



**TARRAWONGA COAL MINE
ENVIRONMENTAL
MANAGEMENT SYSTEM**

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WHC_PLN_TAR_HERITAGE MANAGEMENT PLAN

HERITAGE MANAGEMENT PLAN

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ACRONYMS USED THROUGHOUT THIS DOCUMENT

AEMR	-	Annual Environmental Management Report (now Annual Review)
AHIMS	-	Aboriginal Heritage Information Management System
AHIP	-	Aboriginal Heritage Impact Permit
CCC	-	Community Consultative Committee
CL	-	Coal Lease
DP&E	-	Department of Planning and Environment
DRE	-	Department of Industry Skills and Regional Development - Division of Resources and Energy
EIS	-	Environmental Impact Statement
EPA	-	Environment Protection Authority
EPL	-	Environment Protection Licence
GSC	-	Gunnedah Shire Council
HMP	-	Heritage Management Plan
LALC	-	Local Aboriginal Land Council
ML	-	Mining Lease
NSC	-	Narrabri Shire Council
OEH	-	Office of Environment and Heritage
RAP	-	Registered Aboriginal Party
TCM	-	Tarrawonga Coal Mine
TCPL	-	Tarrawonga Coal Pty Ltd



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1 INTRODUCTION

The Tarrawonga Coal Mine (TCM) is located approximately 15 km northeast of Boggabri and adjacent to the Boggabri Coal Mine (Figure 1). The mine is being developed by Tarrawonga Coal Pty Ltd (TCPL), a joint venture between Whitehaven Coal Mining Pty Ltd (70%) and Idemitsu Boggabri Coal Pty Ltd (30%).

The mine site operates under Project Approval (PA) 11_0047 (granted 22 January 2013) and Environment Protection Licence (EPL) 12365. The mine site covers an area of approximately 1173 hectares contained within Mining Lease (ML) 1579, Mining Lease 1693 and Coal Lease (CL) 368. The areas of disturbance comprise open cut mining, out-of-pit emplacement areas, a coal processing and stockpile area, administration buildings and various water management structures and roads (Figure 2).

This Heritage Management Plan (HMP) has been prepared to ensure that impacts on cultural heritage within the area are avoided or mitigated. The HMP has been prepared with the following objectives:

- To provide a precise set of procedures to enable the identification and conservation of cultural heritage places and objects within the mine site;
- To provide management strategies for those parts of the mine site not affected by mining or mining-related activities;
- To establish a protocol with the Registered Aboriginal Parties (RAP's) for involvement in management works and access to sites and salvaged cultural materials; and
- To ensure all personnel are aware of their obligations, responsibilities and the procedures under the *National Parks and Wildlife Act 1974* and *NSW Heritage Act 1977* and their obligations under the Project Approval.

The contents of this plan have been drawn from relevant sections of reports prepared by Kayandel Archaeological Services (Kayandel) and Heritage Management Consultants Pty Ltd, included as Appendices K and L of the Tarrawonga Coal Project Environmental Assessment (2011).

This document applies to all activities conducted at the mine site and should be read in conjunction with other environmental management plans. Aboriginal cultural heritage management performance to date is available in the mine site's Annual Environmental Management Reports/Annual Reviews (AEMR/Annual Review).

1.1 Consultation

Relevant stakeholders from the Aboriginal community were identified during the Tarrawonga Coal Mine Project Environmental Assessment using a process consistent with the NSW Office of Environment and Heritage's *Aboriginal Cultural Heritage Community Consultation Requirements for Proponents* (DECCW, 2010) and also considering the *Draft Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation* (DEC, 2005).

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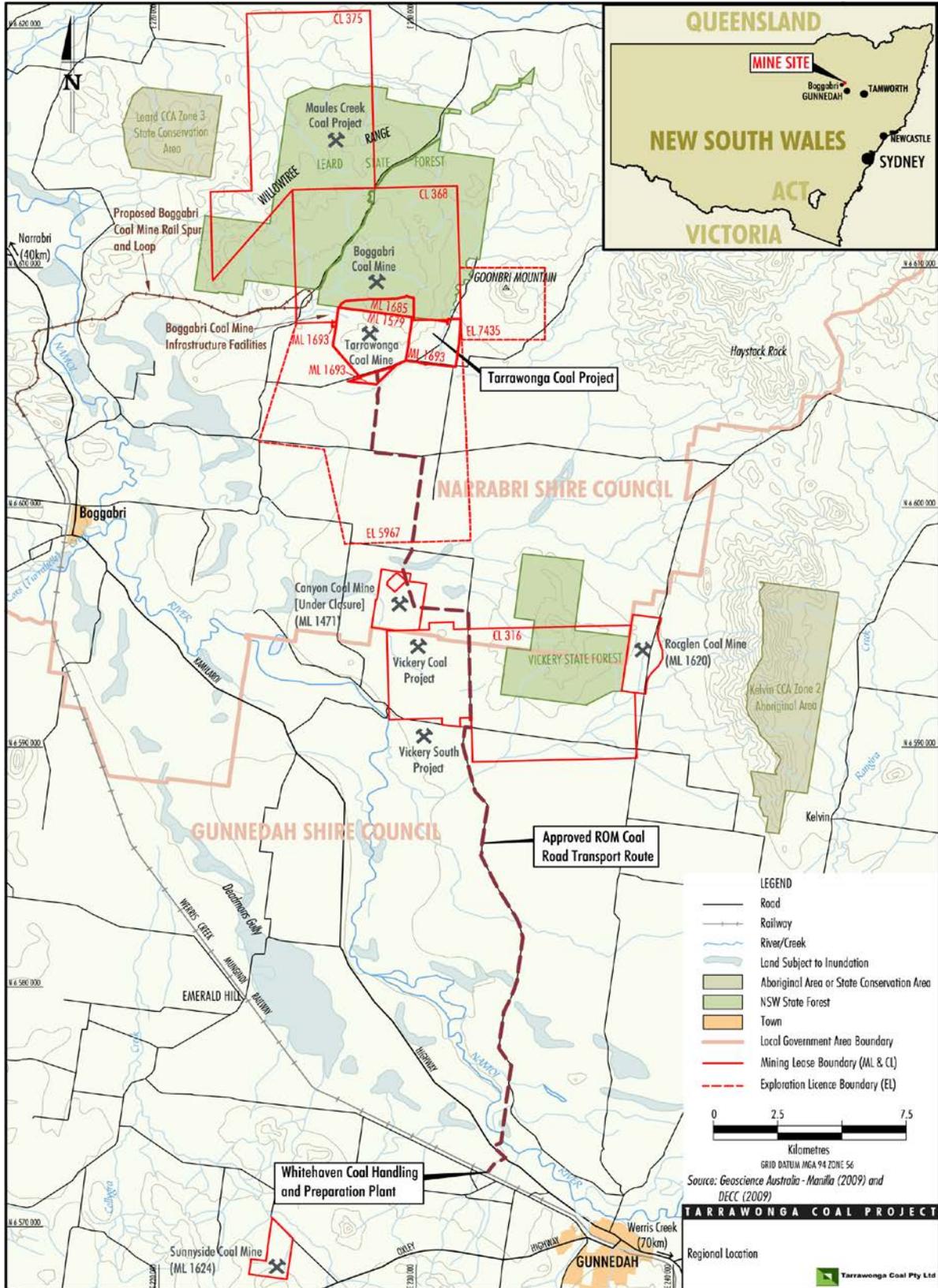


Figure 1 Tarrawonga Coal Mine Location



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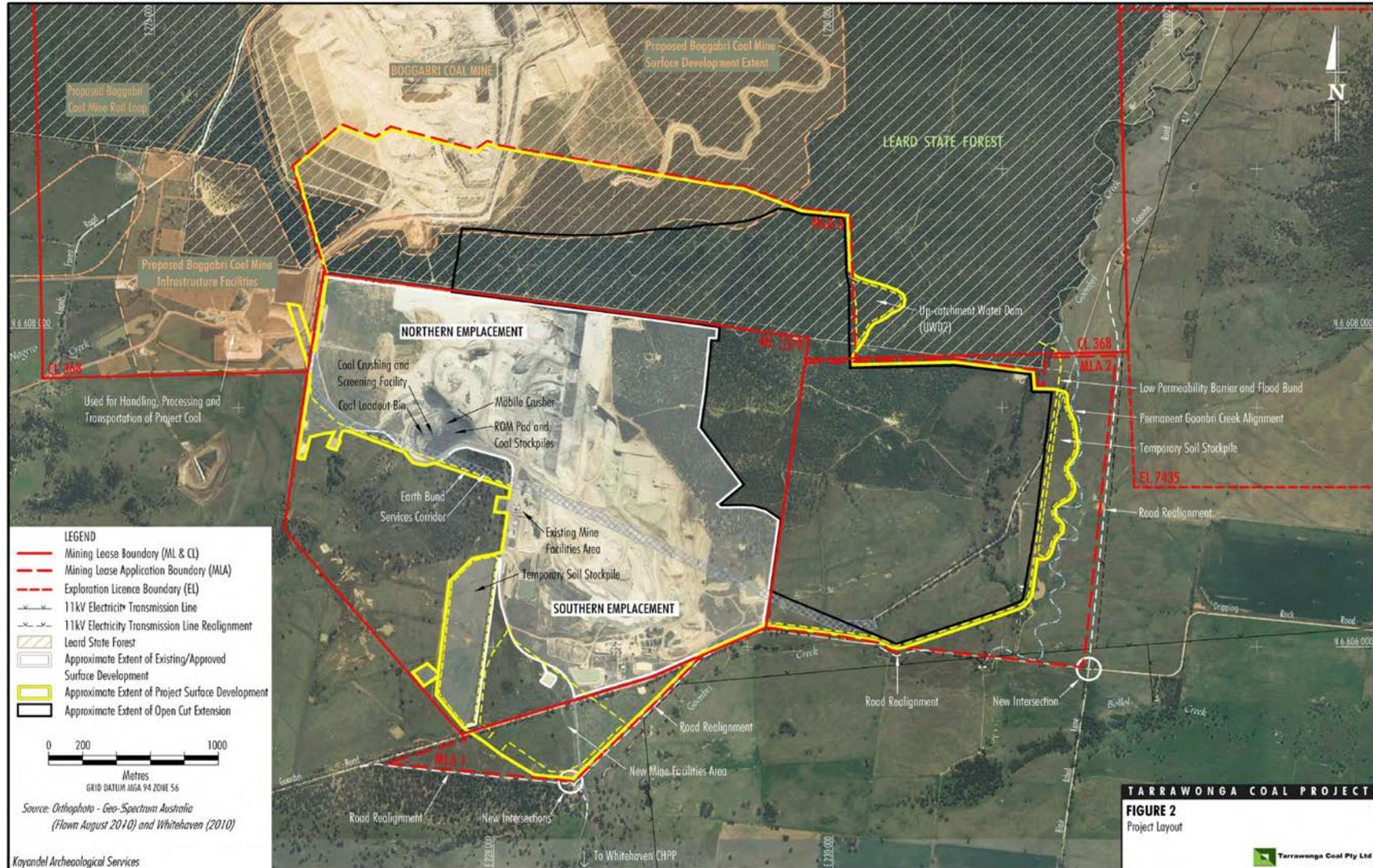


Figure 2 Project Layout



TARRAWONGA COAL MINE ENVIRONMENTAL MANAGEMENT SYSTEM

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The nine stakeholders who registered an interest (Registered Aboriginal Party – RAP) in being consulted in relation to the Cultural Heritage Assessment process are listed below (in alphabetical order):

- Aboriginal Native Title Consultants;
- Bigundi Biame Gunnedarr Traditional People;
- Bullen Bullen Consultants;
- Cacatua Culture Consultants;
- Giwir Heritage Consultants
- Gunida Gunyah Aboriginal Corporation;
- Min Min Aboriginal Corporation;
- Minnga Consultants; and
- Red Chief Local Aboriginal Land Council (LALC).

Details of consultation with RAP's in the preparation of this HMP are contained in Appendix 1.

It is recognised that other stakeholders have registered an interest in the Tarrawonga site post approval of the project. Details of these stakeholders have been noted and, where appropriate, information in relation to the Tarrawonga project will be supplied to these parties by Tarrawonga. However, for the purposes of this management plan, and ongoing site works, Tarrawonga Coal will consult directly with the nine registered stakeholders. The nine registered stakeholders may consult with the wider Aboriginal community in relation to cultural heritage management matters related to the project.

Consultation with the RAP's has occurred since the registration process, through the development of the draft methodology for the Aboriginal Cultural Heritage Assessment, the completion of the site survey works and finalisation of the Cultural Heritage Assessment, and development of this management plan.

This management plan has been developed on the basis that it will remain a “live” document, and will be subject to frequent review and update. It is also noted that under the terms of the Project Approval, the submission of management plans may be undertaken on a progressive basis. For this reason, this management plan has been prepared to cater for the next five (5) years of operation and passive management measures for areas not subject to impact over this term.



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2 STATUTORY REQUIREMENTS

This HMP has been prepared in accordance with Condition 52 of PA 11_0047, which states:

The Applicant shall prepare and implement a Heritage Management Plan for the development to the satisfaction of the Secretary. This plan must:

- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;*
- (b) be prepared in consultation with OEH and local Aboriginal stakeholders (in relation to the management of Aboriginal heritage values);*
- (c) be submitted to the Secretary for approval prior to undertaking any activities that may impact heritage items or sites, unless the Secretary agrees otherwise;*
- (d) include the following for the management of Aboriginal cultural heritage:*
 - *a detailed archaeological salvage program for Aboriginal sites/objects within the project disturbance area, including methodology and procedures/protocols for:*
 - *sub-surface testing;*
 - *staged salvage, based on anticipated mine planning;*
 - *pre-disturbance monitoring;*
 - *site assessment and reporting;*
 - *research objectives to inform knowledge of Aboriginal occupation;*
 - *protection, storage and management of salvaged Aboriginal objects;*
 - *addressing relevant statutory requirements under the National Parks and Wildlife Act 1974; and,*
 - *long term protection of salvaged Aboriginal objects;*
 - *a description of the measures that would be implemented for:*
 - *protecting, monitoring and managing Aboriginal sites outside the project disturbance area;*
 - *maintaining and managing reasonable access for Aboriginal stakeholders to cultural heritage items on site and in the biodiversity offset area;*
 - *managing the discovery of any human remains or previously unidentified Aboriginal objects on site, including (in the case of human remains) stop work provisions and notification protocols;*
 - *ongoing consultation with the local Aboriginal stakeholders in the conservation and management of Aboriginal cultural heritage both on-site and in the biodiversity offset area;*
 - *ensuring any workers on site receive suitable heritage inductions prior to carrying out any activities which may disturb Aboriginal sites, and that suitable records are kept of these inductions;*
- (e) include the following for the management of historic heritage:*
 - *a description of the measures that would be implemented for:*
 - *managing the discovery of human remains or previously unidentified historic heritage items at the site, including (in the case of human remains) stop work provisions and notification protocols; and*



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- *ensuring workers on site receive suitable heritage inductions prior to carrying out any development on site, and ensure that suitable records of these inductions are kept.*

This plan has been prepared with reference to relevant legislation, approvals and guidelines and is consistent with the information and commitments provided in the *Tarrawonga Coal Project Environmental Assessment* (Resource Strategies, 2011), including the *Aboriginal Cultural Heritage Assessment* (Kayandel, 2011) and *Historical Cultural Heritage Assessment* (Heritage Management Consultants Pty Ltd, 2011). It is also conforms to Schedule 5 (3) Management Plan Requirements of PA 11_0047.

All registered and unregistered Aboriginal archaeological sites in NSW are protected by the *State National Parks and Wildlife Act 1974* (NPW Act) and the *Environmental Planning and Assessment Act 1979* (EP&A Act). All historical sites in NSW are protected by the *NSW Heritage Act 1977* and the EP&A Act. These Acts prohibit the destruction or disturbance of any cultural heritage site, place or object, whether on private or public land. These places are considered to have significance according to the guidelines of the *Australia ICOMOS Charter for the Conservation of Places of Cultural Significance* (the Burra Charter).

The Office of Environment and Heritage (OEH) is the NSW State Government agency that administers these Acts.

Consultation undertaken for the mine has been in accordance with the relevant NSW Government's guidelines and future investigations on site will also give due consideration to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (DECCW, 2010).

As the Tarrawonga Extension Project was approved under Part 3A of the EP&A Act, an Aboriginal Heritage Impact Permit (AHIP) under the NPW Act for impacts to Aboriginal sites or salvage of Aboriginal sites is not required.

Notwithstanding this, statutory requirements under the NPW Act for a Care and Control Permit under Section 85a and notification of sites under Section 89a are still required and will be undertaken accordingly.

It is also recognised that for areas outside of the Tarrawonga project boundary, which have not been assessed for Aboriginal heritage, the provisions of the NPW Act apply in full. This will apply to the biodiversity offset area as applicable to the Tarrawonga project, and as a consequence, due diligence requirements and the need for an Aboriginal Heritage Impact Permit will be considered prior to any activity at the biodiversity offset site that may disturb Aboriginal artefacts.

Additionally, it is recognised that a Native Title Claim (NC11/6) is current over a section of Leard State Forest to which this HMP relates. Generally, Whitehaven has been engaged in consultation with the Native Title Claimants (Gomeri People), and where appropriate, is reflected in this plan.

To ensure satisfactory implementation of the requirements of this HMP, the roles and responsibilities of TCPL personnel are defined in the Table 1.



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Table 1 Roles and Responsibilities

Role	Responsibility
General Manager – Open Cut Operations	<ul style="list-style-type: none"> • Provide required resources and support to implement this plan. • Understand the requirements of this plan
Operations Manager - Tarrawonga	<ul style="list-style-type: none"> • Ensure personnel are aware of their obligations under this plan, and provide support to the site Environmental Officer in implementing the requirements of the plan. • Follow relevant procedures in relation to site salvage and identification of artefacts during operational activities. • Report any incidents to the Environmental Officer for immediate action and resolution.
Group Environment Manager	<ul style="list-style-type: none"> • Authorise the HMP and any reviews/updates • Ensure inductions and training is relevant to the requirements of this HMP • Consult with relevant agencies and stakeholders on the development and implementation of the HMP • Report any incidents to the relevant agencies
Environmental Officer	<ul style="list-style-type: none"> • Undertake the on-ground implementation of this HMP • Coordinate activities in this plan with operational personnel and the RAP's • Coordinate archaeologists and arborists in the active completion of works required in this plan • Assess the ongoing effectiveness of this plan and provide feedback to the Group Environment Manager for any revision requirements • Provide operations with relevant advice and information pertinent to management of cultural heritage issues, including provision of toolbox talks on heritage matters • Undertake review of site disturbance requirements and coordinate site disturbance approval processes, including review of known heritage sites against areas proposed for disturbance • Provide input to the AEMR/Annual Review in relation to performance against the requirements of the HMP and any developments relating to heritage management during the review period. • Coordinate RAP's for site monitoring purposes • Coordinate with the RAP's any required site monitoring for soil stripping activities • Respond to any events impacting on cultural heritage in accordance with the procedures in this management plan.
All personnel	<ul style="list-style-type: none"> • Understand site obligations in relation to this HMP. • Report any incident of harm or potential harm to cultural heritage material immediately to your supervisor.



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3 CULTURAL HERITAGE OF THE MINE SITE

3.1 Cultural Heritage Assessments

An assessment of the cultural heritage of the mine site was initially undertaken by Archaeological Surveys & Reports Pty Ltd (ASR) as part of the 2005 EIS for the mine. ASR (2005) estimated that they archaeologically surveyed approximately 473 ha within ML 1579. A total of four Aboriginal heritage sites were identified by ASR within the ML while an additional four sites were identified along the proposed access route, as discussed in Section 3.2.

In 2010, Landsape undertook a cultural heritage assessment for a modification to the mine. The survey by Landsape did not encounter any additional cultural heritage places or objects.

Kayandel completed an Aboriginal cultural heritage assessment for expansion of the mine in the Tarrawonga Coal Project Environmental Assessment (2011). The specific objectives of the assessment undertaken by Kayandel were to:

- Consult the local Aboriginal community to identify any concerns they may have;
- Conduct a desktop assessment to delineate areas of known and predicted cultural heritage within the modification area;
- Undertake a stratified archaeological survey of known and predicted cultural heritage identified in the desktop assessment with representatives of the local Aboriginal community;
- Record any cultural heritage sites within the work areas and assess their significance;
- Identify the nature and extent of potential impacts of the development on cultural heritage; and,
- Devise options in consultation with the community to avoid or mitigate potential impacts of the development on cultural heritage places and items.

Heritage Management Consultants Pty Ltd completed a non-aboriginal historical heritage study of the mine for the Tarrawonga Coal Project Environmental Assessment (2011). The survey did not encounter any places or objects of historical cultural heritage significance. Notwithstanding this, the heritage study did identify various items within a rubbish dump site "H2" which contained a collection of car and truck bodies and various other agricultural implements that may be of interest to the Boggabri Historical Society or the Gunnedah Rural Museum. Prior to undertaking the required "clean up" of this dump site, the opportunity to salvage these materials will be made to these groups. It is noted that disturbance to this site is not planned to occur within the next 5 years, and will be outside the term of this management plan. On this basis, more specific details around the "clean up" of this site, and subsequent retrieval of items of interest will be identified in revisions to this plan.



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3.2 Identified Aboriginal Cultural Heritage Sites

69 Aboriginal archaeological sites have been recorded within the mine area (Figure 3). These include 27 scatters of stone artefacts, 30 isolated finds of stone artefacts and 12 modified trees. Representative images of these features are depicted in Figure 4 to Figure 10.

Summary descriptions of the Aboriginal cultural heritage sites identified are contained in Table 2. Additional descriptions are available in Appendix 2.

Table 2 Aboriginal Cultural Heritage Sites at the Tarrawonga Coal Mine

AHIMS Site	Site Name	Number in Figure 3	Site Type	GDA94 mE	GDA94 mN	Salvage Status
20-4-0092	NAS1	NAS1	Stone Artefact Scatter	227359	6607672	
20-4-0093	NIS1	NIS1	Isolated Artefact	227127	6607690	
20-4-0156	NAS2	NAS2	Stone Artefact Scatter	228888	6606030	
20-4-0111	BC17	BC17	Isolated Artefact	227644	6608315	Salvaged
20-4-0112	BC18	BC18	Isolated Artefact	227622	6608416	Salvaged
20-4-0116	BC19	BC19	Isolated Artefact	227622	6608492	Salvaged
20-4-0116	BC22	BC22	Isolated Artefact	227767	6608516	Salvaged
20-4-0157	GGOS1	GGOS1	Stone Artefact Scatter	228604	6605280	
20-4-0158	GGOS2	-	Stone Artefact Scatter	228450	6604477	
20-4-0159	GGOS3	-	Stone Artefact Scatter	228397	6604437	
20-4-0160	GGOS4	-	Stone Artefact Scatter	228440	6604352	
20-4-0161	NST1	NST1	Culturally Modified Tree	227458	6606533	
20-4-0294	TCEP-IF-013	13	Isolated Artefact	229859	6607371	
20-4-0295	TCEP-IF-014	14	Isolated Artefact	230202	6607362	
20-4-0296	TCEP-IF-015	15	Isolated Artefact	230341	6607326	
20-4-0297	TCEP-IF-016	16	Isolated Artefact	230909	6607039	
20-4-0298	TCEP-IF-017	17	Isolated Artefact	231028	6606385	
20-4-0300	TCEP-IF-019	19	Isolated Artefact	232793	6605428	
20-4-0301	TCEP-IF-018	18	Isolated Artefact	228277	6604964	
20-4-0302	TCEP-IF-001	1	Isolated Artefact	227652	6605232	
20-4-0303	TCEP-IF-002	2	Isolated Artefact	229020	6608474	Salvaged
20-4-0304	TCEP-IF-003	3	Isolated Artefact	232451	6605436	



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AHIMS Site	Site Name	Number in Figure 3	Site Type	GDA94 mE	GDA94 mN	Salvage Status
20-4-0305	TCEP-IF-004	4	Isolated Artefact	227590	6605116	
20-4-0306	TCEP-IF-005	5	Isolated Artefact	231525	6608604	
20-4-0307	TCEP-IF-006	6	Isolated Artefact	227063	6605159	
20-4-0308	TCEP-IF-007	7	Isolated Artefact	231260	6607745	
20-4-0309	TCEP-IF-008	8	Isolated Artefact	231076	6607769	
20-4-0310	TCEP-IF-009	9	Isolated Artefact	231342	6607585	
20-4-0311	TCEP-IF-010	10	Isolated Artefact	230835	6607798	
20-4-0312	TCEP-IF-011	11	Isolated Artefact	230894	6607193	
20-4-0313	TCEP-IF-012	12	Isolated Artefact	230148	6607603	
20-4-0314	TCEP-IF-020	20	Isolated Artefact	230950	6606068	
20-4-0315	TCEP-IF-021	21	Isolated Artefact	229678	6606300	
20-4-0316	TCEP-IF-022	22	Isolated Artefact	229639	6606170	
20-4-0317	TCEP-IF-023	23	Isolated Artefact	229205	6605789	
20-4-0318	TCEP-IF-024	24	Isolated Artefact	231021	6606355	
20-4-0319	TCEP-IF-025	25	Isolated Artefact	228896	6605473	
20-4-0322	TCEP-OS-001	26	Stone Artefact Scatter	231590	6608721	
20-4-0323	TCEP-OS-002	27	Stone Artefact Scatter	231503	6608363	
20-4-0324	TCEP-OS-003	28	Stone Artefact Scatter	231338	6608099	
20-4-0325	TCEP-OS-004	29	Stone Artefact Scatter	231340	6608288	
20-4-0326	TCEP-OS-005	30	Stone Artefact Scatter	231211	6608107	
20-4-0327	TCEP-OS-006	31	Stone Artefact Scatter	231225	6607945	
20-4-0328	TCEP-OS-007	32	Stone Artefact Scatter	231309	6607856	
20-4-0329	TECP-OS-008	33	Stone Artefact Scatter	231199	6607594	
20-4-0330	TECP-OS-009	34	Stone Artefact Scatter	231084	6607415	
20-4-0331	TCEP-OS-010	35	Stone Artefact Scatter	231239	6607304	
20-4-0332	TCEP-OS-011	36	Stone Artefact Scatter	230827	6607211	
20-4-0333	TCEP-OS-012	37	Stone Artefact Scatter	231039	6607183	
20-4-0334	TCEP-OS-	38	Stone Artefact	231170	6607115	



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AHIMS Site	Site Name	Number in Figure 3	Site Type	GDA94 mE	GDA94 mN	Salvage Status
	013		Scatter			
20-4-0335	TCEP-OS-014	39	Stone Artefact Scatter	230317	6607387	
20-4-0336	TCEP-OS-015	40	Stone Artefact Scatter	230902	6606931	
20-4-0337	TCEP-OS-016	41	Stone Artefact Scatter	230314	6605906	
20-4-0338	TCEP-OS-017	42	Stone Artefact Scatter	228527	6605098	
20-4-0339	TCEP-OS-018	43	Stone Artefact Scatter	229384	6605975	
20-4-0340	TCEP-OS-019	44	Stone Artefact Scatter	228763	6605355	
20-4-0341	TCEP-OS-020	45	Stone Artefact Scatter	228841	6608319	Salvaged
20-4-0342	TCEP-OS-021	46	Stone Artefact Scatter	231292	6607423	
20-4-0299	TCEP-ST-001	47	Culturally Modified Tree	228998	6608401	
20-4-342	TCEP-ST-002	48	Culturally Modified Tree	231307	6608235	
20-4-0343	TCEP-ST-003	49	Culturally Modified Tree	231090	6606729	
20-4-0344	TCEP-ST-004	50	Culturally Modified Tree	229111	6605908	
20-4-0345	TCEP-ST-005	51	Culturally Modified Tree	230940	6606189	
20-4-0346	TCEP-ST-006	52	Culturally Modified Tree	230930	6606183	
20-4-0349	TCEP-ST-009	53	Culturally Modified Tree	227834	6605044	
20-4-0350	TCEP-ST-007	54	Culturally Modified Tree	231309	6605396	
20-4-0351	TCEP-ST-008	55	Culturally Modified Tree	231529	6605495	
20-4-0347	TCEP-ST-010	56	Culturally Modified Tree	227984	6608219	Salvaged
20-4-0348	TCEP-ST-011	57	Culturally Modified Tree	228319	6608164	Declassified ¹

¹ Inspected by the RAPs not considered to be a culturally modified tree and it was believed to be a survey tree. This advice was provided to OEH and the tree was subsequently removed during the clearing process

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Figure 4 TCEP-OS-001



Figure 5 TCEP-OS-020



Figure 6 TCEP-ST-003



Figure 7 TCEP-ST-005



Figure 8 TCEP-IF-001



Figure 9 TCEP-IF-010

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Figure 10 NIS1

Sites BC17, BC18, BC19 and BC22 were identified during prior surveys conducted for the adjacent Boggabri Coal operation. Boggabri Coal has confirmed that these sites have not been salvaged and will require salvage prior to the Tarrawonga extension works progressing.

Sites GGOS1 to GGOS4 were previously identified during the original Tarrawonga development survey, and occur along the coal haulage transport route. All these sites have been protected by fencing. Only one of these sites was proposed to be impacted by the Tarrawonga extension works, being GGOS1 which was within the footprint of the proposed Goonbri Road realignment. It is not intended that this section of road will be realigned within the next 5 years, and on this basis, the existing protection measures for this site will remain in place. Revised protocols for this site will be developed during the next update to this plan.

NAS1, NAS2 and NISO1 were all salvaged as part of the prior Tarrawonga development and are not considered further in this plan. NST1 is a culturally modified tree outside the area of impact, with protection fencing retained around its perimeter.



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4 MANAGEMENT PROGRAM

TCPL recognises the importance of Aboriginal places and objects to the Aboriginal community and its obligations under the NPW Act the EP&A Act, and the provisions of the Project Approval, and will undertake all activities in a manner that conserves the cultural heritage values of the area.

Central to the satisfaction of this commitment, there will be the continuation of the existing open and honest relationship between TCPL management and the RAP's.

The management plan has been prepared principally based upon the recommendations of the Tarrawonga Coal Project Environmental Assessment (Resource Strategies, 2012) and in consultation with registered stakeholders.

4.1 Collection of Aboriginal Cultural Heritage

During the life of the project, collection will be required for 39 cultural heritage features comprising open scatters, isolated finds and scarred trees within areas planned for future expansion and development of the mine. However, over the course of the next 5 years (the life of this management plan), collection will be required for 6 cultural heritage features, being sites 13 (Isolated Find), 14 (Isolated Find), 15 (Isolated Find), 36 (Stone Artefact Scatter), 39 (Stone Artefact Scatter) and 47 (Modified Tree).

This management plan focuses on the management of these sites only, with additional details to be developed for the management of the remaining identified sites over the life of the project in consultation with the RAP's. This will be achieved through the development of updated Heritage Management Plans every time a modification of the Mine Operations Plan is submitted and is likely to impact on items of aboriginal significance throughout the life of the project. The purpose of the collection program is to retrieve culturally significant items from these Aboriginal cultural heritage places to avoid their destruction prior to disturbance proceeding in accordance with the project approval. Table 3 lists the cultural heritage sites requiring collection over the next five years whilst Table 4 lists the sites requiring collection over the life of the project.

An additional three cultural heritage sites within the mine site have previously been collected under Aboriginal Heritage Impact Permits 2312 [NAS01 and NIS01] and 1123843 [NAS02]. These are currently stored at the Cumbo Gunerah Keeping Place at the Red Chief LALC office in Gunnedah.

Collection must be supervised by a suitably qualified archaeologist in partnership with the RAP's.

Table 3 Aboriginal Cultural Heritage Sites Requiring Collection During the Term of this Plan (next 5 years)

Site Name	Number in Figure 3	Site Type	Impact Type	Management
TCEP-IF-013	13	Isolated Find	Open Cut	Collection
TCEP-IF-014	14	Isolated Find	Open Cut	Collection
TCEP-IF-015	15	Isolated Find	Open Cut	Collection
TCEP-OS-011	36	Stone Artefact Scatter	Infrastructure	Collection
TCEP-OS-014	39	Stone Artefact Scatter	Open Cut	Collection
TCEP-ST-001	47	Culturally Modified Tree	Open Cut	Collection



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Table 4 Aboriginal Cultural Heritage Sites Requiring Collection During the Life of the Project

Site Name	Number in Figure 3	Site Type	Impact Type	Management
TCEP-ST-003	49	Culturally Modified Tree	Open Cut	Collection
TCEP-ST-004	50	Culturally Modified Tree	Overburden	Collection
TCEP-ST-005	51	Culturally Modified Tree	Infrastructure	Collection
TCEP-ST-006	52	Culturally Modified Tree	Infrastructure	Collection
TCEP-IF-001	1	Isolated Artefact	Infrastructure	Collection
TCEP-IF-007	7	Isolated Artefact	Open Cut	Collection
TCEP-IF-008	8	Isolated Artefact	Open Cut	Collection
TCEP-IF-009	9	Isolated Artefact	Infrastructure	Collection
TCEP-IF-010	10	Isolated Artefact	Open Cut	Collection
TCEP-IF-011	11	Isolated Artefact	Open Cut	Collection
TCEP-IF-012	12	Isolated Artefact	Open Cut	Collection
TCEP-IF-016	16	Isolated Artefact	Open Cut	Collection
TCEP-IF-017	17	Isolated Artefact	Open Cut	Collection
TCEP-IF-021	21	Isolated Artefact	Open Cut	Collection
TCEP-IF-022	22	Isolated Artefact	Open Cut	Collection
TCEP-IF-024	24	Isolated Artefact	Open Cut	Collection
TCEP-OS-007	32	Stone Artefact Scatter	Infrastructure	Collection
TCEP-OS-008	33	Stone Artefact Scatter	Open Cut	Collection
TCEP-OS-009	34	Stone Artefact Scatter	Open Cut	Collection
TCEP-OS-010	35	Stone Artefact Scatter	Open Cut	Collection
TCEP-OS-012	37	Stone Artefact Scatter	Open Cut	Collection
TCEP-OS-013	38	Stone Artefact Scatter	Open Cut	Collection
TCEP-OS-015	40	Stone Artefact Scatter	Open Cut	Collection
TCEP-OS-017	42	Stone Artefact Scatter	Infrastructure	Collection
TCEP-OS-021	46	Stone Artefact Scatter	Infrastructure	Collection
GGOS1	GGOS1	Stone Artefact Scatter	Infrastructure	Collection

4.1.1 Collection Procedure

The research objectives underlying the collection (salvage) procedures are to identify for the Project site:-

- any patterns of stone artefact discard behaviour in relation to topographic features in the landscape,
- any patterns to the location of culturally modified trees in relation to topographic features in the landscape,
- integration of findings from above into mine planning, including refinement and consideration of specific questions for subsequent salvage programs.



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This collection procedure provides for the recording, collection, curation and storage of identified Aboriginal cultural heritage items from areas that will be disturbed as a result of the operational activities associated with expansion of the mine. Prior to active salvage occurring, the cultural values associated with the artefacts for salvage, and the specific area in which the salvage is undertaken, will also be considered and assessed, with specific input sought from the RAP's in relation to cultural values, how sites may have been used in the past, and their overall significance in the wider landscape. This information will be recorded and incorporated into the salvage report to be produced at the conclusion of each salvage event.

Identified archaeological sites and isolated finds within the expanded open-cut pit, waste emplacements, infrastructure areas and associated disturbance areas will be collected (Table 3). Collection of all artefactual material will be undertaken with the relevant details recorded on the Aboriginal Site Impact Recording Form, as available from the Office of Environment and Heritage Website. Those site locations noted as being impacted by infrastructure will be subject to additional review, prior to disturbance, to ascertain if these sites can be practically avoided, and hence left in-situ, during the life of the project.

Prior to commencing salvage works, the archaeologist will review and consider the outcomes/findings from prior salvage works in the vicinity of the area, and use this information to develop the salvage program, with specific consideration to identifying key research questions/opportunities during the salvage. A key aspect of the research questions relevant to salvage will be consistency with other cultural heritage programs in the area, and in particular, how the knowledge gained from the salvage works can be utilized in the development of the broader Aboriginal Heritage Conservation Strategy required under Condition 51 of Schedule 3 of the Project Approval PA 11_0047, and in the context of any other cultural heritage programs being developed by the OEH.

At the conclusion of the salvage works, the archaeologist will provide written clearance to the Tarrawonga mine that all known artefacts have been salvaged and that mining activities may commence in that area. Ongoing management of the area will include the opportunity for representatives of the RAP's to participate in a soil stripping monitoring program on a roster basis. This will provide capacity to monitor for additional uncovering of artefacts during the soil stripping program.

Prior to any vegetation clearance, archaeological work at each disturbance site will include the following:

1. Stone Artefacts:

The following methodology is required for collection of stone artefacts:

- Commissioning of a suitably qualified archaeologist to inspect and record each known site to identify surface Aboriginal objects within the proposed disturbance area. The archaeologist will engage with the RAP's during this process who will be invited to observe and participate in the works (e.g. recording, excavation and collection).
- In relation to each identified Aboriginal object, the archaeologist will, prior to any disturbance, record its position with a GPS and/or map, and measure and describe the site or find. All identified Aboriginal objects will be recovered and separately bagged, labelled, and stored temporarily at Tarrawonga Coal Mine in



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the designated shipping container until such time as a long term keeping place is agreed to by the RAPs and TCPL. If during the period of this management plan a long term keeping place or change in temporary keeping place is established a Care and Control Permit will be obtained for the storage of the artefacts in consultation with OEH and the RAP's.

- The collected Aboriginal objects will be recorded in sufficient detail to allow description of the lithic technology and reduction strategies adopted. The regional and local contexts of the collected objects will also be analysed and described.

Following the completion of rehabilitation activities or during the rehabilitation program at a time when works within the specific area do not pose a threat, the salvaged Aboriginal objects will be replaced in a location as close as possible to their original location in consultation with OEH and the RAP's. Aboriginal object replacement will be conducted by a suitably qualified archaeologist, with the RAP's invited to observe and participate in replacement works.

2. Culturally Modified Trees:

The following methodology is proposed for scarred tree removal and relocation. Prior to any actions to remove the tree, relevant advice will be obtained from a suitably qualified arborist to ensure the integrity of the tree prior to movement. Advice will be sought from an archaeologist to verify archival recording requirements of the trees prior to removal:

- Protection of the tree prior to removal, to protect the surface and structure of the tree during movement. It may also be necessary to fill the hollows of the tree with two part liquid polyurethane foam, which expands and fills the cavity, thereby further supporting the surface. The requirement for this treatment will be confirmed with the arborist.
- Depending on the structural integrity of the tree, the tree may need to be cut back to a manageable size before attempting to remove the tree.
- Lifting of the tree using a crane or similar, with the tree supported by straps placed around the protected trunk or a heavy cargo net. During the initial stages of lifting, the crane would also support the tree when the final cut is made near the ground surface.
- After the base cut is complete, the tree would be suspended by the straps and manoeuvred into a horizontal position so that it is possible to examine the underside of the tree.
- Movement of the tree onto the back of a flat bed truck, where it would be placed on a bed of foam and or tyres and secured with straps for transport to the onsite temporary keeping place or another suitable location agreed with the RAP's.
- Unloading the tree using a crane, with the tree supported by straps. The tree will be supported on a well-drained bed of rubber or similar protective surface. Periodic treatment for termites or other insect infestation would be undertaken as required during storage.

It may be necessary to undertake insect eradication of the section of tree removed to minimise the potential for termite or other insect damage to the tree. This will be assessed



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with the arborist at the time of tree removal, and where required, appropriate fumigation will be undertaken prior to its temporary/permanent relocation.

Upon agreement with the RAP's as to suitable placement locations, specific measures will be taken depending on whether the tree is kept in an indoor or outdoor location. If the tree is to be retained in an outdoor location, it should be positioned such that it has shelter from rain and direct sunlight. Placement of a metal cap of the top of the trunk will also reduce potential for water ingress. If kept upright, an excavation will be made in the ground surface at least 3m in diameter and 1m deep. This will be filled with concrete and then covered in gravel to minimise moisture being drawn into the wood and discouraging termites from accessing the tree. A suitable mechanism for supporting the trunk will be established in consultation with the RAP's, which may include a steel shaft through the centre of the trunk, set in the concrete described above, or such other alternate measure that will not result in damage to the cultural scar. These methods are in accordance with the "Guidelines for the Preservation and Management of Carved and Scarred Trees" as produced by the Australian Museum 2010.

4.1.2 Reporting

TCPL will commission an archaeologist to produce reports detailing the results of the investigation programs. These reports will include:

- the aims and methodology of the investigation program;
- the location and characteristics of sites;
- the cultural values associated with the artefacts and the specific area from which the artefacts were salvaged;
- the number of Aboriginal objects collected from each site;
- the nature of the cataloguing system used;
- the lithic technology and reduction strategies adopted;
- an analysis of the regional and local contexts of the artefacts; and,
- a summary of consultation undertaken with the RAP's.

These reports will form part of the Annual Environmental Management Report/Annual Review (AEMR/Annual Review). They will be provided to the NSW DRE and OEHL within 12 months of the completion of each investigation program. The reports will also be provided to the RAP's at the conclusion of each salvage event.

Following completion of the salvage event, the archaeologist will provide relevant notification to the OEHL to enable updating of the AHIMs records.



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4.2 Site Protection

Twenty-five cultural heritage features comprising open scatters, isolated finds and scarred trees occur outside areas planned for future expansion and development of the mine.

Table 5 lists the cultural heritage sites requiring protection.

In order to protect and conserve these features, TCPL will undertake the following:

- Culturally modified trees will be fenced at a distance of 5m from the tree where practicable. The fence line location will be subject to physical constraints such as other vegetation and topography, fencing will be in accordance with Whitehaven Standards;
- Isolated Artefacts will be fenced with a 10m radius from the centre point from the identified GPS coordinate;

Artefact scatters will be assessed in terms of their extent based on the site record from the archaeological survey.

All fenced sites will be subject to 12 monthly inspections to verify the sites remain secure. RAP's will be invited to participate in annual reviews of the protective measures. Inspections of these sites will also consider any potential impacts associated with drainage lines and erosive processes and any options to mitigate impacts.

Blasting will be a regular feature of operations at site. The nature of the known artefacts (isolated finds, artefact scatters and culturally modified trees) suggests that blasting is likely to have minimal impact on these features, with no predicted impacts from blast vibration and flyrock likely to impact on those artefacts to be retained in-situ. An assessment of blast vibration will be undertaken where a known artefact site lies within the 300m exclusion zone.

Known artefact sites which are located within a blast exclusion zone will be subject to regular inspections, as part of the site monthly inspection regime, to verify no detrimental impact from blasting activities, and in accordance with the management measures specified in the Blast Management Plan.

Cultural heritage awareness will be included in the induction, as discussed in Section 4.7.

Table 5 Aboriginal Cultural Heritage Sites Protected for the Life of the Project

Site Name	Number in Figure 3	Site Type	Management
TCEP-ST-002	48	Culturally Modified Tree	Protective Fencing
TCEP-ST-007	54	Culturally Modified Tree	Protective Fencing
TCEP-ST-008	55	Culturally Modified Tree	Protective Fencing
TCEP-IF-003	3	Isolated Artefact	Protective Fencing
TCEP-IF-004	4	Isolated Artefact	Protective Fencing
TCEP-IF-005	5	Isolated Artefact	Protective Fencing
TCEP-IF-006	6	Isolated Artefact	Protective Fencing
TCEP-IF-018	18	Isolated Artefact	Protective Fencing
TCEP-IF-019	19	Isolated Artefact	Protective Fencing



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TCEP-IF-020	20	Isolated Artefact	Protective Fencing
TCEP-IF-023	23	Isolated Artefact	Protective Fencing
TCEP-IF-025	25	Isolated Artefact	Protective Fencing
TCEP-OS-001	26	Stone Artefact Scatter	Protective Fencing
TCEP-OS-002	27	Stone Artefact Scatter	Protective Fencing
TCEP-OS-003	28	Stone Artefact Scatter	Protective Fencing
TCEP-OS-004	29	Stone Artefact Scatter	Protective Fencing
TCEP-OS-005	30	Stone Artefact Scatter	Protective Fencing
TCEP-OS-006	31	Stone Artefact Scatter	Protective Fencing
TCEP-OS-016	41	Stone Artefact Scatter	Protective Fencing
TCEP-OS-018	43	Stone Artefact Scatter	Protective Fencing
TCEP-OS-019	44	Stone Artefact Scatter	Protective Fencing
GGOS2	-	Stone Artefact Scatter	Protective Fencing
GGOS3	-	Stone Artefact Scatter	Protective Fencing
GGOS4	-	Stone Artefact Scatter	Protective Fencing
NST1	NST1	Culturally Modified Tree	Protective Fencing

4.3 Subsurface Test Excavations

Subsurface archaeological investigation is proposed to establish the presence, extent and significance of Aboriginal objects that may occur in the vicinity of Goonbri Creek. Active works in the vicinity of Goonbri Creek do not occur until late in the mine life, with no impacts predicted during the 5 year term of this management plan. As a consequence, the detailed methodology for subsurface test excavations is not considered in this management plan. Details pertaining to the methodology for the subsurface excavations will be established in consultation with the OEH and the RAP's at least one year in advance of site development at Goonbri Creek, and will be incorporated into a new HMP at that time.

4.4 Contingency Plan for the Management or Previously Unidentified Cultural Heritage

The surface area within the mine site, which has been significantly altered by clearing and agricultural activity over the past 150 years, was examined by representatives of the RAP's during the initial EIS and later EA process, with 68 sites identified. It is considered that there is only a very low potential for the remaining area within the mine site to contain any other archaeological material and, even if present, it is likely to only constitute isolated or dispersed artefacts.

Notwithstanding the recognised low potential for other archaeological material to be present within the areas to be disturbed by mining and mining-related activities, TCPL will continue to invite representatives of the RAP's on a rotational roster to undertake pre soil strip inspections throughout the life of the mine.

In the event of the discovery of a new potential site or artefact, the following procedure will be followed.



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1. Work will cease in the area of discovery immediately.
2. If the area of discovery is in deposited material, then work will also cease immediately in the area where the material originated.
3. The person discovering the artefact will notify their supervisor immediately who will ensure that work has ceased and area(s) is (are) cordoned off with tape.
4. The supervisor will notify the Operations Manager or senior TCPL person on site.
5. The Operations Manager/Group Environment Manager will:
 - a. arrange a qualified archaeologist to undertake an assessment of the find and attend the site if deemed necessary and advise on its archaeological significance at their earliest availability;
 - b. arrange for RAPs, if not already present, to attend and advise on its cultural significance in consultation with the qualified archaeologist;
 - c. if the find is determined to be a site, notify OEH with the advice from the archaeologist and the RAP's for determination of further procedures.
6. If the find is confirmed as a site, the archaeologist will complete a Sites Register Card and forward to OEH for inclusion on the Aboriginal Heritage Information Management System (AHIMS) database.
7. If the find is confirmed as a site, TCPL will offer to facilitate inspection of the new site by other registered Aboriginal groups prior to salvage.
8. Subject to the recommendations of the archaeologist and the RAP's, artefacts from the site will be collected following the protocols outlined in Section 4.1 prior to further work being undertaken in the vicinity of the site.

Should any bone(s) be uncovered by mining staff or subcontractors working on the mine site, work should cease immediately in the area of the find, a suitably qualified person should be contacted to clearly identify the bone(s). If the bone(s) cannot be identified as animal bones, the police and RAP's will be advised of the discovery. Work will not recommence until both the police and the RAP's have given their permission to do so.

Failure to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the relevant Acts.

4.5 **Biodiversity Offset Area**

The biodiversity offset area ("Willeroi") established for the Tarrawonga extension project was not subject to a cultural heritage assessment, and as such is not covered by the provisions of the Part 3A Project Approval relating to cultural heritage. On this basis, the provisions of the NPW Act apply in full at the "Willeroi" property in relation to the protection of items of cultural heritage. The biodiversity offset area is being set aside for conservation purposes, in perpetuity, and is unlikely to be subject to any surface disturbance activity other than those activities associated with general land management and enhancement of vegetation communities. As a consequence, any disturbance activities within the "Willeroi" property will be subject to the Due Diligence Code of Practice for the Protection of Aboriginal objects in NSW. The completion of the Aboriginal Cultural Heritage Strategy, as required under the Project Approval, will include additional consideration to the Aboriginal heritage values

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associated with the area, and the potential opportunities to enhance and conserve Aboriginal heritage within the biodiversity offset site.

4.6 Aboriginal Heritage Conservation Strategy

Recognising the cumulative impact of proposed mining activities within the wider Leard State Forest area, in addition to this HMP, an Aboriginal Heritage Conservation Strategy will be prepared and implemented for the Boggabri-Tarrawonga-Maules Creek complex, to enhance and conserve the Aboriginal Cultural Heritage Values (both cultural and archaeological) of this area and provide for their long term management. The Strategy will be developed in accordance with the following requirements of the Tarrawonga Project Approval:

The Proponent shall prepare and implement an Aboriginal Heritage Conservation Strategy for the Project and Biodiversity Offset Strategy areas to the satisfaction of the Secretary. This Strategy must enhance and conserve the Aboriginal cultural heritage values (both cultural and archaeological) and provide for their long term protection and management. The Strategy must:

- (a) be prepared by suitably qualified and experienced person/s whose appointment has been endorsed by the Secretary;*
- (b) be prepared in consultation with OEH, the local Aboriginal community and other mines within the Leard Forest Mining precinct, and submitted to the Secretary for approval within 12 months from the date of project approval;*
- (c) identify the Aboriginal cultural heritage values of the Biodiversity Offset Strategy areas;*
- (d) identify areas of high Aboriginal cultural heritage significance within both the site and the Leard Forest Mining Precinct;*
- (e) identify a range of options for enhancing and conserving Aboriginal cultural heritage values, with specific consideration of the potential for the long-term protection and management of significant sites within either the site, the Biodiversity Offset Strategy Areas, or other lands within the Leard Forest Mining Precinct identified as having high cultural heritage significance to the Aboriginal community; and*
- (f) consider cumulative impacts and potential for developing joint initiatives with other mines within the Leard Forest Mining Precinct for enhancing and conserving Aboriginal cultural heritage values.*

Options to enhance and conserve Aboriginal Cultural Heritage Values and mitigate cumulative impact within the complex will include the following:

- Identification and management of the Aboriginal cultural heritage values of the proposed biodiversity offset areas;
- Development of a long term storage strategy for Aboriginal objects salvaged from identified sites within the complex;
- In cooperation with Boggabri Coal and the Maules Creek Project, participate in the establishment of a regional keeping place, or similar facility that provides opportunities for storage and cultural heritage education.

The Aboriginal Cultural Heritage Strategy will focus on opportunities to conserve and enhance areas of cultural heritage significance that are not impacted by the approved



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projects, and how these areas can be used to enhance knowledge and cultural understanding in the wider community.

Development of the Aboriginal Cultural Heritage Strategy will be undertaken progressively with the Boggabri and Maules Creek projects, with an approved expert, as endorsed by the Secretary, and in consultation with the RAP's for each project.

4.7 Workforce Education

Prior to any person undertaking work on the mine site, they will undergo cultural awareness training as provided in the general mine site induction. Any person undertaking soil stripping activities will undertake such works in consultation with the Environmental Officer and RAP's undertaking site monitoring during pre-strip works.

The Environmental Officer at site will also provide general education to the workforce via toolbox talks on a range of environmental issues relevant to operations. This will include discussion on matters relating to cultural heritage and the obligations of personnel to preserve and protect items of cultural heritage significance. This will be further embodied in pre-clearance procedures at site that requires Environmental Officer sign off prior to site disturbance to ensure Aboriginal heritage items are considered in site operations.

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5 CONSULTATION, MONITORING AND REPORTING

5.1 Consultation Protocol

Subject to any modifications initiated by the RAP's, the following protocol will be followed with respect to consultation:

1. Prior to any topsoil stripping campaign, the Operations Manager, or authorised delegate, will notify the RAP's and advise of the extent, location, timing and expected duration of the planned campaign and invite a representative to monitor the topsoil stripping activities. For safety and logistical reasons, RAP involvement will be rotated such that one representative from each of up to three groups will be on site each day as required. Where practicable a minimum of three days' notice will be provided in advance of each campaign to enable representation as required.
2. At the request of the RAP's, the Operations Manager, or authorised delegate, will avail themselves to attend community meetings at the RAP's offices or to arrange site visits for interested personnel or members. A meeting will be held with RAP's prior to each salvage event to ensure the stakeholders are informed of the intended works and a clear line of communication is established for those works, outlining the expectations of the RAP's, the Archaeologist and TCPL throughout the process.
3. In the event that any possible archaeological sites are identified in the absence of the RAP's, the Operations Manager, or authorised delegate, will notify the RAP's following the initiation of the procedures identified in Section 4.4.
4. If requested by the RAP's, TCPL will facilitate access to known sites within the mining lease areas, and along the Haul Route, subject to satisfaction of required safety protocols. The Aboriginal Heritage Conservation Strategy, required under Condition 51 of PA 11_0047 requires determination of cultural heritage values within the Biodiversity Offset Strategy Areas. Development of this strategy, in consultation with the other mining projects and Aboriginal Stakeholders will further define heritage values of the offset areas, and any ongoing access arrangements to those sites.
5. If requested by members of the Aboriginal community, TCPL will facilitate access to any artefact material salvaged from the TCM and stored within an agreed Keeping Place either at the site or other Whitehaven controlled property. Any material held at the Cumbo Gunerah Keeping Place would be subject to any access requirements of the Red Chief LALC.

The effectiveness and value of the consultation with the RAP's will be periodically reviewed. In the event there is agreement that the approach to consultation needs to change, the changed procedures would be documented and a copy forwarded to the Secretary and recorded in the relevant AEMR/Annual Review. All consultation will be diarised.



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5.2 Monitoring and Reporting

Monitoring undertaken by the RAP's will be documented. In the event that an Aboriginal artefact or site is identified, and in accordance with the procedure documented in Section 4..1.2, a site register card will be completed and forwarded to OEH for entry onto the AHIMS database.

In addition, the results of monitoring undertaken on the mine site will be summarised in each relevant AEMR/Annual Review, with the RAP's kept informed as to developments by virtue of the ongoing consultation with those groups. TCPL will discuss the measures implemented to preserve and protect Aboriginal cultural heritage in the AEMR/Annual Review.

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6 MANAGEMENT OF INCIDENTS, COMPLAINTS AND NON-COMPLIANCES

6.1 Compliance and Incident Management

To ensure compliance with the requirements of the NPW Act, EP&A Act and the conditions of PA 11_0047, the following measures will be implemented:

- Continue to include information relating to Aboriginal cultural heritage in inductions for all site personnel (refer to Section 4.7);
- Maintain protection measures for sites;
- Maintain ongoing consultation with the RAP's over the life of the mine, including appropriate RAP representation during topsoil stripping, disturbance activities and archaeological fieldwork (e.g. collection of artefacts);
- Maintain a record of known Aboriginal heritage sites (e.g. status and location) including identification of these sites on mine plans. Copies of the site cards completed for each heritage site will be retained in the site office for detailed information about each site;
- Require a land disturbance protocol be followed at site whereby site disturbance does not commence until sign off is provided by the Environmental Officer;
- Undertake all salvage works in accordance with requirements outlined in Section 4.1;
- Undertake all consultation as outlined in Section 5.1;
- Undertake regular reviews of this HMP as outlined in Section 7.

Any incidents will be recorded and managed via the Whitehaven incident management process. Incident reporting will be conducted in accordance with the requirements of Condition 8 of Schedule 5 of PA 11_0047, requiring notification at the earliest possible opportunity, the Secretary, and any other relevant agency, of any incident that has caused or threatens to cause material harm to the environment, or other breach or incident associated with the Project. Any notification would be followed by a written report within 7 days of the incident, and provision of any other information as may be requested.

A discussion of any incidents will also be provided in the AEMR/Annual Review.

For the purposes of this plan, an incident is defined as any activity or action that results in the damage to, or destruction of heritage sites within the Tarrawonga project boundary.

6.2 Complaints

A complaints management protocol has been developed to ensure an appropriate and consistent level of reporting, response and follow-up is adopted by TCPL. A complaint is verbal or written advice from any party in response to activities undertaken at the Tarrawonga Mine site. The following complaints management protocol will be followed on all complaints received relating to Aboriginal cultural heritage:



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- A publicly advertised telephone complaints line will be in place to receive complaints during operating hours and record complaints at other times.
- Each complaint received will be recorded on a Complaints Register, which will include the following details:
 - The date and time of complaint.
 - Any personal details the complainant wishes to provide or if no such details are provided a note to that effect.
 - The nature of the incident that led to the complaint.
 - The action taken by TCM in relation to the complaint, including any follow-up contact with the complainant.
 - If no action was taken by TCM, the reason why no action was taken.
- The Environment Officer will be responsible for ensuring that an initial response is provided within 24 hours of receipt of a complaint (except in the event of complaints recorded when the mine is not operational).
- Additional measures will be undertaken as required to address the complaint. This may include visiting the complainant, or inviting the complainant to the mine site.
- Once the identified measures are undertaken, the Group Environment Manager will sign off on the relevant complaint within the Complaints Register.
- If necessary, follow-up monitoring or will take place to confirm the source of the complaint is adequately mitigated.
- A copy of the Complaints Register will be kept by TCM and made available to the Tarrawonga Coal Mine Community Consultative Committee (CCC) and the complainant (on request). Complaints are also listed on the Whitehaven website (www.whitehavencoal.com.au) and a summary of complaints received every 12 months will be provided to DPI, NSC, GSC, OEH/EPA, DRE and the CCC through the AEMR/Annual Review.

Based on the nature of individual complaints, specific contingency measures may be implemented to the (reasonable) satisfaction of the complainant. The Group Environment Manager retains ultimate responsibility to ensure that complaints received are properly recorded and addressed appropriately.

6.3 Dispute Resolution Process

For the purposes of this management plan, a dispute is a disagreement between Tarrawonga Coal, an individual or group of RAP's, or consulting Archaeologist in relation to the measures required to implement this management plan.

In the event of a dispute arising between TCPL and the RAP's in relation to implementation of this management plan, the following protocol will be followed:

1. The Group Environment Manager will discuss the issue with the disputer within 2 weeks (10 business days) of becoming aware of the dispute. TCPL may engage



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- a Heritage Advisor to assist in this process.
2. If a resolution is not reached from the above discussions, a meeting will be convened at site between TCPL, the RAP's and the Heritage Advisor to discuss the issue and reach consensus. This meeting is to be convened within 1 month of the discussion identified in 1 above.
 3. If a resolution is still not achieved, the matter will be referred to the Secretary for a decision within 2 weeks (10 working days) of the meeting identified in 2 above.

Where a dispute is technical in nature (ie. relates to methodology or interpretive issues) for implementation of the management plan, the same process will be followed, however if a consensus is not reached, TCPL may refer the matter to an independent third party for review. As TCPL will have the right of engagement of an independent third party, the costs associated with engagement of an independent third party will be borne by TCPL. The independent third party will be identified by writing to one of the following:

The President
Australian Archaeological Association
M257, 35 Sterling Highway
University of Western Australia
Crawley WA 6009
Australia.
or

Australian Association of Consulting Archaeologists Inc
AACAI Secretariat Officer
Box 196
585 Little Collins Street
Melbourne VIC 3000



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7 DOCUMENT REVIEW AND CONTINUOUS IMPROVEMENT

This document will be reviewed internally on an annual basis following completion of the Annual Review, and/or following a heritage related incident, audit, or modification to the conditions of approval.

TCM will investigate and implement ways to improve the environmental performance of the project over time. This will be achieved by keeping abreast of best practice in the industry for cultural heritage management and controls and reporting on outcomes of surveys and monitoring in the AEMR/Annual Review.



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8 REFERENCES

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Resource Strategies Pty Ltd (2011) *Tarrawonga Coal Project Environmental Assessment*. Prepared for Tarrawonga Coal Pty Ltd.

Australian Museum Materials Conservation Unit (2010) *Guidelines for the Preservation and Management of Carved and Scarred Trees*

Appendix 1 Record of Consultation between TCPL, OEH and Registered Stakeholders

TARRAWONGA EXTENSION PROJECT CONSULTATION RECORD			
DATE	RECIPIENT	CONSULT TYPE	CONSULT RESPONSE
23-Sep-10	Red Chief LALC	Letter requesting names of Aboriginal parties interested in registering for consultation process	No response
23-Sep-10	Office of the Registrar	Letter requesting names of Aboriginal parties interested in registering for consultation process	No registered Aboriginal owners of subject land - referred to Red Chief LALC
23-Sep-10	NTS Corp	Letter requesting names of Aboriginal parties interested in registering for consultation process	No response
23-Sep-10	DECCW Dubbo EPRG	Letter requesting names of Aboriginal parties interested in registering for consultation process	Letter received with listing of known Aboriginal parties that may be interested in registering
23-Sep-10	National Native Title Tribunal	Letter requesting names of Aboriginal parties interested in registering for consultation process	Letter received confirming no registered native title claims, unregistered claimant applications or land use agreements
23-Sep-10	Namoi CMA	Letter requesting names of Aboriginal parties interested in registering for consultation process	No response
23-Sep-10	Narrabri Shire Council	Letter requesting names of Aboriginal parties interested in registering for consultation process	No response
28-Oct-10	Aboriginal Native Title Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	Response received registering for the project - 2nd Nov 2010
28-Oct-10	Bigundi Biame Traditional People	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
28-Oct-10	Bullen Bullen Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	Response received registering for the project - 2nd Nov 2010
28-Oct-10	Cacatua Culture Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	Response received registering for the project - 4th Nov 2010
28-Oct-10	Tarrawonga Culture Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
28-Oct-10	Ellielewis Cultural Heritage Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
28-Oct-10	Giwiir Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	Response received registering for the project - 15th Nov 2010
28-Oct-10	Gomerioi Narrabri Aboriginal Corp	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
28-Oct-10	Gunida Gunyah Aboriginal Corp	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	Response received registering for the project - 4th Nov 2010
28-Oct-10	Hunter Valley Cultural Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
28-Oct-10	Minning Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
28-Oct-10	Min Min Aboriginal Corp	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	Response received registering for the project 4th Nov 2010
28-Oct-10	Red Chief LALC	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
28-Oct-10	Upper Hunter Heritage Consultants	Letter seeking request for registration for Tarrawonga Project on basis of responses from above	No response received.
2-Nov-10	General Public	Public Notice in Namoi Valley Independent seeking registration of interest	No additional Registrations received.
7-Dec-10	Dubbo DECCW ERPG	Official record of Aboriginal parties that registered an interest in the consultation process	No response received
7-Dec-10	Red Chief LALC	Official record of Aboriginal parties that registered an interest in the consultation process	No response received
4-Jan-11	Aboriginal Native Title Consultants	Letter seeking comment on draft Methodology and invitation to attend information session	No response received. Phone call made 19th January to follow up and confirm attendance
4-Jan-11	Bullen Bullen Consultants	Letter seeking comment on draft Methodology and invitation to attend information session	No response received. Phone call made 19th January to follow up and confirm attendance
4-Jan-11	Cacatua Culture Consultants	Letter seeking comment on draft Methodology and invitation to attend information session	No response received. Phone call made 19th January to follow up and confirm attendance
4-Jan-11	Giwiir Consultants	Letter seeking comment on draft Methodology and invitation to attend information session	No response received. Phone call made 19th January to follow up and confirm attendance
4-Jan-11	Gunida Gunyah Aboriginal Corp	Letter seeking comment on draft Methodology and invitation to attend information session	No response received. Phone call made 19th January to follow up and confirm attendance
4-Jan-11	Min-Min Aboriginal Corp	Letter seeking comment on draft Methodology and invitation to attend information session	No response received. Phone call made 19th, 20th and 21st January to follow up and confirm attendance - no answer
4-Jan-11	Red Chief LALC	Letter seeking comment on draft Methodology and invitation to attend information session	No response received. Phone call made 19th January to follow up and confirm attendance
25-Jan-11	Aboriginal Native Title Consultants	Project Information Session	Participated in session on the Tarrawonga Extension Project
25-Jan-11	Bullen Bullen Consultants	Project Information Session	Participated in session on the Tarrawonga Extension Project
25-Jan-11	Cacatua Culture Consultants	Project Information Session	Participated in session on the Tarrawonga Extension Project
25-Jan-11	Gunida Gunyah Aboriginal Corp	Project Information Session	Participated in session on the Tarrawonga Extension Project
25-Jan-11	Red Chief LALC	Project Information Session	Participated in session on the Tarrawonga Extension Project
25-Jan-11	Tarrawonga Mine	Verbal advice from John Matthews on behalf of Minning Consultants	Registration of interest in consultation process by Minning Consultants
1-Feb-11	Tarrawonga Mine	Letter from Cacatua Consultants with comments on draft Methodology	Letter in response to request of 4th Jan
24-Feb-11	Tarrawonga Mine	Letter from Gunida Gunyah on draft Methodology	Letter in response to request of 4th Jan
24-Feb-11	Aboriginal Native Title Consultants	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
24-Feb-11	Bullen Bullen Consultants	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
24-Feb-11	Cacatua Culture Consultants	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
24-Feb-11	Giwiir Consultants	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
24-Feb-11	Gunida Gunyah Aboriginal Corp	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
24-Feb-11	Minning Consultants	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
24-Feb-11	Min Min Aboriginal Corporation	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
24-Feb-11	Red Chief LALC	Letter documenting outcomes from Project Information Session and invite to field surveys	No response necessary
2-Mar-11	Tarrawonga Mine	Registration of interest from Bigundi Biame Traditional People	Registration of interest accepted on basis of prior works on site - invited to attend field surveys.
14-Mar-11	All RAP's	Field Survey Works - Cultural significance and Aboriginal Heritage Sites discussed	Participated in surveys from 14th-17th March. At the conclusion the RAP's agreed adequate survey had been completed but additional survey would be required prior to disturbance of Goonbri Creek, and pre-clearance works in the area of Leard Forest. These requirements could be included in the Management Plan.
27-Jun-11	Aboriginal Native Title Consultants	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made on 19th July to seek feedback - advised that the assessment and consultation was satisfactory.
27-Jun-11	Bigundi Biame Traditional People	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made on 19th, 20th and 21st July to seek feedback - advised that comments would be emailed.
27-Jun-11	Bullen Bullen Consultants	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made on 19th, 20th, 21st and 25th July - no answer.
27-Jun-11	Cacatua Culture Consultants	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made 19th, 20th July from which a request for new copy was made. The ACHA was emailed 20th July with comments to be made in next few days.
27-Jun-11	Giwiir Consultants	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made 19th, 20th July from which a request for new copy was made. The ACHA was emailed 20th July with a follow up call on the 20th, 21st to confirm receipt, but no answer. A further call on 25th July and he indicated he had still not received the report and asked that it be emailed again. Subsequent follow up on 25th he indicated he had not yet opened his emails. A further call was made on the 26th when he confirmed receipt of the ACHA. Made comment that the Goonbri Creek area should be subject to subsurface excavations prior to disturbance and that scar trees be fenced to avoid disturbance. He agreed the consultation undertaken was satisfactory.
27-Jun-11	Gunida Gunyah Aboriginal Corp	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made 19th July at which it was advised the Board had met to discuss the ACHA the previous week and that a letter would issue next week.
27-Jun-11	Min Min Aboriginal Corp	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made 19th, 20th, 21st, 25th July but no answer.
27-Jun-11	Minning Consultants	Letter with copy of Draft ACHA seeking comments	No response received. Phone call made 19th July but phone disconnected.
27-Jun-11	Red Chief LALC	Letter with copy of Draft ACHA seeking comments	No Response Received. Phone call made 19th, 20th July. Confirmed receipt of the ACHA but not yet reviewed. Would provide comments by due date.
26-Jul-11	Tarrawonga Mine	Email from Bigundi Biame in relation to the Draft ACHA	Agreed with the mitigation and management measures and recommendations in the report. Requested a meeting to further discuss.
31-Jul-11	Tarrawonga Mine	Letter from Cacatua Culture Consultants on the Draft ACHA	Agreed with the recommendations made in the report. Requested engagement in the development of the Management Plan.
8-Aug-11	Red Chief LALC	Phone call to attend meeting to further discuss project and Draft ACHA	Confirmed attendance at meeting for 15th August
8-Aug-11	Bigundi Biame Traditional People	Phone call to attend meeting to further discuss project and Draft ACHA	Confirmed attendance at meeting for 15th August
15-Aug-11	Red Chief LALC & Bigundi Biame Traditional People	Meeting in relation to Project and ACHA	Meeting held to discuss the project and ACHA generally
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DATE	RECIPIENT	CONSULT TYPE	CONSULT RESPONSE
13-May-13	Cacatua Culture Consultants	Letter with copy of HMP for review	No response
13-May-13	Red chief LALC	Letter with copy of HMP for review	No response
13-May-13	Giwiir Consultants	Letter with copy of HMP for review	No response
13-May-13	Gunida Gunyah	Letter with copy of HMP for review	No response
13-May-13	Minning Consultants	Letter with copy of HMP for review	No response
13-May-13	Min Min Aboriginal Corporation	Letter with copy of HMP for review	No response
13-May-13	Aboriginal Native Title Consultants	Letter with copy of HMP for review	No response
13-May-13	Bigundi Biame Traditional People	Letter with copy of HMP for review	No response
13-May-13	Bullen Bullen Consultants	Letter with copy of HMP for review	No response
5-Jul-13	Cacatua Culture Consultants	Phone call to confirm they received the plan	Advised that plan not received due to a change of address
5-Jul-13	Cacatua Culture Consultants	Letter with copy of HMP for Review hand delivered to revised address	No response received
5-Jul-13	Red Chief LALC	Phone call to confirm they received the plan	Acknowledged receipt of the plan and that feedback would be provided the following week
5-Jul-13	Giwiir Consultants	Phone call to confirm they received the plan	Phone went to message bank - message left for call back in relation to the HMP - no response received
5-Jul-13	Gunida Gunyah	Phone call to confirm they received the plan	Acknowledged receipt of the plan - HMP on agenda for meeting of 10th July following which comments would be made
5-Jul-13	Minning Consultants	Phone call to confirm they received the plan	Message that phone service is unavailable with no message bank or alternate contact details - not contactable
5-Jul-13	Min Min Aboriginal Corporation	Phone call to confirm they received the plan	Acknowledged receipt of the plan and advised any comments would be made by 19th July.
5-Jul-13	Aboriginal Native Title Consultants	Phone call to confirm they received the plan	Spoke with John who had not received plan. Agreed to deliver copy of the plan to him at Maules Creek site.
5-Jul-13	Bigundi Biame Traditional People	Phone call to confirm they received the plan	Left message on message bank for return call to confirm receipt of the plan
5-Jul-13	Bigundi Biame Traditional People	Return phone call received	Confirmed that the plan had been received and reviewed. No issues with the plan subject to adequate investigations if additional artefacts are found
5-Jul-13	Bullen Bullen Consultants	Phone call to confirm they received the plan	No answer and no message bank to provide message for call back.
12-Jul-13	Cacatua Culture Consultants	Phone call to confirm they received the plan at new address	Acknowledged receipt of the plan and that any comments would be provided by 19th July
12-Jul-13	Aboriginal Native Title Consultants	Phone call to confirm they received the plan at the Maules Creek Site	Acknowledged receipt of the plan and advised any comments would be made by the 19th July

Appendix 2 Aboriginal Heritage Sites Recorded at the Tarrawonga Coal Mine

Site Name: NST 1 AHIMS site number 20-4-0161

GPS Reference: 227458 6606533±10m (hand held)

Map Reference: 8936-4-S, 1:25,000 scale Topographic map.

Site Type: Scarred tree: four possible scars on the one tree, three on the stump and one on the dead trunk lying on the ground

Species: Box. The living stump is 121cm tall; the main trunk has been felled by wind or storm and lies to the east of the stump.

Trunk scar (see Plate 1):

Length: 100 cm

Width: 76 cm

Tree girth middle of the scar: 180 cm

Depth of the bark around the scar: 10 cm

Height of scar above ground: approx. 260 cm when trunk standing

Aspect: probably southwards

Agency: probably Aboriginal bark removal

Interpretation: bark removed for shield.

Stump scar 1 (see Plate 2):

Length: 135 cm

Width: 35 cm

Tree girth middle of the scar: 273 cm

Depth of the bark around the scar: 12 cm

Height of scar above ground: approx. 20 cm

Aspect: southerly

Agency: probably deliberate bark removal. Possible stone axe marks around lower end. Interpretation: bark removed for a shield.

Stump scar 2 (see Plate 2):



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Length: 20 cm

Width: 15 cm

Tree girth middle of the scar: 305 cm

Depth of the bark around the scar: 3 cm

Height of scar above ground: probably 25

Aspect: south-westerly

Agency: possible contact from machinery.



Plate 1: NST1 – Trunk Scar



Plate 2: NST 1 - Stump scar 1 (right) and Stump scar 2 (lower left)

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Plate 3: NST 1 – Stump scar 3

Site Name: NAS01 AHIMS site number 20-4-0092

Status: Salvaged (AHIP 2312) and stored at the Cumbo Gunerah Keeping Place

GPS Reference: 227359 6607672

Map Reference: Boggabri 8936-4-S, 1:25,000 scale Topographic map
Site Type: Artefact scatter of four artefacts

Land unit: gentle lower slopes, or undulating plain <3°

Archaeological visibility of site: 90%

Artefact type: Core or
scraper/adze Material:
Chert or volcanic

Diagnostic features: 8+ negative
flake scars Cortex: 0

- 5 metres away

Artefact type: Core
Material: Volcanic

Diagnostic features: 4 negative scar flakes

- 10 metres away from first

Artefact type: Core Material: Volcanic

- 20 metres to east of above

Artefact type: Core or scraper/adze

Material: Agate

Site Name: NAS02 AHIMS site number 20-4-0156

Status: Salvaged (AHIP 1123843) and stored at the Cumbo Gunerah Keeping Place

GPS Reference: 228888 6606030



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Map Reference: Boggabri 8936-4-S, 1:25,000 scale Topographic map
Site Type: Artefact scatter of two artefacts (only one artefact identified during 2010 assessment)

Land Unit: gentle lower slopes, or undulating plain < 2°

Land Use: cleared and probably harrowed for pasture improvement
Archaeological visibility of site: 70%

Artefact Type: Flake and scraper/adze> Material: Metasedimentary

Diagnostic Features: Dorsal ridge, axial termination, broad platform and retouch to left margin.

Cortex: 0

Site Name: TCEP-OS-001

Located on a level position approximately 50 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of three artefacts.

Site Name: TCEP-OS-002

Located on a level position approximately 20 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts.

Site Name: TCEP-OS-003

Located on a level position approximately 30 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of four artefacts (including a core).

Site Name: TCEP-OS-004

Located on a level position approximately 80 m west of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts.

Site Name: TCEP-OS-005

Located on a level position approximately 100 m west of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts.

Site Name: TCEP-OS-006

Located on a level position approximately 40 m west of Goonbri Creek this site has been identified as a low density artefact scatter consisting of six artefacts (including one core).

Site Name: TCEP-OS-007

Located on a level position approximately 20 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of eight artefacts.

Site Name: TCEP-OS-008

Located on a level position approximately 40 m east of Goonbri Creek this site has been identified

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as a low density artefact scatter consisting of three artefacts.

Site Name: TCEP-OS-009

Located on a level position approximately 20 m west of Goonbri Creek this site has been identified as a high density artefact scatter consisting of 61 artefacts (including 10 cores).

Site Name: TCEP-OS-010

Located on a level position approximately 100 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of three artefacts.

Site Name: TCEP-OS-011

Located on a slightly inclined position approximately 200 m west of Goonbri Creek this site has been identified as a low density artefact scatter consisting of three artefacts. The site is gently sloping with an east to southeast aspect.

Site Name: TCEP-OS-012

Located on a level position approximately 20 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of four artefacts (including one core).

Site Name: TCEP-OS-013

Located on a level position approximately 200 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of seven artefacts (including two cores).

Site Name: TCEP-OS-014

Located in an elevated position approximately 700 m west of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts. The site is gently sloping with an east to southeast aspect.

Site Name: TCEP-OS-015

Located on a level position approximately 20 m west of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts (including one core).

Site Name: TCEP-OS-016

Located on a level position approximately 30 m south of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts. The site is gently sloping with an east to southeast aspect.

Site Name: TCEP-OS-017

Located on a level position approximately 80 m north of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts (including one core). The site is gently sloping with an east to southeast aspect.

Site Name: TCEP-OS-018

Located on a slight inclined position approximately 20 m north of Goonbri Creek this site has been identified as a low density artefact scatter consisting of six artefacts (including two cores). The site

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is gently sloping with an east to southeast aspect.

Site Name: TCEP-OS-019

Located on a slight inclined position approximately 20 m west of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts. The site is gently sloping with an east to southeast aspect.

Site Name: TCEP-OS-020

Located on an elevated position in Leard State Forest this site has been identified as a low density artefact scatter consisting of six artefacts. The site is gently sloping with an east to southeast aspect.

Site Name: TCEP-OS-021

Located on a level position approximately 180 m east of Goonbri Creek this site has been identified as a low density artefact scatter consisting of two artefacts.

Site Name: GGOS 1

Located on a level position approximately 100 m north of Goonbri Creek, this site had been found previous to the March 2011 survey. It has been identified as a medium density artefact scatter consisting of 15 to 20 artefacts. The artefacts identified were flaked chalcedony, volcanics, mudstone, porcellanite and chert with a maximum artefact density of 4 per square metre (m²).

Site Name: TCEP-ST-001

Located on an elevated position in Leard State Forest, this site has been identified as a modified tree and lies in close proximity with TCEP-ST-010 and TCEP-ST-011. The site is gently sloping with an east to southeast aspect. The shape of the scar is characterised by an oval and its orientation is north.

Site Name: TCEP-ST-002

Located on a level position approximately 20 m west of Goonbri Creek this site has been identified as a modified tree. The tree is currently a stump and the shape of the scar is characterised by an oval, with an orientation facing north.

Site Name: TCEP-ST-003

Located on a level position approximately 150 m east of Goonbri Creek this site has been identified as a modified tree. The shape of the scar is characterised by being round in shape and its orientation facing south-west.

Site Name: TCEP-ST-004

Located on an elevated position alongside Goonbri Road approximately 150 m north of Goonbri Creek, this site has been identified as a modified tree. The site is gently sloping with an east to southeast aspect. The width of the scar is 260 mm with an orientation facing south-east.

Site Name: TCEP-ST-005

Located on a slight inclined position approximately 20 m north of Goonbri Creek, this site has been identified as a modified tree in close proximity to TCEP-ST-006. The site is gently sloping with an



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east to south-east aspect. The tree has two scars both characterised by a round shape, with an orientation facing north.

Site Name: TCEP-ST-006

Located on a slight inclined position approximately 20 m north of Goonbri Creek, this site has been identified as a modified tree in close proximity to TCEP-ST-005. The site is gently sloping with an east to south-east aspect. The shape of the scar is characterised by an oval and its orientation is north.

Site Name: TCEP-ST-007

Located on a level position approximately 250 m north of Goonbri Creek, this site has been identified as a modified tree. The tree has two scars both characterised by an oval shape, with an orientation facing north.

Site Name: TCEP-ST-008

Located on a level position approximately 300 m west of Bollol Creek this site has been identified as a modified tree. It lies in close proximity to TCEP-ST-009. The shape of the scar is characterised by an oval, with an orientation facing south-west.

Site Name: TCEP-ST-009

Located on a level position approximately 100 m west of Bollol Creek this site has been identified as a modified tree. It lies in close proximity to TCEP-ST-008. The shape of the scar is characterised by an oval, with an orientation facing south-west.

Site Name: TCEP-ST-010

Located on an elevated position in Leard State Forest, this site has been identified as a modified tree. The site is gently sloping with an east to south-east aspect. The shape of the scar is characterised by an oval, with an orientation facing south-east.

Site Name: TCEP-ST-011

Located on an elevated position in Leard State Forest, this site has been identified as a modified tree. The site is gently sloping with an east to southeast aspect. The width of the scar is 110 mm and orientation on the tree is 280 degrees. The shape of the scar is characterised by an oval, with an orientation facing south-west.

Site Name: TCEP-IF-001

Located on a level position approximately 400 m north of Goonbri Creek this site has been identified as an isolated flake. The site is gently sloping with an east to south-east aspect.

Site Name: TCEP-IF-002

Located on an elevated position in Leard State Forest this site has been identified as an isolated stone flake. The site is gently sloping with an east to south-east aspect.

Site Name: TCEP-IF-003

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Located on a level position approximately 50 m south of Bollol Creek this site has been identified as a hammer stone artefact.

Site Name: TCEP-IF-004

Located on a level position approximately 300 m north of Goonbri Creek this site has been identified as isolated artefact.

Site Name: TCEP-IF-005

Located on a level position approximately 10 m south of Goonbri Creek this site has been identified as a isolated flaked artefact.

Site Name: TCEP-IF-006

Located on a level position approximately 300m north of Goonbri Creek this site has been identified as isolated quartz flake artefact.

Site Name: TCEP-IF-007

Located on a level position approximately 30 m east of Goonbri Creek this site has been identified as an isolated flaked artefact.

Site Name: TCEP-IF-008

Located on a level position approximately 150 m west of Goonbri Creek this site has been identified as an isolated artefact with potential retouch.

Site Name: TCEP-IF-009

Located on a level position approximately 150 m east of Goonbri Creek this site has been identified as an isolated silcrete flake artefact.

Site Name: TCEP-IF-010

Located on a elevated position approximately 380 m west of Goonbri Creek this site has been identified as an isolated silcrete flake artefact.

Site Name: TCEP-IF-011

Located on a slight inclined position approximately 150 m west of Goonbri Creek this site has been identified as an isolated mudstone flake artefact.

Site Name: TCEP-IF-012

Located on an elevated position approximately 1,000 m west of Goonbri Creek this site has been identified as isolated stone flake.

Site Name: TCEP-IF-013

Located on an elevated position approximately 1,500 m west of Goonbri Creek this site has been identified as isolated mudstone flake artefact.

Site Name: TCEP-IF-014

Located on an elevated position approximately 900 m west of Goonbri Creek this site has been

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identified as isolated fine-grained siliceous (FGS) flake artefact.

Site Name: TCEP-IF-015

Located on an elevated position approximately 700 m west of Goonbri Creek this site has been identified as isolated stone flake artefact.

Site Name: TCEP-IF-016

Located on a level position approximately 40 m west of Goonbri Creek this site has been identified as isolated stone flake artefact.

Site Name: TCEP-IF-017

Located on a slight inclined position approximately 10 m west of Goonbri Creek this site has been identified as isolated stone flake artefact.

Site Name: TCEP-IF-018

Located on a slight inclined position approximately 20 m west of Goonbri Creek this site has been identified as an isolated stone flake artefact.

Site Name: TCEP-IF-019

Located on a level position approximately 50 m south of Bollol Creek this site has been identified as a grinding stone artefact possibly made of sandstone.

Site Name: TCEP-IF-020

Located on a level position approximately 20 m east of Goonbri Creek this site has been identified as an isolated silcrete flake artefact.

Site Name: TCEP-IF-021

Located on a slight inclined position approximately 300 m north of Goonbri Creek this site has been identified as isolated silt stone core.

Site Name: TCEP-IF-022

Located on a slight inclined position approximately 200 m north of Goonbri Creek this site has been identified as isolated silt stone flake artefact.

Site Name: TCEP-IF-023

Located on a slight inclined position approximately 20 m west of Goonbri Creek this site has been identified as isolated grey stone flake artefact.

Site Name: TCEP-IF-024

Located on a slight inclined position approximately 20 m west of Goonbri Creek this site has been identified as isolated quartz flake artefact.

Site Name: TCEP-IF-025

Located on a level position approximately 30 m west of Goonbri Creek this site has been identified



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as isolated stone flake artefact.

Site Name: BC17

Located on an elevated position in Leard State Forest this site had been found previous to the March 2011 survey and identified as an isolated stone flake. The site is gently sloping with an east to southeast aspect.

Site Name: BC18

Located on an elevated position in Leard State Forest this site had been found previous to the March 2011 survey and identified as an isolated stone flake. The site is gently sloping with an east to south-east aspect.

Site Name: BC22

Located on an elevated position in Leard State Forest this site had been found previous to the March 2011 survey and identified as an isolated stone flake. The site is gently sloping with an east to south-east aspect.