







SOUTH AFRICAN HERITAGE RESOURCES AGENCY

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SITE INSPECTION TEAM

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EXECUTIVE SUMMARY

- inspections of the thirteen fossil sites of the Cradle of Humankind World Heritage Site (COH WHS) carried out between 7 and 11 May 2007 This document presents the outcome of the fifth Monitoring and Evaluation
- 1 office of SAHRA; Mr E Seamark of the Gauteno Department of Accions Department of Finance and Economic Affairs) and was carried out by officials of the COH WHS MA, Mr P Mills and Mr J Sibanyoni; Ms M Leslie from the national office of Langa from GDACE, and Dr J Maguire, a professional specialist service provider Conservation and Environment (GDACE) and, on occasion, Dr. K Mbatha and Ms M (COH WHS MA) for the COH WHS (Currently the Office of the CEO, Blue IQ Projects The May 2007 Fossil Site inspection was commissioned by the Management Authority
- دب The brief remains unchanged from previous reporting exercises, namely
- ಶಾ To carry out inspections of the thirteen fossil sites with comprehensive reporting
- 9 To make recommendations on issues identified based on best practice
- C To develop a checklist for each fossil site for use in future Monitoring and Evaluation (M&E) inspections
- To provide advice and inputs into the compulsory Periodic Reporting required by UNESCO from the COH WHS MA.
- 4 sites; a site-specific report for each site which provides an update on the previous report introductory section dealing with generic issues which are common to most of the fossil and notes new issues that have arisen, and a cumulative checklist of monitoring criteria The results of the site inspection are reported in a 3-part document for each site: an
- S into the current report. Continuity is provided by carrying forward all unattended issues from previous reports
- 0 many of the issues, whether generic or site-specific, remaining unchanged. On account of administrative uciays, we represent the current inspection, resulting in inspection had not yet been actioned at the time of the current inspection, resulting in the current inspection. 2006 report are new, have not been discussed again in detail as such detail is available in the October management role-player presented below. Generic issues, with the exception of those that issues as yet unattended have been listed in the 'list of actions required' prepared for each been carried forward into this report as items in the cumulative checklists, and generic On account of administrative delays, the report generated by the October 2006 site
- --1 New generic issues include:
- <u>5</u> 8 The process of scrutiny, comment, approval and circulation of site inspection reports
- Policy issues which affect site management
- 0 some developments) The presence of resident farm workers within the fossil sites (not a new issue but
- 0 The need to foster palaeontological research and palaeontologists
- æ timing of inspections by the site safety officer The requirement for annual site safety inspections of the caves and fossil sites
- Cave monitoring equipment for use in subterranean environments

- Tourism: Tour operators and tourists on the fossil sites
- The erection of site plaques (not new, but there have been some new developments)
- ごきゅ Updating the site management plans, which process is now seen as incorporating the document archives issues of the need for site plans, status quo reports, photographic and
- و بنسبة The Heritage Agreements, which are due for revision shortly

SITE INSPECTION PROCESS

MA and to the scientists by SAHRA, immediately after the approval of the report. scientists. Issues relevant to each site will be communicated to the landowners by the COH WHS document to the COH WHS MA, within 3 working days. The final version of the report will be approved by the CEOs of the COH WHS MA and SAHRA prior to circulation to landowners and inspection official. collated comments from the COH WHS MA and GDACE, which field more than one site of inspection. Team members will return the report with comments within 5 working days, with by the specialist service provider, to the site inspection team for comment within 5 working days The Site Inspection Process will in future entail the submission of a draft site inspection report, The service provider will collate and include comments and return the final

ISSUES FOR THE ATTENTION OF THE MANAGEMENT AUTHORITY

mostly Arising from the fossil site inspections the COH WHS MA will give attention to the following generic issues, old and new:

- owned land' to 'irreplaceable part of the national estate A review of policy to change the perception of the declared fossil sites from "privately-
- 9 Local Authorities. Addressing the issue of resident farm workers within the heritage boundaries of certain properties, in conjunction with the Department of Housing and the relevant
- 0 the Heritage Agreement (HA), particularly with regard to control of alien invasive plants, To initiate dialogue (with GDACE) to ensure that landowners comply with the terms of weeds, fire control, littering and education of resident communities ('duty of care', HA,
- 0 Proactive planning of the changes needed in an updated version of the HA, especially with regard to the turn-around time of fossil site inspection reports
- Engagement with landowners regarding frequency and timing of the site inspections
- (1) (e) Fossil Site Inspection report (HA, clauses 6.1.3 and 6.1.4) make a recommendation that the ensuing site safety reports become Annexures to the Decisions regarding the obligatory cave and fossil site safety inspections, remembering to
- 9 (with GDACE). This would include the bat monitoring equipment needed at Gladysvale. A review of appropriate cave monitoring requirements, equipment, and recording of data
- 5 plans, a status quo report and the beginnings of an archive of photographs for each site. submission of the Periodic Report to UNESCO in 2009. This should include proper site Proactive planning to compile an updated version of the site management plans ahead of

The COH WHS MA will also consider the following issues:

- <u>a</u> research would be seen as a threat to the long-term sustainability of the COH WHS The need to promote scientific research and palaeontologists. Cessation of or lack of
- 5 Recommendations to tour operators on the fossil sites (mostly permitted scientists) with insurance requirements – some are obliged to do this to support their research regard to authorization, accreditation and compliance with the terms of the HA and

- 0 mining heritage: Iron Age sites, lime-mining and old wagon routes into planning Addressing the need to incorporate recording and documentation of the COH WHS
- 9 Protecting 'sense of place' not only within each fossil site but the viewshed from each
- 0 Consideration of the presentation of the full suite of heritage values present in the WHS which currently omits mining and natural assets СОН

ISSUES FOR THE ATTENTION OF SAHRA

generic issues, old and new: Arising from the fossil site inspections SAHRA will give attention to the following mostly

- <u></u> be discussed are listed in section 2.2.2.6 below Planning for the technical workshop with permit holders, past and present. Key issues to
- 9 Submission of details of selected plaque erection sites as per agreed priority list for approval by landowners where applicable
- 90 Permit applications for site plaques to be erected
- Relocation and permanent marking of heritage boundary site beacons decide on a
- 0 may need to provide surveyed diagrams. SAHRA will also collate a photographic archive and compilation of site plans. Further information may need to be sought by the MA who from SAHRA records at all inspections and other photographs that can be acquired SAHRA permitting committee by permit holders, for use in updated management plans, will collate available data for site plans for the fossil sites as submitted to
- 5 Draw up a checklist by which problematic vegetation can be identified in excavation
- (30) areas, brecciated pits and old kilns – a 'justification for eradication' guideline. Arrange for the annual cave and fossil site safety inspection (with COH WHS clause 6.1.3 and 6.1.4 of the HA). MA as
- E COH WHS environment Inputs into a Signage Policy which relates specifically to the fossil sites but also to the
- title deed of the property so that these do not have to be renegotiated each time a property Investigate having the requirements for management of the fossil sites written into the

ISSUES FOR THE ATTENTION OF LANDOWNERS

landowners: It is recommended that the following mostly generic issues, old and new, receive attention by the

- Control of alien vegetation and weeds
- J 2 discussed Control of littering and dumping of waste provisions for waste management to be
- 0 applicable Explaining the heritage values and appropriate behaviour to resident workers where
- 0 The need for proper fire management
- 0 Approval and written consent of landowner for tourism on the property where applicable
- 5 Updating the agreements with current and future permit holders when the HA comes up
- 9 Control over movement of local residents that might adversely affect fossil site integrity includes housing on or near the sites

ISSUES FOR THE ATTENTION OF PERMIT HOLDERS

It is recommended that the following mostly generic issues, old and new, receive attention by the

- dumps to be annotated according to history, source and content. commencing their excavation, or whether they were generated by the permit holder. All It is recommended that SAHRA request that the permit holders record all dumps within the fossil site and annotate them according to whether or not they were there prior to
- J provide information, where deficient. Permit holders to respond sections at those sites which are being actively worked, and request the permit holders to It is recommended that SAHRA collate what has been submitted regarding witness
- 0 Site plans: permit holders often have the best available site plans. It is recommended that SAHRA request updates on site plans submitted with new permit applications.

ISSUES FOR THE ATTENTION OF GDACE

It is recommended that GDACE give attention to the following issues:

- ىم supervision process and follow-up monitoring. Details in section 2.1, recommendation 3 Compiling of a set of guidelines for the removal of trees from sensitive heritage sites, a
- 9 supervision process and follow-up monitoring. Details in section 2.1, recommendation 2 Engaging with landowners via the COH WHS MA to ensure that the terms of the Compiling a guideline document for the use of herbicides on heritage sites, the
- Agreement adhered

Site Management Plans, and to check for, note and make recommendations on new issues arising heritage values of the sites, to check compliance with the Heritage Agreement and the accepted The purpose of the site monitoring and evaluation inspection programme is to safeguard the

INSPECTION TEAM STRUCTURE AND SITE INSPECTION PROCESS

problem areas were noted and captured on the cumulative checklist. discuss progress of their research work and excavation, or problems experienced as a landowner. The Site Inspection team would observe research work in progress, ask questions and any If the permit holder and/or landowner were available on site, they were given an opportunity to

essential to have permit holders present at the site inspection and this is a prerequisite for indepth, meaningful reportage. It is equally important to have landowners present at the site not guess this. Scientists are generally in a better position to draw the attention of monitors to enhances good relations and co-operative management of the sites. chemicals to the breccias to eradicate weeds may not be appropriate. This emphasizes that it is on issues that may affect the heritage value of the sites, for example to point out that applying issues that may threaten the heritage value of the sites. They also need to be present to comment the problem of warthogs damaging the excavation at one of the sites. The inspection team would encountered as often these would not be apparent to someone just visiting the site, for example, The permit holders are in a privileged position to give inputs as to problems that are being they must be encouraged to attend these meetings at least once a year as this

misunderstandings at subsequent visits. It is also important that both authorities are represented at all site visits, or this may cause

together and with the scientists make notes for inclusion in the next report. completion of issues in hand and capture new issues. The site inspection team could consult checklist with the permit holder At site inspections the monitoring and evaluation team would then go through the cumulative and landowner if they were present and note progress or

at several of the key sites where site safety is an issue. and preferably the landowner be present at every inspection. A site safety officer would be useful that representatives of the COH WHS MA, GDACE, and SAHRA, the permit holder (essential) site safety, landowner, permit holder and scientific issues to be dealt with. It is therefore essential Every site has administrative (COH WHS MA), environmental (GDACE), heritage (SAHRA),

then become part of the Fossil Site Inspection report. This aspect is not equally important for all sites and should be prioritized inspector for at least as long as it takes to inspect for this at each site. The site safety report can It is recommended that at future site inspections the team be supplemented by the site safety

STRUCTURE OF REPORT AND THE NEED FOR CONTINUITY

the sites. New generic issues are discussed in some detail, and unattended old generic issues are executive summary and discusses new generic issues - those issues which affect several or all of This site inspection report comprises three sections: an introductory section which provides an

monitoring recorded. continuity is maintained, progress reported, and the need, where appropriate, for ongoing carried over from previous reports into the cumulative checklists for each site. In this way,

not 'drop off the Agenda'. The checklist, as a record of what is happening and what needs to happen on each site becomes the backbone for site management plans Maintaining the checklist by updating from one report to the next is crucial in order that items do

N OF HUMANKIND CENERIC ISSUES AFFECTING THE FOSSIL SITES IN THE CRADLE

2 POLICY ISSUES WHICH AFFECT MANAGEMENT ON THE GROUND

identification, protection, conservation, presentation and transmission to future generations of the protection, conservation, rehabilitation and presentation of this heritage cultural and natural heritage situated on its territory belongs primarily to the State (Article 4). Each State Party to the World Heritage Convention recognizes that the duty of ensuring requires that appropriate financial (amongst others) measures be taken for the

outcomes in the areas of conservation, rehabilitation and presentation. are not just a bureaucratic paper exercise and that the fossil site inspections result in positive SAHRA have undertaken to ensure that the Fossil Site Inspections and the ensuing 'Management' in the five reports as requiring attention remain almost identical. Five Fossil Site Inspections have taken place (September 2004, February 2005, August 2005 October 2006 and May 2007) and a number of issues still require attention. The COH WHS MA and The issues identified

The inspection team would not guess this. The following challenges require creative solutions:

- respect to the landowner 'duty of care' and the public responsibility to safeguard an Particularly in the case of the COH WHS MA and GDACE, public sector policy limits COH WHS happen to be situated on private land. Heritage Sites in South Africa and indeed elsewhere in the world, the fossil sites of the public money 'irreplaceable national heritage asset' being spent on private land. Unlike most (if not all) the other A policy review is needed with
- 2 enhance the management of the designated fossil sites would be of value The areas that the designated fossil sites themselves cover are small. Personnel, expertise invasive plants and removing certain indigenous trees which are impacting on heritage environmental issues such as checking for Red Data species, snares, control of alien resources Consideration of increased use of the personnel and expertise of GDACE are available within GDACE, to manage several relatively
- ري circumstances, manner and supervision of tree removal and the same for the use of assets will occur. The need for a SAHRA permit to effect changes on the fossil sites need brecciated areas of fossil sites) would be of value. SAHRA would need to approve these poisons (it was recognized that no chemicals of any kind should be deployed within the sites" and a "Use of herbicides policy within the fossil sites" which sets out the SAHRA is required. Submission by GDACE of a 'Tree removal policy within the fossil Before any alteration of the fabric of the declared sites can be undertaken, a permit from Any delay for this process to reach finality could mean further deterioration of heritage

therefore important for landowners to attend site meetings. often apply on the behalf of landowners. not inhibit landowners from doing anything and permitted scientists (where these exist) As indicated elsewhere in the report, it is

Lack of implementation of the accepted Management Plan is considered a 'potential various parties and implementation of these responsibilities is a priority. World Heritage Convention). The management plan ascribes certain responsibilities to (paragraph 179 of the Operational Guidelines for the Implementation of the

2.2 ADMINISTRATIVE OBLIGATIONS: HERITAGE AGREEMENT

plans. The objectives listed include colliservation and its appropriate use, improvement and presentation. The purpose of the Heritage Agreement is to provide for implementation of the site management The objectives listed include conservation and total protection of the National Heritage

2.2.1 THE OBLIGATIONS OF THE COH WHS MA

2.2.1.1 Annual report to SAHRA

the COH WHS MA) submit a report at least annually to SAHRA. This report needs to address the following: Clause 2.4 of the Heritage Agreement requires that GDACE (responsibility since transferred to

- heritage value and their interpretation Issues relevant to the National Heritage Sites of the COH WHS, the maintenance of their
- b) Achievements
- c) Agreements undertaken with landowners
- d) Problems that have arisen in respect of management
- 0 Potential areas of concern requiring further co-operation and management
- 5 funds derived from tourism to be used to maintain the sites The management of tourism and other impacts upon these sites and the potential for
- Contributions to scientific endeavours through the Trust
- Areas of concern with regard to compliance with and implementation of the management

changes to site management structures as part of such a report. representative on the team. SAHRA would like to be kept informed of administrative and other Site Inspection Report as mentioned in clause 6.5.2 of the HA, as pointed out by the SAHRA It is clear that this reporting (called for in terms of clause 2.4 of the HA) is not the same as the

Recommended action:

ensure that such reports have been received and are on file It is recommended that the COH WHS MA send the required reports, and that SAHRA

Updating of the Heritage Conservation Management Plan ('The Management Plan')

Heritage Sites and that these are updated at least every 5 (five) years. It is not clear whether or not SAHRA requires that Heritage Conservation Management plans are drawn up for all National

review and updating of the Management Plan is a COH WHS MA function, in consultation with this dates from the date of acceptance by SAHRA of the management plan as the Heritage the case, the updated management plan is due or almost due. Clause 3.5 of the HA notes that the from the date of acceptance of the management plan by the World Heritage Committee. Whatever Conservation Management Plan or from the date of signature of the Heritage Agreements, or

developed will go a long way towards compiling the required update the information included in the permit applications and the photographic archive that is being The four (and with the current report, five) existing Fossil Site Inspection Reports, collation of

Recommended action:

- 2 inspection, due in 2009 of the management Plan is compiled. Submission date is ahead of the ICOMOS site It is recommended that the COH WHS MA take steps to ensure that an updated version
- 9 It is recommended that the site plans and status quo reports together with the archive of monitoring photographs be compiled as soon as possible. The details of what is required have been noted in the October 2006 report and need not be repeated here
- 0 photos taken during site visits Details concerning witness sections should be included. It will also set up an archive of permit holders for those sites that are SAHRA has indicated that it will collate available information on site plans submitted by requested to submit published work as this is in any case a condition of the permit being actively worked. Scientists can also be
- 0 a 'gap analysis' - see exactly what is required by doing the collation first. site plans for those sites which have no active researcher. This exercise should start with It is recommended that steps be put in place by the COH WHS MA to acquire suitable

2.2.2 THE OBLIGATIONS OF SAHRA

2.2.2.1 Annual Site Safety Inspection: Caves and National Heritage Sites

be necessary. The Site safety official might consult with the team, inspect the site, and then leave wasted by an outsider looking for these. SAHRA needs to know what safety interventions might holders often know the site very well and can best point out problematic areas without time being applicable) at the site inspection of some of the key sites. the Safety Inspector be present with the other team members and the permit National Heritage Sites. Such specialist personnel are expensive. appoint inspectors to undertake inspections of the safety of caves and to inspect the safety of the Clauses 6.1.3 and 6.1.4 of the Heritage Agreement call for the COH WHS MA and SAHRA to The reason for this is that the permit The suggestion was raised that holder (where

with a GDACE or MA official danger, or they have relatively stable subterranean areas. The Site Safety inspector can visit these Sites with no active permit holder are less problematic in that worked faces do not constitute a

Site safety reports should be filed together with the Fossil Site Inspection reports. This has not been done in the past, so that this element of monitoring and reporting is missing from the fossil

Recommended action:

It is recommended that the COH WHS MA and SAHRA ensure that the annual Site safety inspections of caves and of the National Heritage Sites take place and that the reports appear as an Appendix to the Fossil Site Inspection Report.

2.2.2.2 Distribution of Excavation permits

any excavation permit within 30 days of issuing such a permit. SAHRA has undertaken to furnish both the COH WHS MA and the Landowner with copies of

Recommended action:

Reporting required by UNESCO and SAHRA would need to be involved in this process. reports, are necessary for the compilation of the updated management plans and Periodic inevitable destruction) of the fossil deposits. Such records, together with permit holders' site as in effect, the excavation permits are a record of the systematic excavation (and forwarded by SAHRA become part of the archive that is being developed for each fossil It is recommended that the COH WHS MA ensure that copies of excavation permits

2.2.2.3 Site beacons

responsibility now falls to SAHRA. All the sites need to be permanently marked in some and the boundaries marked with beacons as white stuck into the ground (which will burn off in veld fires) or a small pile of stones painted Site beacons were not established as part of the original survey of the sites. Considerable expense was incurred in surveying in the points defining the extent of the fossil sites. At many places, approval of the landowner, and SAHRA. steel dropper if this is acceptable in terms of the NHRA. The mode of marking will also need the preferably with an inconspicuous low beacon and metal dropper, or by a flat cement disk with boundary markers could not be found, and at others, the markers were merely a stick painted As the HA (Clause 5.1) states that 'The National Heritage Site will be officially surveyed specified in the NHRA, by SAHRA"

There are two aspects to this task: re-location, and permanent marking

Recommended action:

- surrounding area should be examined for surveyor's markings. recommended that the beacons be re-located using a GPS as a first guide. Then the The co-ordinates for the site boundary are recorded on the site survey diagrams. It is
- 9 to the site boundary - similar skills are involved the COH WHS MA and possibly by the same person so that the site plans can be related It is recommended that this be done at the same time as the site plans are established by
- 0 surveyor or similar contractor done by GDACE and would save professional time and help with defining the TOR for a original beacons some of which may merely be concealed by vegetation. This could be Before such a task is outsourced an attempt should be made using a GPS to relocate the

2.2.2.4 Site plaques

priority list drawn up so that plaques can be installed as funds become available - see individual vertically in a protected position. Positions for plaques have been chosen at most sites and a mounted at Sterkfontein and Motsetse. Plaques will need to be mounted vertically or near-SAHRA has had the text of the site plaques approved by the scientists. Plaques have already been Site plaques are a SAHRA responsibility. The SAHRA representative has the matter in hand

Recommended action:

- SAHRA has complied a list of sites that need to be prioritized and will need to make provision for a budget for these
- 5 as most landowners were not at the meetings, SAHRA will need to confirm their approval, except where this has already been done The positions for most plaques have been agreed between SAHRA and the scientists but

225 Reporting on researchers in terms of the permit conditions

addressed in terms of the permitted conditions, together copy of the report. the APMHOB permit committee and will send letter to the scientist explaining what needs to be After each inspection report has been approved, SAHRA will, as necessary, communicate with

The SAHRA workshop with permit holders, past and present

next workshop, planned 2007, several issues concerning excavation and research taking place on SAHRA has already convened workshops with the permitted scientists, addressing various issues that have arisen and during the October 2006 Fossil Site Inspection report it was agreed that at the the fossil sites would be discussed

Recommended action:

it may include the following items for discussion at the workshop: The programme will be set by SAHRA after discussion with the scientists. SAHRA has indicated

- a) Promotion of palaeontological research in the cradle:
- Concerns and possibilities
- ii. Students and transformation
- b) Stabilization:
- i. Friable excavation walls in decalcified breccia
- ii. Friable excavation edges

C

- Closure procedures after pausing or discontinuing an excavation:
- Backfilling; materials and methods
- The use of different types of sandbag and discussion of when are sandbags called for or other methods available?
- The choice and rationale for selecting witness sections
- d) The choice and ratioe) Sampling protocols:
- Sampling procedures (physical) for different sample types
- ii. Recording of sample sites (what are all those holes?)
- Curation of sample remainders and 'other halves' for independent verification
- iv. Export permits for samples tested oversea

- Central archiving of sampling results (dating)
- Permits and Export Permits
- とこうきゅう Contribution to Site Plan
 - Photographic archives to record change
 - Methodology pros and cons, use of drills for removing fossils acid preparation, etc
 - Dumps: the best way to construct them, the best way to record their status
- Recording techniques, old and new
- Preserving and archiving organic remains

THE OBLIGATIONS OF THE LANDOWNER

the case of many properties, weeds, alien vegetation, littering and uncleared rubble remains an required to adhere to regulations for the management of Conservation, Environment, Water and behaviour is also necessary. unaddressed problem. Agriculture. This includes the control of alien vegetation, weeds and littering on the property. In The landowner has a duty of care in terms of the Heritage Agreement and the landowner is Educating workers with regard to appropriate sanitary

Recommended action:

The COH WHS MA address this ongoing management issue by engaging with the landowner to encourage that action should be taken in this regard. The terms of the HA inspection reports. rubble, invasive aliens, etc should be implemented. Such issues are perennials on the site party in default, e.g. the landowner) and the costs recovered, but this has never been (clause 7.4) state that clearing may be done by any one of the other parties (other than the A follow-up strategy for those landowners who do not attend to litter, builders

RESIDENT COMMUNITIES WITHIN THE FOSSIL SITE BOUNDARIES

together with environmental preservation and rehabilitation will need to be implemented partnerships to achieve the protection of Word Heritage values in areas of multiple land use The issue of resident communities within the fossil sites is a looming problem. Working

as fire, and on-site infrastructure, which may be inadequate or inappropriate. It also raises the The problems associated with the issue of internal residents are unrestricted access to fossil sites, Convention and the local NHRA issue of community benefits, which need to be addressed in terms of both the World Heritage security, sanitation and waste management, littering, dumping, environmental impacts such

reports and cumulative checklists The issues of resident communities at the site-specific level are discussed in the relevant site

Recommended action:

It is recommended that the COH WHS MA address the issue of resident communities with the Department of Housing and within the fossil sites using existing policies, legislation and resources available jointly the Local Authorities

2.4 MONITORING SUBTERRANEAN ENVIRONMENTS

indicators of tourist impacts on cave environment. A fourth area for monitoring is bats and the atmosphere, the surface of speleothems and the substrate condition, all of which will provide relevant here. The subterranean environments require monitoring for a variety of factors, not only cave biota, macro and micro CO2 concentrations. There are several important areas for monitoring including the cave Sites with subterranean environments which are utilized by researchers, students and tourists are

Recommended action:

and a cave inspector for information on appropriate monitoring equipment for monitoring It is recommended that the COH WHS MA contact an international tourist cave expert

2.5 EXISTING AND EXPECTED TOURISM WITHIN THE FOSSIL SITES

sites for which they may not have permits. Some have websites which advertise their tours tourism 'businesses' on the heritage site for which they are permitted as well as on other fossil It has come to the attention of the site inspection team that several of the permit holders operate

which tourism may be conducted on the Heritage Sites. The content of these clauses may be summarized as follows: However, the Heritage Agreement has several clauses which place restrictions on the manner in

- Any tourism operator must have the written consent of the Landowner
- Ø MA in which the terms, conditions and obligations of operation are specified. Consent to operate tours, in the form of a contract, must be sought from the COH WHS
- C behaviour and safety of the tourists and visitors whom the operator brings to the site Other terms will include that the tourism operator will be accountable for the discipline,
- ٩ cover for an amount of not less than R1 000 000.00, with written proof insurance. Sections 10 and 11 of the HA deal with provisions for liability loss and damage, and The HA requires tourism operators to provide for Public Liability insurance
- 0 tourists is required protection of the sites from the impacts of tourism and for the comfort and safety of Adequate infrastructure in accordance with a permit issued by SAHRA to ensure the
- 5 MA for reporting purposes. Records of tourist numbers must be kept and submitted to SAHRA and to the COH WHS
- 9 the COH WHS MA on a six monthly basis. The impacts of tourism must be monitored and monthly data forwarded to SAHRA and
- J The tour guide should be registered with the Gauteng Tourism Authority and the tour guides should be trained in terms of accredited courses recognized by the Gauteng Tourism Authority or SETA.

guide training course which would not normally be part of the permit holders expertise, such as a valid First Aid Certificate, Level One. Without such a certificate, registration cannot take place 'recognition of prior learning', but there are many other unit standards and outcomes in the tourist As tourist guides, the permit holders would almost certainly qualify for RPL status, that is,

to monitor the impact of tourism, if any, on the sites to provide details of their tourism operations. This is also required to record tourist numbers and However, it is almost certain that the permit holders are unaware of the terms of the HA tourist guide registration compliance details and should be informed of these. They should be requested

Recommended action:

operators and/or tour guiding or both with the permit holders and anyone else who takes tourists onto the sites. Such activities need to be in accordance with the requirements of It is recommended that the COH WHS MA take up the issue of tourism with tour the HA and management plan.

2.6 THE NEED TO FOSTER RESEARCH AND RESEARCHERS

site significance, and nothing of interest to show or tell. as Universities are obliged to rationalize and combine or close Departments and Museums also. references) suggests that the number of formal palaeontological posts has halved over the last 10 years, and this from a very small starting level. There are today simply very few posts to be had, are crucial to the Cradle of Humankind - without their input there would be no story to tell, no deposits at World Heritage Sites are consequently very scarce. A recent study commissioned by the Department of Science and Technology (2004, see list of Well-trained and experienced palaeontologists competent to do excavation on hard breccia Paleontologists and their research

Recommended action:

wherever possible, and steps be taken to assist researchers to achieve their research goals is recommended that ways and means of fostering and facilitating research be used

STATUS QUO REPORT, SITE PLANS, PHOTOGRAPHIC ARCHIVE

committed to the site plans have been listed in the October 2006 Fossil Site Inspection report. These generic issues have been discussed under section 2.2.1.2. The items required to

3 SITE REPORT FOR KROMDRAAI

The May 2007 Fossil Site inspection was commissioned by the Cradle of Humankind World Heritage Site Management Authority (COH WHS MA) - currently the Office of the CEO, Blue professional service provider SAHRA; Mr E Seamark of the Gauteng Department of Agriculture, Conservation and Environment (GDACE), Dr. K Mbatha and Ms M Langa from GDACE, and Dr J Maguire, a COH WHS MA, Mr P Mills and Mr J Sibanyoni; Mrs M Leslie from the national office of the IQ Projects, Department of Finance and Economic Affairs) and was carried out by officials of the South African Heritage Resources Agency (SAHRA); Ms J Kitto from the Gauteng office of

Dr Francis Thackeray's permit for the site expired in June 2006. However it has been extended to the end of July to enable SAHRA to process his current application. No active excavation was

at the time of the fossil site inspection visit and was able to clarify a number of issues carried out at the site, either at Kromdraai A or Kromdraai B. Dr Thackeray was available on site

Progress that has been made on both generic and site-specific issues has been noted in the text forward into the current report and as a consequence the two reports differ in only slight details. has resulted in few of the issues noted being actioned. Unaddressed issues have been carried cumulative checklist administrative delays in distributing the October 2006 fossil site inspection reports

ري سر KEY ISSUES AT KROMDRAAI

- oversee the site. Theft of equipment is a problem and a generator and power drills have Many issues are arising due the death of the site caretaker, who is no longer there to been stolen from the storage shed on site. This is a serious loss to the excavation
- 1 site and seed with Cynodon which will soon cover all traces requested to remove the remains of the structure that were lying around and to level the pit toilet has been filled in and the hole covered. The permit holder has been
- دبا The site for the WHS plaque was re-located and photographed
- Þ stratigraphy has been published The researcher pointed out the preserved witness section and noted that much of the site
- 0 5 The site is backfilled and neat. Grass had been encouraged to grow on trench fillings
- sandbags due to UV was noted (Kromdraai A) and the researcher will attend to this. Unstable decalcified breccia has been backfilled and sandbagged. The decay of the
- -1 The green metal huts mentioned in the management plan will be removed in time, but still have a function to perform
- 00 site can be interpreted for tourists and visitors The wire-mesh store has been ear-marked for a simple on-site museum in order that the
- The researcher has repaired the road as best as he is able
- 0 the history of the site, including mining history, as possible. The researcher has undertaken to furnish the team with as much information concerning
- The large pile of dumped builders' rubble has been removed from outside the front gate
- 2 around the excavation is not necessary It would appear that the cow issue is not as serious as it was at Coopers and that a fence
- دب A toilet will be brought in if further research is to be undertaken

3.2 GENERIC ISSUES AT KROMDRAAI

These remain largely unchanged since the last report.

- re-located and permanently marked Permanent site beacons demarcating the heritage boundary are necessary. These need to be
- Ŋ of the landowner will need to be sought. suitable place for a plaque on a cairn has been selected and photographed. The permission
- (4) Site plan for management purposes (see generic issues Section 2.1.4, October 2006 report)
- 4 photographic archive against which change can be assessed is required status quo report describing site conditions and stage of excavation, including
- Ų. There is a need to review the Site Specific management plan and update it as it is 5 years old
- 0 Site safety - compliance with terms of Heritage Agreement clause 6.2.2 required
- Stabilisation of excavation edges not presently a problem but needs to be considered see
- Stabilisation of high excavation faces see checklist

- Stabilization of abandoned excavations and ongoing work faces not yet a major problem at Kromdraai where the excavations are not deep - see checklist
- Sampling procedures and protocol (see Generic Issues section 2.4, October 2006 report)
- Criteria for the selection, recording and preservation of witness sections see checklist
- Recording of mining history of site
- Compliance with Heritage Agreement clauses
- Compliance with requirements of World Heritage Convention

see appendix Recommendations concerning generic issues are listed in the cumulative checklist for the site

نب نب SITE-SPECIFIC ISSUES AT KROMDRAAI

3.21 INFRASTRUCTURE INCLUDING WORKERS' TOILET

replaced with an Enviroloo The resident caretaker died recently and the premises are unoccupied. The toilet has not been

Recommendation:

- suitable site needs to be pursued. As research goes on at Kromdraai from time to time, the erection of an Enviroloo on a from SAHRA A permit to erect such a structure must be procured
- 9 fact that they are no longer occupied. Comment: The pit toilet has been removed and the site is in the process of being rehabilitated. Toilets will be brought in when work rerecommendations made in the original management plan and particularly in view of the fate of the present infrastructure should be reconsidered

SAPLINGS IN EXCAPATION AREAS

The site was neat and tidy but there are new saplings sprouting in the excavation areas.

this task will have to be attended by GDACE or SAHRA. The researcher has agreed to control the sapling growth which he can see is going to become a problem to the conservation of the site. The re-growth of saplings needs to be controlled. Since there is not at present a researcher on site,

SAMPLING PROCEDURE

kept, as well as details of sample remainders sent overseas require a permit from SAHRA and a record of the repository of samples needs to be or recorded in some way, in order that independent verification of results is possible. Samples There are a great number of sampling holes in the breccias. These need to be committed to plan

Recommended action:

invited to attend workshop on excavation and research issues to be convened by SAHRA. Protocol for sampling procedure needs to be drawn up by SAHRA. Researcher to be

3.2.4 APPROACH ROAD

This is very eroded. This road is primarily to give access to the fossil site and is not used by the landowner. Therefore it becomes the responsibility of the permit holder. Dr Thackeray had in fact responsible for maintenance which is an ongoing problem previous site inspection, however his permit has expired and therefore he can no longer be held upgraded the road as best as he was able and it was in a much improved condition relative to the

Recommended action:

0 SAHRA to investigate and effect repairs in terms of clause 9.3.2 of the Heritage policy issue. Agreement - there is no researcher on site at present. The matter should be reviewed as B

3.4 ISSUES TO BE ADDRESSD BY THE COH WHS MA

- be obligatory Although site safety is not an issue at this site, an annual site safety inspection seems to
- The site management plan requires an update
- A site plan required for management and reporting purposes
- 9040 Photographic archive for the site needs to be set up
- Status quo report needs to be set in motion

5 ISSUES TO BE ADDRESSED BY SAHRA

- N SAHRA has undertaken to finalise the erection of the site plaque
- permanent markers already exist The heritage boundary heeds to be found and permanently marked - it is possible that

3.6 ISSUES TO BE ADDRESSED BY GDACE

might be necessary before this can be done Monitoring and removal of invasive aliens of which there are many. A policy change

3.7 ISSUES TO BE ADDRESSED BY THE PERMIT HOLDER

- The permit holder will have to take steps to counteract theft at the site.
- N superstructure and to rehabilitate the site. His action in removing the pit toilet was commended. A sealed toilet will have to be brought on site when work resumes permit holder has been requested to remove the remains of the pit toilet
- دب edges as they are deteriorating The researcher was asked to monitor the sandbags used for supporting excavation
- The researcher undertook to provide the team (SAHRA) with as much information on mining history of hе site 25 ne had available

4 CUMULATIVE CHECKLIST FOR KROMDRAAI FOLLOWING MAY 2007 FOSSIL SITE INSPECTION

ISSUE	ACTION TO BE'TAKEN	RESPONSIBILITY	FIRST NOTED	PROGRESS	DONE
ADMINISTRATIVE.	AND GENERIC ISSUES			THE STATE OF THE S	
Site beacons	Beacons demarcating heritage site boundaries to be re-located and made permanent. Record on site plan	SAHRA	October 2006	SAHRA is aware of this requirement. The researcher has agreed to help with site plans, several of which have been published	
Site plaque	Suitable site has been chosen in conjunction with permitted scientist. Install plaque after	SAHRA to approve, check with landowner, and install	February 2005, October 2006	SAHRA is aware of this requirement	
Site plan	landowner approval Site plan as specified in generic issues chapter of October 2006 report is required for management use. Separate plan for excavation area required	COH WHS COH WHS MA SAHRA to request detailed excavation site plan from permit holders	October 2006	SAHRA and permit holder to co-operate	
Status quo report	Status quo site report to be compiled with supporting photographic record, to function as a framework against which change can be measured	COH WHS COH WHS MA and SAHRA to initiate	October 2006	COH WHS MA and SAHRA are aware of this requirement	
Photographic record	Photographic record from	COH WHS MA,	October 2006	COH WHS MA and	

ISSUE	ACTION TO BE TAKEN	RESPONSIBILITY	FIRST NOTED	PROGRESS	DONE
	previous reports to be included in Status Quo report, with dates, photographic archive to be initiated to record systematic excavation (and destruction) of deposit.	SAHRA		SAHRA are aware of this requirement	
Heritage Agreement compliance	In terms of this, the COH WHS MA has to submit an annual report on the site to SAHRA	COH WHS MA, SAHRA to check for compliance	Original Heritage Agreement	COH WHS MA and SAHRA are aware of this requirement	
UNESCO compliance, periodic reporting	COH WHS MA to ensure that the periodic report is submitted by the deadline date	COH WHS MA	World Heritage Convention requirement, dates set by WHC	COH WHS MA and SAHRA are aware of this requirement	
Management Plan update	SAHRA and World Heritage Convention require and update every five years and update is now due	COH WHS MA to ensure that the updated management plan is ready on schedule	Condition of Heritage Agreement, World Heritage Convention	COH WHS MA and SAHRA are aware of this requirement	
Copies of permits	Copies of permits need to be submitted to landowners and COH WHS MA by SAHRA	COH WHS MA to ensure that this has been done	Heritage Agreement condition	SAHRA is aware of this requirement	
Copies of inspection visit reports	Copy of site inspection report to be handed to landowners within 21 days of inspection	COH WHS MA to ensure that this is done	Condition of Heritage Agreement	COH WHS MA has this in hand	
Action required	Actions need to be set in motion within 30 days of receipt of inspection report unless an appeal is lodged with SAHRA	COH WHS MA to ensure that recommendations are actioned or appealed	Condition of Heritage Agreement	COH WHS MA is aware of this requirement	

ISSUE	ACTION TO BE'TAKEN	RESPONSIBILITY	FIRST NOTED	PROGRESS	DONE
Mining history and	Record and photograph.	COH WHS MA	October 2006	COH WHS MA and	
heritage of site	Include relevant items on	8000000000°	development of the control of the co	SAHRA are aware of	State of the state
	site plan		A CANADA	this need	you no dodan a wada
Site safety:	Ensure that a site safety	COH WHS MA	Condition of	COH WHS MA and	
excavation area,	inspection of the entire		Heritage	SAHRA are aware of	development
subterranean areas	property is done annually in		Agreement	this need	Verdelining review of 650
and public walkways	compliance with the				němi roživočenia
	Heritage Agreement				or Concompanies
ENVIRONMENT AN	D EXCAVATION AREAS				
Toilet – pit type	Replace with Enviroloo as	SAHRA to	End 2004,	The pit toilet had been	
	suggested in Feb 2005	encourage permit	February 2005	filled in the site is	PROFESSION OF THE PROFESSION O
		holder to pursue		undergoing rehabil-	
			THE PROPERTY OF THE PROPERTY O	itation. Monitor site	delicit
			on acquiring money.	clearance and re-	
				vegetation	
Fence around	Cattle are at risk of falling	SAHRA to	2005	This is no longer	
immediate	into excavation trenches	investigate necessity		considered an issue	
excavation area		of fence with permit	in operation in control		
		holder and landowner			
Lack of site	Previous caretaker has died	Permit holder to be	October 2006	Theft is taking place and	
supervision	leaving site, installations and	asked for comment		valuable equipment has	
*	infrastructure vulnerable to			been stolen	
	theft ad interference	W grant of the control of the contro	,	The second of th	
				No replacement as yet	
Site infrastructure	Death of caretaker opens	Permit holder to be	End 2004, 2005	Sheds still fulfill a	
	question of fate of sheds,	asked for comment		purpose and will remain	
	toilet and other infrastructure			in the medium term.	
	Will de la constant d	The state of the s		No. of the Control of	
				In the long term they	
	vertical control of the control of t	en-contraction of the contraction of the contractio		will be removed	
Approach road -	Used almost exclusively by	Permit holder as the	Original	Road has been repaired	***************************************
badly eroded	*	main user is liable in	management plan	as far as possible.	

ISSUE	ACTION TO BE TAKEN	RESPONSIBILITY	FIRST NOTED	PROGRESS	DONE
	researchers. Repair erosion damage. Create meter drains and keep clear	terms of Heritage Agreement		Monitoring ongoing	
Rubbish in avens	Ongoing problem exacerbated by lack of site supervision SAHRA, COH WHS MA to educate local farm residents	SAHRA, COH WHS MA and Landowner will need to address problem	End 2005	Littering may possibly be caused by residents living nearby. Domestic waste removal is an ongoing problem	
Unauthorised dumping of builders' rubble	Unsightly dumping just outside access gate is taking place – see site photographs	?	October 2006	The dumped material has been removed almost entirely	
Concerns of landowner regarding access	Ongoing problem – no cubicle has been set up as mentioned in	Permit Holders, GDACE and inspectorate to negotiate a modus operandi with landowner	End 2004	This issue was not discussed at Kromdraai because the permit holder is not active — only at Coopers. The entrance point is the same. Continue to monitor.	
EXCAVATION AREA					
Saplings growing in excavation trenches	Permit holder to remove	SAHRA to request permit holder to attend.	Ongoing, monitor	Ongoing. Researcher will remove problem plants before they get too big	
Friable edges	Neglected edges adjacent to excavation pits can become friable and tend to collapse	Researcher has cut back to stable areas or has sandbagged or	2004	SAHRA is planning a technical workshop to discuss such issues. The	

ISSUE	ACTION TO BE TAKEN	RESPONSIBILITY	FIRST NOTED	PROGRESS	DONE
		backfilled		permit holder will be invited to attend.	The state of the s
High excavation walls	High excavation walls become unstable without support because large rocks embedded in the breccia fall out leaving undercuts, etc.	Methods of addressing this problem need to be discussed at a forum organized by SAHRA	October 2006	SAHRA is planning a technical workshop to discuss such issues. The permit holder will be invited to attend.	
Sampling procedures	Standard procedures and permitting requirements are required.	Sampling needs to be discussed at a forum to be organized by SAHRA	October 2006	SAHRA is planning a technical workshop to discuss such issues. The permit holder will be invited to attend.	
Witness sections	The need for witness sections and the criteria by which such sections are selected and preserved require discussion	Researcher pointed out the witness section which is published	Original management plan	SAHRA is planning a technical workshop to discuss such issues. The permit holder will be invited to attend.	
Closure procedure	Closure procedures after excavation projects are halted or concluded need to be discussed	As above	October 2006	SAHRA is planning a technical workshop to discuss such issues. The permit holder will be invited to attend.	

5 GLOSSARY OF TERMS AND ABBREVIATIONS

Archaeology The study of ancient cultures and their physical remains

Artefact Something that has been man-made or modified by people, like a stone tool, a ground piece of ochre, a wooden

awl, etc

Artefact assemblages

Best practice

The most effective actions which minimize human impact on the environment Biodiversity

Collections of stone that have been modified and /or transported by people

The most effective actions which minimize human impact on the environment in which they live, biological diversity

COH WHS Cradle of Humankind World Heritage Site

COH WHS MA COH Management Authority

Conservation The management of natural resources in a way that will benefit both present and future generations

Cumulative checklist Checklist containing all the issues from previous and current site inspection reports, for use by heritage monitors

of fossil sites

Curated Material that has been collected, arranged, catalogued, recorded, maintained and stored.

Ecology The relationship between living things and their environment

Fossil Site Inspection Report generated after each fossil site inspection – these take place twice or thrice annually

Report

Gauteng Department of Agriculture, Conservation, Environment and Land Affairs

Guiding Principles Rules that guide how the COH WHS should be managed – SAHRA has defined some

Heritage Resource Things and places of value which are inherited

HA Heritage Agreement

Heritage Agreement
Infrastructure

The Heritage Agreement signed by the representatives SAHRA, GDACE and landowners of individual properties
Permanent or semi-permanent installation, building, sewerage management structure, water management structure,

road or excavation equipment

Interpretation (with regard A means of communicating ideas and feelings which helps people to enrich their understanding and appreciation

to sites) of their world, and their role within it

Issues Problems for which there may be more than one solution which affect the fossil sites in the COH WHS

International Council on Monuments and Sites, an NGO based in Paris. The role of ICOMOS in relation to the

WHC is to evaluate and monitor WHS like the COH WHS. The inspectorate is drawn from ICOMOS officials.

International Union for the Conservation of nature, now known as the World Conservation Union. Provides

inspectorate for WHS, natural heritage.

MA Management Authority, CEO Dr P Hanekom

Management Plan The Management Plans, both generic and site-specific, accepted by SAHRA as the Heritage Conservation

Management Plan for purposes of the Heritage Agreement and in terms of the WHCA. This requires updating

every 5 years.

Monitoring A method of checking to detect and observe short- or long-term trends in the state or condition of a site

National Heritage Site A Category 1 Heritage Site in terms of the NHRA which indicates that the site has received formal protection at

the highest national level and which has been formally surveyed and gazetted as such (published in the

Government Gazette)

NHRA National Heritage Resources Act No 25 of 1999

Palaeontology The study of early, often extinct life forms by the examination o fossils
Permit Permit issued by SAHRA to the excavator in terms of the NHRA

Permit holder A professional archaeologist or palaeontologist who has a valid permit issued by SAHRA to carry out permitted

excavation, exploration or research work on site in terms of Section 35 and 48 of the NHRA

Policy A determined course of action

Protocols (for activities) A way of carrying out certain activities which are agreed to by the community involved – e.g. sampling protocols

for scientists

SAHRA The South African Heritage Resources Agency, a statutory body established in terms of the NHRA

State Party A country which is a signatory to the World Heritage Convention and has agreed to accept the duty to identify,

protect, conserve, present and transmit to future generations the natural and cultural heritage located within its

territory

Structure Tourist

A person who is not connected with the excavation team or a student undergoing training on site; a person entering

the site as an intellectually curious visitor or for recreational purposes

UNESCO United nations Educational, Scientific, and Cultural Organisation

Value Qualities of a World Heritage Site which we wish to protect and enhance

WHCA World Heritage Convention Act No 49 of 1999

World Heritage Centre
World Heritage Committee
World Heritage Committee
World Heritage Convention
World Heritage Convention
An international agreement that aims to promote co-operation among nations to protect areas that have natural or

cultural values of outstanding universal significance

World Heritage Convention

Act No 49 0f 1999

WRDM

WHCA. The legislation through which the South African WHS are administered.

West Rand District Municipality

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