidence in place names

Place names give insight into the history of the area and the surrounding landscape.

Of particular relevance are the names of the places Gams, Aroam and Aggeneys – names that were attached to farms once they were parcelled out as private property in the first two decades of the twentieth century. These names are derived from Nama names and thus echo an aspect of precolonial spatiality and sensibility here – what Ingold (2000) refers to as a 'dwelling perspective'. Some of the local debates around the meanings of these names have thrown up details of some of the violent aspects of local history which must be given some emphasis with regard to an intangible heritage significance for the Aggeneys-Gamsberg area.

Aggeneys

A variety of interpretations exist for the name Aggeneys/Aggeneis. It appeared first in written form as *Achenijs* in 1859. In a "Brief history of Aggeneys" published in *The Cape Argus* in July 1973 (Nienaber & Raper 1977:173) the following story is given:

"Aggeneys is the name of a kloof on Vickie Burger's farm ... Long before the turn of the century, the Bushmen had several strongholds in the mountains between Pofadder and Springbok and from these they carried out raids on the farmers. Finally the farmers could no longer tolerate the marauding Bushmen and formed a commando which followed the spoor of the Bushmen and the livestock that they had stolen to the kloof, which is today known as Aggeneys. Near the kloof they split into three parties which surrounded and trapped the Bushmen at a spring near the confluence of three ravines. The Bushmen were wiped out and the kloof became known as 'The Place of Blood'. The Nama Coloureds have always known the kloof as 'The Place of Water', as there were several natural springs there, but to this day no-one is quite certain of the origin of the name Aggeneys..." (Nienaber & Raper 1977:173).

Other interpretations are cited by Nienaber and Raper, including the possibility that it means 'Place of Red Clay' or that it is associated with reeds (*riete*) (reviewed in Morris 2000a:10).

An important further source not accessed previously comes in the form of C.R. Burger's (1986) thesis, 'N Ondersoek na die Oorsprong en Betekenis van Pleken Plaasname in die Landdrosdistrik Namakwaland, which cites A.J. Burger, a retired farmer, in commentary given in a letter written in 1982 which contradicts the above and links the incident of the killing of Bushmen rather with Gamsberg than with Aggeneys.

"Daar was beslis riete, ook nounog, en daar was ook een of meer fonteine toe my oorlede vader die plaas in 1910 gekoop het. Daar was en is ook nog rooi klei. Ek kan onthou hoe die meide hulle gesigte besmeer het – eintlik 'n rooi sagte klip. Die laaste vesting waar die Boesmans doodgeskiet is deur die Boere, was nie Aggeneys nie, maar baie beslis aan die suiderkant van Gamsberg – so 'n lelike kloof in die berg. Jy kan dit sien as jy met die ou gryspad ry." (Burger 1986 :147-148).

["There were certainly reeds, even now, and there were also one or more springs when my late father purchased the farm in 1910. There was also and still is red clay. I can remember the Coloured women [meide] smearing their faces with it – actually a red soft stone. The last place where the Bushmen were shot dead by the farmers was not at Aggeneys, but very definitely on the southern side of Gamsberg – a dreadful kloof in the mountain. You can see it if you drive along the old gravel road"]

C.R. Burger thus rejects the meaning 'Place of Blood' for Aggeneys, on the one hand, and is inclined to opt for 'Place of Reeds' – from the Nama ‡a meaning riet and !keis meaning place. On the other hand he is quite emphatic and specific about Gamsberg being a site where Bushmen were killed.

Gamsberg

In 1824 when Thompson travelled through this area he noted the name of the place as being *t'Kams*, meaning "tufted grass" in the Nama dialect. Nienaber and Raper cite a local farmer, A.J. van Jaarsveld, who similarly asserted that the origin of *Gams* or *Gaams* was in the word *Tha-aams* which was pronounced with a click, where *Tha* means "grass" and *aams* means "mouth". The Nama *|Gâ-ams* literally means "Grasmond" or "Grasfontein". The grass in question is most likely to be *Aristida brevifolia* (Nienaber & Raper 1977, 1980).

Aroam

This name is derived from the Nama ‡*aro-* meaning "wag-'n-bietjie" tree (*Ziziphus mucronatus*) and *am* or *am-s* meaning "mouth". The name could thus be translated as "Wag-'n-bietjiebosfontein".

Discussion on place names and local histories

One point of significance is that these names appear to derive from Nama usages which began to be fixed in colonial naming conventions by at least 1824. That farms were being sold off as private property here as recently as the second decade of the twentieth century meant that on average indigenous names were surviving longer and entering official geographical nomenclature on a larger scale than elsewhere in the region.

Those amongst whom these names were originally current may well have been responsible for some of the most recent Stone Age material that includes pottery types associated with the Khoekhoe.

Another hint of some continuity from a precolonial past is the evidence that certain traditional customs were still practised locally as can be deduced from the description of the use of 'red clay' or ochre.

However, there are indications of quite radical breaks in continuity, with a significant element of violence punctuating the recent history of the region, as indicated by the stories related above. Further corroborating the local legend, E.J. Dunn mentioned the incident in an 1872 account of a journey through the area. At 'Ghaums' (ie Gams), he mentions a spring: "at this water an affray took place between the Boers and Bushmen. The Bushmen scherms, made of stones, still remain, as well as the marks of the bullets on the rocks" (Dunn in Robinson 1978:62). In the previous Gamsberg study (Morris 2000a:11) it was remarked that this may have been a spring on the eastern side of Gamsberg, but the comments in C.R. Burger's study make it most likely that this was on the south side of the inselberg. Several massacres are recorded as having taken place in the region from the mid 1850s, as reported by Louis Anthing to the Colonial Secretary, Cape Town, in 1863, where he exposes deliberate acts of extermination (it has been referred to as genocide) by Boers and Bastaards. Anthing specifically alludes to major incidents of this nature in the vicinities of Bosluis and Namies (immediately east of Gamsberg) where "hundreds must have been killed" - while "smaller affairs [were] equally horrible" (Anthing 1863:10).

More than a quarter of a century prior to this, Thompson noted that the local people, called the *Obseses*, were an amalgamated grouping of various 'tribes' which had been "assailed by ... formidable enemies." The latter enemies had included the raiding bands of Afrikander and probably other frontier bandits and commandos (1827:288, 290-1). The indigenous people of the region had faced sustained onslaughts from at least the 1770s (Penn 2005) and by the later nineteenth century the independent San had essentially been wiped off the face of the country.

Important insights into the pre- and protocolonial adaptation of seasonal/opportunistic aggregation and dispersal by herders in this harsh environment are given by George Thompson who camped at *t'Kams* (Gams) on 24 August 1824 – where in fact the missionary Bartlett of Pella was then temporarily stationed. He remarked that "severe droughts, and consequent failure of pasturage, forced them [Nama herders of Pella] occasionally to disperse themselves in divisions over the country wherever a spring of water exists with grass in the vicinity for their flocks ... the nature of the country is such, that a people like the Namaquas must be nomadic ... as soon as rain falls, the pastures of Pella will instantly spring up, and the scattered divisions of the people will again be reassembled" (Thompson 1827:284).

Thompson interestingly observed that they possessed a breed of sheep different from the fat-tailed variety that was usual further south (1827:289). While fat-tailed sheep lose their fat tails under drought conditions, there is a thin-tailed breed of indigenous sheep known from the eastern side of the subcontinent (E.A. Voigt pers. comm.). Thin-tailed sheep are depicted in rock paintings in the Limpopo basin.

3.3.10 Conflict sites: Gamsberg and Namiesberg

See discussion above under Colonial frontier and Place names.

3.3.11 Anglo-Boer War

Not documented in this study.

3.3.12 Cemeteries and graves

Towns as well as farms in the area contain grave yards including designated urban cemeteries and often small burial grounds on farms. There are also indications of isolated graves, some of which were found in the vicinity of Gamsberg.

3.3.13 Mining and its impacts

Mining infrastructure per se has not been a focus of this study but should be documented in the longer term.

3.3.14 Intangible histories, sacred waters

Much intangible history and oral history complements the material heritage traces, hinted at in the section above on place names.

Where legends remain in the form of oral testimony, these should be recorded.

3.3.15 Comment

The above overview provides indications of the range of heritage resources that occur on BMM property. This is not a comprehensive record as parts of the properties have yet to be systematically surveyed: the resources made available for this report did not allow for substantial extension of the survey work.

This Environmental Management Plan Report for heritage needs to take this into account and ensure that mechanisms are set in place to redress this issue. The fact that large parts of the property are rich in minerals means that the heritage, which is a non-replaceable resource, is particularly under threat. Therefore there

is urgency to this matter and implementation of further survey and inventorying of sites must be a priority.

3.4 Data management strategies

3.4.1 Existing data

Information concerning heritage resources has been generated by a range of organizations and individuals and exists in various formats such as maps, documents and images (both analogue and digital). In some cases the information may not be complete and may not conform to any standard in terms of descriptive fields, significance rating, grading etc.

3.4.2 Standards and nomenclature

Data standards and naming conventions for heritage resource data, consistent with those used by SAHRA need to be adopted.

3.4.3 Procedures and protocols

Procedures and protocols need to be adopted for heritage. This document serves to indicate some guidelines and procedures for this purpose.

SECTION 3 ENVIRONMENTAL MANAGEMENT PLAN FOR HERITAGE RESOURCES

CHAPTER 4.

LEGAL REQUIREMENTS, CAPACITY AND GOVERNANCE: CURRENT POLICIES AND PLANNING FOR HERITAGE RESOURCE MANAGEMENT AT BLACK MOUNTAIN MINING PROPERTIES

4.1 Introduction

This chapter summarises the key legal rights and responsibilities in terms of the NHRA.

4.2 Key rights and obligations in terms the NHRA

SAHRA. The primary obligation to classify and manage heritage resources under the NHRA is imposed upon heritage resources authorities.

The provisions of the NHRA are applicable to all places and objects within the BMM properties which are determined to be "heritage resources" as defined in the NHRA.

General obligations of those responsible for heritage places, heritage areas and heritage objects include:

With respect to heritage sites:

- to maintain them according to a minimum standard and procedure prescribed by the heritage resources authorities; and
- to obtain a permit for any alteration to, damage, destruction, relocation, subdivision or changing of planning status of such a site;

in relation to protected areas or heritage areas:

- to consult the relevant heritage resources authority before damaging, disfiguring, altering or in any way developing any part of a protected area; and
- to obtain the consent of the relevant local authority for any alteration or development affecting a heritage area;

in relation to provisionally protected places or objects (if such should exist):

- to obtain a permit from the relevant heritage resources authority or local authority before damaging, disfiguring, altering or in any way developing any part of a provisionally protected place or object; and
- to obtain the consent of the relevant local authority for altering or developing or affecting a place listed on a provincial heritage register;

In relation to graves or burial grounds:

- to obtain a permit from the relevant heritage resources authority before destroying, damaging, altering, exhuming or removing from its original position or otherwise disturbing, the grave of a victim of conflict or any burial ground which contains graves of victims of conflict; and
- to obtain a permit before destroying, damaging, altering, exhuming, or removing from its original position or otherwise disturbing any grave or burial ground that is older than 60 and which is situated outside a formal cemetery;

and otherwise:

- to notify the heritage resources authority before undertaking a development of the kind named in SAHRA, and in certain circumstances submit an impact assessment report to the heritage resources authority;
- to obtain a permit before destroying, damaging, excavating, altering, defacing or otherwise disturbing or removing from its original position or dealing with any archaeological or palaeontological site or meteorite or using any excavating equipment at an archaeological or palaeontological site:
- to obtain a permit from the provincial resources authority before altering or demolishing any structure or part of a structure that is older than 60 years;
- to report the finding of any archaeological or palaeontological object or material or meteorite to the relevant heritage resources authority.

In relation to heritage objects:

- to inform SAHRA of dealings in respect of such objects;
- to obtain a permit from SAHRA before carrying out restoration work or repair on a heritage object listed in Part 2 of the heritage register; and
- to obtain a permit before destroying, damaging, disfiguring or altering any heritage object;

4.3 Internal capacity, organizational structures and co-operative governance

It is desirable that environmental management staff at Black Mountain Mining should be sensitized concerning heritage resources and be equipped to exercise basic oversight in this sphere.

4.4 Towards an Environmental Management Plan for heritage

The EMPP should include the following specific strategies and actions.

Strategic Actions

- 1. Identify, research and document information on tangible and intangible cultural heritage resources associated with the properties of BMM.
- a) Encourage formation of a cultural heritage working group
- b) Audit tangible and intangible heritage resources
- c) Collect and document oral information
- d) Develop a framework for interpretation
- e) Facilitate research programmes
- f) Compile a comprehensive spatial and non-spatial database on cultural heritage resources
- 2. Manage tangible and intangible cultural resources
- a) Audit tangible and intangible heritage resources
- b) Take steps to manage impacts on tangible cultural resources
- c) Identify priorities for protection, stabilisation and rehabilitation
- 3. Develop materials and facilities that develop an appreciation and respect for the diverse cultures and spiritual significance associated with BMM
- a) Identify and prioritise the development of education facilities and materials
- b) Develop educational materials and facilities

CHAPTER 5 PROPOSAL FOR AND IMPLEMENTATION OF A PROCEDURES AND GUIDELINES MANUAL FOR HERITAGE RESOURCE MANAGEMENT

5.1 Introduction

This chapter suggests that a procedures and guidelines manual be compiled to assist in fulfilling legal obligations as identified through the legal review.

The procedures should encompass the following:

5.2 General procedures and guidelines for heritage management:

Some of the heritage resources of the Black Mountain Mining properties have been captured in existing databases, for example at the McGregor Museum, but ongoing research and other activities will be constantly adding to these observations and it is inevitable that new resources will come to light. This could happen when new development or mining activities take place. Heritage resources that may be encountered could be examples from any of the range of categories summarized in Chapter 2, above.

Protocols need to be established; a Heritage Data Capture Form designed; and a Register of Terms standardized.

Specific procedures for the discovery of human remains or graves should be provided for separately as also procedures for archaeological, palaeontological material and meteorites and heritage objects.

The guidelines should explain the procedures that should be followed when something is discovered.

Most importantly no further activity where the find has been made should be undertaken until it has been established whether further mitigation or archaeological investigation is required.

The manual should outline:

- a) Procedure for identification and recording of newly discovered heritage resources.
- b) Procedure for capturing heritage resources on a BMM Heritage Register Database
- c) Guidelines for Annual Reporting to Ngwao Bošwa ya Kapa Bokone (Northern Cape Heritage Authority) and to the South African Heritage Resources Agency on Heritage Resource Management.

5.3 Procedures for physical planning and development

The guideline should establish the need and overall procedure to be followed at BMM for planning the management of heritage areas or sites, of which highly significant examples exist, e.g. the cupule site on the western slope of Swartberg. Two main levels of planning for the management of heritage resources can be applied: a Conservation Plan / Heritage Statement and a more detailed Site Conservation Management Plan. The Conservation Plan / Heritage Statement can be the first stage of the management plan. The purpose a Conservation Plan / Heritage Statement is to be proactive, identifying sensitivities and vulnerabilities attached to heritage sites prior to further planning or any other form of development.

5.3.1 Conservation Plan

The Conservation Plan would establish why a place is significant and how this significance would be maintained. Some of this information would already have been formulated in the Heritage Register, where a preliminary Heritage Statement is found in some instances. A Conservation Plan can be an integral component (alongside a statement on biodiversity, etc.) of a Phase One Site Assessment for local areas.

Heritage Statements are an outline version of a Conservation Plan, based on the same principles. Such a statement uses readily available existing information to establish:

- a chronology for the site;
- an overview of significant surviving elements;
- a statement of significance;
- the identification of major conservation issues; and,
- a set of outline policies.

It should also identify key gaps in the knowledge of the site and issues affecting it. If the gaps are significant, the Heritage Statement may be used as the basis for a brief for a full Conservation Plan. A Heritage Statement is not as comprehensive as a full Conservation Plan and is unlikely to be the subject of the same degree of consultation.

It is useful to produce a Heritage Statement:

As early as possible in any project; To provide a rapid overview; Where there are likely to be conservation constraints and opportunities which need to be understood early on; As a way of bringing together key management staff (especially those who are not heritage/conservation specialists) at the outset to encourage them to engage with heritage issues; To facilitate stakeholder participation.

Once a Conservation Plan and Heritage Statement is in place, specific strategies or actions can follow.

5.3.2 Site Conservation Management Plan

A Site Conservation Management Plan is necessary to ensure that any development envisaged will not detrimentally impact the heritage resources of BMM. It is about stewardship and sustainability and the management of change. The Site Conservation Management Plan might include management strategies, option appraisals, feasibility studies, work plans, development opportunities and financial provisions.

In summary, actions for BMM should include:

- a) Developing management plans for heritage areas or sites;
- b) Integration of heritage resource assessment into local mining and development planning;
- c) Heritage impact assessments (including archaeological impact assessments as components of environmental impact assessments required in terms of the Environmental Conservation Act);
- d) Heritage impact assessment procedure where required as a stand-alone study.

5.4 Procedures and guidelines for management of specific types of heritage resources defined by the NHRA

5.4.1 Procedure for obtaining consent from relevant authorities for alteration or development affecting heritage objects

No person may destroy, damage, alter, excavate, remove from its original site any object without a permit from the relevant heritage authority. An 'object' means any movable property of cultural significance, including archaeological artefacts, palaeontological or rare geological specimens, meteorites, and other objects. Archaeological and palaeontological objects and meteorites which belong to the state and which are generally managed as part of the site from which they came (section 35 of the NHRA) are generally handled separately from other heritage objects which may be privately owned and which are therefore not only associated with the site of origin. In terms of the permit process they are managed by approved repositories and should not be moved or altered without consultation with SAHRA. Permission for permanent or temporary export or loan of archaeological and palaeontological material and meteorites is given to qualified researchers and institutions with established collections.

In terms of the NHRA, a 'heritage object' is an object that has been given formal protection in terms of Part 2: Section 32 of the Act. Heritage objects may be protected in two ways. They may be Gazetted as 'type of Heritage Object', in which case they may not be exported without a permit. They may be specifically

declared as a 'specific' heritage object or 'collection'. There are procedures for declaring an object a heritage object, and there are also provisions for dealing with claims for restitution of heritage objects (NHRA Section 41).

5.4.2 Guidelines and procedures for managing: archaeological impact assessments, archaeological resources, rock art, graves & burial grounds

Archaeological Sites are relatively well protected by heritage legislation, but once destroyed or removed without an adequate record, archaeological evidence is gone forever.

Archaeology is based on a systematic process of revealing, recording, analysing and interpreting evidence from 'material culture' – remains resulting from human activities. It also considers 'intangible' evidence, such as beliefs, traditions and stories, which provide a context in which to understand the material clues. Evidence thus includes artefacts, landscapes, food debris, documents, photographs, stories, and much more.

Specific sets of detailed guidelines and procedures need to be compiled in a manual to address the management of:

- (i) Archaeological impact assessments;
- (ii) Archaeological resources;
- (iii) Rock art;
- (iv) Graves/burial sites;
- (v) Palaeontological resources and meteorites.

5.4.3 Guideline for developing an inventory of structures or remnants of structures that are more than 60 years old

Probably only a small proportion of the structures within the BMM properties, e.g. those at the original Aggeneys farm homestead, would qualify under this criterion. Where they exist they need to be captured in the database. They would need to be assessed for vulnerability.

5.4.4 Procedures and guidelines for identified management needs: managing heritage landscapes

Almost every part of the BMM landscape has been modified to some degree by past human activity. Most of these modifications, in rural settings, may have been quite small while some, such as urban development or mining have been dramatic. The latter include cultural landscapes which may be just as important to conserve as significant components of cultural landscapes as it is to protect a rare plant or an individual structure. Cultural landscapes are vital pieces of the historical record.

Any present and future activity must ensure that the record remains intact for future generations.

Cultural landscapes have yet to be identified in the BMM properties but would include locales such as those that might be associated with the genocide against the San on the south eastern side of Gamsberg. Once they have been defined, any activity within any of these landscapes would require careful planning and liaison with Bošwa and/or SAHRA.

A manual of guidelines and procedures is needed for managing heritage landscapes.

5.4.5 Procedures and guidelines for management in respect of interpreting heritage resources.

The cultural significance of many places is not readily apparent, and should be explained by interpretation. Interpretation should enhance understanding and enjoyment, and be culturally appropriate (Article 25 Burra Charter 1999)

More than simply the provision of information on a particular area or site, interpretation can provide a deeper awareness, engender caring and responsibility for the resource so that residents/workers/visitors utilise it properly, and promote public support for the continued conservation of the heritage resources of BMM.

Some of the issues that a manual of procedures and guidelines should address are:

- Soft visitor management: the specialness of the place, to enhance enjoyment and appreciation of the attraction and influence attitudes and values towards the thoughtful and appropriate use of the resources there.
- Hard visitor management: includes trails and other facilities that are carefully positioned and designed to physically limit human impact.
- *Marketing:* opportunities through which the public image of an organisation can by promoted along with an understanding of the rationale behind its actions and management decisions.
- Value-added product of the tourism industry: enhancing existing tourist attractions, identifying and promoting new destinations, developing employment and revenue-generating activities.

Appropriate ways of making the significance of a place understood should be consistent with the retention of that significance. It may be a combination of the treatment of the site, the use of the place and the use of introduced interpretive material.

• Effective communication: to capture intended audiences; to sustain their interest, to present information in such a way that it stays in the audience's

- memory."Tell me I'll forget; Show me I'll remember; Involve me and I will understand" Chinese proverb.
- The power of the place itself: any interpretation that does not somehow relate to what is being displayed or described to something within the personality of experience of the visitor will be sterile; experiencing is the essence of interpretation.
- Multiple interpretations: places open to the public where significance is
 obscure or contested or intangible may need general policies to control
 interpretation and presentation. It is necessary to involve people in the
 decision-making process, particularly those with strong associations with a
 place.
- *Provocation:* the chief aim of interpretation is not instruction but stimulation.

CHAPTER 6 PRIORITIES FOR HERITAGE RESOURCES MANAGEMENT OVER THE NEXT FIVE YEARS

6.1 Introduction

This section presents the priorities for heritage resources management over the next five years.

The management priorities are categorised into non-spatial and spatial priorities. The non-spatial priorities include developing institutional capacity for managing heritage resources, stakeholder engagement, research and the continued development of the heritage resources inventory.

6.2 Non-spatial priorities management priorities

6.2.1 Developing internal heritage resource management capacity

6.2.1.1 Current staffing

Existing environmental management staff need to be sensitized to the needs of heritage and heritage site management.

6.2.1.2 Training requirements

A training needs assessment has not been undertaken as part of this study.

Training for relevant environmental management personnel is recommended to enhance their capacity to implement heritage management.

6.2.1.3 Institutionalising heritage resource management

Institutionalising heritage management at BMM is not only about staffing and training; it is about making it an integral part of the work of people whose primary responsibility might be in other spheres of mining and development activity or nature conservation.

6.2.3 Stakeholder engagement

6.2.3.1 Ongoing stakeholder engagement and communication in prioritisation, planning and implementation

It is recommended that BMM heritage management should focus on establishing and strengthening stakeholder engagement in heritage resource management and that this be focused on proactive approaches.

There are many ways in which stakeholders can be engaged in heritage resource management planning, ranging from providing information, representation on committees and consultation through participation, to full engagement through partnerships and co-management agreements.

6.2.3.2 Dispute Resolution

Heritage resources, their significance, interpretation and management may become the subjects of dispute and contestation. It is therefore important to anticipate such potential disputes in planned approaches to stakeholder engagement in heritage resource management.

6.2.4 Research and continued development of the heritage resources inventory

Databases being developed on an ongoing basis that will need to be integrated into BMM management include:

6.2.4.1 Developing sustainable relationships and data-sharing agreements with data suppliers.

This may include universities, research institutes, museums, and interest groups.

6.2.4.2 Identifying "orphan" databases and ensuring that this information is not lost to society:

There are cases where an individual/group may gather valuable information about a particular resource. As interest rather than legislation or mandate drives such processes, it is essential that these are identified and recorded before being lost. An example may be a private collection of stories or oral histories.

6.2.4.3 Integrating with other heritage resource inventories.

It is essential that BMM management should engage Boswa, SAHRA and other management bodies developing heritage resource inventories on the issue of compatibility and integration. SAHRA has already established and formalized heritage inventory standards by way of SAHRIS.

6.2.4.4 Filling the identified gaps in the BMM heritage resources inventory

Beyond the integration of existing and developing databases, key gaps in known information can be identified. A suggested approach is to engage the relevant interest group/s and jointly implement a project to research and gather the information. The following are priorities:

- i) Archaeological sites. The known distribution of archaeological sites in BMM properties is almost certainly not a true reflection of the total archaeological resources of BMM. Further archaeological research/survey must be undertaken in areas not systematically investigated thus far. This is imperative in areas of increased mining and development, before potential sites are negatively impacted.
- *ii)* Indigenous knowledge systems. It is not known to what extent indigenous knowledge survives in the vicinity of BMM with respect to sites and natural resources. Research is needed on this.
- *iii)* Audit of structures older than 60 years old. Probably very few structures on BMM property are older than 60 years. Some might have significance and others not. The results of such an audit should be captured on the heritage inventory and used to inform operational management.
- *iv)* Cultural landscapes. Cultural landscapes are receiving more attention in heritage management in South Africa and are particularly pertinent in BMM in relation to the history of the last independent Khoisan people of the area.

6.3 Spatial priorities

It is recommended that over the next five years, a systematic approach be undertaken to identify spatial priorities on an ongoing basis as further information is provided through research. The following set of criteria could be used to prioritise areas:

Pre-colonial human history has not received sufficient attention in South Africa and requires focused research to enable more prominent representation, both within the inventory but more importantly in representation and interpretation on the ground. It is therefore proposed that a partnership research project be developed not only to identify and map these resources for inclusion in the heritage inventory, but to enable a prioritisation of sites for the development and implementation Conservation Management Plans and interpretation.

Key areas/sites need to be identified for the development and implementation of Site Conservation Management Plans over the next five years (see procedure manual suggestion above). It is likely that the availability of funding would significantly impact the further prioritisation of these spatial priorities that can feasibly be addressed over the next five years.

Key sites include the rock art and cupule sites on BMM property.

6.4 The way forward

An integrated plan for the region must include all of the intended management actions for heritage resource management presented in this report.

This together with a GIS-based heritage resources inventory, yet to be initiated, and the sets of manuals of management procedures and guidelines proposed above would provide a robust platform for the continued evolution of integrated management of heritage resources at Black Mountain Mining properties at Aggeneys.

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