MGO MT OWEN / GLENDELL

GLENCORE



Aboriginal Cultural Heritage Management Plan

Document Number: MGOOC-1779562647-4159

Status: Approved

Version: 5.0

Effective: 31/05/2018 **Review: 26/10/2020**

Owner: Officer - Environmental

Table of Contents

| 1 | Comm | nitment and Policy | 5 |
|----|--------|--|----|
| | 1.1 | Background | 5 |
| | 1.2 | Objectives of the ACHMP | g |
| | 1.3 | Requirements of the ACHMP | 10 |
| | - | .3.1 Statutory Requirements | |
| | 1.4 | Consultation | |
| | | .4.1 Consultation with Internal (MGO) Stakeholders | |
| | 1 | .4.2 Consultation with External Stakeholders | 16 |
| | | Aboriginal Cultural Heritage Working Group Access to Aboriginal sites and stored Aboriginal objects | |
| | 1.5 | Dispute Resolution Process | 17 |
| 2 | Aborio | ginal Cultural Heritage Sites | 18 |
| _ | 2.1 | Sites within approved disturbance area | |
| | 2.2 | Socio-cultural values | |
| | | .2.1 Value of Aboriginal sites | |
| | 2.3 | Previous archaeological investigations | |
| | 2.4 | Known Aboriginal sites remaining in place | |
| | 2.5 | Cultural values assessment | |
| _ | | | |
| 3 | | gement Strategy and Plan | |
| | 3.1 | Aboriginal heritage impacts | |
| | 3.2 | Impact and non-impact areas within the ACHMP Area | |
| | 3 | .2.1 Management Areas | |
| | | 3.2.1.1 Yorks Creek Voluntary Conservation Agreement Area | |
| | | .2.2 Bettys Creek Habitat Management Area | |
| | | .2.3 Biodiversity Offset Areas | |
| | 3.3 | Management of sites outside impact areas | |
| | 3.4 | Protection measures for cultural heritage sites | |
| | 3 | .4.1 General Controls | |
| | 3 | .4.2 Monitoring of Aboriginal sites in non-impact areas | 34 |
| | | .4.3 Verification of Aboriginal sites in non-impact areas | |
| | | · · · · · · · · · · · · · · · · · · · | |
| 4 | Opera | tional and Training Protocols | |
| | 4.1 | Obligation to protect Aboriginal cultural heritage | |
| | | .1.1 Obligation to avoid harm | |
| | | .1.2 Obligation to protect | |
| | | 4.1.3.1 Aboriginal heritage induction and permitting process | |
| _ | | | |
| 5_ | Apori | ginal Heritage Protection | 38 |

| | 5.1 | Measures to protect Aboriginal sites | 38 |
|----|---------|---|----|
| | 5.2 | Fencing | 38 |
| | 5.: | 2.1 Fencing of sites within Management Areas | 38 |
| | | 5.2.1.1 Yorks Creek VCA | |
| | | 5.2.1.2 Biodiversity Offset Areas and the Bettys Creek HMA | |
| | 5 | 2.2 Fencing of sites outside of Management Areas | |
| | 5.3 | Land management within Management Areas | |
| | | 3.1 Erosion control | |
| | 5.3 | 3.2 Bushfire hazard reduction | 39 |
| | | 3.3 Exclusion of stock | |
| | 5.3 | 3.5 Land Management in the York's Creek Catchment Enhancement Project | 40 |
| | | 3.6 Land Management in the York's Creek VCA | |
| | 5. | Ş , | |
| | | 5.3.7.1 Historical information | |
| | | 5.3.7.3 Wollombi Brook Plan of Management Consultation Procedure | |
| | 5.4 | Interpretation panels | 41 |
| | 5.5 | Site monitoring | 41 |
| | 5. | 5.1 Photographic monitoring | 41 |
| | 5. | .5.2 Site condition monitoring | 41 |
| 6 | Detaile | ed Procedures | 42 |
| | 6.1 | Discovery of Aboriginal ancestral remains | 42 |
| | 6.2 | Discovery of new Aboriginal sites | 42 |
| | 6.: | 2.1 New sites within impact areas | 42 |
| | | 6.2.1.1 Group 1: Surface artefact collection | |
| | 6.: | 2.2 New sites outside of impact areas | 44 |
| | 6.3 | Managing impact to sites outside of impact areas | 44 |
| | • • • | 3.1 AHIMS Site #37-3-0687 | |
| | 6.4 | Managing impact to sites inside of impact areas | 45 |
| | 6.5 | Incident controls | |
| 7 | Record | d Keeping and Reporting Requirements | 46 |
| • | 7.1 | Project records | |
| | 7.2 | Statutory reporting requirements | |
| | | 2.1 Discovery of Aboriginal objects | |
| | 7.: | 2.2 Care and Control Permit application | 46 |
| | | 2.3 Reporting impact to Aboriginal sites | |
| _ | | | |
| 8 | | w and Improvement | |
| | 8.1 | Plan Review | 47 |
| 10 | Accou | ntabilities | 52 |
| 11 | Definit | tions | 53 |

| 12 | Docum | nent Information | 55 |
|-----|---------|---|------------------|
| | 12.1 | Relevant Legislation | 55 |
| | 12.2 | Related Documents | 55 |
| | 12.3 | Reference Information | 55 |
| | 12.4 | Change Information | 56 |
| App | endix A | - Endorsement of Appointment of Consultant | 58 |
| App | endix B | - External Consultation Records | 59 |
| App | endix C | - Aboriginal Cultural Heritage Management Plan Approval | 64 |
| App | endix D | - Mount Owen Complex Aboriginal Cultural Heritage Working Group | o <u>65</u> 64 |
| Apr | endix E | - Yorks Creek Plan of Management | 66 65 |

Number:MGOOC-1779562647-4159Status:ApprovedEffective:31/05/2018Owner:Officer - EnvironmentalVersion:5.0Review:26/10/2020

1 Commitment and Policy

1.1 Background

This Aboriginal Cultural Heritage Management Plan (ACHMP, the Plan) is one of a series of Environmental Management Plans that together form the Environmental Management System for the Mt Owen Glendell Operations (MGO).

Current and approved operations within the MGO include:

- a) Mount Owen North Pit
- b) Ravensworth East (Bayswater North Pit)
- c) Glendell Barrett Pit.

Mining operations at the MGO include the integrated use of the Mount Owen coal handling and preparation plant, coal stockpiles and rail load-out facility.

This Plan documents procedures for management of Aboriginal cultural heritage values within the approval area for the Mount Owen Glendell Operations, incorporating Mt Owen Mine (SSD 5850) and the Glendell Mine (DA 80/952). Collectively these will be referred to as the ACHMP Area.

A modification, 'MOD 2', of SSD 5850 was approved by the NSW Department of Planning and Environment on 4 September 2019 and maximises reserve recovery within the Glencore mining tenements whilst minimising the overall project disturbance area (Umwelt 2018).

This Plan supersedes the previous Mt Owen Complex ACHMP (May 2018).

The following figures provide context for this ACHMP, namely:

- a) Figure 1-1 shows the location of the MGO
- b) Figure 1-2 Figure 1-2 shows the area in which this ACHMP is applicable (ACHMP Area)
- c) Figure 1-3 Figure 1-3 shows the development consent boundaries for both Mt Owen (SSD 5850) and the Glendell Mine (DA 80/952). Together, these constitute the ACHMP Area.

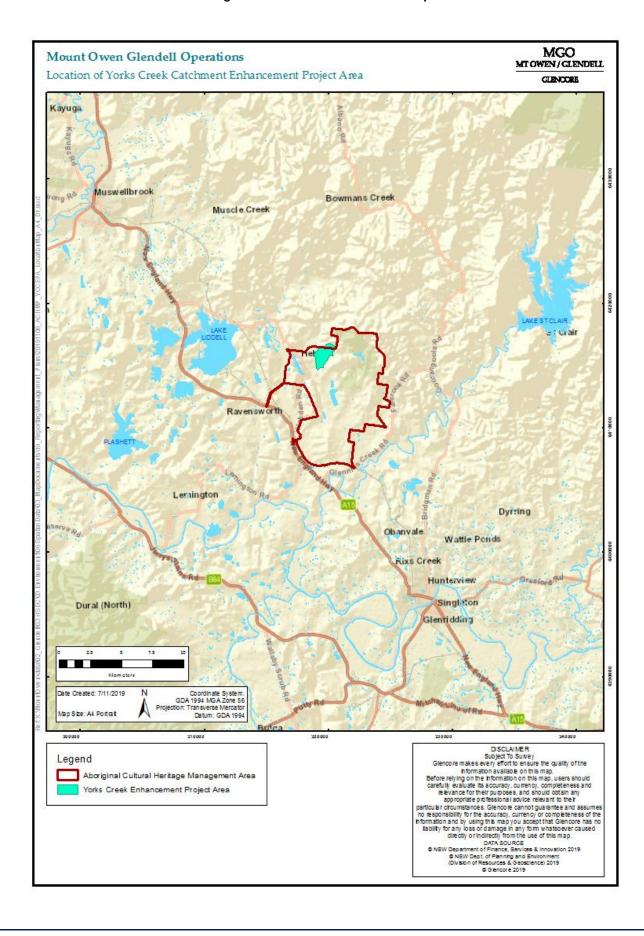


Figure 1.1- ACHMP Area location map

Figure 1-2 – ACHMP Area

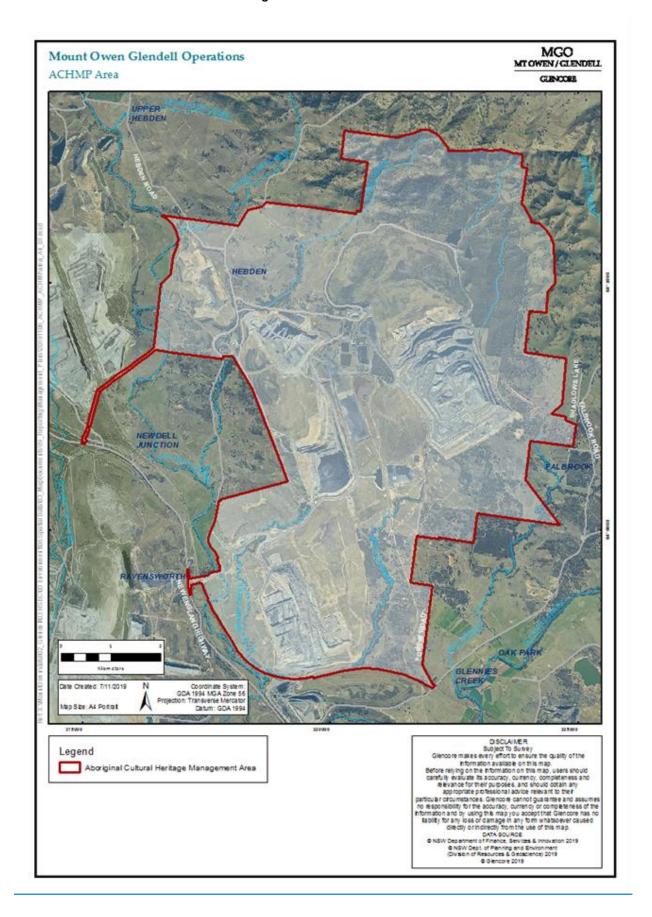
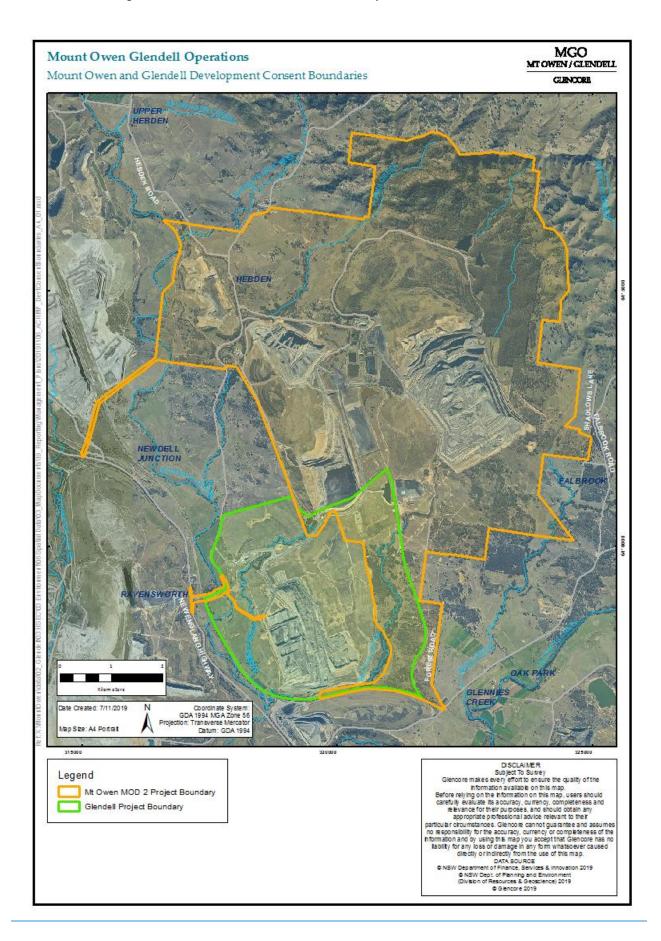


Figure 1-3 – Mount Owen and Glendell Development Consent Boundaries



1.2 Objectives of the ACHMP

This Plan has been developed to satisfy consent requirements under development approvals SSD 5850 and DA 80/952, and to ensure that Aboriginal cultural heritage within the MGO is managed in accordance with all relevant legislation and in consultation with relevant Aboriginal parties.

The objectives of this Plan are to set out controls and protocols to prevent unapproved impact to any identified and/or unidentified Aboriginal cultural heritage sites and values on land occupied by the MGO.

This Plan:

- a) details the management procedures for Aboriginal heritage within the MGO
- b) details reporting requirements
- c) presents a detailed process for ongoing Aboriginal consultation
- d) outlines the obligations of project personnel to protect Aboriginal sites not subject to approved harm
- e) describes the roles and responsibilities of MGO staff in managing Aboriginal heritage sites before and after salvage works
- f) provides for continuous improvement through auditing and plan modification.

The manner in which this plan addresses the statutory requirements of SSD 5850 and DA 80/952 are detailed in **Section 1.3.1**.

1.3 Requirements of the ACHMP

1.3.1 Statutory Requirements

Both the Mt Owen (SSD 5850) and the Glendell Mine (DA 80/952) development approvals stipulate requirements related to this Plan. These are summarised in <u>Table 1-1</u>.

Table 1-1 - Relevant Development Consent Conditions

| Mount Owen Continued Operations (SSD 5850, Schedule 3) | Glendell Mine (DA 80/952, Schedule 4) | Condition | Relevant Section of Plan |
|--|--|--|---|
| 33 | | Protection of Aboriginal Heritage Items Unless otherwise authorised under the NP&W Act, the Applicant shall ensure that the development does not cause any direct or indirect impact on identified Aboriginal heritage items located outside the approved disturbance of the development. | Section 5 |
| 34 | | Aboriginal Heritage Management Plan The Applicant must prepare an Aboriginal Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must: | |
| 34 (a) | | be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Secretary; | Appendix A (this endorsement is for the preceding version of this Plan, however, the preceding version was authored by Ben Churcher of OzArk Environmental & Heritage Management). This version was reviewed and endorsed by Ben Churcher |
| 34 (b) | | be prepared in consultation with BCD, RAPs and relevant landowners, and be submitted to the Secretary for approval prior to commencement of development under this consent, unless the Secretary agrees otherwise; | Section 1.4 and Appendix B (all heritage items to be managed by this ACHMP are located on land owned by Glencore Coal Assets Australia Pty Limited. As such, additional landholder consultation was not required) |
| 34 (c) | | include the following for the management of Aboriginal heritage: an Aboriginal cultural heritage education program, to be developed in consultation with relevant RAPs, and used for the induction of all personnel and contractors involved in construction or surface disturbance activities under this consent; | Section 4 |

| 34 (c) | | details regarding the establishment and role of the Aboriginal Cultural Heritage Working Group in monitoring and managing cultural heritage; | Section 1.4.3.1 and Appendix D |
|---------------|--------|---|--------------------------------|
| 34 (c) | | details regarding the management of the Yorks Creek Voluntary Conservation Area and Aboriginal heritage sites within the Mount Owen Complex that would not be disturbed by the development; | Section 3 and Appendix E |
| 34 (c) | | a program and description of the measures/procedures that would be implemented for: protecting, monitoring and/or managing (including any proposed archaeological investigations and/or salvage measures) Aboriginal cultural heritage on site including specific measures to protect AHIMS Site #37-3-0687 (unless separate approval is obtained for its salvage); | Section 5.5, 6 and 6.3.1 |
| 34 (c) | | managing any new Aboriginal objects or skeletal remains discovered during the development; | Section 6.1 and Section 6.2 |
| 34 (c) | | maintaining and managing reasonable access for relevant Aboriginal stakeholders (including RAPs) to heritage items on site and within offset areas; | Section 1.4.3.2 |
| 34 (c) | | ongoing consultation and involvement of relevant Aboriginal stakeholders in the conservation and/or management of Aboriginal cultural heritage on the site; and | Section 1.4 |
| 34 (c) | | a strategy for the storage of heritage items salvaged on site, both during the development and in the long term, including: - an interim strategy for the storage of heritage items pending the completion of the Wollombi Brook VCA Artefact Storage Facility; and | Section 5.3.7 |
| <u>34 (c)</u> | | a procedure to consult with the Mount Owen Complex Aboriginal Cultural Heritage Working Group in the development of the Plan of Management for the Wollombi Brook VCA Artefact Storage Facility. | Section 5.3.7 |
| 34 | | The Applicant must implement the Aboriginal Heritage Management Plan as approved by the Secretary. | Section 8 |
| | 44 | Aboriginal Cultural Heritage Management Plan The applicant must prepare and implement an Aboriginal Cultural Heritage Management Plan to the satisfaction of the Secretary. This plan must: | |
| | 44 (a) | be prepared in consultation with BCD and the Aboriginal communities. | Section 1.4 and Appendix B |
| | 44 (b) | be submitted to the Secretary for approval by the end of April 2008 and prior to the disturbance of an Aboriginal object or site. | Appendix C |
| | 44 (c) | include a: management plan for all Aboriginal sites and potential archaeologically sensitive areas within the development disturbance area; | Section 3 and 6 |
| | 44 (c) | detailed description of the measures that would be implemented to protect Aboriginal sites and potential archaeologically sensitive areas outside the development disturbance area; | Section 5 |
| | 44 (c) | description of the measures that would be implemented if any new Aboriginal objects or skeletal remains are discovered during the development; and | Section 6.1 and Section 6.2 |
| | 44 (c) | protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site. | Section 1.4 |
| | 44 | The Applicant must implement the approved Plan as approved from time to time by the Secretary. | Section 8.1 |

In addition, MGO outlined a number of commitments as part of the Environmental Impact Statement (EIS) for the Mt Owen Continued Operations (MOCO) Project (Umwelt 2015), Statement of Environmental Effects (SEE) (Umwelt, 2018) and the Environmental Assessment for Modification 3 to Glendell Mine (Hansen Bailey 2017). The outstanding commitments are outlined in Table 1-2 Table 1-2 and the section of the Plan where these items are addressed are noted. Completed commitments have been removed from this table, and are discussed in **Section 9**.

Table 1-2 - Aboriginal Cultural Heritage Management Commitments

| No. | Commitment Relevant Section of Pla | | Comments |
|-------------|--|--|---|
| | Mt Owen on-site management meas | ures | |
| MOCO | MOD 2 | | |
| MOD 2 R3 | Aboriginal Cultural Heritage - The Aboriginal Cultural Heritage Management Plan should be updated to include mitigation of all Aboriginal sites within the proposed Modification 2 Boundary. OEH recommends that on approval of the proposed modification the consent issued includes a consent condition that the Aboriginal Cultural Heritage Management Plan for Mount Owen Open Cut (OzArk 2018) be updated to include mitigation of any Aboriginal sites within the MOD 2 Boundary | Refer to SSD-5850, Schedule 3 Condition 34. Figure 1, 2 and 3 Appendix C | ACHMP updated and submitted to the Secretary |
| MOD 2 R4 | Aboriginal Cultural Heritage - AHIMS Site #37-3-1172 (MOCO-IF3) will be harmed by the proposed modification and requires collection under the Aboriginal Cultural Heritage Management Plan OEH recommends that any consent issued for the proposed modification includes a consent condition that provides for Aboriginal objects at AHIMS Site #37-2-1172 (MOCO-IF3) to be collected prior to ground surface disturbance works in accordance with the Aboriginal Cultural Heritage Management Plan for Mount Owen Open Cut (OzArk 2018) | Action to Salvage prior to disturbance | Included in ACHMP Action: Salvage site #37-3-1172 (MOCO IF-3) prior to MOCO MOD 2 disturbance |
| MOD 2 R5 | Aboriginal Cultural Heritage - AHIMS Site #37-3-0687 (MC-7) is not within the proposed modification boundary and may not be harmed AHIMS Site #37-3-0687 (MC-7) is more than 42 metres outside of the MOD 2 Boundary and therefore may not be harmed by works within the MOD 2 Project Area. The artefact scatter site cannot be salvaged as part of the MOD 2 Project. | <u>Table 2-1</u> | Included in monitoring program |
| MOCO | | | |
| R11 | Yorks Creek Artefact Storage Facility The MGO will construct a suitable fit for purpose artefact storage facility to store cultural heritage artefacts recovered during previous research and salvage programs, and for items recovered for the MOCO Project. The preferred location for the storage facility will be in the Yorks Creek VCA, subject to an agreed modification of the existing Plan of Management for the VCA. The facility will provide suitable shelving and storage to allow for the curation of artefacts to be stored and accessible to researchers and RAPs. The artefact storage facility will be constructed within 2 years of MOCO Project approval. A protocol for the use of the Yorks Creek VCA artefact storage facility will be developed as part of the MGO ACHMP including accessibility and use of the facility by researchers and RAPs. | Section 5.3.7 | The facility will be located at the Wollombi Brook Conservation Area at Bulga Coal. |
| R12 | Repatriation of artefacts from the MGO Cultural heritage artefacts recovered from the MGO area during previous archaeological surveys and salvage programs that have been previously analysed and catalogued, will be returned to the site to be stored in the new artefact storage facility. Artefacts recovered for the MOCO Project will be suitably categorised and labelled to allow for future research or repatriation to the landscape. Artefacts previously recovered have been | Section <u>5.3.75.3.75.5</u> | Artefacts will be stored at the Wollombi Brook Conservation Area at Bulga Coal. |

| | analysed and indexed and will be placed appropriately within the new storage facility. | | |
|-----|---|--|---|
| R14 | Yorks Creek VCA and new Facilities The Yorks Creek area contains of VCA of 28.5ha that was consented in 1998. The VCA is surrounded by a larger area that was identified as an area of cultural significance in 2005. The Yorks Creek Cultural Landscape Restoration Project involves the restoration of the Upper Reaches of Yorks Creek covering approximately 212 ha. The project commenced in 2005 and involved a partnership between the MGO and the local Aboriginal community. The MGO will work with the ACHWG to develop appropriate improvements to the Yorks Creek VCA. Such improvements may include a formed access road, the establishment of a car parking area, an artefact storage facility with rainwater tank and toilets with tables and benches, and signage to identify the extent of the conservation area and its purpose. The MGO will commit funding to the establishment of such facilities. | Section 5.3.5 and Section 5.3.7 Appendix E | Sites within the YCVCA are monitored during the quarterly site monitoring. Storage Facilities are now to be located at the Wollombi Brook Conservation Area at Bulga Coal. Currently working with RAPs to identify whether there is a desire for such items at YCVCA Area |
| R16 | Annual Cultural Heritage Open Day The MGO will also host an annual open day for our RAPs to attend the Yorks Creek VCA and spend the day on the land, and use the facilities provided in the VCA. Possible activities to be considered for the day may include: • Teaching and learning outcome through Elders; • Visitation to rehabilitation and conservation areas; • Use of the artefact storage facility; • Update on progress of cultural heritage management programs for all RAPs; and • Walks on country, including conservation sites, rehabilitation and 'song lines' owned by the MGO. | Section 1.4.3.2 | This is an annual, ongoing commitment. |

Page 14 of 81

| | Off-site management measures | | |
|-----|---|---------------------------------|---|
| R18 | Massacre Site Surveys The MGO through research studies recommended in the ACHAR, and through field studies and walks on country with the RAPs will better understand the history of the area and conflict with settlers and the Aboriginal community in the local area. MGO will support funding of a memorial story board or other suitable marker, located in an appropriate location. The wording of any plaque shall be developed through the ACHWG. | Section 1.4.3.2 and Section 5.4 | |
| R19 | Landscape and Video 3D Model MGO will investigate the potential for a 3D digital model of the ACHMP Area to be developed to illustrate the cultural sites in the ACHMP Area landscape for intergenerational equity. This will be undertaken in consultation with the ACHWG and will include layers of appropriate cultural knowledge and values across the landscape. | | No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG. |
| R22 | Yorks Creek VCA and New Facilities The Yorks Creek VCA Plan of Management includes the ongoing maintenance of the area. RAPs including the Wonnarua Nation Aboriginal Corporation, the Plains Clans of the Wonnarua People and the Wonnarua Traditional Custodians groups will be given opportunity to tender for carrying out these works. The MGO will commit funding to help facilitate this outcome in consultation with the ACHWG. The framework to manage such a process will be included in the ACHMP. | Section 5.3.7 | Facilities are now to be located at the Wollombi Brook Conservation Area at Bulga Coal. Currently working with RAPs to identify whether there is a desire for such items at YCVCA Area |
| R26 | Travelling Stock Reserve (TSR) There is a TSR in the ACHMP Area that was set aside as part of the Mount Owen DA 14-1-2004 as a biodiversity offset. The MGO is currently discussing the long term plans of this TSR with the Local Land Services. The MGO will provide the RAPs, as requested, with any information regarding any proposed changes to land use or from its current status as Crown Land. | | No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG. |
| R27 | Landform and Revegetation Involvement The MGO will consult with the RAPs on the final landform, flora and fauna corridors, water courses and revegetation strategies. The MGO through the ACHWG and the Annual Open day will update the RAPs on the progress on the landform and rehabilitation outcomes. | Section 3.4.4 | This is an ongoing commitment. |
| R28 | DVD or other Recording for Teaching Purposes The MGO will provide funding toward the development of an educational DVD or reference material to record the cultural knowledge as identified in the ACHAR including the cultural context and relationship to significant Creation story sites, song lines, and other significant sites in the local area. | | In progress. No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG. |
| R29 | Wonnarua Educational Material Funding MGO will support programs that enable information gained through the research programs noted in these recommendations to be prepared into education materials. These may be for use by Wonnarua, used to assist in educational material for schools, or provide opportunities for publishing of research articles. | | In progress. No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG |
| R30 | Education – Cultural Related Areas During the life of the Project, the MGO will offer assistance towards three trainee scholarships (up to three years in duration) to be undertaken in culture related training areas. | | In progress. No specific ACHMP policies pertain to this commitment that will be |

Number:MGOOC-1779562647-4159Status:ApprovedEffective:31/05/2018Owner:Officer - EnvironmentalVersion:5.0Review:26/10/2020

| | The training and education opportunity will include opportunities which may arise from vocational based learning including graduate and postgraduate studies. | managed between the MGO and the ACHWG |
|-----|---|--|
| R31 | Wonnarua Lore and Custom Training The MGO will commit to funding and support for specific Wonnarua lore and custom training. The identified training programs in the ACHAR process were stone tool making or possum skin cloaks as well as other possible programs. | In progress. No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG |
| R32 | St Clair Mission Facilities The MGO will provide support for the ongoing development of the St Clair facility in line with the existing Plan of Management. | Completed No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG |

1.3.2 **GCAA Requirements**

A set of guiding principles has been developed which describe how Glencore's Coal Assets Australia (GCAA) will engage with Aboriginal people to pursue mutually beneficial outcomes:

- a) Principle 1: GCAA respects the interests, cultures and customs of Aboriginal people with a demonstrated traditional and cultural connection with the land associated with GCAA's mining operations and projects;
- b) Principle 2: GCAA will work closely with Aboriginal people with a legitimate connection or interest in its mining operations or projects, and other interested stakeholders, to mitigate impacts on Aboriginal cultural heritage;
- Principle 3: GCAA will communicate with Aboriginal people in a respectful and culturally appropriate manner through all stages of mining and will establish forums for information exchange on mining operations and projects, where relevant;
- d) Principle 4: GCAA will engage with Aboriginal people to build constructive and sustainable relationships based on openness, trust, honesty, fairness and a mutual understanding of each other's roles and responsibilities and needs;
- e) Principle 5: GCAA understands that its employees and contractors must be conscious and respectful of the uniqueness and diversity of Aboriginal culture and of the importance of the landscape and its values to Aboriginal people. In recognition of this, all relevant employees and contractors will be provided with cultural awareness training;
- f) Principle 6: GCAA will identify opportunities to support Aboriginal communities in the areas of employment, business, education and training and economic development through its established Corporate Social Involvement (CSI) Program; and
- g) Principle 7: GCAA will comply with the requirements of all existing cultural heritage and native title legislation.

The right of Aboriginal peoples to free, prior and informed consent is recognised, and engagement with these communities is based on principles of good faith negotiation and relevant legislation as outlined in the GCAA document *Human Rights and Our People*.

Systematic engagement with Aboriginal peoples' representative bodies as well as individual members of Aboriginal communities is undertaken in a way that is consistent with the GCAA Community and Stakeholder Engagement Standard (see **Section 6.3**) and the International Council on Mining & Metals Position Statement on Indigenous Peoples and Free, Prior and Informed Consent.

1.4 Consultation

The GCAA *Protocol for Aboriginal Cultural Heritage - NSW* outlines the GCAA's policy of engagement with Aboriginal people in all aspects of cultural heritage assessment, reporting and conservation.

The GCAA *Community and Stakeholder Engagement* standard outlines GCAA's protocol for community engagement. This protocol has been considered in development of the consultation mechanisms described in this Plan.

1.4.1 Consultation with Internal (MGO) Stakeholders

This Plan has been reviewed by MGO and GCAA personnel. Details of Training and Communication arrangements are outlined in **Section 4**.

1.4.2 Consultation with External Stakeholders

The Department of Planning and Environment (DP&E) endorsed the appointment of Ben Churcher, OzArk Environmental & Heritage Management to prepare the 2018 version of this Plan. A copy of correspondence confirming this endorsement is included in *Appendix A*.

This Plan has been prepared in consultation with the MGO Aboriginal Cultural Heritage Working Group (ACHWG), MOCO and MOCO Modification (MOD) 2 Project Registered Aboriginal Parties (RAPs) and the Biodiversity & Conservation Division (BCD) within the Department of Planning, Industry and Environment (DPIE).

A draft of this Plan was sent to members of the MGO ACHWG on 11th November 2019 to provide members with an opportunity to comment.

All RAPs received a copy of the draft Plan on 11th of November 2019 with a request that any comments be received by the MGO by 25th November 2019. A reminder email was sent to members.

1.4.3 **Consultation Protocols**

1.4.3.1 Aboriginal Cultural Heritage Working Group

The MGO ACHWG oversees the implementation of the ACHMP and actively contributes to the development of cultural heritage management options and recommendations for Aboriginal objects or places associated with the operation. This is achieved by:

- a) providing relevant information about the cultural significance and values of the Aboriginal object(s) and/or place(s)
- b) providing for ongoing communication of information on mining operations and cultural heritage management and the Aboriginal community
- c) providing advice on how to address community relationships
- d) commenting on draft assessment reports and management plans before they are submitted to regulatory authorities.

The ACHWG comprises of the following representatives:

- a) two representatives of the Wonnarua Nation
- b) two representatives of the Plains Clans of the Wonnarua People
- c) two representatives of the Wanaruah Local Aboriginal Lands Council
- d) at least three representatives of the MGO (including the Environment and Community Manager) who may be employees or suitably qualified heritage professionals as required.

Only one representative from each of the above groups is required to attend meetings. Each group nominates a primary representative and provides a backup if the primary is not able to attend.

Members are appointed for a period of three years and may be re-appointed for subsequent terms at the discretion of the MGO A list of the current membership of the ACHWG is included in *Appendix D*.

At least two meetings of the ACHWG are held per calendar year. In addition, an Annual Open Day is held to which all MGO RAPs will be invited to attend (see **Section 1.4.3.2**).

Meetings will be held in accordance with the Terms of Reference (ToR) agreed by the committee.

1.4.3.2 Access to Aboriginal sites and stored Aboriginal objects

Local Aboriginal community access to Aboriginal sites and stored Aboriginal objects will be made available by the MGO subject to reasonable safety and security measures. These could include the location of mining operations and availability of MGO assistance. Any request to visit is to be made to the MGO Environment & Community team.

The MGO will also host an annual open day for our RAPs to attend the Yorks Creek Voluntary Conservation Area (VCA) and spend the day on Country. Possible activities to be considered for the day may include:

- a) teaching and learning outcome through Elders
- b) visitation to rehabilitation and conservation areas
- c) update on progress of cultural heritage management programs for all RAPs
- d) walks on Country, including conservation sites, rehabilitation and 'song lines' owned by the MGO.

1.5 Dispute Resolution Process

Communications with stakeholders are recorded in a centralised location, Consultation Manager.

Complaints will be recorded and investigated by the Environment and Community team. Initial response to the complainant will be made as soon as practicable.

Follow up correspondence with the complainant will be made explaining the outcome of complaint investigations.

If required, the investigation will involve:

- a) receipt of complaint and details of the complaint will be recorded
- b) investigation of the complaint and recording of details into an actions tracking database
- c) responding to the complaint as soon as practicable following receipt and investigation
- d) corrective action and implementation of training, where applicable.

If the complainant is not satisfied with the actions of the MGO or the MGO- is not satisfied with those proposed by the complainant, the matter will be referred to a DPIE appointed independent dispute facilitator.

2 Aboriginal Cultural Heritage Sites

2.1 Sites within approved disturbance area

All sites previously recorded under DA 80/952 and MOCO SSD-5850 were salvaged. MOCO MOD 2 concluded that one site AHIMS #37-3-1172 (MOCO IF-3) is located within the disturbance boundary. MOCO IF3 will be salvaged as per **Section 6.2** of this plan prior to disturbance.

2.12.2 Socio-cultural values

2.1.12.2.1 Value of Aboriginal sites

The ACHMP Area is located within the traditional country of the Wonnarua people. The physical evidence of Aboriginal life throughout this country is pervasive. Cycles of life, interaction, ceremony and death are all represented in a range of sites throughout the Hunter Valley and beyond.

A prevailing view throughout the Aboriginal community is the importance of all physical evidence of Aboriginal life to current Aboriginal communities. Aboriginal sites provide a tangible connection to pre-European Aboriginal land use. Aboriginal sites are valuable in sustaining contemporary Aboriginal identity through opportunities for teaching and engagement with heritage in field investigations.

RAPs have identified concerns with current and future mining within the MGO area and the broader region, and that this mining poses a significant threat to Aboriginal cultural heritage values. It is believed that mining continues to cause fragmentation to the cultural, spiritual and historic values of the cultural landscape including degradation to important waterways.

2.22.3 Previous archaeological investigations

A detailed database of Aboriginal archaeological sites previously identified within the ACHMP Area has been developed to assist in the management of Aboriginal cultural heritage.

381 sites have been recorded within the ACHMP area during the course of previous archaeological investigations. These assessments began in the early 1980s and have continued to the present day.

65 of these sites have been recorded as artefact scatters although it is noted that a majority of these recorded 10 or less artefacts. 118 sites are listed as isolated finds with the remaining 1 per cent of these sites being split between a potential archaeological deposits (PAD), a stone arrangement and a stone quarry with PAD.

These sites are shown in Figure 2-1 Figure 2-1 and Figure 2-2.

2.32.4 Known Aboriginal sites remaining in place

Of the 381 sites, 111 remain intact or partially intact and the remainder have been salvaged under permit (<u>Figure 2-1</u> and <u>Figure 2-2</u> in addition, there are eight archaeologically sensitive areas that are not registered with AHIMS.

2.42.5 Cultural values assessment

To gain an understanding of the importance or the cultural significance of the MGO to Aboriginal people, RAPs were invited to participate in a cultural values assessment process as part the MOCO Project ACHAR. This included opportunity for independent statements to be provided in writing and verbally. The details of the extensive community consultation is provided in the ACHAR (Umwelt 2015 Appendix 13a).

Cultural values expressed by the RAPs are detailed in the ACHAR and are summarised here.

- the submissions made during the RAP workshops clearly communicate a deep contemporary attachment to place, although in common with most of the more urbanised regions of Australia, the understanding of 'place' and the cultural lore and traditions associated with it exist in a somewhat fragmentary state
- The landscape of the Project area has a fundamental significance because of its historical, social, and scientific value. Mt Owen Consolidated Project Area and surrounds is a complex, multi-layered cultural landscape where in combination (a) the biophysical attributes of the landscape including the drainage systems, fauna and flora, geology and soils; (b) the material traces of traditional Wonnarua people; (c) the historical associations and experiential reference points of its members and (d) the various spiritual, lived experiences contribute to a high level of cultural significance for which words are considered inadequate to describe.
- there is a discussion of creation or ancestral beings (i.e. Biame and Wedge Tailed eagles) in one of the cultural value reports that form the cultural values assessment in the ACHAR and some mentions of ritual practices or ritualised places, named landscape features or places within or in proximity to the MGO where ritual or lore was physically practiced. There are also known Bora grounds in the region surrounding the MGO, and there is also reference to a stone arrangement within the MGO being described as a 'birthing site'
- the disclosed material within the ACHAR seeks to demonstrate cohesive group ownership and control of the MGO area by the Wonnarua people, albeit through the auspices of different knowledge holder groups. This exertion of group ownership from all RAPs extends to all aspects of the natural and cultural environment, as well as to the spiritual and mythical realms. However, the level of direct knowledge of traditional ancestral lifeway's (i.e. creation myths, ongoing ceremonial activities, ritualised lore, custom and practices and language) existing prior to white settlement is generally limited, and detailed information about these matters is also limited.

Figure 2-1 - All known valid sites in the ACHMP Area

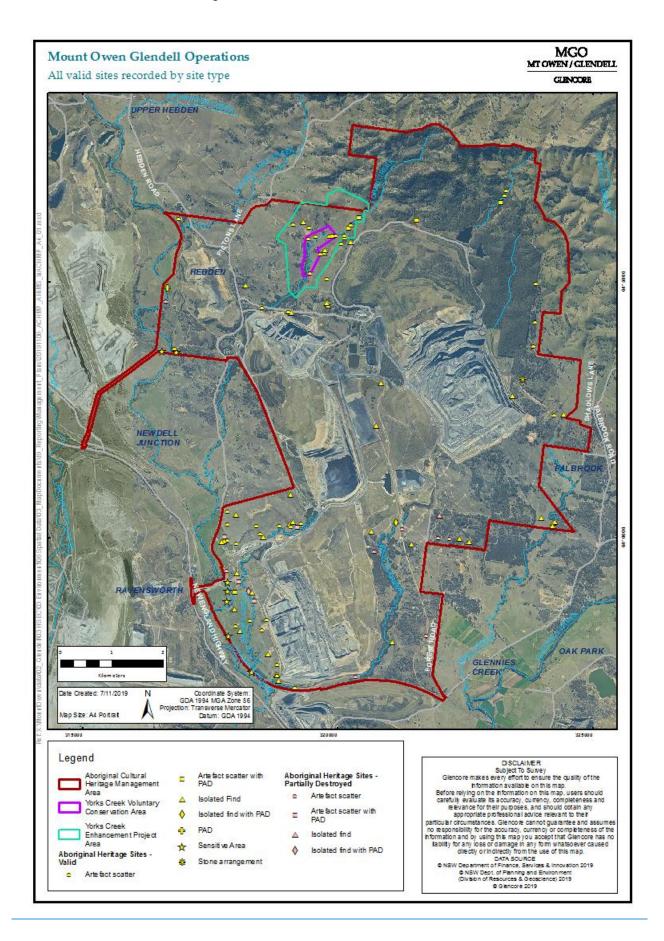


Table 2-14 – All known valid sites and archaeologically sensitive areas within the ACHMP Area

| AHIMS ID | Site Name | GDA Zone 56 East | GDA Zone 56 North | Site type | Status |
|-----------|--------------------------------|---------------------------|----------------------------|---------------------------------|--------|
| 37-3-0039 | Stringybark Creek | 317820 | 6416209 | Artefact scatter | Valid |
| 37-3-0050 | Yorks Creek Yorks Creek A | 319470 | 6415189 | Artefact scatter | Valid |
| 37-3-0056 | Stringybark Creek Hebden | 316890 | 6416254 | Artefact scatter | Valid |
| 37-3-0294 | Site 2 (MORL2) | 321168 | 6410327 | Artefact scatter | Valid |
| 37-3-0346 | Mt Owen (1996) 6 | 320245 | 6415789 | Isolated find | Valid |
| 37-3-0355 | Mt Owen (1996) 20 | 319848 | 6415913 | Artefact scatter | Valid |
| 37-3-0356 | Mt Owen (1996) 18 | 320215 | 6416059 | Artefact scatter with PAD | Valid |
| 37-3-0357 | Mt Owen (1996) 17 | 320425 | 6416269 | Artefact scatter with PAD | Valid |
| 37-3-0359 | Mt Owen (1996)_3 | 319792 | 6415070 | Artefact scatter | Valid |
| 37-3-0362 | Mt Owen (1996) 24 | 319735 | 6415599 | Isolated find | Valid |
| 37-3-0469 | Bowman's/Swamp Creek Trench | 318072 | 6409137 | Artefact scatter with PAD | Valid |
| 37-3-0494 | MO-IF2 | 319060 | 6410265 | Isolated find | Valid |
| 37-3-0521 | MO-IF1 | 319123 | 6410319 | Isolated find | Valid |
| 37-3-0612 | Bettys Creek 22 | 321138 | 6410296 | Isolated find with PAD | Valid |
| 37-3-0615 | Bowman's Creek 3 | 317989 | 6408929 | Artefact scatter with PAD | Valid |
| 37-3-0637 | Bettys Creek Stone Arrangement | 323618 | 6413117 | Stone arrange ment | Valid |

| 37-3-0642 | Liddell Pipeline 1 | 316646 | 6414633 | Artefact scatter | Valid |
|-----------|------------------------------|--------|---------|---------------------------------|---------------------|
| 37-3-0670 | Liddell Pipeline | 316646 | 6414633 | Artefact scatter | Valid |
| 37-3-0643 | Bowman's Creek 1 PAD | 316669 | 6414898 | PAD | Valid |
| 37-3-0689 | G11 Glendell | 319223 | 6410211 | Artefact scatter with PAD | Partially destroyed |
| 37-3-0691 | Mt Owen(1996) 7 | 320146 | 6415881 | Artefact scatter | Valid |
| 37-3-0692 | Mt Owen(1996) 16 | 320266 | 6416131 | Artefact scatter with PAD | Valid |
| 37-3-0693 | Mt Owen(1996) 19 | 319907 | 6415911 | Artefact scatter with PAD | Valid |
| 37-3-0694 | Mt Owen(1996) 23 | 319676 | 6415561 | Artefact scatter | Valid |
| 37-3-0695 | Mt Owen(1996) 25 | 320085 | 6415771 | Artefact scatter | Valid |
| 37-3-0697 | GCS9 | 321982 | 6410431 | Isolated find | Valid |
| 37-3-0698 | GCS8 | 322504 | 6409912 | Isolated find | Valid |
| 37-3-0700 | GCS-9 | 322568 | 6409923 | Isolated find | Valid |
| 37-3-0701 | GCS-10 | 321980 | 6409997 | Artefact scatter | Valid |
| 37-3-0702 | Forest East Offset 1 (FEO 1) | 323878 | 6414226 | Artefact scatter | Valid |
| 37-3-0703 | Forest East Offset 2 (FEO 2) | 323885 | 6414975 | Artefact scatter | Valid |
| 37-3-0704 | Forest East Offset 3 (FEO 3) | 323852 | 6413751 | Artefact scatter | Valid |
| 37-3-0705 | Northeast Offset 1 (NEO 1) | 323209 | 6416566 | Artefact scatter with PAD | Valid |
| 37-3-0706 | Northeast Offset 2 (NEO 2) | 323283 | 6416707 | Artefact scatter | Valid |
| 37-3-0707 | Northeast Offset 3 (NEO 3) | 323309 | 6416793 | Artefact scatter | Valid |
| 37-3-0708 | Northwest Offset 1 (NOW 1) | 321558 | 6416221 | Artefact scatter with PAD | Valid |
| 37-3-0726 | Yorks Creek (Mt Owen Mine) 1 | 320272 | 6416121 | Artefact scatter | Valid |

| 37-3-0728 | Yorks Creek (Mt Owen Mine) 3 | 320138 | 6415921 | Artefact scatter | Valid |
|-----------|-------------------------------|--------|---------|---------------------|-------|
| 37-3-0729 | Yorks Creek (Mt Owen Mine) 4 | 319574 | 6415913 | Artefact scatter | Valid |
| 37-3-0730 | Yorks Creek (Mt Owen Mine) 5 | 319965 | 6415925 | Artefact scatter | Valid |
| 37-3-0731 | Yorks Creek (Mt Owen Mine) 6 | 319436 | 6415852 | Artefact scatter | Valid |
| 37-3-0732 | Yorks Creek (Mt Owen Mine) 7 | 319136 | 6416136 | Artefact scatter | Valid |
| 37-3-0733 | Yorks Creek (Mt Owen Mine) 8 | 319330 | 6416189 | Isolated find | Valid |
| 37-3-0734 | Yorks Creek (Mt Owen Mine) 9 | 319452 | 6416084 | Artefact scatter | Valid |
| 37-3-0735 | Yorks Creek (Mt Owen Mine) 10 | 319754 | 6415634 | Isolated find | Valid |
| 37-3-0921 | MCISO1 | 324228 | 6410295 | Isolated find | Valid |
| 37-3-0922 | MCISO2 | 324255 | 6410311 | Isolated find | Valid |
| 37-3-0923 | MCISO3 | 324200 | 6410232 | Isolated find | Valid |
| 37-3-1005 | REA124 | 317982 | 6408615 | Isolated find | Valid |
| 37-3-1009 | REA131 | 318080 | 6408179 | Isolated find | Valid |
| 37-3-1156 | MT OWEN ISOLATED FIND1 | 318001 | 6410455 | Isolated find | Valid |
| 37-3-1172 | MOCO IF-3 | 323425 | 6412780 | Isolated find | Valid |
| 37-3-1173 | MOCO IF-4 | 320849 | 6413041 | Isolated find | Valid |
| 37-3-1175 | MOCO IF-6 | 320749 | 6412208 | Isolated find | Valid |
| 37-3-1185 | MOCO IF-16 | 321445 | 6409882 | Isolated find | Valid |
| 37-3-1186 | MOCO IF-17 | 321066 | 6407957 | Isolated find | Valid |
| 37-3-1214 | MOCO IF-23 | 319809 | 6414557 | Isolated find | Valid |
| 37-3-1215 | MOCO IF-24 | 319791 | 6414618 | Isolated find | Valid |
| 37-3-1216 | MOCO IF-25 | 319780 | 6414604 | Isolated find | Valid |

| 37-3-1496 | SCK-9 | 318871 | 6410241 | Artefact scatter | Valid |
|-----------|------------------------------|--------|---------|---------------------|---------------------|
| 37-3-1497 | SCK-11 | 319089 | 6410231 | Artefact scatter | Valid |
| 37-3-1193 | MOCO OS-5 | 321277 | 6410178 | Artefact scatter | Partially destroyed |
| 37-3-1194 | MOCO OS-6 | 320718 | 6409739 | Artefact scatter | Partially destroyed |
| 37-3-1197 | MOCO OS-9 | 320364 | 6407290 | Artefact scatter | Partially destroyed |
| 37-3-1196 | MOCO OS-8 | 321748 | 6408083 | Artefact scatter | Partially destroyed |
| 37-3-1198 | MOCO OS-10 | 317840 | 6409364 | Artefact scatter | Partially destroyed |
| 37-3-0343 | Mt Owen (1996) 1; MTO1 | 318524 | 6414512 | Artefact scatter | Valid |
| 37-3-0360 | Mt Owen (1996)_2 | 319084 | 6414419 | Isolated find | Valid |
| 37-3-0727 | Yorks Creek (Mt Owen Mine) 2 | 319041 | 6414427 | Artefact scatter | Valid |
| 37-3-1494 | Swamp Creek IF-1 | 318640 | 6407727 | Isolated find | Valid |
| 37-3-1493 | Swamp Creek IF-2 | 318807 | 6407327 | Isolated find | Valid |
| 37-3-1492 | Swamp Creek IF-3 | 318805 | 6407330 | Isolated find | Valid |
| 37-3-1491 | Swamp Creek IF-4 | 318805 | 6407340 | Isolated find | Valid |
| 37-3-1394 | IF1. | 323988 | 6410403 | Isolated find | Valid |
| 37-3-1499 | Swamp Creek-OS1 | 318819 | 6407299 | Artefact scatter | Valid |
| 37-3-1498 | Swamp Creek-OS2 | 318006 | 6408283 | Artefact scatter | Valid |
| 37-3-1500 | Main Creek-OS16 | 324256 | 6412412 | Artefact scatter | Valid |
| 37-3-1501 | Main Creek-IF15 | 324426 | 6412429 | Isolated find | Valid |
| 37-3-1535 | Glendell North IF1 | 318189 | 6414948 | Isolated find | Valid |
| 37-3-1520 | Glendell North IF16 | 319072 | 6410845 | Isolated find | Valid |
| 37-3-1519 | Glendell North IF17 | 317777 | 6409943 | Isolated find | Valid |

| 37-3-1518 | Glendell North IF18 | 317723 | 6409918 | Isolated find | Valid |
|-----------|---------------------|--------|---------|---------------------------------|---------------------|
| 37-3-1517 | Glendell North IF19 | 318543 | 6410024 | Isolated find | Valid |
| 37-3-1515 | Glendell North IF20 | 318022 | 6409310 | Isolated find | Valid |
| 37-3-1514 | Glendell North IF21 | 318328 | 6408936 | Isolated find | Valid |
| 37-3-1513 | Glendell North IF23 | 318833 | 6407204 | Isolated find | Valid |
| 37-3-1566 | Glendell North IF26 | 318253 | 6408957 | Isolated find with PAD | Partially destroyed |
| 37-3-1560 | Glendell North OS1 | 316819 | 6413702 | Artefact scatter | Valid |
| 37-3-1542 | Glendell North OS17 | 317850 | 6410521 | Artefact scatter | Valid |
| 37-3-1541 | Glendell North OS18 | 317852 | 6410274 | Artefact scatter | Valid |
| 37-3-1572 | Glendell North OS19 | 317790 | 6410020 | Artefact scatter with PAD | Partially destroyed |
| 37-3-1540 | Glendell North OS20 | 317856 | 6409957 | Artefact scatter | Valid |
| 37-3-1539 | Glendell North OS21 | 318418 | 6410236 | Artefact scatter | Valid |
| 37-3-1538 | Glendell North OS22 | 319293 | 6410281 | Artefact scatter | Valid |
| 37-3-1537 | Glendell North OS23 | 318500 | 6410083 | Artefact scatter | Valid |
| 37-3-1570 | Glendell North OS25 | 318367 | 6408758 | Artefact scatter with PAD | Partially destroyed |
| 37-3-1508 | Glendell North OS28 | 318611 | 6408397 | Artefact scatter | Valid |
| 37-3-1547 | Glendell North OS29 | 318291 | 6408381 | Artefact scatter | Valid |
| 37-3-1546 | Glendell North OS30 | 318530 | 6408206 | Artefact scatter | Valid |
| 37-3-1545 | Glendell North OS31 | 318827 | 6407525 | Artefact scatter | Valid |
| 37-3-1543 | Glendell North OS33 | 319166 | 6407069 | Artefact scatter | Valid |
| 37-3-1576 | Glendell North OS39 | 318028 | 6409888 | Artefact scatter | Valid |

| 37-3-1577 | Bettys Creek 23 | 320652 | 6410133 | Isolated find | Valid |
|----------------|------------------|--------|---------|---------------------|-------|
| 37-3-0696 | GCS10 | 322190 | 6409990 | Artefact scatter | Valid |
| Not registered | Sensitive Area 1 | 317850 | 6409135 | Sensitive Area | N/A |
| Not registered | Sensitive Area 2 | 317845 | 6408965 | Sensitive Area | N/A |
| Not registered | Sensitive Area 3 | 317830 | 6408770 | Sensitive Area | N/A |
| Not registered | Sensitive Area 4 | 317860 | 6408085 | Sensitive Area | N/A |
| Not registered | Sensitive Area 6 | 318320 | 6407385 | Sensitive Area | N/A |
| Not registered | Sensitive Area 7 | 316570 | 6413656 | Sensitive Area | N/A |
| Not registered | Sensitive Area 8 | 316845 | 6413648 | Sensitive Area | N/A |

Figure 2-2: All known valid and destroyed sites in ACHMP area

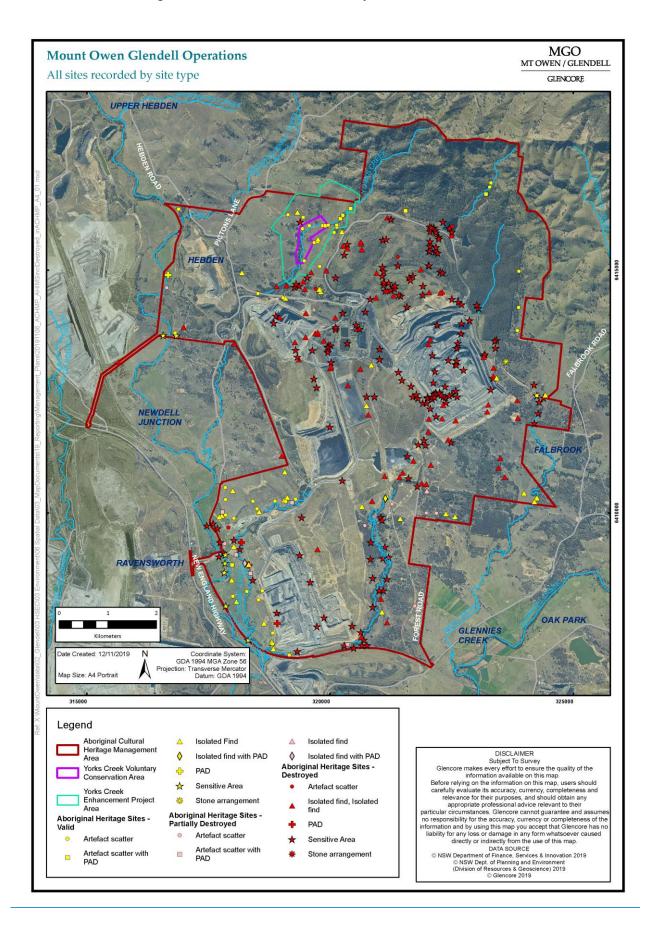
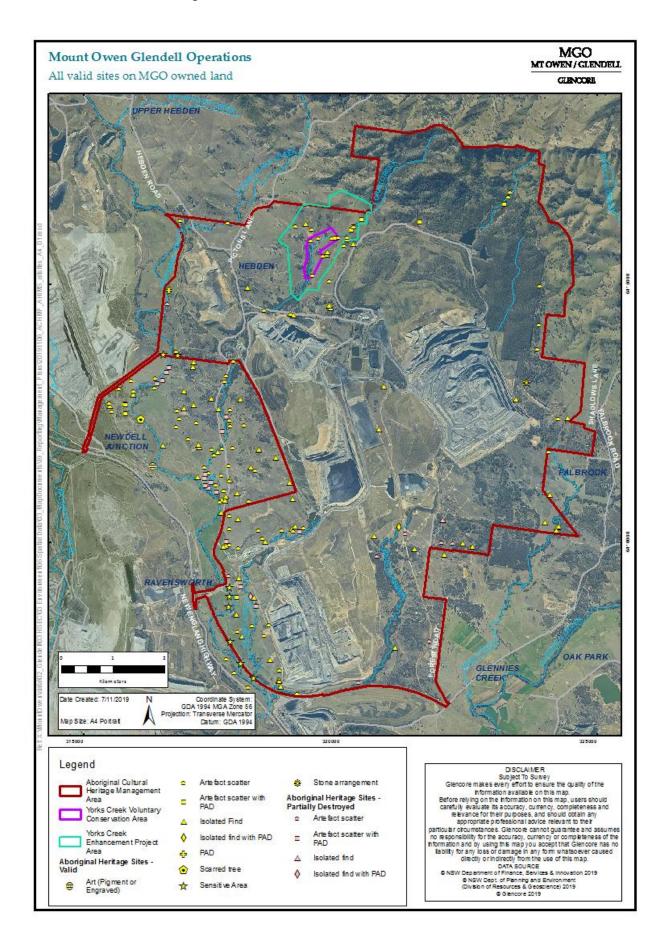


Figure 2-3: All known valid sites on MGO owned land



3 Management Strategy and Plan

3.1 Aboriginal heritage impacts

Approved mining activities have resulted in impacts to some Aboriginal objects both at Aboriginal sites where objects are visible, as well as below the ground surface where they are not readily apparent. However, not all parts of the ACHMP Area will be impacted by approved activities and therefore many Aboriginal sites will not be harmed.

Aboriginal site investigations undertaken to date confirm that Aboriginal stone artefacts additional to those originally recorded may continue to be found in low numbers across the landscape as exposure conditions change. These findings confirm that Aboriginal stone artefacts are broadly distributed within the soil across the ACHMP Area and that vegetation cover and soil exposure conditions can change to reveal previously obscured artefacts. Such exposed artefacts are referred to as "sites" which means the site where Aboriginal objects may be observed in the present. Similarly changing environmental conditions can obscure previously visible Aboriginal objects. The phenomenon of previously recorded "sites" not being discoverable at a later time is also common.

The management strategy addresses the recorded sites of Aboriginal objects as well as the inferred broad distributions of Aboriginal stone artefacts reflecting past Aboriginal activity in all parts of the landscape. Because Aboriginal objects occur within the topsoil in parts of the ACHMP Area, impacts to undiscovered Aboriginal objects may occur. The management strategy is provided as mitigation of all Aboriginal heritage impacts, including impacts to those Aboriginal objects that have been recorded and Aboriginal objects which may occur unrecorded within the topsoil.

3.2 Impact and non-impact areas within the ACHMP Area

Several defined areas occur within the ACHMP Area where specific management measures will be implemented for the protection of Aboriginal sites. The areas identified in the development consent as requiring management within the ACHMP Area include:

- a) impact areas: approved disturbance areas for the Mt Owen and the Glendell mines
- b) non-impact areas: includes all areas outside of approved disturbance areas but within the ACHMP Area that will not be impacted by approved activities. Within this category are four Management Areas that are described in **Section 3.2.1**.

These areas are described below and are shown in <u>Figure 3-1</u> Figure 3-1. The common management measures for these areas are described in **Section 5**.

The <u>York's</u> Creek VCA <u>management measures are described</u> separately in <u>Appendix E</u> and is shown in <u>Figure 3-1</u>.

3.2.1 Management Areas

3.2.1.1 Yorks Creek Voluntary Conservation Agreement Area

Aboriginal occupation and use of the Yorks Creek area is described in detail in a number of existing reports outlining previous Aboriginal archaeology assessments within the general area. Previous surveys of the Yorks Creek catchment have indicated a high density of archaeological material, particularly adjacent to the drainage lines. Knapping floors and dense surface scatters of artefacts, including a possible hearth were identified within the existing Yorks Creek VCA.

Figure 3-1 Figure 3-1 shows the location of the Yorks Creek VCA.

The management plan for the Yorks Creek VCA is presented in Appendix E.

3.2.1.2 Yorks Creek Catchment Enhancement Project

In recognition of the need to offset the destruction of a significant number of Aboriginal archaeological sites across the Glendell and Mount Owen mine leases, the MGO proposed a Yorks Creek Catchment Enhancement Project (YCCEP) area as an alternative to setting aside a land package. Subsequently, the Office of Environment and Heritage (OEH; now BCD) accepted the YCCEP area as an appropriate offset arrangement. The implementation of the YCCEP area with an aim to conserving a significant cultural landscape was required under Section 90 Consent # 2131, Special Condition 4, issued to the MGO by the OEH on 22 February 2005, in relation to site destruction within the Mount Owen West Dump area.

The Yorks Creek area has been highly disturbed by past land clearing and agricultural activities and comprises degraded open pasture land and areas of historic and active erosion along Yorks Creek and its tributaries. The YCCEP area incorporates the existing Yorks Creek VCA and land adjoining this area.

The design and implementation of the YCCEP area, including the assessment and selection of remediation options, design of work program and co-ordination of on-ground works involves a partnership between the MGO, BCD and RAPs.

An Aboriginal Cultural Landscape Remediation and Management Plan (ACLRMP) was prepared in 2007 to guide the implementation of the YCCEP area by a working group comprising representatives from the MGO, the OEH now BCD, the relevant Aboriginal stakeholders and an independent land management consultant (Global Soil Solutions). The close involvement of the Aboriginal stakeholders was integral to the overall success of the ACLRMP given the presence of Aboriginal sites throughout the YCCEP area and their significance to the Aboriginal community.

The following benefits to the Aboriginal community have arisen from the project:

- offsets for the loss of Aboriginal cultural heritage sites and values within the Glendell and Mount Owen mining areas
- establishment of an ongoing relationship with the relevant Aboriginal stakeholders
- restoration of cultural landscape values within the YCCEP area by controlling erosion and rehabilitating with locally indigenous vegetation
- training and skill development for Aboriginal stakeholder representatives through involvement in the design and implementation of the YCCEP, which has included assessment of remediation options, fencing, erosion control works, tree planting, maintenance works etc
- facilitation of the review of the Plan of Management for the existing Yorks Creek VCA area with the OEH
- provision of increased opportunities and the desirability of the use of the existing VCA by the Aboriginal community for educational purposes by improving access to the site and remediating cultural landscape values
- provision of further protection for archaeological sites along Yorks Creek outside of the existing Yorks Creek VCA area
- rehabilitation of the upper catchment of Yorks Creek, which has been highly degraded from
 past land clearing and agricultural activities and provision of a wildlife corridor link to
 rehabilitation at Mount Owen, the Mount Owen Biodiversity Offset Areas and remnant
 vegetation to the north of Mount Owen
- the improvement of the visual amenity of the overall Yorks Creek landscape.

The ACLRMP was not finalised during 2007, therefore management measures for the YCCEP area have been incorporated into the Yorks Creek Plan of Management. The plan supersedes the 2007 ACLRMP. The management plan is presented in *Appendix E* as part of the YCVCA Plan of Management.

3.2.2 Bettys Creek Habitat Management Area

As part of the 2007 modification to DA 80/952, the MGO committed to establishing a Habitat Management Area (HMA) within the Bettys Creek area (refer to <u>Figure 3-1</u>Figure 3-1). While the HMA has been established primarily in response to the conservation of ecological values within the Glendell Mine area, the HMA contains four known Aboriginal sites:

- 37-3-0294 Site 2 (MORL2)
- 37-3-0612 Bettys Creek 22
- 37-3-1194 MOCO OS-6

It also contains an area that was noted to have Aboriginal cultural values in the Umwelt 2004 survey and assessment report. These values included (Umwelt 2005: 7.9 to 7.14):

- a ridge that affords expansive views of the Bettys Creek valley
- areas along Bettys Creek and on the lower slopes where five or more useful/edible plants were recorded during the survey
- semi-permanent water from Bettys Creek and associated billabongs (old meander cut-offs) and a permanent waterhole in the vicinity of Bettys Creek 21, Bettys Creek 22 and MORL-
- numerous creek confluences with associated areas of low gradient suitable for camping.

It is probable that further artefacts may remain in association with the main creek channel of Bettys Creek and along the tributaries that drain the slopes.

In summary, the HMA contains three known Aboriginal sites, the potential for Aboriginal artefacts in a subsurface context (in association with the creek line and tributaries) and it contains important Aboriginal values that will be protected into the future as part of this ACHMP.

Figure 3-1 Figure 3-1 shows the location of the Bettys Creek HMA.

3.2.3 Biodiversity Offset Areas

In 2006, Umwelt was commissioned by the MGO to conduct an archaeological survey of the Mount Owen Biodiversity Offset Areas to satisfy the requirements of the previous Mount Owen development consent. The following is a summary list of the findings of that report:

- a) two recorded sites existed in the Biodiversity Offset Areas prior to the survey undertaken by Umwelt in 2006. Both of these sites were stone arrangements recorded in 1980 and 2004.
- b) the 2006 survey recorded seven new sites within the Biodiversity Offset Areas, which were artefact scatters varying number of artefacts from two to eighty-one.

OzArk Environment & Heritage (OzArk) has also undertaken further archaeological surveys within Biodiversity Offset Areas during the development and operational phase of MOCO.

Figure 3-1 Figure 3-1 shows the location of the Biodiversity Offset Areas.

3.2.4 Bowmans Creek and Swamp Creek Landscape

The Glendell Mine site contains a substantial area of floodplain and slopes associated with Bowmans Creek and Swamp Creek (including the majority of the shared Bowmans Creek and Swamp Creek floodplain) that will not be impacted by mining under the approved disturbance plan. During the Umwelt 2004 survey and assessment these areas were noted to have nine Aboriginal sites, of which seven were salvaged under Section 90 Consent #2267, as they were within areas that were proposed under the initial mine plan for disturbance. The landscape contains –known Aboriginal sites, six of the eight archaeologically sensitive areas and these sites/areas will be protected under this ACHMP. Despite the fact that the majority of the sites have been salvaged, it is probable that further artefacts may remain in a subsurface context within parts of this area associated with the creek lines. The areas also retain Aboriginal cultural heritage values including (Umwelt 2005: 7.9 to 7.14):

Subsequent investigations have demonstrated that there is only one stone arrangement feature.

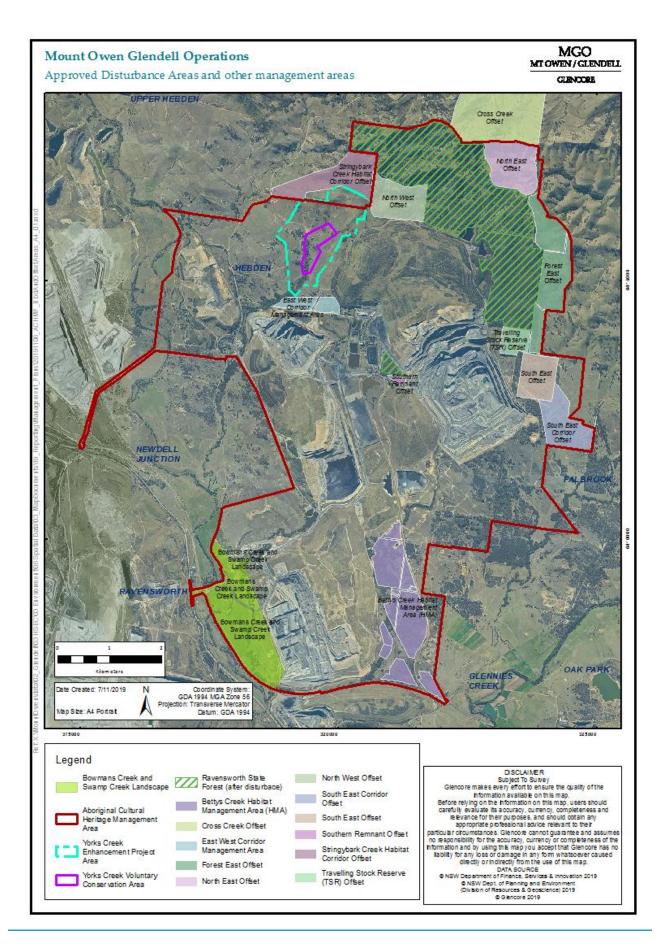
- a ridge that affords expansive views of the Swamp Creek valley (Swamp Creek);
- areas along Bowmans Creek and Swamp Creek and on the lower slopes where five or more useful/edible plants were recorded during the survey;
- semi-permanent water from Swamp Creek and associated billabongs (old meander cutoffs) and most likely permanent water from Bowmans Creek;
- outcropping stone (on hilltop) and cobble bed load in creek channel suitable for tool manufacture (Bowmans Creek); and
- numerous creek confluences with associated areas of low gradient suitable for camping.

In summary, the area of Bowmans Creek and Swamp Creek within the Glendell Mine site but outside the mine disturbance area contains known Aboriginal sites and six of the eight archaeologically sensitive areas. As there is potential for Aboriginal artefacts in a subsurface context in association with the creek lines and tributaries, this landform will be protected into the future as part of this ACHMP.

Portions of this landform were impacted by approved mining operations, particularly near the Hebden Road upgrade works.

Figure 3-1 Figure 3-1 shows the location of the Bowmans Creek and Swamp Creek Landscape.

Figure 3-1 – Aerial showing approved disturbance areas and other management areas



3.3 Management of sites outside impact areas

The management strategy will be implemented with participation of the Aboriginal parties.

Aboriginal sites within the ACHMP Area but outside of the approved disturbance areas, such as those within the Yorks Creek VCA, will not be impacted. The following management strategies apply to these sites:

- a) previously recorded Aboriginal sites not impacted by development will be considered for protection by fencing and/ or signage (see **Section 5.2**), and will be subject to monitoring (see **Section 5.5**).
- b) protected Aboriginal sites, including partially protected sites where impacts have not extended to all of the site, within the ACHMP Area will be actively managed to prevent deterioration.

3.4 Protection measures for cultural heritage sites

The MGO will consult with the RAPs on matters raised in the MOCO ACHAR, in order to better understand where there may be changes or improvements to existing cultural heritage management mechanisms and protocols.

3.4.1 General Controls

The following general Aboriginal heritage management measures have been implemented at MGO:

- a) a significant area of the MGO has been previously surveyed for Aboriginal heritage sites by archaeologists and Aboriginal community groups
- b) a GIS database of Aboriginal sites has already been established for the MGO
- c) MGO maintains an up to date mine plan which minimises mining in areas of high Aboriginal significance
- d) there is an Aboriginal Heritage section within the MGO site induction
- e) pre-clearance surveys are undertaken prior to ground disturbance
- f) Ground disturbance permit ensures Aboriginal Heritage is reviewed prior to ground disturbance.

The following controls have been established at the MGO to protect and conserve Aboriginal cultural heritage values. These include:

- a) consultation with the Aboriginal community (undertaking field study and reviewing reports)
- b) contractors working in the MGO to be made aware of responsibilities under *National Parks* and *Wildlife Act 1974* (NPW Act) and location of known sites
- c) location of known sites to be added to MGO GIS database which is reviewed prior to any site disturbance through the Ground Disturbance Permit (GDP) process.

3.4.2 Monitoring of Aboriginal sites in non-impact areas

Monitoring of non-impacted sites will take two forms:

- a) photographic monitoring: will consist of photographic monitoring every three years at a representative sample of up to 10 Aboriginal sites with more than 10 artefacts. Further details are provided in **Section 5.5.1.**
- b) site condition monitoring: will consist of RAPs or their representatives, as well as a suitably qualified archaeologist, inspecting a roster of Aboriginal sites on an annual basis. Further details are provided in **Section 5.5.2**5.5.2.

3.4.3 Verification of Aboriginal sites in non-impact areas

The MGO supports a project to study the archaeological values in non-impact areas. The study focuses on the AHIMS registered sites in the ACHMP Area and involves monitoring surveys in order to ground-truth the location and condition of all previously recorded sites.

The aim of the monitoring survey is to recommend procedures to ensure that these sites are preserved in the landscape. In most cases, this preservation will involve fencing and/ or signage (if not already in place), although if erosion threatens a site, broader erosion controls / sandbagging of banks etc may be needed to ensure the site's preservation. The MGO has committed funding to review and monitor these sites, including remediation activities.

The verification project is run in conjunction with the monitoring program set out in Section 3.4.2.

3.4.4 Landform and revegetation involvement

The MGO will consult with the RAPs on the final landform, flora and fauna corridors, water courses and revegetation strategies (R27).

The MGO through the ACHWG and the Annual Open day (**Section 1.4**) will update the RAPs on the progress on the landform and rehabilitation outcomes.

4 Operational and Training Protocols

MGO recognises that training and awareness is an important aspect of the Environmental Management System. All MGO personnel and contractors are required to complete a Glencore generic, and a site specific induction prior to commencing works on the site. Personnel working in the Thiess nominated area will be required to undertake a Thiess induction. Personnel undertaking works in the Yorks Creek VCA and the Biodiversity Offset Areas are required to complete a specific Cultural Heritage induction.

All relevant mining personnel associated with surface activities have knowledge in the recognition of Aboriginal materials. The Environment and Community Manager has an understanding of Aboriginal heritage legislation (NPW Act) and the legislative process.

4.1 Obligation to protect Aboriginal cultural heritage

4.1.1 Obligation to avoid harm

Employees, contractors, sub-contractors and visitors to the ACHMP Area have an obligation to avoid harming Aboriginal heritage unless engaged in approved development activity in an area where Aboriginal salvage obligations have been met as described in this Plan.

The definition of harm used in this Plan stems from the definition in Section 5 of the NPW Act. The examples used below are for illustrative purposes and are not exhaustive.

Harm to an Aboriginal object or Aboriginal site means:

- a) moving or collecting stone artefacts (although picking up artefacts and inspecting them is acceptable as long as they are immediately returned to their original location
- b) disturbing the earth where stone artefacts are located, e.g. by earthworks for drains, roads, etc.
- c) breaking stone artefacts, e.g. by running over them in a vehicle
- d) causing damage to a grinding groove sandstone platform by creating or exacerbating cracks
- e) cutting down, disturbing or otherwise marking scarred trees

Trivial or negligible impacts to Aboriginal objects are not regarded as harm. However, 'trivial' is defined, for example, as breaking an artefact during gardening. Activities on a mine site would rarely be regarded as 'trivial'.

4.1.2 Obligation to protect

Mine personnel, contractors and subcontractors having responsibility for land management or construction have an obligation to protect Aboriginal heritage within their area of work responsibility.

Protection means active recognition of known Aboriginal heritage and active measures to avoid Aboriginal heritage. This may include fencing, mitigation of erosion effects and modification of work plans to avoid Aboriginal heritage such as changing vehicular access routes.

4.1.3 Obligation to implement management measures for Aboriginal heritage impacts

Mining personnel, contractors and subcontractors have a responsibility to ensure that the appropriate Aboriginal heritage salvage has been conducted prior to or in association with their activities which impact Aboriginal objects. This is achieved through use of the work authorisation and a GDP.

4.1.3.1 Aboriginal heritage induction and permitting process

Employees, contractors, sub-contractors and visitors to the ACHMP Area will be made aware of the obligation to avoid harm to Aboriginal heritage through an Aboriginal heritage component of the site induction and the GDP process.

The Aboriginal heritage induction includes the following points expressed in plain language:

- a) Aboriginal sites occur extensively across the ACHMP Area
- b) Aboriginal sites are of great significance to the Aboriginal community, are important to the wider community and will be treated with respect
- c) Aboriginal sites are protected by law
- d) Aboriginal sites include stone tool sites and a stone arrangement site
- e) Aboriginal sites can be hard to recognise, so refer to the MGO GIS to determine site locations
- f) many Aboriginal artefacts are hidden within the topsoil and are not readily visible. The apparent absence of a site does not mean it is no longer in existence.

The MGO revised its onsite induction program during 2017 to include material to raise awareness of Aboriginal cultural values of the ACHMP Area and local area more generally. The induction material positively messages the Aboriginal cultural heritage values of the area (R06).

The induction materials and content were developed in consultation with the relevant RAPs through the ACHWG.

5 Aboriginal Heritage Protection

5.1 Measures to protect Aboriginal sites

Measures to protect and manage Aboriginal sites and Aboriginal heritage management areas not impacted by development activities include fencing, land management, recording, interpretation, and monitoring. The common measures for all sites and areas are described below.

5.2 Fencing

5.2.1 Fencing of sites within Management Areas

5.2.1.1 Yorks Creek VCA

Refer to Appendix E.

5.2.1.2 Biodiversity Offset Areas and the Bettys Creek HMA

Fencing the perimeter of the Biodiversity Offset Areas and the Bettys Creek HMA will be considered. As these areas are not solely for the conservation of Aboriginal cultural heritage sites, signage at entry points will indicate:

- a) the area contains Aboriginal cultural heritage sites
- b) no ground disturbing impacts without authorisation
- c) no vegetation removal beyond weed control.

5.2.1.3 Bowmans Creek and Swamp Creek Landscape

The Bowmans Creek and Swamp Creek Landscape will neither have a perimeter fence and or individual sites be fenced if they are not already in place. This landscape will be noted in the MGO GIS as an area of archaeological sensitivity. Should ground disturbing impacts be required within this landscape, the exact location of the impacts will be assessed by a suitably qualified archaeologist to determine the level of impact to the archaeological values of this landscape.

5.2.2 Fencing of sites outside of Management Areas

A number of sites are located in non-impact areas outside of the Management Areas and the approved disturbance areas.

Individual fencing at these sites will be considered on a case by case basis with the desired outcome being the long-term preservation of the site.

Fencing at these sites, if required, shall constitute at a minimum star pickets placed outside the limits of observable Aboriginal objects and <u>signage to identify the area as being significant</u>. Where there is doubt over the extent of surface artefacts, a competent person will be involved in an inspection to identify the extent of visible Aboriginal objects (usually stone artefacts) on the surface. Where grazing by stock poses a risk to a site, <u>discussion with RAPs during monitoring program may result in</u> more substantial, stock proof fencing <u>where required</u>.

Where there has been partial impact on an Aboriginal site the remaining portion shall be fenced.

Fencing at any individually fenced sites shall be maintained for both site presentation as well as being a visible impact deterrent.

Fencing may be omitted or removed if it brings undesired attention to the site from vandals or otherwise increases risk of damage to the site. If fencing is omitted or removed, other management options to protect the site will be considered on a case by case basis in consultation with MGO RAPs. Other management options may include reburial or relocation of artefacts, salvage and storage of artefacts in accordance with this Plan, or strategic revegetation to protect an exposed site.

5.3 Land management within Management Areas

This section deals with land management practices in areas designated as Management Areas that include cultural heritage sites and values. The Management areas include the Biodiversity Offset Areas, the Bettys Creek HMA and the Yorks Creek VCA.

5.3.1 Erosion control

Erosion control measures may be implemented at known protected Aboriginal sites under erosion threat. If erosion control measures are to be carried out:

- a) the area will be inspected by a suitably qualified archaeologist and representatives of the RAPs and/ or Wonnarua Knowledge Holders to determine precisely the likely impacts of the erosion works and to determine appropriate management recommendations
- management measures will be discussed with, and agreed upon by the MGO Aboriginal Cultural Heritage Working Group (ACHWG) and MGO Environment & Community (E&C) staff
- c) minor movement of individual artefacts is permissible on the condition that artefacts are returned to their original location immediately after the erosion control management action
- d) before and after photographs will record erosion control actions. Such records will be retained in association with this Plan.

5.3.2 Bushfire hazard reduction

If bushfire hazard reduction is to be carried out within 50_metres of a known archaeological site, the appropriate safeguards should be in place:

- a) all personnel working within the area should be informed of the site's location and its legislative protection under the NPW Act
- b) clearing of excess fuel load will be undertaken in a manner that minimises ground disturbance
- c) management measures will be discussed with and agreed upon by the ACHWG and MGO E&C staff. Preferred methods of hazard reduction include manual brush cutting and grass slashing with the slasher set at a minimum of 150 millimetres to avoid impacting surface Aboriginal stone artefacts.

5.3.3 Exclusion of stock

Stock will be excluded from Management Areas <u>except Bowmans Creek and Swamp Creek Landscape</u> to avoid impact to identified Aboriginal heritage values.

5.3.4 Weed control

If weed control is to be carried out within 50_metres of a known archaeological site, the appropriate safeguards should be in place:

- a) all personnel working within the area should be informed of the site's location and its legislative protection under the NPW Act
- b) no ground disturbing activities associated with weed control can take place
- management measures will be discussed with and agreed upon by the ACHWG and MGO E&C staff.

5.3.5 Land Management in the York's Creek Catchment Enhancement Project

Land management practices within the YCCEP area are contained in Appendix E.

5.3.6 Land Management in the York's Creek VCA

Management protocols regarding the York's Creek VCA are contained in Appendix E.

5.3.7 Wollombi Brook Artefact Storage Facility

5.3.7.1 Historical information

The MGO has committed to funding the establishment of an artefact storage facility at the Yorks Creek VCA (R14). However, this location is impracticable, and in consultation with the ACHWG, MGO has agreed to house all artefacts from the MGO at the Wollombi Brook Conservation Agreement Area at the Bulga Coal Complex. This purpose-built facility will house artefacts from several Glencore mines in the Hunter Valley. All artefacts from the MGO will be stored in separate archive boxes to artefacts from other mine sites.

The materials will be retained at the Wollombi Brook artefact storage facility for the life of the mine unless otherwise approved by <u>Biodiversity & Conservation Division within the Department (BCD) OEH formally BCD</u> in a Section 85 Care and Control Permit (NPW Act).

At mine closure, the materials are to be transferred to a facility nominated by the RAPs subject to approval by BCDOEH in a Section 85 Care and Control Permit (NPW Act). Where an agreed facility cannot be nominated, consideration will be given to lodging the material with either the Australian Museum (subject to its acceptance), a local Aboriginal cultural centre (if one is present) or a local heritage museum that can provide secure ongoing storage and curation. Where no facility can be identified, the material may be reburied within the MGO in a secure manner that allows later retrieval. The location must be chosen following consultation with all MGO RAPs and be notified to the BCDOEH in the designated manner.

5.3.7.2 Interim Storage Strategy

In response to MOCO MOD 2 Schedule 3 Condition 34c the interim strategy for the storage of heritage items defines storage of heritage items pending the completion of the Wollombi Brook Artefact Storage Facility. Previously salvaged heritage items will continue to be stored at Umwelt with newly salvaged items to be securely stored onsite at Glendell mine as below:

- a) <u>linformation from each artefact will be stored in a full catalogue, including photographic records-</u>
- b) The catalogue will be kept in printed form with the stored artefacts and in an electronic database containing all records.
- c) Aall stone artefacts must be either individually bagged or bagged in appropriate and identifiable units (e.g. excavation or collection units) that can be referenced back to the catalogue.
- d) Ithe stone artefacts are to be stored in good quality, double-bagged plastic zip-lock bags.
- e) **T**the bags will be externally labelled using permanent marker, and an 'independent' label on robust material written with permanent marker must be placed inside each bag-
- f) **T**the collection will be securely stored in an impervious container.

5.3.7.3 Wollombi Brook Plan of Management Consultation Procedure

In accordance with MOCO MOD 2 Schedule 3 Condition 34c the MGO ACHWG will be given the opportunity to comment on the draft Plan of Management for the Wollombi Brook Storage Facility. Consultation will continue in the form of biannual updates and discussions at the ACHWG meetings.

5.4 Interpretation panels

The MGO has developed, with the ACHWG, commitments R17 and R18 regarding the naming of the new Bowmans Creek bridge and the massacre site storyboard.

5.5 Site monitoring

Site monitoring shall take two forms:

- a) photographic monitoring shall be undertaken at up to 10 representative sites within the ACHMP boundary with more than 10 artefacts in the non-impact area
- b) site condition monitoring will be undertaken quarterly with the aim to visit each site within a year.

A site included in the photographic monitoring group could also be in the site condition monitoring group if it is assessed that annual visits would be advantageous to maintain the site's condition.

Should any site included in either monitoring program be assessed as not requiring further monitoring, it can be substituted for another site.

5.5.1 **Photographic monitoring**

The objectives of photographic monitoring is to:

- a) document land condition prior to management measures
- b) measure effects of erosion
- c) measure efficacy of land management measures to mitigate erosion
- d) document Aboriginal site condition over time.

Photographic monitoring will entail:

- a) taking photographs from at least two fixed locations at each site at least every three years
- b) placing permanent photo points (such as a star picket with signage) at all photographic monitoring sites
- c) all photographs will include a range pole placed approximately 10m from the camera in order to create a scaled reference point. If topography or vegetation does not allow the range pole to be placed 10m from the camera, a shorter distance can be used but this will be noted in the report and replicated during the next photographic monitoring program
- d) photographs will be taken in high definition with images stored in digital form at the MGO in association with this plan
- e) the results and recommendations of the photographic monitoring shall be presented in a monitoring report and a summary included in the annual review
- f) colour printouts will be available to interested Aboriginal parties on request for review as to the efficacy of land management measures in relation to Aboriginal heritage.

5.5.2 Site condition monitoring

The objectives of site condition monitoring is to:

- a) measure efficacy of land management measures to mitigate erosion
- b) document Aboriginal site condition over time.

The site condition monitoring program will entail:

- a) visiting a roster of sites annually to identify impacts, recommend mechanisms to avoid impact and/or maintain, where appropriate, any preventive erosion mechanisms at the site
- b) assessing the efficacy of any erosion control measures
- c) maintaining a photographic and written record of each site and presenting the results and recommendations in a monitoring report.

6 Detailed Procedures

6.1 Discovery of Aboriginal ancestral remains

In the event known or suspected Aboriginal skeletal remains are encountered during the course of development the following procedure will be followed:

- a) all work close to the find will cease immediately and an area of 10m radius around the find will be cordoned off with temporary construction fencing
- b) the find will be immediately reported to the work supervisor who will immediately advise the Environment and Community Manager or other nominated senior staff member
- c) MGO will promptly notify the police (as required for all human remains discoveries)
- d) MGO will contact BCD for advice on identification of the skeletal material as Aboriginal and management of the material;
- e) if the remains are Aboriginal ancestral remains, the RAPs will be contacted within two working days and consultative arrangements will be made to discuss ongoing care of the remains, including advice on recommended forensic anthropologists.

6.2 Discovery of new Aboriginal sites

In the event of discovery of new Aboriginal sites which are more than 50 metres from previously recorded boundaries of Aboriginal sites, all work close to the discovery will cease and an area of 10 metres around the site fenced with temporary construction fencing. An archaeologist and members of the RAPs will be contacted to determine the significance of the Aboriginal object(s) present. New sites will be registered in the AHIMS database (see **Section 7.2.1**).

6.2.1 New sites within impact areas

Any new Aboriginal sites identified within approved disturbance areas will be temporarily fenced² as quickly as possible. Signage on the fencing is to state that the area is subject to environmental protection, where no ground disturbance is allowed, and will include relevant contact details for MGO staff. The minor impact to the ground surface during installation of fence posts is permissible on condition that no soil is to be removed off site. The following procedure will be implemented for any newly identified sites:

- a) the site will be assessed by a qualified archaeologist and members of the RAPs
- b) the site will be temporarily fenced (see Section 5.2)
- c) the site location will be registered with AHIMS and a site card submitted
- d) the site location will be entered on to the MGO GIS database
- e) depending on the Aboriginal cultural heritage values at the site and the degree of immediate threat to the site, the site will be salvaged according to the methodology in this Plan (**Section 6.2.1.1** and **6.2.1.2**)
- f) a brief report of the salvage will be produced to record the findings
- g) on the completion of salvage at such sites, an AHIMS Aboriginal Site Impact Recording Form (ASIRF) will be completed (see **Section 7.2.3**). Copies of the forms will be archived. Digital copies will be submitted to the AHIMS Registrar soon after completion of salvage fieldwork. The form will be lodged within a reasonable time of fieldwork completion and certainly within six months
- h) all artefacts salvaged will be stored in the artefact storage facility (Section 5.3.7).

² A temporary fence will consist of 3-4 star pickets with caution tape strung between the star pickets.

6.2.1.1 Group 1: Surface artefact collection

This category includes sites where surface artefacts are identified but where sub-surface archaeological deposits are considered unlikely.

Detailed recording and collection of surface artefacts would be the primary management approach for sites in this category. All sites in this group would have a low scientific value and only limited further investigation is considered necessary.

In the cases where sites may partially overlap with the approved disturbance area, surface collection will be confined to the impact footprint with a 5m buffer.

The following methodology will apply to all Group 1 sites:

- a) all visible artefacts at a site will be flagged in the field
- b) the site will be photographed after flagging and before recording
- all artefacts will have the following artefact information entered directly into a GPS unit, albeit one set up with all variable fields already entered to make the field recording job more efficient:
 - location
 - artefact type
 - size
 - reduction level
 - raw material
 - notes.
- d) a selection of indicative and / or unusual artefacts from each site will be photographed
- e) once all recording is complete, the artefacts will be collected and relocated to the artefact storage facility (see **Section 5.3.7**)
- f) should a human burial be encountered, all work will cease in the area and advice from the police (in the first instance) and RAPs (should the remains be Aboriginal) sought (see Section 6.1)
- g) the recording of the artefacts recovered will largely be completed in the field and this data would be incorporated into a report to be produced in a timely manner subsequent to the surface collection
- h) the supervising archaeologist would be responsible for submitting an ASIRF to the AHIMS to update the register with the results of the salvage works.

6.2.1.2 Group 2: Limited salvage excavation

In rare cases where a significant site with suspected subsurface deposits is at risk of destruction, Group 2 management will be applied to the site. Group 2 sites would have a moderate or high scientific significance.

Limited salvage excavation will be undertaken by manual means.

The manual excavation at these locations will follow the following framework.

The following research aims and design will govern the manual excavation at these locations:

- Research Aim: Are there either subsurface artefacts or intact archaeological deposits at the location?
- Action: To conduct targeted, limited archaeological excavations at the site.
- Research Design: Up to eight 0.5m by 0.5m excavation squares will be excavated at any one location. The excavation squares could be grouped to maximise information in one area, or spaced out to maximise cover. If spread out, it is recommended that pairs of 0.5m by 0.5m squares are excavated together to gain a meaningful sample from any area. These squares, in 0.5m by 0.5m increments, could be expanded if finds or deposits indicate that it would be advantageous. Spits at each area would start in 5cm increments although 10cm

increments could be used once it is established it is archaeologically prudent to do so and all deposits will be dry sieved at location. Should the excavations encounter a human burial, all work will cease in the area and advice from authorities and RAPs (should the remains be Aboriginal) sought (see **Section 6.1**). All excavated material (stone tools, bone, shell etc) will be fully analysed and a report of the findings prepared.

6.2.2 New sites outside of impact areas

Any new Aboriginal site identified outside the approved disturbance areas will be managed in accordance with the following procedure:

- a) the site will be assessed by a qualified archaeologist and members of the RAPs
- b) the site will be considered for fencing and signage
- c) the site location will be registered with AHIMS and a site card submitted
- d) the site location will be entered on to the MGO GIS database
- e) if the site contains Aboriginal objects of interest such as a large number of artefacts or rare features such as a hearth that is located in an area of active and destructive erosion, the site may be subject to limited salvage excavation in accordance with the methodology set out in **Section 6.2.1.2**. The aim of any salvage undertaken in this instance would be to prevent the loss of information from ongoing erosion and will only be undertaken in extreme and obvious circumstances with the full consultation and participation of the RAPs
- f) on the completion of salvage at such sites, an AHIMS ASIRF will be completed (see Section 7.2.3). Copies of the forms will be archived. Digital copies will be submitted to the BCD AHIMS Registrar soon after completion of salvage fieldwork. The form will be lodged within six months from the completion of fieldwork
- g) outside of emergency situations as set out above, any impact to sites outside of the approved disturbance area will require an Aboriginal Heritage Impact Permit (AHIP).

6.3 Managing impact to sites outside of impact areas

Proposed impact by mining or related activities to any site outside of the approved disturbance areas, other than the rescue salvage described in **Section 6.2.2** (e), will require an AHIP to be obtained from the BCD.

6.3.1 AHIMS Site #37-3-0687

AHIMS Site 37-3-0687 is located on the eastern boundary of the Mt Owen Mine pit shell. The site is located outside of SSD-5850 will not be salvaged unless separate approval is obtained. MGO will continue to monitor 37-3-0687 as part of the MGO quarterly monitoring program. The MGO monitoring program will define whether further management and preservation works are required to protect the site.

6.3.2 Archaeologically sensitive areas

OzArk were engaged in 2015 by the MGO to complete an archaeological Due Diligence assessment of a power line relocation (Glendell Mine Development Modification 3, Hansen Bailey Environmental Assessment report 2016).

The assessment identified eight archaeologically sensitive areas.. The general location of the sensitive areas is shown on *Figure 2-1*.

Due to the absence of visible surface artefacts, an assessment of the archaeological significance of the area was made based on landscape features and existing disturbance. The areas were classified as 'Sensitive Areas' rather than 'known Aboriginal sites'.

These areas have no statutory protection and are not registered with AHIMS. However, the location of these archaeologically sensitive areas will be taken into account with future development plans and all

efforts made to avoid these areas. If an artefact happens to be present and is disturbed, penalties may be incurred as per Section 5 of the NPW Act.

Should impacts to these areas be proposed, the location of the impacts will be inspected by a suitably qualified archaeologist and a Due Diligence assessment will be undertaken.

6.4 Managing impact to sites inside of impact areas

MOCO IF-3 AHIMS #37-3-1172 will be salvaged as a Group 1 site (Section 6.2.1.1) as per the consent for MOCO MOD2. Salvage will take place prior to disturbance associated with MOCO MOD 2 approval. Detailed recording and collection of surface artefacts will be the primary management approach for salvage of MOCO-IF-3.

6.46.5 Incident controls

The following measures are to be put in place if there is an unintentional impact to Aboriginal heritage items occurring from the MGO operation. These include:

- the person who disturbed a site/artefact will contact the MGO Environment and Community Manager immediately
- b) the MGO Environment and Community Manager <u>or delegate</u> will visit the site of the disturbance and record the disturbance with photographs
- c) the MGO Environment and Community Manager will correspond with the BCD regarding disturbance as soon as is possible
- d) direction from the BCD will be followed.

7 Record Keeping and Reporting Requirements

7.1 Project records

Copies of all project records will be kept at a secure location at the MGO.

Project records include:

- a) this Plan
- b) field recording forms (if available)
- c) maps showing site location
- d) excavation plans (if available)
- e) Aboriginal site salvage database files in digital and hard copy for reports.

7.2 Statutory reporting requirements

7.2.1 Discovery of Aboriginal objects

Under s89A of the NPW Act, it is a requirement that BCD is notified of the existence of Aboriginal objects as soon as practicable after they are first identified. This is usually done through the completion of an Aboriginal Site Card which is submitted to the Registrar of the AHIMS for inclusion on the Aboriginal sites database. Information regarding AHIMS and site recording forms can be downloaded from the DPIE website³.

7.2.2 Care and Control Permit application

Under s85A of the NPW Act Aboriginal objects remain the property, and under the protection of, the Crown until formal transfer to an Aboriginal owner or Aboriginal owners occurs. An application for a Care and Control Agreement will be made to BCD. Care and Control Agreement Application forms can be downloaded from the DPIE website⁴.

7.2.3 Reporting impact to Aboriginal sites

Although not strictly required by the NPW Act, BCD expects that information on authorised impacts to Aboriginal sites be reported to them on ASIRF which can be downloaded from the DPIE website⁵.

7.2.4 Reporting of ACHMP non-compliance incident

Should any Aboriginal cultural heritage site or area be impacted by works not authorised as described in this plan, MGO will report the non-compliance or potential non-compliance to the DPIE as soon as practicable after identifying the incident. This report will include a description of the incident, its circumstances and the corrective measures undertaken.

³ http://www.environment.nsw.gov.au/licences/DECCAHIMSSiteRecordingForm.htm

⁴ http://www.environment.nsw.gov.au/licences/CareAgreements.htm

⁵ http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf

8 Review and Improvement

8.1 Plan Review

This Plan will be reviewed in accordance with the MGO *Environmental Management Framework that* is within three months of:

- a) the submission of an incident report related to cultural heritage management
- b) the submission of the Annual Review
- c) the submission of an Independent Audit Report
- d) any modification to the relevant conditions of the consent for either Mt Owen or Glendell Mine.

Furthermore, changes may be made to this Plan where new Aboriginal sites are discovered which require specific management approaches proportionate to their cultural significance and which are not otherwise covered in this Plan.

Where changes are made to the Plan, a draft of the modified plan will be subject to Aboriginal consultation in accordance with the Plan. Matters raised in consultation which are specific to the changes in the Plan may be acknowledged and addressed in the modified Plan.

9 Completed MGO ACHMP Commitments

The ongoing / outstanding commitments regarding Aboriginal cultural heritage undertaken by the MGO are presented in <u>Table 1-2 Table 1-2</u> those commitments which have been completed are located below in.

Table 9-1 - Completed MGO ACHMP Commitments

| No. | Completed Commitment | Relevant Section of Plan | Comments |
|--------|--|-------------------------------|--|
| Mt Owe | en on-site management measures | | |
| R01 | Update ACHMP The ACHMP will include a staged approach to the required research and salvage works to ensure that areas required for construction are completed as a priority. | | All applicable MOCO salvage has been completed |
| R02 | Heritage Management Protocols The MGO shall consult with the Registered Aboriginal Parties (RAPs) on matters raised in the MOCO Aboriginal Cultural Heritage Assessment Report (ACHAR), in order to better understand where there may be changes or improvements to existing cultural heritage management mechanisms and protocols. | Section 3.4 | RAP consultation is ongoing through the ACHWG, annual open days, quarterly monitoring, this ACHMP. |
| R03 | Consultation in ACHMP Management Measures Encourage active participation of all RAPs to inform the stages of Aboriginal cultural heritage management; which will include participation in the development, implementation and review of Aboriginal Cultural Heritage management measures. Seek to establish an Aboriginal Cultural Heritage Working Group (ACHWG) within 6 months of Project approval to include representatives of Traditional Owner groups, the RAPs and the Wanaruah Local Aboriginal Land Council. | Section 1.4.3, Appendix D | The ACHWG has been established |
| R04 | Bi Annual Work Group Site Meetings Seek to establish a regular meeting for engaging with the RAPs through the ACHWG, to discuss Project status and cultural heritage matters and intergenerational equity outcomes related to the Project. The meeting will include an opportunity to Walk on Country. The meetings shall consider the inclusion of a process for monitoring and measurement, including the ongoing recording and reporting on Aboriginal cultural heritage conservation outcomes. | Section 1.4.3.1 Appendix D | Meetings have been established. Bi annual work group site meetings are held at MGO. |
| R05 | ACHMP Dispute Resolution Process The ACHMP will include specific provisions regarding ongoing engagement with the RAPs and would include mechanisms for dispute resolution and communication protocols. | Section 1.5 | This ACHMP provides specific provisions for ongoing engagement including dispute resolution and communication protocols. |
| R06 | Recognition of Cultural Values in Site Induction Material The MGO will revise its onsite induction program within 12 months of MOCO Project approval being granted to include material to raise awareness of Aboriginal cultural values of the ACHMP Area and local area more generally. The induction material will positively message the Aboriginal cultural heritage values of the area. The induction materials and content has been developed in consultation with the ACHWG. | Section 4.1.3.1 | The induction material has been revised in consultation with the ACHWG. |
| R07 | Survey, Collection and Analysis Salvage (excavation, analysis and collection) as per the recommendations of the MOCO ACHAR of the sites to be harmed within the MOCO Project Disturbance Area. | | All applicable salvage has been completed. |

| No. | Completed Commitment | Relevant Section of Plan | Comments | | |
|--------|---|-----------------------------|--|--|--|
| R08 | Discovery of previously unknown cultural heritage items The MGO agrees to follow all relevant NSW Government guidelines regarding the location of human skeletal remains. The MGO will apply the precautionary principle to the development of management measures for the MOCO Project Disturbance Area. This approach will include the development of culturally appropriate management measures for the management of human remains, should this occur during the MOCO Project life. Protocols and approach will be developed in consultation with RAPs and updated in the revised ACHMP (this Plan). | Section 6.2 | This is a general NSW Government requirement and the protocol is addressed in the ACHMP. | | |
| R09 | Recording of Archaeological Sites Sites identified in the Mount Owen ACHAR have been recorded on site cards and submitted to OEH. The ACHMP will include the new sites identified in the MOCO ACHAR. | Figure 2-2Figure 2-2 | All sites recorded in the MOCO ACHAR have been registered with the Aboriginal Heritage Information Management System (AHIMS) and on the MGO GIS database. | | |
| R10 | Care and Control Measures regarding Aboriginal Objects Care and control management measures will be developed and included in the ACHMP for Aboriginal objects recovered through the salvage program and long term storage of artefacts recovered from previous salvage programs. Care and control management measures will include provision for: - Interim storage during research and salvage program; - Artefact analysis as recommended in the MOCO ACHAR; and - Development of a long term care and control strategy – building of an artefact storage facility at the Yorks Creek Voluntary Conservation Area (VCA). | Section 5.3.7 | Care and control measures have been developed. Care and control is addressed in this ACHMP. | | |
| R13 | Sites not to be Impacted The MGO will implement the Aboriginal archaeological management measures program for sites in the ACHMP Area that will not be impacted by the Project as recommended in the ACHAR for the MOCO Project. During construction there will be protective fencing of the sites outside the project disturbance envelope that were identified by the OzArk Aboriginal Archaeological Values Assessment. | Section 5 | This has been completed. | | |
| R15 | Research and Management Program The MGO will support a project to study the archaeological values in areas that are outside of the current proposed Disturbance Area, but located within the ACHMP Area. Such a study would focus on the AHIMS registered sites in the ACHMP Area and involve survey in order to ground-truth the location and condition of all previously recorded sites. The aim of this survey would be to recommend procedures to ensure that these sites are preserved in the landscape. In most cases, this preservation would involve fencing and signage (if not already in place), although if erosion threatens a site, broader erosion controls / sandbagging of banks etc may be needed to ensure the site's preservation. The MGO will commit funding to review and monitor these sites, including and remediation activities. | Section 3.4.3 | MMGO supports the research and management program. This is ongoing, occurring on a quarterly basis throughout the MGO. | | |
| Glende | Glendell on-site management measures | | | | |
| 2.1.7 | The Applicant will implement identified management measures to avoid potential impacts to Aboriginal heritage sites MOCO OS-10 and Sensitive Areas 1 to 6 during MOD 3 activities. | | All Glendell Mine MOD 3 construction | | |

Page 50 of 81

| No. | Completed Commitment | Relevant Section of Plan | Comments |
|----------|--|-----------------------------|--|
| | | | activities have been completed |
| 2.1.8 | Should any unidentified Aboriginal archaeological sites be located during operations, the procedures of the approved ACHMP and the 'Unanticipated Finds Protocol' will be followed. | Section 6 | This is a general requirement. The 'Unanticipated Finds Protocol' has addressed in the ACHMP. |
| Off-site | management measures | | |
| R17 | Bowmans Creek Bridge Construction Protocol The ACHAR for the MOCO Project identified that some knowledge holder groups believe that Bowmans Creek has significant cultural values and is believed to form a regional song line. The MGO's bridge design shall span the low flow channel of Bowmans Creek. The MGO will consult with the ACHWG on appropriate and practical cultural protocols to be adopted during the construction of the bridge, piers and other infrastructure in this area. | | This has been addressed with the ACHWG. No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG |
| R20 | 3D Scan Bowmans Creek The MGO will undertake a 3D scan of area of the high significance identified in the ACHAR. The MGO in consultation with the RAPs shall review and recommend the scan area. | | This has been addressed with the ACHWG. The area was determined to be located at Ravensworth Operations. No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG. |
| R21 | Naming of Infrastructure The MGO will consult with the RAPs and other stakeholders including Singleton Council in the naming of infrastructure works on Hebden Road and Bowmans Creek. The MGO supports the naming of the expanded Bowmans Creek Bridge on Hebden Road to reflect the cultural importance of the area and reflecting traditional Aboriginal names from the area. | Section 5.4 | This has been addressed with the ACHWG. |
| R23 | Bettys Creek The portion of Bettys Creek that lies within the existing Bettys Creek Habitat Management Area is managed by Glendell Mine pursuant to the existing development consent. | Section 3.2.2 | |
| R24 | Potential Grave Site Subsequent to preparation of the MOCO ACHAR, the NSW police investigated the potential grave site. The police investigation concluded that 'There does not appear to be any disturbance in the soil or any other items located to suggest this area is a grave site' (NSW Police Force Forensic Services Group 2014). Based on these investigation conclusions that the site is not a grave, this recommendation does not form part of the management measures in this ACHMP. | | Not applicable |
| R25 | Cultural Site Conservation | | MGO has engaged with the relevant Knowledge Holders. |

Number:MGOOC-1779562647-4159Status:ApprovedEffective:31/05/2018Owner:Officer - EnvironmentalVersion:5.0Review:26/10/2020

| No. | Completed Commitment | Relevant Section of Plan | Comments |
|---------|--|-----------------------------|---|
| | In the non-disclosed reports, the relevant Knowledge Holders have indicated that there are areas of high cultural value located in the vicinity of the MGO but are outside the ACHMP Area. Mount Owen will engage in consultation with the relevant Knowledge Holders regarding these areas to determine appropriate management and / or conservation outcomes. | | No specific ACHMP policies pertain to this commitment that will be managed between the MGO and the ACHWG. |
| Modific | | | |
| R33 | Off-site Fencing Fencing will be established around 37-3-1173, 37-3-0294 & 37-3-1193 in associated with the construction of the Integra Underground water pipeline. | | Completed. No specific ACHMP policies pertain to this commitment. |

10 Accountabilities

Table 10-1 Table 10-1 outlines the accountabilities associated with this Plan.

Table 10-1 - Accountabilities

| Role | Accountabilities for this document | |
|--|--|--|
| Operations Manager | Approve the Aboriginal Cultural Heritage Management Plan. Provide adequate resources for the implementation of this Plan. | |
| | Implement the Aboriginal Cultural Heritage Management Plan. Include any actions undertaken in the Annual Review report. | |
| | Coordinate relevant specialist personnel to conduct salvage as specified in the Plan. | |
| Environment and Community Manager | Ensure inclusion of Aboriginal heritage in worker inductions through delivery or input to induction documents. | |
| | Distribute copies of this Plan as required. | |
| | Maintain records of Aboriginal consultation and past ACHMPs. | |
| | Arrange for review of the plan as set out in Section 8.1. | |
| Environment and Community Coordinator / Officer | Assist the Environment and Community Manager as required in implementation of this Plan. | |
| All personnel | Report all incidents. | |

11 Definitions

The following terms have been used in this Plan and are detailed in Table 11-1 Table 11-1.

Table 11-1 – Archaeological definitions

| Term | Definition | | |
|--|--|--|--|
| ACHMP | Aboriginal Cultural Heritage Management Plan. Describes this document which is a requirement of State Significant Developments (SSDs). An ACHMP both manages impacts to Aboriginal cultural heritage within approved disturbance areas (AHIPs are not required), as well as management of Aboriginal cultural heritage sites and values outside of approved impact areas but within land able to be managed by the MGO. | | |
| Aboriginal heritage | Those aspects of Aboriginal culture that are inherited from the past may be referred to as Aboriginal heritage. For the purpose of this plan the term is used to collectively refer to Aboriginal sites and archaeologically sensitive areas. | | |
| Aboriginal object | A physical manifestation of past Aboriginal activity. The legal term is defined in the <i>National Parks and Wildlife Act 1974</i> Section 5 as: any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains. Typical examples include stone artefacts, grinding grooves, Aboriginal rock shelters which by definition include physical evidence of occupation, midden shell, hearths, stone arrangements and other landscape features which derive from past Aboriginal activity. | | |
| Aboriginal scarred tree A tree of sufficient age to have been mature at the time of traditional Aboriginal hugatherer life and therefore generally of more than 220 years of age with evidence cambium wood removal for the purpose of implement manufacture, footholds, bar removal for shelter, or extraction of animals or other food. Care must be taken to a Aboriginal scars from the much more common natural causes of branch tear, insee animal impact, lightning strike and dieback. Scarred tree recognition guidelines ex distinguish these features. Naturally scarred trees may be misidentified as Aboriginal scarred trees. | | | |
| Aboriginal site The location where a person in the present day can observe one or more Abore The boundaries of a site are limited to the extent of the observed evidence. A include the inferred extent of unobserved Aboriginal objects (such as archaeol deposit). Different archaeologists can have varying definitions of a 'site' and m term to reflect the assumed extent of past Aboriginal activity beyond visible Abobjects. Such use of the term risks defining all of Australia as a single 'site'. | | | |
| Aboriginal stone artefact | A stone object with morphological features derived from past Aboriginal activity such as intentional fracture, abrasion or impact. Artefacts are distinguished by morphology and context. Typically flaked stone artefacts are distinguished from naturally broken stone by recognition of clear marginal fracture initiation (typically hertzian/conchoidal or wedging initiation) on highly siliceous stone types which can often be exotic to the area. Care must be taken to distinguish modern broken stone in machine impacted contexts and therefore context must be carefully considered as well as morphology. | | |
| ACHAR | The Aboriginal Cultural Heritage Assessment Report. This report includes the archaeological values assessment and is part of the project EIS. The ACHAR discusses all cultural heritage values of the project area including cultural, scientific, aesthetic and historical values. | | |
| ACHWG | The Mount Owen Complex Aboriginal Cultural Heritage Working Group. See Section 1.4.3.1. | | |
| AHIMS | Aboriginal Heritage Information Management System – a computer software system employed by the Office of Environment and Heritage (OEH) to manage many aspects of Aboriginal site recording and permitting. AHIMS includes an Aboriginal sites database which can be accessed via an internet portal. | | |
| AHIP | Aboriginal Heritage Impact Permit – issued to permit harm to Aboriginal objects under section 90 the NPW Act. | | |
| Archaeological deposit | Aboriginal objects occurring within one or more soil strata. The most common form of archaeological deposit relates to the presence of a single conflated layer of Aboriginal stone artefacts worked into the topsoil through bioturbation. | | |

| ASIRF | Aboriginal Site Impact Recording Form. A standardised OEH form for recording authorised impacts to Aboriginal sites. Only with a completed ASIRF can a site be listed as 'destroyed' on the AHIMS. | | | |
|--|---|--|--|--|
| BCD | Biodiversity & Conservation Division within the Department of Planning, Industry and Environment. BCD is the government department tasked with managing regulation and compliance associated with the NPW Act. | | | |
| Backed artefact | A backed artefact is a thin flake or blade-flake that has been shaped by secondary flaking (retouch) along one lateral margin. The retouched margin is typically steep and bipolar to form a blunt 'back' in the manner of a modern scalpel blade. Distinctive symmetrical and asymmetrical forms are typically found called geometric microliths and bondi points respectively. A thick symmetrical form, called an elouera, is typically the size of a mandarin segment. | | | |
| Deposit | In archaeology a deposit refers to a discrete unit or layer of soil where artefacts within the one deposit have a high chance of being associated with each other. | | | |
| DPIE | Department of Planning, Industry and Environment. DPIE is the NSW government department responsible for project approval and the administration of this ACHMP. | | | |
| EIS | Environmental Impact Statement. This is the document which includes all environmental factors, including heritage, which is used by the government to determine the merits of a particular development proposal. | | | |
| Grinding grooves | Grinding grooves typically derive from the sharpening of stone hatchet heads on sandstone rock. Grooves appear as elliptical depressions of around 25cm length with smooth bases. Although mostly occurring in association with water to wash the abraded stone dust away from the groove, such sites have been recorded away from water. Narrow grooves or broad abraded areas may occur less commonly and may be derived from spear sharpening or other grinding activities. | | | |
| Hearth | A hearth is a collection of stones interpreted by an observer as being heat retainer stones assembled by Aboriginal people in the past as a fireplace. Care must be taken to avoid natural collections of stones, gathering of stones within potholes, concentrations of charcoal from burnt tree stumps or burnt clay patches from burnt tree stumps. | | | |
| Isolated find | A single artefact not directly associated with any other artefacts. The origin of an isolated find may be the spot of the loss or the discard of an artefact, however, most commonly they are artefacts that have been dislodged from their original context by erosion or another impact and redeposited elsewhere. As such, isolated finds rarely have a high archaeological value. | | | |
| OEH | The NSW Office of the Environment and Heritage. OEH is the former government department tasked with managing regulation and compliance associated with the NPW Act. This role is now undertaken by BCD. | | | |
| Open stone artefact site/stone artefact site | An unenclosed area where Aboriginal stone artefacts occur – typically exposed from a topsoil archaeological deposit by erosion. Typically the term is used to refer to two or more artefacts although this is an arbitrary distinction. A general 'rule of thumb' boundary definition employed by archaeologists is that artefacts or features more than 50 metres apart are regarded as separate sites; however, there is no theoretical imperative dictating such as rule. (The 50 metre separation rule may not have been used consistently in previous site recording). | | | |
| PAD | Potential Archaeological Deposit. Used to describe a suitable landform for the retention of archaeological deposits where artefacts are not visible on the surface due to low ground surface visibility or other factors. Generally PADs are test excavated to determine their validity as a site. | | | |
| RAP | Registered Aboriginal Party | | | |
| Salvage | In the face of an impact an appropriate mitigation strategy for archaeological sites is to salvage the site in order to protect individual artefacts from harm but, more importantly, to record as much information about the site before it is impacted and the information lost. Salvage can take many forms. In this ACHMP salvage is limited to the collection and recording of surface artefacts and the archaeological excavation of sites to determine the nature and extent of subsurface deposits. | | | |

12 Document Information

12.1 Relevant Legislation

The following legislation is relevant to this Plan:

- · Environmental Planning and Assessment Act 1979; and
- National Parks and Wildlife Act 1974.

12.2 Related Documents

Related documents, listed in <u>Table 12-1</u> below, are internal documents directly related to or referenced from this document.

Table 12-1 - Related documents

| Number Title | | | | | |
|--|--|--|--|--|--|
| | GCAA | | | | |
| 625378177-9995 | 9.0 Human Rights and Our People | | | | |
| 625378177-9977 | 10.0 Community and Stakeholder Engagement | | | | |
| 625378177-10266 | 11.2 Protocol for Aboriginal Cultural Heritage - NSW | | | | |
| CAA HSEC PRO 0002 Ground Disturbance Permit | | | | | |
| | Mount Owen | | | | |
| XMO SD EXT 0122 Environmental Management Strategy | | | | | |
| GLD SD PRES 0037 Ground Disturbance Permit Process Presentation | | | | | |
| GLD SD TRN 0505 Ground Disturbance Permit Process for Task Coordinators Competency | | | | | |

12.3 Reference Information

Reference information, listed in <u>Table 12-2</u>Table 12-2, is information that is directly related to the development of this document or referenced from within this document.

Table 12-2 - Reference information

| Reference | Title |
|--|---|
| ACHM 2013 | Aboriginal Cultural Heritage Assessment Report and Consultation Records. Mount Owen Continued Operations Project. |
| DECCW 2010 | Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW. |
| GSS Environmental 2006 | Project Plan for Stages 1 – 3 Yorks Creek Catchment Enhancement Project, Mt Owen Mine, Hunter Valley, NSW. |
| Hansen Bailey 2016 | Glendell Mine 132 Kv Powerline Relocation MOD 3 Environmental Assessment. |
| Hansen Bailey 2017 | Integra to Mount Owen Complex. Water pipeline Modification Environmental Assessment. |
| NSW Department of Community Service 2009 | Working with Aboriginal people and communities. A practice resource. |
| OzArk 2013 | Aboriginal Archaeological Values Assessment. Mount Owen Continued Operations. |

Page 56 of 81

| Tocomwall 2013 | Beginning & Belonging: The traditional, historical & contemporary cultural landscape of the Mount Owen Continued Operations Project Area: A Plains Clan of the Wonnarua Peoples Perspective. | | |
|---|--|--|--|
| Umwelt 2005 | Research Design and Methodology to Accompany a Section 90 Consent Application for Aboriginal Sites within the Glendell Open Cut Mine Project, Singleton, NSW. | | |
| Umwelt 2006 | Aboriginal Cultural Heritage Management Strategy for the Mt Owen Biodiversity Offset Areas. Report for Xstrata Mt Owen. | | |
| Umwelt 2015 | Mount Owen Continued Operations Project Environmental Impact Statement | | |
| Umwelt 2018 | Mount Owen Continued Operations Project Modification 2 Statement of Environmental Effects | | |
| Wonnarua Nation Aboriginal Corporation 2013 | Wonnarua Cultural Heritage Assessment for the Mt Owen Continued Operations Project. | | |
| Wonnarua Traditional Custodians 2013 | Aboriginal Cultural Heritage Values Assessment, Mt Owen Project. | | |

12.4 Change Information

A summary of the document history is provided in *Table 12-3Table 12-3* below.

Table 12-3 – Change information

| Document Number | Version | Date | Author/Owner | Description | DPE Approval |
|-------------------------------|---------|------------------|---|--|-----------------|
| XMO SD PLN 0060 | 1 | November 2016 | Glenn Cook Bret Jenkins Shane Scott Vicki McBride Mt Owen Complex Aboriginal Cultural Heritage Working Group Office of Environment and Heritage | First plan for SSD 5850, addressing new project requirements for the approval of Mount Owen Continued Operations and incorporating the previous Glendell Aboriginal Cultural Heritage Management Plan (updated for MOD 3). | 24/11/2016 |
| XMO SD PLN 0060 | 2 | January 2017 | E&C Manager | Update to management strategy for Sensitive Area 6. Minor typographical errors amended in Table 7-1. Update to Table 7-1 and Figure 7-1 as a result of advice received from Ashton Coal Operations. | 29/03/2017 |
| XMO SD PLN 0060 | 3 | October 2017 | E&C Manager | Commitment R33 (Table 1-2) has been added to the ACHMP as a requirement of the 2017 Integra to Mount Owen Complex Water Pipeline Modification 1 Environmental Assessment (Hansen Bailey 2017). | 17/10/2017 |
| MGOOC- 1779562647- 4159 | 4 | November 2017 | Document Control | Migration to new SharePoint | |
| MGOOC- 1779562647- 4159 | 5 | March 2018 | E&C Manager and Commercial Officer | ACHMP revised to: Take into account the completion of all salvage | 29/05/2018 |

Number:MGOOC-1779562647-4159Status:ApprovedEffective:31/05/2018Owner:Officer - EnvironmentalVersion:5.0Review:26/10/2020

| | | | | activities associated with SSD 5850; |
|-------------------------------|----------|------------------|-----------------------------|---|
| | | | | Consider the completion of commitments made during the MOCO approval; and |
| | | | | To remove reference to the construction of an artefact storage facility at the Yorks Creek VCA. |
| | | | | Document properties on title page updated to reflect correct details of document. |
| MGOOC- 1779562647- 4159 | <u>6</u> | November 2019 | E&C Department (Officer) | ACHMP revised to: Include provisions following the approval of MOCO MOD 2 |

Appendix A - Endorsement of Appointment of Consultant



Planning Services

Resource Assessments & Compliance

Contact: Thomas Watt Phone: 9274 6375

Email: thomas.watt@planning.nsw.gov.au

Vicki McBride Approval Manager Glencore PO Box 320 SINGLETON NSW 2330

Dear Vicki,

Endorsement of Consultants - Mt Owen Continued Operations Project

I refer to your letter dated 9 November 2016 requesting the Secretary's endorsement of suitably qualified and experienced persons to prepare the Aboriginal Heritage Management Plan (AHMP), as required by condition 34 in Schedule 3 of SSD 5850.

The Secretary is satisfied Mr Ben Churcher and Dr Jodie Benton from OzArk Environmental and Heritage are suitably qualified and experienced persons and has consequently endorsed their appointment to prepare the AHMP.

If you wish to discuss this matter, please contact Thomas Watt on 9274 6375.

Yours sincerely,

Director

Resource Assessments

as nominee of the Secretary

Hannel Reed

NSW Department of Planning & Environment, GPO Box 39, SYDNEY NSW 2001 www.planning.nsw.gov.au

Number: MGOOC-1779562647-4159 Officer - Environmental Owner:

Status:

Version: 5.0

Approved Effective: 31/05/2018

Review: 26/10/2020

Page 58 of 81

Appendix B - External Consultation Records

B.1 Email to all RAPs 16th April 2018

Good morning,

The Mt Owen Glendell Operations Aboriginal Cultural Heritage Management Plan (ACHMP) was scheduled for review. As such, we have worked with OzArk Environment and Heritage Management (Ben Churcher) to prepare a Draft Aboriginal Cultural Heritage Management Plan (ACHMP) which now includes the management measures for Yorks Creek.

A copy of the Draft ACHMP and YCMP is attached for your review and comment.

If you choose to make comment, please do so by 23 April 2018.

If you would like to discuss any aspect of the ACHMP, please contact me on 0423 043 919 or Melanie.Dillon@glencore.com.au.

Kind regards,

Melanie Dillon

Environment and Community Officer

Mt Owen Glendell Operations

T: +61 265202622

M:0423043919

E. Melanie.Dillon@glencore.com.au

B.2 Email to all RAPs 20TH April 2018

Good morning,

As discussed below, If you choose to make comment on the Mt Owen Glendell Operations Aboriginal Cultural Heritage Management Plan (ACHMP) please do so by 23 April 2018.

Just a friendly reminder the Aboriginal Cultural Heritage Working Group meeting is scheduled for Thursday 26th April at 10am in the Glendell Training room.

If you require any further information please feel free to give me a call.

Regards,

Melanie Dillon

Environment and Community Officer

Mt Owen Glendell Operations

T: +61 265202622

M:0423043919

E. Melanie.Dillon@glencore.com.au

B.3 Response from Wonaruah Local Aboriginal Land Council 23rd April 2018

Dear Melanie,

Wanaruah LALC does not at this stage support the Keeping place at the Bulga offset on the Wollombi Brook. There has been no security plan detailed for this facility, nor has there been adequate clarification for its ongoing management and maintenance or how the Aboriginal community will have ongoing access to the resources.

Until such time as these concerns are adequately met Wanaruah LALC will not support the keeping place being in a remote location with limited access and even less security.

GCAA Requirement 1.3.2 (b) Principle 2:

GCAA will work closely with Aboriginal people with a legitimate connection or interest in its mining operations or projects, and other interested stakeholders, to mitigate impacts on Aboriginal cultural heritage;

Why do the Registered Aboriginal People need to have "a legitimate connection or interest in its mining operations or projects"? Surely it is enough that they have an interest in and connection to the area?

In the paragraph below 1.3.2(g) Glencore Coal Assets Australia acknowledges the right of our community to make free, prior and informed consent. Yet they employ consultants with vested personal interests in the outcomes to deliver on community values reports. I would suggest for Glencore to not be in breach of this clause and possibly GCAA's own policy (Human Rights and Our Peoples) the Cultural Values report being done by the PCWP will need to recognised and classed as the PCWP's personal values statement and one part of a lager document yet to be done for the Upper Hunter Aboriginal Community by an independent consultant not by just one of many vested interest groups.

Section 1.4.1 Consultation: Wanaruah LALC will need to see and agree to the GCAA protocol for Aboriginal Heritage NSW and the GCAA Community and Stakeholder Engagement Standard before we would support this Section.

Section 1.4.3.1 Aboriginal Cultural Heritage Working Group (ACHWG). Wanaruah LALC does not support the exclusion of any Aboriginal person or Group who wish to be part of the ACHWG. Wanaruah LALC believes these meeting must be open to all interested Aboriginal parties.

Section 1.4.3.2 Access: There needs to be a defined process included here acceptable to the Registered Aboriginal Parties before Wanaruah LALC will support this section.

Section 2. Aboriginal Cultural Sites.

Wanaruah LALC is hesitant to support the claim "the area is located within the traditional country of the Wonnarua people." Wanaruah LALC believes there is as yet no definitive evidence to support this. This is not to say families and individuals do not have connection to this area but until such time as proven otherwise Wanaruah LALC will not recognise any exclusive or preferential treatment for any individual or family or group of families. Wanaruah LALC would see greater emphasis put on what the Aboriginal community agree on as a whole rather than try to choose one side over another and neither having a definitive answer.

Only some 25km South West of Mount Owen, in 1819 John Howe recorded the area of the Hunter Valley adjacent to Doyle's Creek as Gummun Kumleroy (or Gummun Comleroy). This generally translates to Smaller or Lesser Kamilaroi.

According to Edward Ogilvie (who resided at Merton near Denman from around 1825 or 26 for 15 or 20 years until he took up his own holdings further north) there were 4 tribes of the Gummun Kumleroy (Lesser Kamilaroi of the Upper Hunter).

These are:

- Marowancal
- · Tooloompikilal,
- Gundical
- Paninpikilal

We know the Marowancal were over near Denman (Merton) on the Eastern side of the Hunter River, and the Gundical are believed to be from Gunda (Gundy) and include the Tullong Clan whose country was the catchment of the Coomawidyera (Dartbrook) and Murrain Clans whose country was the catchment of the Pages River (the area between Hecknadiiey (Hecknaduey) and Dilgoor.)

There is mention of a clan from Puen Buen (Scone) in Mitchell's 1830's expedition through to lands known as Kumlerra Kumleroy (European corruption of this was Corborn Comleroy generally meaning Greater/ Larger Kamilaroi now known as the Liverpool Plains). The Puen Buen Clan could be (most likely are) part of the Tullong who also lived along the Coomawidyera or they may be a clan in their own right as yet we are still researching this.

Later Authors suggest the Tullong and Murrain were part of the Geawegal people. However the main source of information seems to be from G.W. Rusden who places the Geawegal people inhabiting an area of approximately 30 miles on either side of the Glendon Brook catchment near Singleton.

Sadly from about 1875 (through to the 1980's) the Colonial government in its migration to federation and independence from England, with the need for evidence to support their making Aboriginal people wards of the state and non-entities in the constitution had scholars conduct "Research" regarding Aboriginal people. If you compare what the settlers had written in the preceding 60 years to these "Scientific Papers", there is little if any resemblance. Many of these alleged scientific papers are still used and cited today as evidence of Aboriginal People and Cultural practices.

Section 3.

- Wanaruah LALC notes there are no defined processes for impacting cultural sites.
- Wanaruah LALC notes there are no defined processes involving community in the protection and management of sites.
- Wanaruah LALC notes there are no defined processes for communication to notify all Registered Aboriginal Parties of "un-intentional impacts /damage" to sites. (We suggest within 48 hours of known impact).

Section 5.3.1 Erosion Control.

Wanaruah LALC will not support erosion control measures that involve further destruction and impacts to sites and soil profiles or landscaping of creeks and gullies when there are other less invasive measures and methods more suitable for landscape protection.

Section 5.3.4 Weed Control.

Wanaruah LALC does not advocate or support chemical weed control unless absolutely necessary. Chemicals have a negative effect on microbiological ecosystems which reverberate up the chain. Where possible other methods are to be employed. The Use of Chemical spraying is to be avoided at all costs.

Section 5.5

Wanaruah LALC does not at this stage support the Keeping place at the Bulga offset on the Wollombi Brook. There has been no security plan detailed for this facility, nor has there been adequate clarification for its ongoing management and maintenance or how the Aboriginal community will have ongoing access to the resources.

Until such time as these concerns are adequately met Wanaruah LALC will not support the keeping place being in a remote location with limited access and even less security.

Yours Truly

Noel Downs

CEO

Wanaruah LALC

B.4 Minutes from the MGO ACHWG meeting 26th April 2018

Ned Stephenson (NS) and Melanie Dillon (MD) provided updates on the changes made to the ACHMP. Key topics raised:

- Completed commitments had been moved from the commitments table to the Appendix (i.e. completed commitments). Noel Downes (ND) supported this approach.
- Changing the commitment to build an artefact keeping place at the Yorks Creek VCA and changing the location to the Wollombi Brook VCA keeping place was discussed ND raised concerns about the ongoing management of artefacts, particularly the security of the proposed storage facility. ND said the Land Council will support one location as long as it is secure and enables community access.

B.5 ACHMP sit down with Tocomwall Pty Ltd 9th May 2018

Key topics raised:

- Replace section 2.4 Page 19 use Cultural connection report from MGO ACHAR
- Update wording in commitment R26. Remove the use of ownership and land ownership from paragraph.

B.6 Approval email from Planning Development & Environment Department

Hi Ned,

Please find attached a letter approving the revised Aboriginal Heritage Management Plan for the Mt Owen Continued Operations Project (SSD 5850).

Please place a final (untracked) version on your website at your earliest convenience.

Regards

Melissa

Melissa Anderson

Environmental Assessment Officer

Resource Assessments

320 Pitt Street | GPO Box 39 | Sydney NSW 2001

T 02 8275 1392

B.7 Email to RAPs 12th November 2019

Appendix C - Aboriginal Cultural Heritage Management Plan Approval

Letter of approval to be inserted once approved by the Department.



Planning Services
Resource Assessments
Contact: Melissa Anderson
Phone: 8275 1392

Email: Melissa.anderson@planning.nsw.gov.au

Ned Stephenson Environment and Community Manager Glencore Coal Australia Pty Limited Mount Owen Complex PO Box 320 Singleton NSW 2330

Dear Ned

Mt Owen Continued Operations Project (SSD 5850) Aboriginal Heritage Management Plan

I refer to your email of 21 May 2018, submitting the revised Aboriginal Heritage Management Plan, as required under condition 34 of Schedule 3 of the Mount Owen Continued Operations Project's development consent.

The Department has carefully reviewed the plan and finds that it meets the requirements of the condition, and as such the Secretary has approved the revised plan.

Please place the final (untracked) version of the plan on your website at your earliest convenience.

If you have any enquiries about this matter, please contact Melissa Anderson at the details listed above.

Yours sincerely,

Howard Reed 24.5.16

Director Resource Assessments
as nominee of the Secretary

Department of Planning and Environment
320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 1300 305 695 | www.planning.nsw.gov.au

Appendix D - Mount Owen Complex Aboriginal Cultural Heritage Working Group

| Representative Group | Representative Name | | |
|---|---------------------|--|--|
| Mt Owen Complex | | | |
| Operations Manager | Ashley McLeod | | |
| E&C Manager | TBA | | |
| E&C Coordinator | Jason Desmond | | |
| E&C Officer | Melanie Dillon | | |
| Wanaruah Local Aboriginal Lands Council | | | |
| Representative | Noel Downs | | |
| Representative | Susie Worth | | |
| Wonnarua Nation | | | |
| Representative | Arthur Fletcher | | |
| Representative | Tracey Skene | | |
| Plains Clan of the Wonnarua People | | | |
| Representative | Scott Franks | | |
| Archaeologist | | | |
| OzArk | Ben Churcher | | |

Appendix E - Yorks Creek Plan of Management

E.1 Acknowledgement

Mt Owen Proprietary (Pty) Limited (Ltd) (MGO) acknowledges the Wonnarua Knowledge Holders of the area, as well as the wider Wonnarua and Local Aboriginal community.

MGO recognises, values and respects the ongoing cultural responsibilities of Wonnarua people over their traditional Country, and acknowledges the unique and significant contribution made by Aboriginal people and organisations to the local community and to Australia's identity. MGO acknowledges the need to strengthen the voice of Aboriginal people in local decision making and the fundamental right of the Aboriginal community members, including young people, to engage about the matters that are important to their communities. MGO recognises the respected role of Elders and/or Knowledge Holders and the important leadership role they have in guiding current and future generations of Aboriginal communities.

MGO acknowledges that protection and conservation of Aboriginal cultural heritage is important for all Australians. MGO recognises the need to create culturally safe and respectful environments and provide services in a way that demonstrates cultural understanding and ensures Aboriginal people feel recognised and respected. MGO will actively work with Aboriginal people to respond to and address racism should it occur to ensure that the cultural values and human rights of Aboriginal people are respected.

MGO acknowledges the significant social and economic contribution that is provided by the unique skills of people within the Aboriginal community. It will partner with local Aboriginal people to create opportunities for employment and support local economic participation of Aboriginal businesses.

E.2 Purpose

The purpose of the Yorks Creek Plan of Management (PoM) is to provide a framework for the conservation and management of Aboriginal heritage within the Yorks Creek Voluntary Conservation Area (YCVCA), and more broadly, the Yorks Creek Catchment Enhancement Project (YCCEP) area.

The YCCEP area encompasses the YCVCA.

The YCCEP area is located within buffer land, to the west of the Mt Owen Mine It is bound by part of the MGO mining operations to the east and south, and buffer land and biodiversity offset areas to the north, north-west and north-east. (*Figures 1* and *2*).

The YCVCA covers 28.5 hectares (ha). The YCCEP area cover<u>ed</u> approximately 212ha, this has now been reduced to 192 ha as the northern portion overlapped with the Stringybark Creek Habitat Corridor biodiversity offset area.

The YCCEP area covers:

- Lot 13 DP 665120
- Lot 2 DP 730978
- Lot 23 DP 6842
- Lot 2 DP823167
- Lot 12 DP 1017435.

This PoM satisfies:

- conditions 34 (c) and 42 of development approval (DA) SSD-5850
- recommendations R11, R14, and R22 of the MGO Aboriginal Cultural Heritage Management Plan (ACHMP).

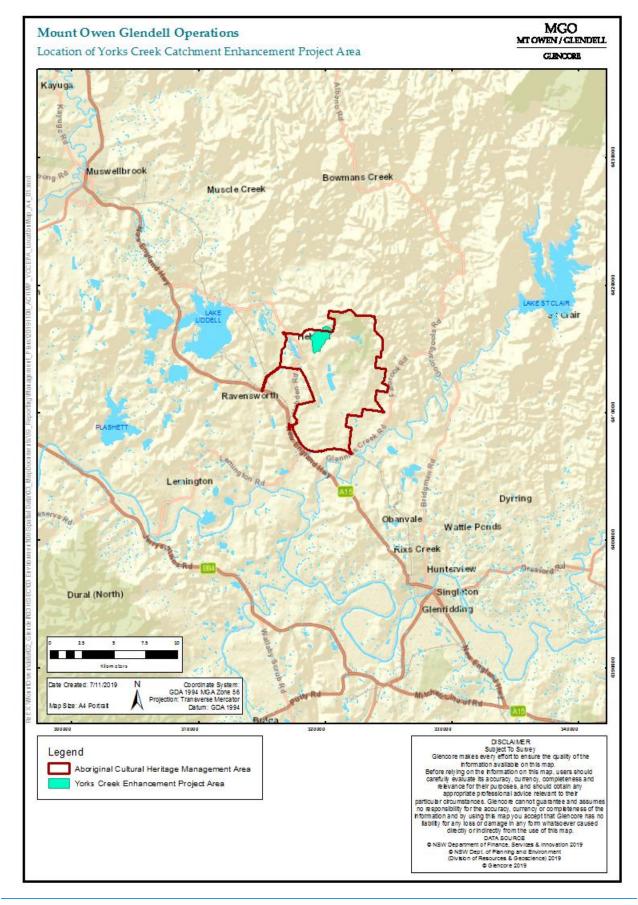


Figure 1- Locality of the YCCEP area

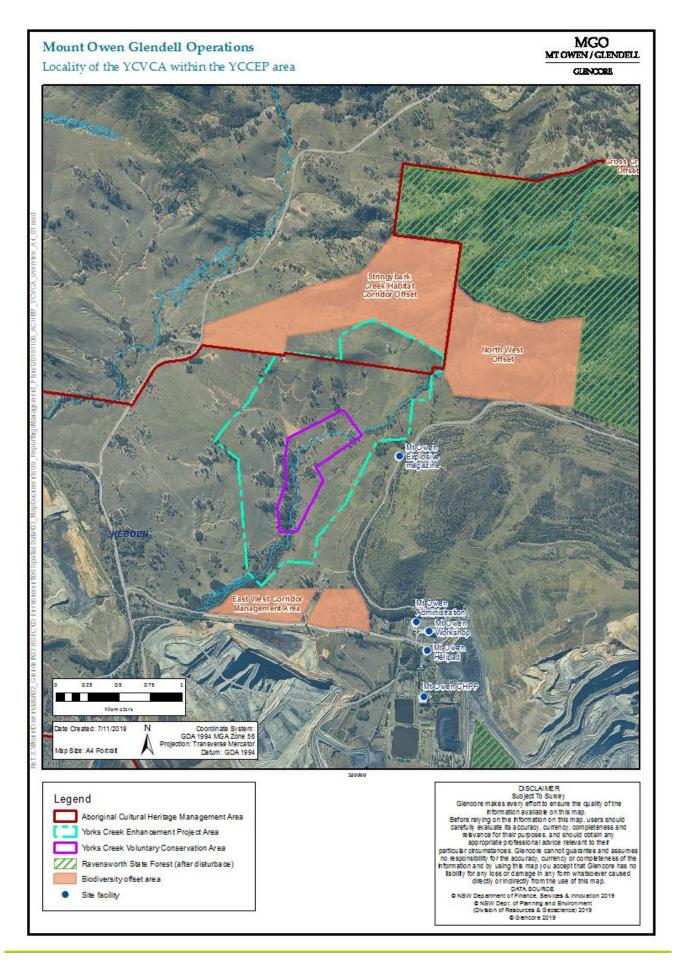


Figure 2 - Locality of the YCVCA within the YCCEP area

E.3 Scope

The PoM refers to the conservation and management of Aboriginal cultural heritage values and historic heritage values within the YCCEP area. It is to be used in conjunction with the MGO ACHMP.

General management regimes relating to within the YCCEP area are set out in various sections of the MGO Management Plans :

- Biodiversity and Offset Management Plan (BOMP)
- Water Management Plan (WMP)
- Erosion and Sediment Control Plan (ESCP)
- Surface Water Management Plan (SWMP)
- Surface and Groundwater Response Plan (SWGWRP)
- Bushfire Emergency Response Poster,

and will not be duplicated in this PoM.

E.4 Background to the Yorks Creek PoM

Section 3.2.1.2 of the MGO ACHMP outlines the history of the establishment of the YCVCA and the YCCEP area.

E.5 Heritage Values at YCCEP

The YCCEP area is located within the traditional homelands of the Wonnarua and within the modern day Wanaruah Local Aboriginal Land Council boundary. Through the involvement of Registered Aboriginal Parties (RAPs) and Wonnarua Knowledge Holders who identify a range of connections to both Country and community, and through a number of past heritage investigations, the YCCEP area is understood to contain a range of sites and areas of cultural, historic and aesthetic value, and to contain archaeological sites and features that are of cultural and scientific value.

E.5.1 Aboriginal Cultural Values

The YCCEP area is a place with social, scientific and aesthetic significance. It has great significance to the local Aboriginal community as a traditional camping area, and provides a spiritual continuity with their ancestors.

There is general traditional and historic knowledge about the area, and it is part of a landscape where their people resisted white settlement and fought to keep their culture strong. Being there, Aboriginal people feel grounded, calm and a sense of belonging, giving the place aesthetic significance.

With secure land tenure and good exposure of stone artefacts, the place has educational value for both the Aboriginal and wider community. It is a place where people can learn from Wonnarua people about Aboriginal culture in the Hunter region, and the strength of that culture today. The YCCEP area has scientific significance as it contains a representative sample of evidence of Aboriginal occupation along a semipermanent creek within a Central Lowland context.

There is also a high potential for intact deposits, and opportunities for further archaeological research. Finally, this is one of few areas within the Hunter Valley which have been set aside as a Conservation Area for the protection of Aboriginal heritage, and it is a place where Aboriginal people can make decisions about managing their heritage.

E.6 Aboriginal Scientific Values

There have been at least four previous Archaeological Surveys either within the immediate YCCEP area or in close proximity. The following is a summary of these surveys and the key findings that are relevant to the YCCEP area:

- Dean-Jones (Resources Planning 1991): This survey included 370ha of the land in and around
 the proposed Mt Owen Mine. Whilst Yorks Creek was outside the proposed mining area, it was
 included in the survey as the information was intended to be used in the formation of a
 Conservation Zone along Yorks Creek (now the YCVCA). The key findings of the investigation
 that are relevant to the YCCEP area include:
 - The 22 sites recorded by Dean-Jones in the broader Yorks Creek area were not recorded in detail. The sites tended to be larger and included the remnants of knapping floors, with dense concentrations of flaked stone of uniform raw material.
 - Yorks Creek contained dense clusters of sites;
 - o Some raw materials predominated with silcrete being prolific; and
 - Yorks Creek had the potential for absolute dating for the occupation of the area through the presence of hearths.
- Witter (1994, cited in GSS 2006): Witter investigated an area in the northern part of the Yorks Creek Catchment. Three samples of 100 artefacts were collected to assist in the construction of a behavioural model for the area. The research led Witter to conclude that Yorks Creek was primarily used as a micro-blade workshop, but had also been utilised as a day foraging campsite and as a satellite campsite.
- Wonnarua Tribal Council (1996): Mt Owen Mine Management commissioned the Wonnarua Tribal Council to undertake an archaeological survey to accompany a Development Application.
 Jill Ruig was engaged by the Wonnarua Tribal Council to undertake the archaeological assessment and prepare the report on their behalf. The key findings of the investigation that are relevant to the YCCEP area include:
 - Of the areas surveyed there were no areas that were considered as being of high archaeological sensitivity. One area (along Yorks Creek itself) was assessed as being of moderate archaeological sensitivity, with the artefact density estimated at 247 artefacts/hectare with the deposits being relatively undisturbed. The remaining areas within the survey were assessed as being of low archaeological sensitivity; and
 - All sites were assessed by the Wonnarua Tribal Council as being of "low" cultural significance.
- Perry (2000, cited in GSS 2006): Junburra Aboriginal Consultancy Services were engaged by the Hunter Valley Coal Corporation to re-survey an area previously surveyed by Ruig (1996) to locate, record and salvage any Aboriginal artefacts within the proposed footprint of a 1000 megalitre Water Storage Dam (note: the dam was not constructed) The key findings of the investigation that are relevant to the YCCEP area include:
 - Three of an original eight sites were not identified during the survey due to natural regeneration of the grassland following the removal of cattle from the area; and
 - One new site not previously recorded was found during the investigation.
- YCCEP Working Group 2005 (GSS 2006): In October 2005 Aboriginal community members participated in undertaking a walk over inspection of the YCCEP area to identify any areas within the YCCEP area that may have artefacts present. While all observed artefacts were recorded, the primary aim and focus of the fieldwork was to identify artefacts in the areas where possible remediation works (earthworks) were being proposed. The intention being that this information would be used in the planning phase for the YCCEP erosion remediation project to ensure that any proposed earthworks would not disturb or destroy any Aboriginal or archaeological site. A total of ten areas were inspected during the field inspections with several hundred artefacts identified. However, many of these locations were not registered with the Aboriginal Heritage Information Management System (AHIMS). While not recorded with AHIMS, GSS 2016 presents a figure showing the location of the 2005 findings.

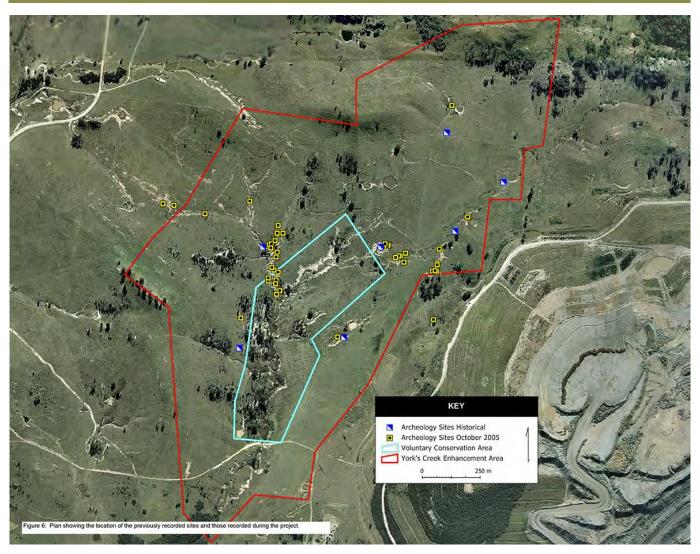


Figure 3 – Location of sites recorded in 2005.

In 2007 GSS Environmental produced a Cultural Landscape Remediation Management Plan (GSS 2007) based on the findings of the Project Plan for Stages 1 - 3 (GSS 2006).

In January 2007 the then Department of Environment and Conservation (was-Office of Environment and Heritage [OEH] now BCD) issued Permit 2604 under Section 87 of the National Parks and Wildlife Act 1974 (NPW Act) to 'temporarily move Aboriginal objects during environmental conservation works associated with the Mt Owen Biodiversity Offset Areas and the Yorks Creek Catchment Enhancement Project Area within the Mt Owen Mine Lease area, Ravensweorth.'

With the issue of Permit 2604, erosion remediation works as set out in GSS 2006 were able to commence. These works included dam construction, contour banking and revegetation works. While the erosion remediation works were largely successful, no report on the works was produced and it is not known which sites were impacted under Permit 2604 and where artefacts were relocated. As such, while the AHIMS sites listed in *Table 1* are listed as 'valid', it is not known whether any of these sites were impacted in 2007 under the authority of Permit 2604.

There are currently 19 registered sites within the YCCEP area, two of which are located in the YCVCA (*Table 4* and *Figure 10*).

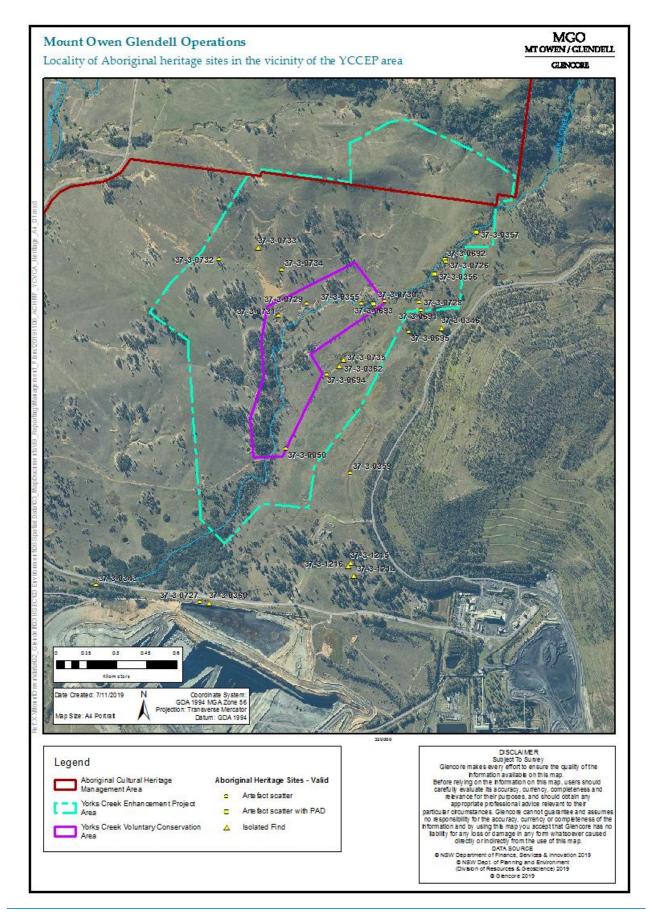


Figure 4: Locality of Aboriginal heritage sites in the vicinity of the YCCEP area

Table 1. Aboriginal cultural heritage sites at the YCCEP

| AHIMS # | Site Name | GDA Zone 56 Easting | GDA Zone 56 Northing | Site Type | Location |
|------------------|--|------------------------|-------------------------|---------------------------------|--------------|
| 37-3-0050 | Yorks Creek; Yorks Creek A; | 319470 | 6415189 | Artefact scatter | YCCEP |
| <u>37-3-0050</u> | Yorks Creek Yorks Creek A | <u>319470</u> | 6415189 | Artefact scatter | YCCEP |
| 37-3-0355 | Mt Owen (1996) 20; | 319848 | 6415913 | Artefact scatter | YCCEP |
| 37-3-0356 | Mt Owen (1996) 18; | 320215 | 6416059 | Artefact scatter with PAD | YCCEP |
| 37-3-0357 | Mt Owen (1996) 17; | 320425 | 6416269 | Artefact scatter with PAD | YCCEP |
| 37-3-0362 | Mt Owen (1996) 24; | 319735 | 6415599 | Isolated find | YCCEP |
| 37-3-0691 | Mt Owen(1996) 7 | 320146 | 6415881 | Artefact scatter | YCCEP |
| 37-3-0692 | Mt Owen(1996) 16 | 320266 | 6416131 | Artefact scatter with PAD | YCCEP |
| 37-3-0693 | 37-3-0693 Mt Owen(1996) 19 | | 6415911 | Artefact scatter with PAD | YCCEP |
| 37-3-0694 | 7-3-0694 Mt Owen(1996) 23 | | 6415561 | Artefact scatter | YCCEP |
| 37-3-0726 | 37-3-0726 Yorks Creek (Mt Owen Mine) 1 | | 6416121 | Artefact scatter | YCCEP |
| 37-3-0728 | Yorks Creek (Mt Owen Mine) 3 | 320138 | 6415921 | Artefact scatter | YCCEP |
| <u>37-3-0729</u> | Yorks Creek (Mt Owen Mine) 4 | 319574 | 6415913 | Artefact scatter | <u>YCCEP</u> |
| 37-3-0730 | 37-3-0730 Yorks Creek (Mt Owen Mine) 5 | | 6415925 | Artefact scatter | YCCEP |
| 37-3-0731 | Yorks Creek (Mt Owen Mine) 6 | 319436 | 6415852 | Artefact scatter | Within YCVCA |

Number: MGOOC-1779562647-4159
Owner: Officer - Environmental

Status: Approved Effective: 31/05/2018 Version: 5.0 Review: 26/10/2020

| AHIMS # | Site Name | GDA Zone 56 Easting | GDA Zone 56 Northing | Site Type | Location |
|-----------|----------------------------------|------------------------|-------------------------|---------------------|--------------|
| 37-3-0732 | Yorks Creek (Mt Owen Mine) 7 | 319136 | 6416136 | Artefact scatter | YCCEP |
| 37-3-0733 | Yorks Creek (Mt Owen Mine) 8 | 319330 | 6416189 | Isolated find | YCCEP |
| 37-3-0734 | Yorks Creek (Mt Owen Mine) 9 | 319452 | 6416084 | Artefact scatter | Within YCVCA |
| 37-3-0735 | Yorks Creek (Mt Owen Mine) 10 | 319754 | 6415634 | Isolated find | YCCEP |

E.7 Historic Scientific Values

There are no known items of historic heritage significance located in the YCCEP area. If there are unrecorded historic items in the YCCEP area they are likely to be movable, utilitarian objects associated with the area's agricultural phase of land use.

E.8 Management of the YCCEP area

Table 2 outlines the management protocols applicable to the YCCEP area.

| Management Aspect | Management Strategy |
|--------------------------|---|
| Consultation Protocols | See: |
| | (MGO ACHMP) Section 1.4 and 5.3.7.3 |
| | Access to the site is to be limited by way of locked gate. |
| | Signs are to be erected around the perimeter of the YCCEP area, identifying that the area is a Conservation Area. |
| | Any person wishing to visit the area is to inform the MGO Environment and Community (E&C) team at least 48 hours prior to each visit. |
| Site Security and Access | All contractors working in the YCVCA are to be trained in the significance of Aboriginal heritage of the area |
| | Prior to entering the area, all personnel are to be made aware of the contents of this PoM. |
| | Vehicles are not permitted within 50 metres (m) of a known Aboriginal site. |
| | See: |
| Aboriginal Heritage | ACHMP Section 4 All mining personnel and contractors will receive Cultural Heritage Awareness Training as part of site induction. |

| | Any personnel working directly in the area are to be made aware of the contents of the ACHMP and this PoM, prior to accessing the area. |
|--|--|
| | Where inspections and management measures are required to be undertaken in the YCCEP area, a work authorisation and if necessary, appropriate permit, is to be completed. Permits are to include a map of heritage sites within the area, and any constraints around these sites. |
| | The YCCEP area will be included in the quarterly monitoring of Aboriginal cultural heritage sites. Monitoring will be undertaken annually in the area by a suitably qualified archaeologist, and representatives of the RAPs and/ or Wonnarua Knowledge Holders. |
| Provision of access to the YCCEP area and the archaeological sites | The main access road to the YCCEP area will be maintained to provide access to the YCCEP area, but will not extend into the YCCEP area itself. The access road is to be an all-weather unsealed road. |
| | See: |
| | ACHMP Section 5.3.1 BOMP* Section 4.6 ESCP Section 4 |
| | If erosion control measures are to be carried out within the YCCEP area: |
| Erosion of the archaeological sites | the area will be inspected by a suitably qualified archaeologist and representatives of the RAPs and/ or Wonnarua Knowledge Holders to determine precisely the likely impacts of the erosion works and to determine appropriate management recommendations management measures will be discussed with, and agreed upon by the MGO Aboriginal Cultural Heritage Working Group (ACHWG) and MGO E&C staff. |
| | See: |
| | BOMP* Section 4.8 If revegetation works are to be carried out within the YCCEP area: |
| Revegetation works within the YCCEP area | the area will be inspected by a suitably qualified archaeologist and representatives of the RAPs and/ or Wonnarua Knowledge Holders to determine precisely the likely impacts of the revegetation works and to determine appropriate management recommendations management measures will be discussed with, and agreed upon |
| | by the ACHWG and MGO E&C staff. |
| Impact by growth of noxious weeds and/or by removal of | ACHMP Section 5.3.4 BOMP* Section 4.2 If weed control is to be carried out within 50m of a known archaeological |
| | (Aboriginal or historic) site, the appropriate safeguards should be in place: |
| noxious weeds | all personnel working within the area should be informed of the site's location and its legislative protection under the NPW Act 1974 |
| | no ground disturbing activities associated with weed control can take place management measures will be discussed with, and agreed upon |
| | by the ACHWG and MGO E&C staff. |

| | 0 |
|---|--|
| | See: |
| Impact by feral animals and/or by the control of feral animals | BOMP* Section 4.3 If pest control is to be carried out within 50m of a known archaeological site (Aboriginal or historic), the appropriate safeguards should be in place: |
| | all personnel working within the area should be informed of the site's location and its legislative protection under the NPW Act no ground disturbing activities associated with pest control can take place |
| | management measures will be discussed with, and agreed upon by the ACHWG and MGO E&C staff. |
| | Periodic grazing is permitted within the greater YCCEP area (excluding the YCVCA) in a manner that does not adversely impact on long term conservation values. Refer to <u>Figure 5 – Grazing Areas Permitted within</u> the YCCEP area Figure 5. |
| Grazing | Three grazing areas have been established in the YCCEP area: |
| | Class A: Grazing totally excluded Class B: Grazing currently excluded, but intermittent grazing possible in the future |
| | Class C: Selective grazing allowed for short periods No livestock is permitted within rehabilitated areas. |
| | See: |
| | ACHMP Section 5.3.2 BOMP* Section 4.7 |
| | Bushfire Emergency Response Poster Routine activities to clear potential fire hazards within the YCCEP area and YCVCA will be undertaken in consultation with the MGO ACHWG. |
| | The use of machinery to control fire hazards within the YCCEP area, but outside known archaeological (Aboriginal or historic) sites (including a 50m buffer), will be permissible if approved by the ACHWG. |
| Impact by works associated with bushfire management | Where possible, any fire breaks required will be placed outside the boundary fence of the YCCEP area. In an emergency situation firebreaks within the YCCEP area will be permissible if they will act to conserve important cultural heritage or ecological values |
| | The local Rural Fire Service (RFS) should be advised of the presence of the archaeological sites in an effort to encourage, where possible, the RFS to avoid impacts within the YCCEP area and particularly within the defined site areas. |
| | Any approved works will be undertaken manually and supervised by the ACHWG and MGO E&C staff. |
| | All mining personnel and contractors will receive Cultural Heritage Awareness Training as part of site induction. |
| Accidental impact to the archaeological sites from other mine related works | Any personnel (employees and contractors) working in the area are to be made aware of the contents of the MGO ACHMP and this PoM, prior to accessing the area. |
| | The YCCEP area will be fenced and display appropriate signage. If any other mine related activities resulting in ground disturbance (including vehicle movements outside existing tracks) are proposed to be |

| | undertaken within the YCCEP area, consultation will be undertaken with the MGO E&C team, and the ACHWG before works may proceed. | | |
|---|---|--|--|
| | Any locations where ground disturbance is proposed, should be first inspected by a suitably qualified archaeologist, representatives of the RAPs and/ or Wonnarua Knowledge Holders to determine precisely the likely impacts of the works and to determine appropriate management recommendations. | | |
| Access to the YCCEP area for archaeological research | Requests to undertake archaeological research within the YCCEP area will be considered by the ACHWG and judged on their merit. | | |
| Monitoring of erosion and water quality in the YCCEP area | See: BOMP* Section 4.6 WMP Section 4.1 ESCP Section 4 SWMP Section 4 SWGWRP Section 3 | | |

^{*}Note that this management plan refers specifically to Biodiversity Offset Areas, however, management principles of the BOMP are to be generally adopted for the YCCEP (Heritage Offset) area, in consultation with the Aboriginal Cultural Heritage Working Group.

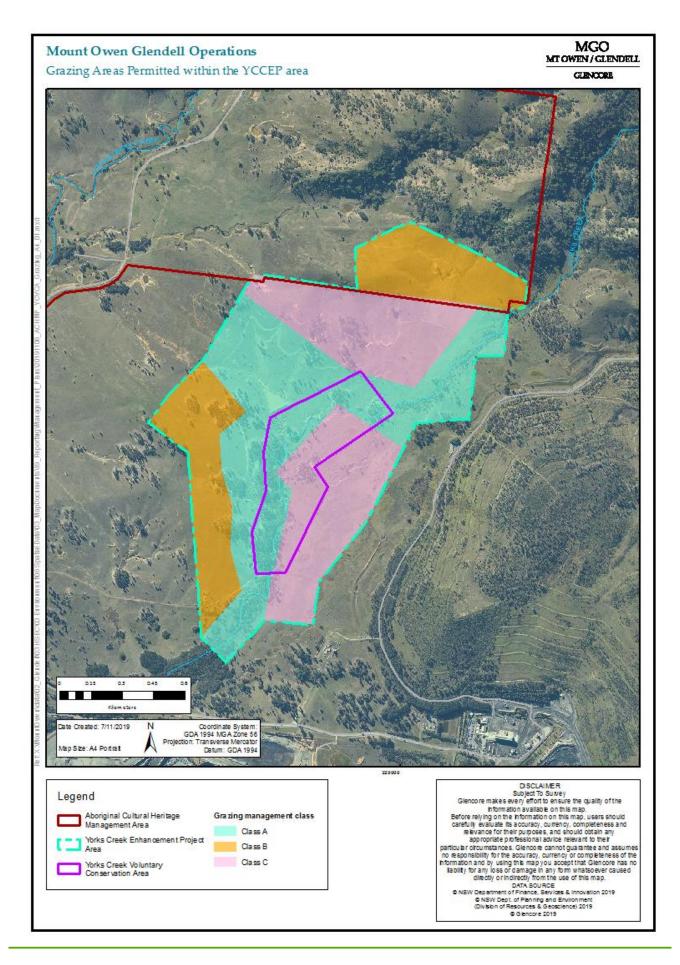


Figure 5 - Grazing Areas Permitted within the YCCEP area

E.9 Permitted Developments within the YCCEP area

Under this PoM, Mt Owen may construct fencing to continue to exclude livestock from certain areas of the YCCEP area, and if required, to construct a firebreak around the outside of the YCCEP boundary fence perimeter.

Other permitted developments could include signage. *Table 6* includes developments that the Aboriginal community and Mt Owen may undertake within the YCCEP area.

All "Permitted Developments" must be undertaken in a manner that they do not conflict with legislation such as the Threatened Species Conservation Act 1995 and the NPW Act that protects, for example, natural heritage and Aboriginal sites.

Table 3 – Permitted Developments within the YCCEP area

| Potential Development | Management Strategy | | |
|--|---|--|--|
| Stock Exclusion / Construction of Boundary Fence | Construction of boundary fencing and/or stock exclusion fencing will be undertaken. The corridor cleared for the fence will not be greater than 3m wide. | | |
| Signage | Signage may be required at various points within the YCCEP at the boundary of archaeological sites where no fencing is required. Alternatively, discussions should be held with MGO and the ACHWG regarding fencing and signing of the whole area, rather than individual sites. | | |
| Erosion Remediation | Erosion remediation may be required throughout certain areas of the YCCEP area. Specific erosion and sediment control designs and works are to be discussed with MGO and the ACHWG prior to any works being undertaken. | | |

E.10 Implementation

Implementation of this PoM will be the responsibility of Mt Owen following approval from the NSW Department of Planning and Environment.

Rostered RAPs and/ or Wonnarua Knowledge Holders are involved in the on-going monitoring of the YCCEP area as part of the Mt Owen quarterly site monitoring program, as per the MGO ACHMP.

Management strategies will be first discussed with the ACHWG, prior to any works being undertaken.

E.11 Measurement and Evaluation

The on-going monitoring of the YCCEP area will be carried out under the terms of the MGO ACHMP.

Quarterly site monitoring has been established across the MGO. MGO will ensure that the YCCEP area is visited as part of this program at least once every calendar year. The area is to be regularly monitored and issues of maintenance can be addressed. Monitoring will be discussed with the ACHWG. Reports will be published on the MGO public website, with a brief summary provided in the Annual Review.

In the event that a complaint is received by MGO in relation to the YCCEP area, it will be managed in accordance with the site complaints management procedure.

E.12 Review and Improvement

This PoM, specifically the on-going maintenance of the YCCEP, can be reviewed on a needs basis by the ACHWG, or annually during the review of the MGO ACHMP.

Should it be deemed necessary, and with agreement from Mt Owen, the ACHWG can propose that maintenance issues at the YCCEP area be addressed.

E.13 Accountabilities

Table 4 - PoM accountabilities

| Role | Accountabilities for this Role | | |
|---|--|--|--|
| MGO E&C Manager | Ensure that adequate resources are available for the implementation of the management plan. | | |
| MGO E&C Officer and Coordinator | Implementation of the management plan. Responsible for protection, monitoring, fencing and signage, track maintenance, pest management, weed management, revegetation, erosion and sedimentation management, and bushfire management of the YCCEP. | | |
| All personnel working in the YCCEP area | Comply with the requirements of this PoM. Report all non-compliances with the plan to their immediate supervisor. | | |

E.14 Document Information

This PoM is for the management of Aboriginal and historic heritage at the YCCEP area, including the YCVCA.

It satisfies Conditions 34 (c) and 42 of SSD-5850.

E.14.1 Terms and Abbreviations

ACHMP: Aboriginal Cultural Heritage Management Plan

ACHWG: Aboriginal Cultural Heritage Working Group

AHIMS: Aboriginal Heritage Information Management System

BCD: Biodiversity & Conservation Division within the Department

E&C: MGO Environment and Community team

MGO: Mt Owen Glendell Operations

Mt Owen: Mount Owen Proprietary Limited OEH: Office of Environment and Heritage

OzArk REHM: OzArk Environmental & Heritage Management Pty Ltd

PoM: Plan of Management

RAPs: Registered Aboriginal Parties

YCVCA: Yorks Creek Voluntary Conservation Area

YCCEP: Yorks Creek Catchment Enhancement Project

E.15 Reference Information

Reference information, listed in *Table 5* below, is information that is directly related to the development of this document or referenced from within this document.

Table 5 - Reference information

| Title |
|--|
| Aboriginal Cultural Heritage Management Plan |
| Biodiversity and Offset Management Plan (BOMP) |
| Water Management Plan (WMP) |
| Erosion and Sediment Control Plan (ESCP) |
| Surface Water Management Plan (SWMP) |
| Surface and Groundwater Response Plan (SWGWRP) |
| Bushfire Emergency Response Poster |
| GSS Environmental. Project Plan for Stages 1–3 Yorks Creek Catchment Enhancement Project, Mt Owen Mine, Hunter Valley, NSW. Report for Xstrata Mt Owen Pty Ltd. |
| GSS Environmental. Cultural Landscape Remediation Management Plan. Yorks Creek Catchment Enhancement Project, Mt Owen Mine, Hunter Valley. Report for Xstrata Mt Owen Pty Ltd. |
| Environmental Impact Statement. Mount Owen Coal Project. Hebden, New South Wales. Report for Hunter Valley Coal Corporation Pty Ltd. |
| Archaeological Survey For Aboriginal Sites. Mt Owen, Hebden Road, Via Singleton, Hunter Valley, New South Wales. Report for Hunter Valley Coal Corporation Pty Ltd. |

E.16 Change Information

Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in *Table 6*. Example detail shown below.

Table 6 - Change information

| Version | Date | Review team (consultation) | Change Summary |
|------------|---------------|----------------------------|---------------------------------|
| 1.0 | April 2018 | MGO E&C OzArk EHM | Initial issue. |
| <u>1.1</u> | November 2019 | MGO E&C OzArk EHM | Review post MOCO MOD 2 approval |