



Environmental & Heritage Management P/L

Aboriginal and Non Indigenous Heritage Assessment

Mt Piper Power Station Ash Placement Project

Lithgow Local Government Area, NSW.

May 2010

OzArk EHM 145 Wingewarra St (PO Box 2069) Dubbo NSW 2830

Report Prepared by OzArk Environmental & Heritage Management Pty Ltd For Sinclair, Knight and Merz

Phone: (02) 6882 0118 Fax: (02) 6882 0630 jodie@ozarkehm.com.au phil@ozarkehm.com.au www.ozark.com.au

Document Controls

Proponent	Delta Electricity						
Client	Sinclair, Knight Merz						
Project No / Purchase Order No							
Document Description	Archaeological Assessment						
	Name	Signed	Date				
Clients Reviewing Officer	Damian Williams						
Clients representative mana document	aging this	OzArk Person(s) managin	g this document				
Damian Williams		Dr Jodie Benton					
Location	Location						
		#424					
Document Status DRAFT V1.0		Date					
Draft V1.0 (JB) to Editor OzArk 1 st Internal (Series		V1.0 HK to JB 19.4.10					
V1.X = OzArk internal edits)		V1.1 27.4.10					
Draft V2.0 Report Draft for rel	lease to client	V2.0 JB to SKM 27.4.10					
(Series V2.X = OzArk and Cli	ent edits)						
FINAL once latest version of client	draft approved by						
Prepared For		Prepared By					
Damian Williams		Dr Jodie Benton and Heidi Kolkert					
Sinclair Knight Merz		Director OzArk Environmental & Heritage					
PO Box 164		Management Pty. Limited.					
St Leonards NSW 2065. P 02 9032 1300		PO Box 2069 Dubbo NSW 2830.					
Email: <u>dwilliams@skm.com.a</u>	u	P 02 6882 0118 F 02 6882 6030					
	<u>-</u>	M 0403 763 504					
		Email: jodie@ozarkehm.com.au					

COPYRIGHT

© OzArk Environmental & Heritage Management Pty Ltd, 2010 and © SKM / Delta, 2010

All intellectual property and copyright reserved.

Apart from any fair dealing for the purpose of private study, research, criticism or review, as permitted under the Copyright Act, 1968, no part of this report may be reproduced, transmitted, stored in a retrieval system or adapted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without written permission. Enquiries should be addressed to OzArk Environmental and Heritage Management Pty Ltd.

Executive Summary

OzArk Environmental & Heritage Management Pty Limited (OzArk) was commissioned by Sinclair Knight Merz (SKM) on behalf of Delta Electricity (Delta) to undertake an Aboriginal and non-Indigenous heritage assessment of two proposed ash emplacement areas as part of the Mt Piper Ash Emplacement Project.

Previous feasibility (SKM 2009) and site selection studies have selected four broad sites on which Delta is proposing to undertake planning activities and obtain relevant approvals for ash placement. The four sites requiring consideration are Lamberts North, Lamberts South, Neubecks Creek and Ivanhoe No. 4. Delta intends seeking Project Approval for ash placement at Lamberts North and Lamberts South (the subject of this heritage assessment) immediately following concept approval being granted for those sites. Neubecks Creek and Ivanhoe No. 4 however, are not likely to be required for ash placement for some time and Concept Approval only is required for these sites. **Figure 1** shows the Study Area and defines the areas for which Delta is seeking approval for ash placement.

The proposed ash emplacement areas at Lamberts North and South have been subject to complete and total disturbance as a result of having been open cut mined over the past twenty years. Prior to mining these areas were subject to several intensive archaeological surveys that covered the entirety of the land currently being assessed as Lamberts North and South. These studies indentified several Aboriginal sites within and adjacent to Lamberts North and South, of which all but two have been destroyed as a result of mining activities. Section 4.3 summarises the previous studies and management of the sites through to their permitted destruction, while Table 4 presents each recorded site with its DECCW AHIMS number, time and reason for recording as well as its' fate. This table demonstrates that only two sites remain extant within the vicinity of the proposed ash emplacement area of Lamberts South) and DECCW AHIMS # 45-1-0261 (located well beyond the ash emplacement limits of Lamberts South to the east).

To ground-truth the expected levels of disturbance and the locations of the two extant sites, a site visit was made by Dr Jodie Benton of OzArk in the company of Rick Peters, representing the Bathurst Local Aboriginal Land Council (BLALC) on the 4th of March 2010. This visit confirmed that disturbance over the site was complete, but that the areas of the two sites remained intact and beyond the limits of mining or mining related disturbance. No new Aboriginal sites were recorded within the Study Areas and it was assessed that due to the heavy prior disturbance there is a low probability of locating further archaeological sites within the Lamberts North or South Study Areas.

These two sites, DECCW AHIMS # 45-1-0218 and # 45-1-0261, have been the subject of an Aboriginal Cultural Heritage Management Plan (CHMP) that has protected them over the most recent mining phase at Lamberts South (OzArk 2006), and it is recommended that this CHMP be redeveloped so as to continue the preservation of these sites in the face of the proposed ash emplacement project. Some measures that may be contained within the CHMP are mentioned in the Recommendations section of this report, Section 6.

No Non-Indigenous sites were recorded during the assessment, nor have any ever been recorded over the Lamberts North or South Study Areas.

An overview of the indigenous and non-indigenous heritage issues at Neubecks Creek and Ivanhoe No 4 is provided. In reference to the Neubecks Creek and Ivanhoe No. 4 Concept Areas, it is recommended that further assessment and survey of the Ivanhoe No. 4 Concept Area would eventually be required to ensure that all heritage (Aboriginal and European) has been adequately identified and documented.

There is already known evidence of Aboriginal and early European occupation over the Neubecks Creek Concept Area (which has undergone full heritage survey) and known Aboriginal heritage only over the partially assessed Ivanhoe No. 4 Concept Area, and consequently any proposed impacts would need to be assessed against known heritage values of these locations such that appropriate heritage management measures could be devised.

A significant component of this process would be Aboriginal community consultation in relation to the assessment for sites, the cultural significance of any recorded locations and with regards to mitigation and management measures for both Concept Areas.

To date it is understood that all such heritage identification and management over the two Concept Areas would be required to be part of environmental assessment that would precede the sites ever being used for ash emplacement.

Contents

Executiv	e Summary	3
1 Intro	duction	7
1.1	Brief Description of the Project	7
1.2	Background	7
1.3	Location	7
1.4	Date of Heritage Assessment	8
1.5	Aboriginal Community Involvement	8
1.6	OzArk EHM Involvement	9
2 The	Project	10
2.1	Proposed Works	10
2.2	OzArk Project Scope	10
2.3	Heritage Assessment Methodology	11
2.4	Heritage Survey Constraints	11
3 The	Study Area	12
3.1	Topography	12
3.2	Hydrology	12
3.3	Vegetation	12
3.4	Climate	12
3.5	Geology	12
3.6	Existing Levels of Disturbance	13
4 Indig	genous Heritage	16
4.1	Ethnohistoric Sources of Past Aboriginal Culture	16
4.2	Regional Archaeological Context	16
4.3	Local Archaeological Context	19
4.3.	1 Desktop Database Searches	19
4.3.2	2 Neubecks Creek	20
4.3.3	3 Ivanhoe North	21
4.3.4	4 Lamberts Gully	22
4.4	Predictive Model For Site Location	26
4.5	Survey Results	26
4.5.	1 Previously recorded Aboriginal sites	26
4.6	Discussion	27
4.7	Assessment of Heritage Significance	27

4.8	Like	Likely impacts on Indigenous Heritage From the Proposal27					
4.9	Man	Management Options					
4.10	Rele	evant Legislation	28				
4.10	D.1	State legislation	29				
4.10	0.2	Commonwealth legislation	30				
4.10	0.3	Applicability to the Study Area	30				
5 Nor	n-Indig	genous Heritage	31				
5.1	Data	abase Searches	31				
5.2	Euro	opean Settlement in the Area	31				
5.3	Surv	vey Results	32				
5.4	Disc	cussion	32				
5.4.	1 As	ssessment of significance – general principals	33				
6 Red	comme	endations	34				
7 Ref	erence	es	36				
8 Plat	tes		38				
Appendi	x 1: A	boriginal Site Descriptions	2				
Appendi	x 2: A	boriginal Community Correspondence	48				
Appendi	x 3: A	boriginal Community Consultation Log	50				

Figures

Figure 1: Locality map of the Project Site. Blue hatched area is Lamberts South and North	.14
Figure 2: Lot and DPs of the Study Area and larger Project Site	. 15
Figure 3: AHIMS search results for Mt Piper.	.25

Tables

Table 2: Summary of the assemblage from Lidsdale open site, Area I	19
Table 2: Desktop-database search results	19
Table 3: Number, type and percentage frequency of sites within a 5 x 5 km ² centred on	the Lamberts
Gully Study Area.	22
Table 4: Sites recorded during previous assessments over the Lamberts South and	North Study
Areas.	23

1 Introduction

1.1 Brief Description of the Project

OzArk Environmental & Heritage Management Pty Limited (OzArk) was commissioned by Sinclair Knight Merz (SKM) on behalf of Delta Electricity (Delta) to undertake an Aboriginal and non-Indigenous heritage assessment of two proposed ash emplacement areas as part of the Mt Piper Ash Emplacement Project.

1.2 Background

Delta has identified a need to expand its current ash placement facilities, which service the Mt Piper Power Station, to enable the further placement of ash once the existing ash placement area has reached capacity. The current ash placement area (known as Area 1, Figure 1) is estimated to have 5-6 million m³ of remaining capacity. The removal of ash is critical to the long-term ongoing operations of the power station. Lamberts North and South are currently being mined for coal but will be exhausted within a few years. The current study seeks to provide sufficient assessment to allow for Project Approval after mining is complete.

Previous feasibility (SKM 2009) and site selection studies have selected four broad sites on which Delta is proposing to undertake planning activities and obtain relevant approvals for ash placement. The four sites requiring further consideration are Lamberts North, Lamberts South, Neubecks Creek and Ivanhoe No. 4.

As part of the Mt Piper Ash Placement Project, Delta is seeking Concept Approval for ash emplacement at:

- Lamberts North;
- Lamberts South;
- Neubecks Creek;
- Ivanhoe No. 4.

Delta intends to seeking Project Approval for ash placement at Lamberts North and Lamberts South (which is the Study Area for this heritage assessment) immediately following concept approval being granted for those sites.

Neubecks Creek and Ivanhoe No. 4 would not be developed for ash placement for many years into the future and would only be required if Mt Piper Extension were constructed as a coal fired plant. For these reasons concept approval only is being sought for these sites. A summary of heritage issues relating to these sites is included at desktop level only.

Figure 1 shows the Study Area and defines the areas for which Delta is seeking approval for ash placement.

1.3 Location

The Mt Piper Ash Placement Project areas for the project application comprise highly disturbed land (Lot 9 and Lot 15 DP 804929, Lot 501 DP825541, Lot 357 DP 751651 and Lot 13 DP 751651) which is situated on land owned by Centennial Coal known as Lamberts Gully (Lamberts North and Lamberts South). The areas subject to the concept application are on lands owned by Centennial Coal and Delta Electricity. The whole study area is, close by to Portland, Pipers Flat, Meadow Flat

and Wallerawang. The Study Area lies within the County of Cook and Parish of Lidsdale in the Lithgow City Council area, and is governed by the Greater Lithgow Local Environmental Plan (LEP) of 1994 on land zoned 1(a) rural. In this zone the proposed activity is permissible with consent.

1.4 Date of Heritage Assessment

The heritage assessment was undertaken on the 4^{th} of March 2010. Weather was clear and warm to hot (28° C to 35° C) and did not pose any constraints to the assessment.

1.5 Aboriginal Community Involvement

The Study Area falls within the boundaries of the Bathurst Local Aboriginal Land Council (BLALC).

The Ash Emplacement Project is being undertaken as per the Department of Environment and Conservation¹ (DEC 2005) Interim Community Consultation Requirements (ICCRs)² as recommended in the DEC 2005 *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* (for Part 3A assessments).

An advertisement seeking expressions of interest from Indigenous community organisations was placed in the local paper the 'Lithgow Mercury' on the 23rd of January 2010. Letters were also issued to Aboriginal groups or individuals known to have an interest in Indigenous heritage within the Study Area, in addition to letters sent to DECCW, Lithgow City Council, the Register of Aboriginal Owners, BLALC and Native Title Services Corporation (NTSCORP). A second round of letters were then sent to additional groups identified as a consequence of the first round of advertising and agency contact. As a result of these processes, the following organisations / individuals formally registered interest by the close of Stage 1:

- Bathurst Local Aboriginal Land Council (BLALC);
- Mingaan Aboriginal Corporation Lithgow;
- Mitchell Cutmore;
- Stuart Cutmore;
- Neville Williams;
- Wayne Williams;
- Sharon Williams;
- Shawn Williams;
- Gundungurra People;
- Bill Allan;
- Warrabinga NTCAC; and
- North East Wiradjuri Co Ltd.

¹ Now Department of Environment, Climate Change and Water (DECCW).

² It is noted that by the time of report completion, the new DECCW Aboriginal cultural heritage consultation requirements of proponents 2010, had come into affect (12th April 2010). The transitional arrangements fact sheet indicates that as we are beyond Stage 2 of the project, we are not required to restart community consultation under the new parameters.

ICCR Stage 2 letters describing the proposed heritage assessment methodology were sent to all registered stakeholders on 22.3.2010 with a request for any specific cultural information (should any be available), as well as inviting comment / input on the methodology proposed. Input into the proposed heritage management measures for the Aboriginal Cultural Heritage Management Plan (ACHMP) was also sought. Responses to the Stage 1 and 2 letters can be found in **Appendix 2**.

Desktop review had demonstrated that Lamberts South and North had been fully assessed for heritage in the past and that both were now completely disturbed through mining and consequently, full pedestrian assessment of these Study Areas was not deemed appropriate. However, to ensure that the Impact Footprint lay completely within disturbed areas, a site ground-truthing visit was made to the Study Area on March 4th 2010 in the company of Mr Rick Peters representing the BLALC. Due to the Project Site being within the boundaries of the BLALC, one position was made available for an Aboriginal community representative from this organisation to participate in the groundtruthing survey.

Irrespective of field representation, all groups who have expressed interest in being part of the consultation process have been kept informed of the methods and results, and were invited to comment on draft documents prepared for the project. Subsequently a copy of the draft report was sent to all the relevant organisations / individuals for review. Comment period on the draft report closed June 3rd 2010 and no responses were received from any of the registered stakeholders regarding the report.

A record of all consultation with the Aboriginal groups kept during the course of the project which can be reviewed in **Appendix 3**.

1.6 OzArk EHM Involvement

This assessment was undertaken by Dr Jodie Benton. The aforementioned personnel and Heidi Kolkert wrote and edited this report.

2 The Project

2.1 Proposed Works

As summarised in Section 1.2, the proposed ash emplacement areas that require Project Approval are Lamberts North and Lamberts South.

The following standard pad construction techniques currently used are as follows (extracted from SKM 2009):

- Ash is placed in layers and stepped to the desired height in 'pads'...
- Materials moisture conditioned with water are placed in the lower layers to an elevation of 946 m AHD (as outlined above), with ash moisture conditioned with Brine, placed above this level.
- The ash is compacted through a combination of controlled addition of water (through conditioning) and a process of machine compacting with vehicles which are also used for the transport of the material.
- In all cases surface water runoff is drained away from permanent batters and directed to flow along benches and/or formalised channels into the dirty water storage areas via drainage channels.

Thus, ground surface disturbance will be extensive and occur progressively within Lamberts North followed by Lamberts South. In order to maximise the ash placement at the current Area 1 and the adjoining Lamberts North site, it is also proposed to place ash over the drainage area known as Huons Creek that separates the two areas.

2.2 OzArk Project Scope

The consultant was briefed to undertake survey and assessment of Indigenous and non-Indigenous issues arising from the proposed Mt Piper Ash Emplacement Project, specifically for the two areas that require Project Approval, Lamberts North and South. An overview desktop assessment was also required for the Neubecks Creek and Ivanhoe No 4 sites subject to concept approval only (**Figures 1** and **2**).

This investigation for Lamberts North and Lamberts South included the following aspects:

- A search of the NSW DECCW Aboriginal Heritage Information Management System (AHIMS) for any previously recorded sites, a search of NSW State Heritage Register and Inventory; the Register of the National Estate and the Lithgow Council LEP;
- A review of relevant literature including previous consulting reports, academic theses, articles and published works on the history and ethnography of the Lambert Gully region;
- Consultation with the Bathurst Local Aboriginal Land Council and other stakeholders as registered through the ICCR process;
- Physical groundtruthing of the two previously recorded Indigenous sites # 45-1-2601 and 45-1-0218; and
- Pedestrian field survey to ground-truth the anticipated levels of disturbance.

2.3 Heritage Assessment Methodology

The Proponent requested an impact based methodology for the Aboriginal and non-Indigenous assessment over Lamberts South and North. Prior knowledge of the site and aerial photography indicated the very high likelihood that the entire footprints for ash emplacement at Lamberts North and South had been completely destroyed through open cut mining. Further, desktop review of previous heritage assessment reports showed that the entirety of Lamberts North and South had been subject to several previous heritage assessments. These reports did, however indicate that two Aboriginal sites were just outside previous impacts and remained protected through an active Cultural Heritage Management Plan (CHMP) relevant for the most recent mining phase.

Consequently, the heritage assessment methodology was designed to ground truth the levels of disturbance and check on the presence / condition of the two sites known to have remained protected by the CHMP.

The Study Area was traversed using vehicle transects on tracks only. Both areas are still undergoing active open cut mining, and consequently the field team had to remain accompanied at all times and did not have free access to the site. Through vehicle inspection we assessed as many accessible sections of Lamberts South and North as feasible, although access to the previously recorded Aboriginal sites was not possible.

2.4 Heritage Survey Constraints

Assessment was limited to the proposed Lamberts South and North Impact Footprint areas. As noted above, both areas are still undergoing mining, thus the field team had to remain accompanied and did not have free access to the site. It is considered, however, that the locations able to be assessed provided sufficient vantage points to visually determine the levels of disturbance over the majority of the Lamberts North and South study areas.

We were not able to access site DECCW # 45-1-0218 as it was no physically feasible to gain vehicle access at that time, although we were able to confirm that the bushland in which the site is located remains intact and hence it is likely that the site also remains undisturbed.

This was deemed as an adequate assessment methodology.

3 The Study Area

3.1 Topography

The Project site lies within the South Eastern Highlands Bioregion which covers the dissected ranges and plateaux of the Great Dividing Range.

The subject land comprises an elevated, undulating plateau / north facing valley side including a series of northward protruding, steep-sided spurs dissected by ephemeral drainage lines reducing in elevation towards the north. To the south of the Study Area the landscape rises significantly to form the high escarpment country that bounds the Pipers Flat valley. Some outcropping sandstone ledges are present along the east side of this valley, but no escarpments suitable for Indigenous shelters occur within the Study Area.

3.2 Hydrology

In terms of hydrology, several ephemeral creeklines are present within the Study Area, all draining from the higher elevations in the south in a northerly / north-easterly direction into Neubecks Creek, which then runs southeast before its confluence with the Coxs River. These are all currently dry but show evidence of carrying water during high flow events. Specifically, Huon Creek transects the northern portion of Lamberts North, and it is note-worthy that this creek is today highly modified. Artificial water bodies which are part of current and historic mining operations also occur within the Study Area.

3.3 Vegetation

Prior to European occupation and mining operations, the vegetation in the Lamberts Gully area would have been characterised by two broad vegetative types: Southern Tableland Dry Sclerophyll Forest and Highly Modified Landscape. The Southern Tableland Dry Sclerophyll Forest is characteristic of portions of the South Eastern Highlands Bioregion.

OzArk 2005 identified the Lamberts Gully area consisting of a tall open forest dominated by brittle gum (*E. mannifera*), broad-leaved peppermint (*E. dives*) and red stringybark (*E. macrorhynca*) on the hills and slopes (Tablelands – Peppermint Woodland) and snow gum (*E. pauciflora*) and candlebark (*E. rubida*) on the broader flats (Coxs Valley Woodland).

Both Lamberts North and South Study Areas have undergone extensive mining operations and as such are today devoid of any vegetation, although vegetation does remain intact along the boundaries of the mined areas, particularly to the northwest and south.

3.4 Climate

Blackmans Flat, the nearest residential area (c. 1 km from the mines boundary) has a mild climate with a wet, late summer (average temperature is 16.5 °C with a maximum of 35.1 °C) and cold, dry winters (average temperature 5.1 °C with a minimum of -9.4 °C). Summers are the pronounced wet seasons, particularly from January to March, often accompanied by high intensity storms. Only intermittent rains are received during winter (BOM 2010).

3.5 Geology

The South Eastern Highlands Bioregion comprises part of the Lachlan fold belt that runs through the eastern states as a complex series of metamorphosed Ordovician to Devonian sandstones, shales

and volcanic rocks intruded by numerous granite bodies and deformed by four episodes of folding, faulting and uplift. The general structural trend in this bioregion is north-south and the topography strongly reflects this.

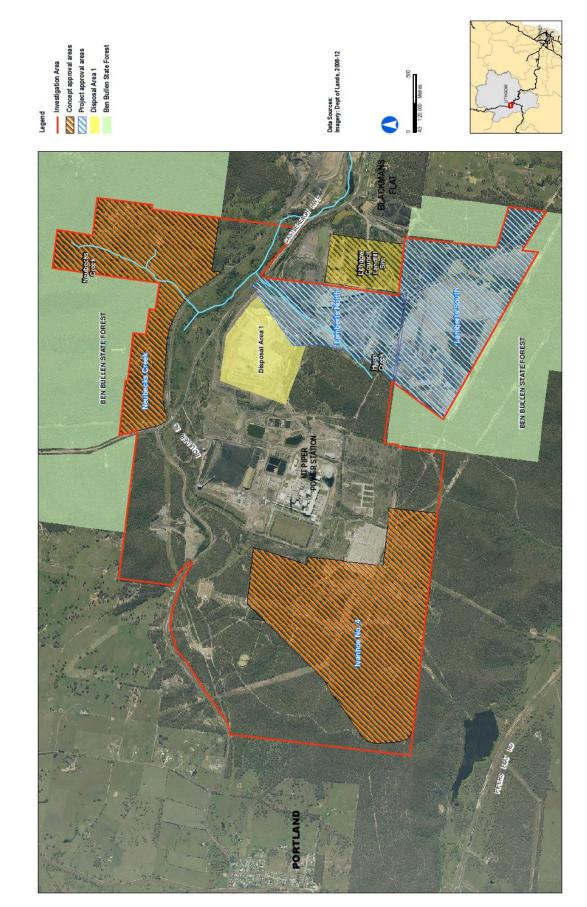
More specifically, the Project Site is situated near the edge of the Permo-Triassic Sydney Basin, in an area known as the Western Coalfields. This is comprised of an extensive plateau of erosion resistant Triassic sandstone dissected by steep-sided valleys. There is a remnant surface layer of weathered sandstone and shales of the Narrabeen Group overlying a complex stratigraphic sequence including the Lidsdale and Lithgow Seams, which are both sub-groups of the Illawarra Coal Measures (Appleton 2004: 12).

3.6 Existing Levels of Disturbance

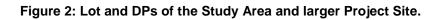
Lamberts North and Lamberts South are currently open cut pits and have both undergone extensive disturbance related to mining operations and surface reworking. Both sites are located to the immediate east of the Mt Piper Power Station and are part of the existing Lamberts Gully Open Cut Mine operations.

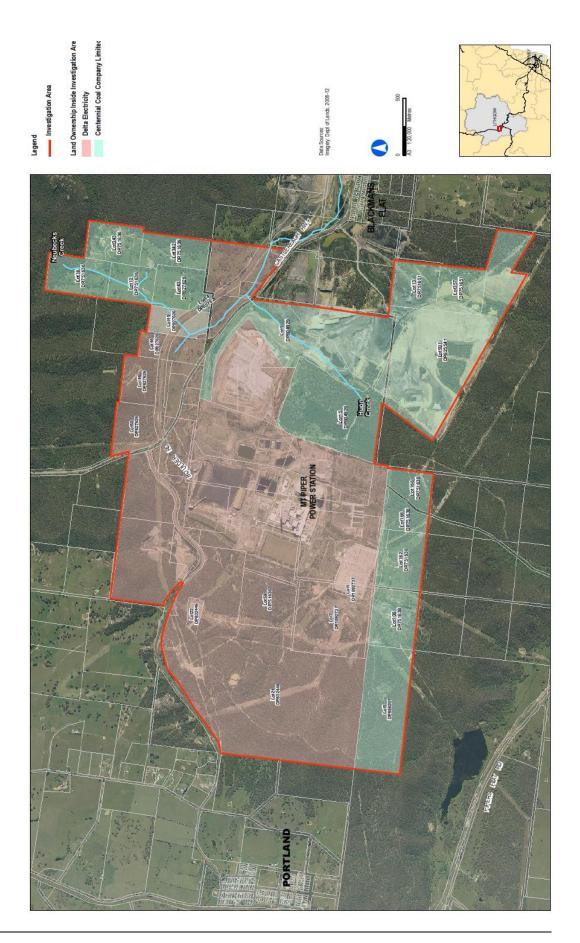
The aerial photograph (**Figure 1**) gives a fairly accurate macroscopic overview of site disturbance patterns, although disturbance has continued since this aerial was generated.

In summary, the entire footprints for the Lamberts North and South Ash Emplacement areas have been mined (**Plates 1-4**). The only area of currently intact landform follows the route of the coal conveyor belt between Lamberts North and South, and this corridor has been extensively disturbed on the surface through the construction of the conveyor belt.









4 Indigenous Heritage

4.1 Ethnohistoric Sources of Past Aboriginal Culture

According to Tindale (1974), the current Study Area falls within the eastern limits of the lands occupied by the Wiradjuri tribe. However, due to the location of this area at the western base of the mountains it has often been referred to as zone of interaction between the Wiradjuri, the Dharug to the east and the Gundungurra to the south (Bowdler 1984).

Few archival sources are available which give any great detail regarding local Aboriginal culture at the time of contact or even soon after. The Lithgow area seems to have undergone little study by professional or amateur ethnologists and anthropologists despite its close proximity to Sydney.

A resident of nearby Lidsdale, Fay Hasler, has written notes based on oral histories of people in the area (reproduced in part in Kelton 2002: 12-13), which are held by the Lithgow and District Family Historical Society. The salient points derived from these notes are as follows:

- A large Aboriginal settlement is described as being located at Pipers Flat, with the burial ground being located at Lidsdale;
- The Pipers Flat Aborigines would regularly travel to Richmond to fight the local Aboriginals and bring back women to combat in-breeding; and
- The tribes occupying the valleys in the area were wiped out by disease including measles and small pox.

Interviews with Fay Hasler during March and May 1999 (Gay 1999) indicate that the burial ground at Lidsdale was located on the river flats either side of the current Coxs River alignment. It is noted that the colliery railway line was constructed through this area in the 1920's, and further disturbance would have affected this area during the Coxs River realignment in the 1950's (Gay 1999: 15).

Gay (1999: 16) also notes an historical reference to the burial of an Aboriginal Elder in the Wallerawang area. King Myall (Mylles) had worked for James Walker who had been granted land in the Wallerawang and Lidsdale districts during the 1820's. The burial site of King Myall was drawn and published in the Sydney Illustrated News in October 1880, showing a burial mound and carved trees. This may be part of the burial ground referred to by Fay Hasler (Gay 1999: 16)

4.2 Regional Archaeological Context

Current understanding of the types of sites present or likely to be present, within the Coxs River catchment remains sketchy. Data from excavated sites combined with information derived from surveys, points to a variable use of the valley, with some sites indicating ephemeral, casual or limited use, while other sites show more intensive or repeated use.

Sites / studies from within the Lamberts Gully Study Area will be considered in the following section (5.2 Local Context), while those from the general Neubecks Creek / Coxs River valley will be briefly reviewed here.

In 1985 a preliminary survey of the proposed conveyor and pipeline routes between Mount Piper Power Station and Angus Place colliery recorded a scarred tree and two open artefact scatters close to the Coxs River, and a small scatter of artefacts at Rydal Mount (Rich 1985 in Navin Officer 2005: 5). Also in 1985, survey for the Bayswater to Mt Piper electricity transmission line (ETL) recorded no sites in the vicinity of the Mt Piper power station, concluding that the surrounding hills had a dearth of

resources (Aitken 1985 as report in Navin Officer 2005: 5). It has to be commented that this conclusion would appear to require revision based on the large numbers of sites subsequently recorded in the Neubecks Creek, Pipers Flat Creek and Coxs River valleys since this time.

Further survey in the area by Rich (1988) and Silcox (1988) provided additional evidence for the site occupation pattern noted previously by Rich, indicating that open sites are most frequent on elevated ground close to permanent water, such as the Coxs River. Quartz was seen as the dominant raw material, in contrast to sites on the Newnes Plateau, which appear to have mudstone and chert dominated assemblages. The limited presence of cortex on some of the quartz artefacts led Rich to argue that artefacts may have been carried to these locations after primary/initial flaking elsewhere. The general quality of the quartz was reported as high, with few fracture plains.

Also in 1988, survey in the northern portion of the catchment for the Mt Piper water supply and a dam on Thompson Creek led to the recording of five previously unrecorded Aboriginal sites along Pipers Creek, the relocation of two previously recorded Aboriginal sites as well as four historic sites (McIntyre 1988 as reported in Navin Officer 2005: 5).

Assessment of the Mt Piper to Angus Place Colliery haul road in 1992 resulted in the recording of two open sites and one isolated find. All were in close vicinity of Neubecks Creek and included artefacts of chert and quartz (Brayshaw and Haglund 1992). These sites are further discussed in relation to the Neubecks Creek area in Section 4.3.2 of this report.

In 1993 an extended corridor of land for the proposed 500 kV transmission line between Mount Piper and Marulan was assessed, recording twenty-six previously unrecorded Aboriginal sites. Only two of these sites were located within relatively close proximity of the current Study Area, beings sites 25 (DECCW # 45-1-239) and 26 (DECCW # 45-1-0238). The former is an open artefact scatter situated 300 m west of the confluence of Pipers Creek and Irondale Creek while the latter is a shelter with deposit, art and axe grinding grooves (Brayshaw and Dallas 1993: 56-57).

Lyell Dam, situated in the Coxs River catchment approximately 15 kms south of the current Study Area, was formed by damming the Coxs River. Three open sites located on the slopes of spurs overlooking the Coxs River floodplain were investigated here in 1994, prior to raising the water level in the lake. All three sites were situated c. 400 m from the river margin (Gay 1999: 14).

At open site Lyell Dam 3 (LD3) a quartz block fractured knapping floor was found. Although the assemblage was dominated by quartz, other raw materials such as indurated mudstone (silicified tuff) and stone of volcanic origin was also present. In terms of surface manifestations of this site, the highest artefact density recorded was $3/m^2$, with most sample areas showing lower densities (Barton & McDonald 1995: 25). The excavated assemblage, however, was far larger, with estimated thousands of artefacts present at this location. Barton & McDonald (1995: 35) interpreted this site as being repeatedly occupied by people carrying out the same range of tasks.

Conclusions of the Lyell Dam site investigation project can be summarised as follows (from Barton & McDonald 1995: 67 as summarised in Gay 1999: 15):

- Cobbles of igneous, metamorphic and sedimentary rocks were procured locally, primarily from the bed of the Coxs River;
- Quartz was locally available and the ease with which it was procured eliminated the need to flake using the bipolar technique;
- Quartz was used to create medium sized flakes and some smaller retouched tools;

- Volcanic stone was used to create large or heavy tools; and
- All three sites were interpreted as representing repeated short-term occupation areas that focussed on acquiring resources such as specific plants or animals endemic to the swampy margins of the Coxs River.

As may be expected, research into the known archaeological sites in the region surrounding the current Study Area has shown that the majority of sites are located on landforms close to water sources. Most sites were small, containing low densities of artefacts, with only one large site present, being LD 3 situated in the Lyell Dam area. Quartz dominates the artefact assemblages that are characterised by the Core and Flake tradition (Gay 1999: 15).

In 1999 and 2000, Kelton undertook surveys in the Wallerawang and Marrangaroo areas respectively. Of the seventeen sites recorded at Marrangaroo, the majority were rock shelter sites, as most of the Study Area was within the sandstone escarpment. Kelton notes that the location and nature of sites recorded conforms to the previously developed site prediction and distribution models outlined above (Kelton 2000: 101).

In 1992 Brayshaw and Haglund undertook survey in the face of the proposed construction of a haul road between Angus Place Colliery and Mt Piper Power Station (north and east of the current Study Area). Three sites were recorded as a result of this study, two open camp sites and one isolated find (Brayshaw and Haglund 1992c).

In 1999 a survey undertaken by Gay, indicated the possibility of an Aboriginal burial area being located close to the road alignment between Duncan Street and the coal conveyor. Oral history from a local informant provided primary data for the location of the burial ground and test excavations of this general area were undertaken in 1993 (McIntyre as reported in Gay 1999: 17). During this work two areas were tested, and although no skeletal remains were uncovered, a minor open site was identified on the west side of the railway line (AHIMS # 45-1-237), where stone tools were said to have been manufactured or repaired.

McIntyre concluded that the reported burial ground may have been destroyed during the Coxs River deviation works in the 1950's, although there is still the possibility that skeletal material may occur east of the railway and river. She further notes that the presence of artefacts within the level ground adjacent to the river indicates the potential this landscape unit has for the occurrence of Aboriginal sites (McIntyre as reported in Gay 1999: 16-17).

In 1999 and 2000, two surveys by Gay were undertaken in the face of the proposed Castlereagh Highway deviation at Lidsdale. One open site and two PADs were identified and test excavation of the latter two was recommended. Subsequently, large scale test and salvage excavations were carried out at these sites, located on a crest above the Coxs River (Benton 2003 and 2004). Part of the site revealed deep soils with evidence for cultural stratification. Sediment samples were dated using the OSL technique providing determinations of 7, 400 +700 BP at 30 cm depth and 13, 500 +1, 000 BP at 45 cm depth. While these sediment samples may not directly date the lithic assemblage, they do give an indication of potential age range, particularly the presence of a pre-Bondaian assemblage in the deepest spits. This interpretation is supported by an absence of Bondaian technical features within the lithic assemblage from spits 3 and 4.

The assemblage from the lower spits lacked backed artefacts and evidence of asymmetric alternating flaking and no flakes with faceted platforms were recovered. This Pre-Bondaian assemblage is dominated by quartz, and has higher frequencies of quartzite and igneous artefacts than the more recent assemblage and average artefact weight is higher than in the upper spits. The assemblage

from spits 1 and 2 both include backed artefacts, some cores show asymmetric alternating platforms and some flakes have faceted platforms. Both upper spit assemblages are dominated by quartz, but siliceous tuff / FGS is more frequent in spit 1 than in spit 2. A few bipolar artefacts occur in spit 2. A piece of utilised pigment was also found in spit 2. Average artefact weight is lowest in spit 1.

Age BP	Spits	Total artefacts	% Quartz	% S.Tuff	Mean weight Quartz	Mean weight S.Tuff	% Backed artefacts	% Cores	% Bipolar artefacts
	1	559	71.4	26.1	1.2g	1.2g	2.1	0.6	
7,400+700 before 2000AD (K-0032) (ANUOD1591)	2	642	84.6	12.8	1.6g	2.4g	1.9	1.1	0.6
13,500+1000 before 2000AD (K-0033) (ANUOD1592)	3+4	284	79.9	11.6	2.9g	3.9g		1.4	

Table 1: Summary of the assemblage from Lidsdale open site, Area I

* (Assemblage data from White 2004; sediments dated using OSL, reported in Benton 2004)

Another survey was undertaken in 2003 (Appleton 2004) in the face of proposed coal mining at Pine Dale Coal Mine, immediately north of Enhance Place Coal Mine. This study recorded one isolated find – WC1A, which was recorded in a very disturbed location at the base of a gully near a drainpipe.

Most recently, heritage assessment was undertaken for proposed extensions to the Mt Piper Power Station (Navin Officer 2005). This assessment recorded no Aboriginal sites, either new or previously recorded, within the impact footprint for the project and documented the previously high levels of disturbance as a result of former mining activities as being a contributing factor to the lack of sites (Navin Officer 2005: i).

4.3 Local Archaeological Context

4.3.1 Desktop Database Searches

Searches were conducted of relevant databases and the results are summarised in **Table** 2.

Table 2: Deskte	op-database	search results
-----------------	-------------	----------------

Name of database searched	Date of search	Type of search	Comment
Australian Heritage Database <u>http://www.environment.gov.au/heritage/ahdb/</u>	21.4.10	Lithgow LGA	14 items listed. No places on the search are within the Study Area.
Australian Heritage Inventory	21.4.10	Lithgow LGA	24 items listed. No places on the search are within the Study Area.
NSW Heritage Office State Heritage Register and State Heritage Inventory http://www.heritage.nsw.gov.au/	21.4.10	Lithgow LGA.	22 items listed under NSW Heritage Act. 133 listed by other local and state agencies. A Railway Cottage is the closest listing in Pipers Flat.

Name of database searched	Date of search	Type of search	Comment
			No places on the search are within the Study Area.
National Native Title Claims Search <u>http://www.nntt.gov.au/Applications-And-</u> <u>Determinations/Search-</u> <u>Applications/Pages/Search.aspx</u>	21.4.10 Map published 31 March 2010.	NSW	No Native Title Claims cover the Study Area. Gundungurra Tribal Council Aboriginal Corporation #5 have a native Title claim to the east of the Study Area.
Department of Environment, Water Resources, Heritage and the Arts (DEWHA) Protected Matters (EPBC Act) Database; <u>http://www.environment.gov.au/erin/ert/epbc/in</u> <u>dex.html</u>	21.4.10	Lithgow LGA	None of the Aboriginal or Non- Indigenous places on the RNE occur near the Study Area.
Department of Environment, Climate Change and Water (DECCW) Aboriginal Heritage Information Management System (AHIMS);	21.4.10	5 x 5 km centred on the Study Area	36 sites within the search area. The five within proximity have been discussed in this report.
Local Environment Plan	21.4.10	Lithgow LGA	None of the Aboriginal places noted occur near the Study Area.

4.3.2 Neubecks Creek

The area delineated as Neubecks Creek on Figure 1 has already undergone complete Aboriginal heritage assessment. The following paragraphs summarise the heritage assessments and constraints related to this site.

In 1992 Brayshaw and Haglund undertook survey in the face of the proposed construction of a haul road between Angus Place Colliery and Mt Piper Power Station. The area then assessed included a portion of the Boulder study area (Kelton 2002), through which the haulage road runs. Three sites were recorded as a result of this study, two open camp sites and one isolated find. Only the two camp sites are relevant to this study (DECCW # 45-1-0216 and 0217), and their location is shown on Figure 3. During his 2002 study for the Boulder project, Kelton attempted to relocate these sites and was unsuccessful, concluding that site 45-2-0217 must have been destroyed during the construction of the electricity easement immediately south of the haul road (Kelton 2002: 32). Site 45-2-0216, however, although not relocated was noted to be situated within c. 300 m of the haul road. Re-assessment of the AHIMS site card for this site places it north of the haul road, as can be seen on Figure 3 and its location adjacent to site DECCW # 45-1-2588 led OzArk to believe that these are manifestations of the same site. This site will thus be further discussed in the following paragraphs.

In 2002 Kelton undertook survey of the proposed Boulder Road coal mine, which is comprises the western extent of the current Neubecks Creek area between the Castlereagh Highway and Ben Bullen State Forest (Figure 1). During this 2002 survey, Kelton identified one isolated find (BP-IF1, DECCW # 45-1-2582) and one open camp site (BP-OS1, DECCW # 45-1-2581) (see Figure 3 for their location). OzArk EHM attempted to ground truth these sites in 2005, but was only able to relocate the open site. This open site (# 45-1-2581) contained seven recorded artefacts in a disturbed context next to the transmission line easement immediately west of the Boulder study area. The isolated find (# 45-1-2582) was apparently situated on a high flat spur overlooking the tributary into

Neubecks Creek, and although the exact location was found (according to photos in Kelton 2002) this artefact was not relocated.

In 2005 OzArk Environmental & Heritage Management (Benton 2005) undertook survey in the Neubecks valley, on the property between Pinedale and Boulder, for another proposed open cut coal mine. The Indigenous heritage component of that study recorded five (5) Indigenous sites. Two were open camp sites with Potential Archaeological Deposit - PAD (NC-OS1 & NC-OS2 with PAD, DECCW # 45-1-2588, 41-1-0239), a further two were small open camp sites (NC-OS3 and NC-OS4, DECCW # 45-1-2589 and 2590) and the last is an isolated find (NC-IF1, DECCW # 45-1-2591). It was determined that site NC-OS1 with PAD is in fact a previously recorded site, # 45-1-0216, identified by Brayshaw and Haglund during their haul road survey in 1992 (summarised above). Both open camp sites with PAD were recorded on knolls / elevated spurs while the remaining sites were located on the colluvial / alluvial terraces adjacent to Neubecks Creek.

This report concludes that sites DECCW # 45-1-2588, 45-1-2590 and 41-1-0239 were assessed as having high cultural significance and potentially moderate-high archaeological / scientific significance. Consequently it was recommended that if impacts to these sites were unavoidable, test excavations would be needed to determine the presence, nature, extent and integrity of potential sub-surface deposits. Provision of such information was needed to allow a more accurate assessment of the scientific significance of the site thus enabling the formulation of appropriate future management recommendations. The remaining sites were noted as having low scientific significance, but some cultural significance. At the time of writing (2005) the Aboriginal community representatives consulted indicated possible support for these sites to be destroyed with artefacts collected as part of a salvage programme. It is noteworthy that this consultation is out of date and would required recommencement should impacts to any of these sites be proposed. As far as OzArk is aware, there has been no further heritage assessment work in this area since 2005.

4.3.3 Ivanhoe North

In 1982, Haglund undertook survey for Ivanhoe # 4. This assessment was a sample survey covering many areas between Portland Road and the Wallerawang railway line. Portions of the area delineated as Ivanhoe No. 4 on **Figure 1** were included in this survey. Haglund recorded total of 7 open camps sites, of which two are within the current Ivanhoe No. 4 area, being Site 1, (DECCW # 45-1-0066) and Site 2 (DECCW # 45-1-0067) (**Figure 3**). Artefacts of quartz and chert were recorded at both sites, but neither was described as being extensive or rich in material (Haglund 1992 as reported in Mills 1998: 11). Test excavations were then carried out on Site DECCW # 45-1-0067, revealing shallow deposits of no greater than 10 cm, with 30 artefacts being recovered from three test pits measuring 1 x 0.5 m. As a result of the excavations Haglund concluded that the archaeological deposits were shallow and unlikely contain archaeological features such as hearths.

In 1998 Mills undertook further survey for the proposed Stage 4 of the Ivanhoe Mine (Mills 1998). Her study area overlaps the southern portion of the current area delineated on Figure 1 as Ivanhoe No. 4. A total of six open camp sites, two isolated finds and eight Potential Archaeological Deposits (PADs) were recorded (Mills 1998). Of these, only the sites and isolated finds were registered on the DECCW AHIMS and the majority of these can be seen located on **Figure 3** (DECCW # 45-1-2547 – 2554), with only sites DECCW # 45-1-2547 and 2554, being within the proposed ash emplacement area.

In her 1998 assessment Mills notes that there is a lack of clarity as to the ultimate fate of previously recorded sites DECCW # 45-1-0066 and 45-1-0067. Mills felt that her field review of those two locations indicated that artefacts remained present and were assumed to represent artefacts of the same sites. Heavy disturbance in these areas was, however, noted as a result of erosion and spoil

from a nearby box cut (Mills 1998: 11). Recommendations for sites recorded by Mills ranged from further archaeological investigation to conservation, depending on their relation to proposed mining impacts.

In summary, from desktop review, it is not clear what proportion of the area nominated on **Figure 1** as Ivanhoe No. 4 has been subject to field survey for Aboriginal sites. Further research and mapping of previously assessed locations would be required to identify any gaps, which should then be surveyed prior to any impacts occurring. Previously recorded sites would also require groundtruthing to determine whether they remain extant and then management recommendations be devised for their management. The understanding is that such work would precede mining in these areas which will also precede possible future ash emplacement.

4.3.4 Lamberts Gully

As seen in **Table 2**, the search of the DECCW AHIMS (26.2.2010) shows the presence of 36 recorded sites within a 5 x 5 km square area centred on the current Study Area. It is noteworthy that of the 36 sites, two sites (# 45-1-235 and # 45-1-0236) have been recorded twice on the register and hence there is in reality only 34 sites. **Table 3** provides a breakdown of site types present. The most frequent site type recorded in the vicinity of the current Study Area is the small open camp site, which is most often found on level, well drained terrain close to permanent water. Artefacts on these sites usually number less than 50, although it was noted by Silcox (1988 as reported in Gay 1999: 13) that site size appears to be greatly affected by ground surface visibility conditions at the time of recording. The next most prevalent site type is isolated finds, which should really be seen as a sub-set of the open camp sites. Only one stone arrangement site has been recorded in the vicinity of the Study Area, north in Ben Bullen State Forest. The lack of scarred trees within the AHIMS database results for this area is likely to be the result of the intensive clearing for the purposes of settlement.

Table 3	3: Number, type and percentage frequency	of sites with	nin a 5 x 5 km ² centred	on the
Lambe	rts Gully Study Area.			

Site Type	Total	% Frequency
Open Camp Site	28	82
Isolated Finds	5	15
Stone Arrangement	1	3
Totals	34	100

As previously noted, several investigations have been previously undertaken in the immediate vicinity of the existing Lamberts Gully mine. The results of these surveys are of relevance to the current project and hence will be reviewed in some detail below.

In 1992 a survey for Springvale Colliery and the proposed Springvale to Mt Piper coal conveyor (Rich & Gorman 1992) recorded 26 sites, 13 along the coal conveyor route, washery and pit top areas and 13 in the location of the undergound mining activities (Rich & Gorman 1992: 4). As the coal conveyor passes between the Lamberts South and Lamberts North Study Areas for the current project, the results of this investigation are particularly pertinent. Overall sites were located in the lesser disturbed parts of the survey area, mostly occurring on spurs adjacent to creek lines, with the larger sites being close to streams. Bipolar technology was evident at many sites and the largest recorded a maximum artefact density of 25 per square metre. Three of the sites identified by this study are located within /adjacent to the current Study Area (# 45-1-0208, # 45-1-0203 and # 45-1-0218).

In 1993, Rich produced two further reports for the same project, the first describing inadvertent impacts to two sites within her Study Area (Rich 1993a) and the second being based on additional survey as a result of the conveyer belt route being realigned to what is now the corridor of land between Lamberts South and North (Rich 1993b). Three additional sites were recorded as a result of this second survey, two open camp sites (#45-1-0243 & #45-1-0244) and an isolated find (IF2 never registered on the AHIMS database). The location of these sites is provided in **Figure 3**.

Also in 1992, Haglund & Brayshaw undertook survey for Western Main colliery for the Lamberts Gully open cut mine (Haglund & Brayshaw 1992a). Six (6) Aboriginal sites were recorded as a result of this survey, predominantly located at the southern end of Lamberts Creek. Later that year test excavations were carried out at two PADs, one having been recorded during their Lamberts Gully survey (POS A), and the second being a PAD recorded by Rich and Gorman in 1992 (POS2). The latter site came to be known as Lamberts Creek 6 (# 45-6-2355) and while POSA came to be known as Lamberts Creek 6 (# 45-6-2355) and while POSA came to be known as Lamberts Creek 7 (# 45-6-2354) (Figure 7). Test excavation of these locations revealed them to be open sites, although of a "one-off" nature, likely to date within the last 3,000 yrs due to the presence of a backed blade and bipolar knapping technology (Brayshaw 1993: 8).

In 1993, further assessment was undertaken by Brayshaw and Haglund for the Western Main Colliery. At this time three open camp sites were recorded (Brayshaw and Haglund 1993), Western Main Sites 1-3 (# 45-6-0234, # 45-1-0235 and # 45-6-0236). Somehow, two of these sites – Western Main 1 and 3 - were then entered on the AHIMS database twice, as can be seen on **Figure 3**. Only one of these sites (# 45-1-0235) is close to the current Lamberts North Study Area.

In 1998 Mills undertook survey of the proposed Ivanhoe Stage 4 project c. 1 km west of the current Study Area. The survey identified six (6) open sites, two (2) isolated artefacts and eight (8) other areas of potential archaeological deposit. Mills concluded that the presence of high quality milky white quartz flakes and debitage at all sites recorded in the survey area may indicate that it was a procurement place for the raw material however, no source was located.

More recently in 2005, OzArk Environmental and Heritage Management undertook survey over the Lamberts Gully ML1448, recording one additional open camp site, # 45-1-2601 (OzArk 2005).

In total, there have been nine (9) previously recorded sites within or in close vicinity of the Lamberts North and South Study Areas (**Figure 3**). The fate of these sites is as follows (as summarised in Table 4):

- Six sites have been issued with Section 90 permits (# 45-1-0208, 45-1-0235, 45-6-2355, 45-1-0243, 45-6-2355, 45-6-2354) and have been subsequently destroyed.
- Site # 45-1-0203 had, at the time of the 2006 assessment, been destroyed.
- Sites # 45-1-0218 and # 45-1-2601 remain intact and extant and were the subject of a Cultural Heritage Management Plan for the ML1448 coal mining extension operations at Lamberts Gully (OzArk 2006).

Table 4: Sites recorded during previous assessments over the Lamberts South and North Study Areas.

Site name	DECCW AHIMS #	Recorded by	Site type	Fate	Relocated 2006	Relationship to Ash Emplacement Project
--------------	------------------	----------------	-----------	------	----------------	--

Site name	DECCW AHIMS #	Recorded by	Site type	Fate	Relocated 2006	Relationship to Ash Emplacement Project
Site 5	45-1-0208	Rich & Gorman 1992	OS: 2 Q flakes on a track	Still present. (Permit #361).	N/A	N/A
POS 2 (Lamberts Creek 6)	45-6-2355	Rich & Gorman 1992, Brayshaw & Haglund 1992	PAD, became OS after test excavation.	Test excavated and destroyed for Lamberts Gully mine. (Permit #405).	N/A	N/A
Site 6	45-1-0203	Rich & Gorman 1992	Open site: 16 artefacts on a sloping spur above Lamberts Creek.	Section 90 recommended, but there is no certainty it was issued. The site has nonetheless been destroyed. (Permit #361 may be related to this site as well as 0208.	Not relocated. Site is within mine/washery area. Destroyed	N/A
Site 7	45-1-0218	Rich & Gorman 1992	OS: 10 artefacts on an overgrown tracks on a slight spur above a small stream	Still present.	Yes, this site was relocated and assessed as having potential for limited, intact deposits.	Outside Impact Footprint, but close enough to require mitigation / management
Site 12	45-1-0243	Rich 1993	Open site: 4 quartz artefacts along vehicle track.	Consent to Destroy issued (Permit #467)	N/A	N/A
Site 13	45-1-0244	Rich 1993	Open site	Consent to Destroy issued (Permit #467)	N/A	N/A
POS A Lamberts Creek 7	45-6-2354	Brayshaw & Haglund 1992	PAD, became OS after test excavation.	Test excavated and destroyed for Lamberts Gully mine. (Permit #405).	N/A	N/A
Western Main 3	45-1-0235	Brayshaw & Haglund 1993	Open site	Consent to Destroy issued (Permit #428)	N/A	N/A
SVW – OS1 with PAD	45-1-2601	OzArk EHM 2005	Open Site	Remains extant	First recorded.	Well outside Impact Footprint.

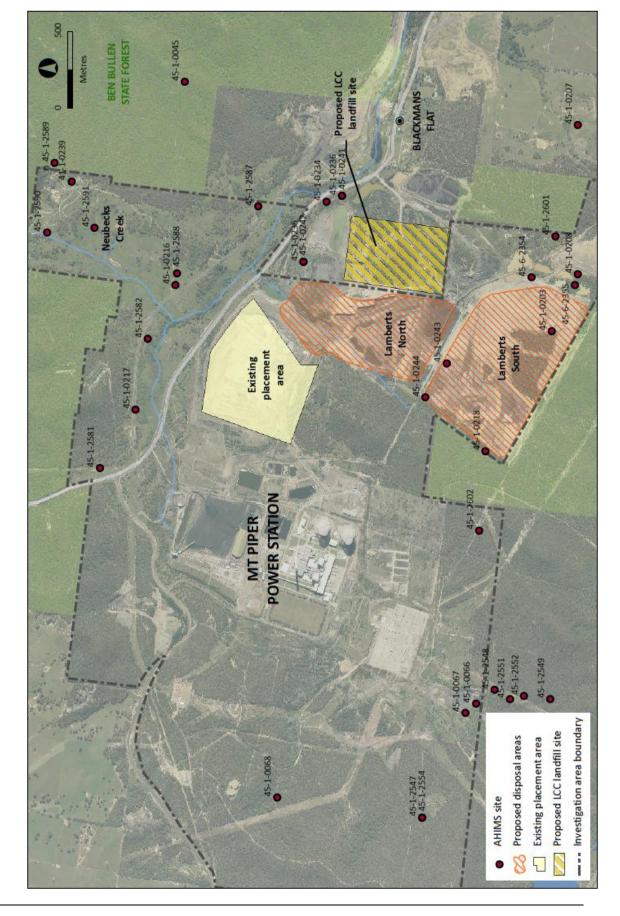


Figure 3: AHIMS search results for Mt Piper.

In summary, it can be said that the entire current Study Areas of Lamberts North and South have been completely surveyed in the past and all sites other than # 45-1-2601 and 45-1-0218 have been destroyed. These two sites are now protected under a CHMP and it is recommended that they continue to be protected by the Mt Piper Ash Emplacement Project.

4.4 Predictive Model For Site Location

The following model is general in applicability, although it has undergone limited revision and focus through examination of the local and regional context.

Proximity to a permanent water supply is the primary factor appearing to determine the location of Aboriginal campsites. Results of an integrated series of studies including a serious excavation component, suggests a high correlation between the permanence of a water source and the permanence and/or complexity of the areas Aboriginal occupation. This is further reflected in the lithic assemblages from sites close to permanent water, which suggested that a greater range of activities were represented (e.g. tool use, manufacture and maintenance, food processing and quarrying). Sites near ephemeral water sources had evidence for one-off occupation (e.g. isolated knapping floors or tool discard), and creek junctions were also proven to be foci for site activity. The location and frequency of previously recorded sites as documented in Section 4.3 indicates that Study area was utilised in the past by Aboriginal people and that this occupation was concentrated along the creeklines. Due to the complete previous survey and subsequent total destruction of the current Study Areas, it is predicted that there will be no Aboriginal sites extent over Lamberts North and South and that the previously recorded sites nearby should remain intact.

4.5 Survey Results

No Aboriginal sites were recorded as part of the current assessment. Further, the Study Area holds little potential for the existence of undetected Aboriginal sites due to the high levels of prior disturbance.

4.5.1 Previously recorded Aboriginal sites

Sites # 45-1-0218 and # 45 -1-2601 were not relocated during the field visit. Both are currently protected by a CHMP that remains in force and is relevant to the current mining operations. Site # 45-1-0218 (described below) is situated within a heavily wooded area adjacent to a waterway beyond the north-western boundary of the existing mined area. This vegetated area remains intact and hence the likelihood is high that site also remains intact. Conversations with the mine manager (March 4 2010) confirmed that this site has not been impacted. Site # 45 -1-2601 is a significant distance away from the proposed impacts of Lamberts South and is not considered at threat from the ash emplacement project. This site is nonetheless described below, was discussed with the mine manager and is reported as being protected as per the CHMP.

Site # 45-1-0218

This open camp site was recorded by Rich and Gorman in 1992 on a gently sloping spur leading down to a small creek line along the western edge of the ML 1448 Study Area (outside the current Impact Footprint). Approximately ten artefacts were recorded here, all but one were made of quartz, while the last was of a fine grained white material, and included 8 flakes and 2 cores. Visibility was assessed as low and more artefacts were thought likely to be present with the further possibility of intact sub-surface deposit.

OzArk relocated this site in 2005 (OzArk 2005) using both co-ordinates and the maps provided. Not all the artefacts were relocatable, but we did find several of the previously recorded artefacts as well as three artefacts not previously recorded.

- Broken flake Fine grained, creamy-grey material, flake scars on dorsal surface, measuring 5 x 4 x 1 cm.
- Flake White quartz, 2 x 0.8 x 0.7 cm
- Flake Creamy chert, 2.5 x 1 x .6 cm

OzArk generally agrees with the previous assessment of this site by Rich and Gorman (1992: 48) that overall impacts to this site are potentially minimal in terms of disturbance, and that there is limited potential for intact archaeological deposit.

Site # 45 -1-2601

This site is located on a slightly elevated flat, open landform near a minor ephemeral drainage line within the valley floor landscape east of Lamberts South. Six artefacts were recorded on an unsealed service track, four of which were diagnostic. Of these two were quartzite primary flakes and the remainders were broken flakes of quartzite and quartz.

This site was flagged in the field with a wooden marker post such that the representatives of the Proponent were aware of its location and hence able to protect the site under the previous CHMP.

4.6 Discussion

Previous surveys of the Lamberts North and South Study Areas demonstrate that this area was used in the past by Aboriginal peoples. As a result, however, of the wholesale nature of the subsequent disturbance associated with open cut mining operations and the reshaping of the ground surface soils which has completely modified the entire local landscape, there is now low / zero potential for intact archaeological deposits over the proposed ash emplacement Study Area.

The two previously identified sites, one just west of the Lamberts South Study Area and the other more distant to the east, remain intact and are currently protected by a CHMP. For the purpose of this project, these two previously registered sites remain as constraints and are to be avoided by project impacts.

4.7 Assessment of Heritage Significance

As no new sites were recorded in the Study Area and there is a demonstrated low potential for intact, undetected subsurface material, the significance assessment section of this report has been omitted.

The previously recorded sites were assessed in OzArk 2005. As a result a CHMP now governs the management of these sites (OzArk 2006), and this documented should revised and updated as a recommendation in this report to cover the protection of these sites into the future.

4.8 Likely impacts on Indigenous Heritage From the Proposal

No Aboriginal sites should be impacted at Lamberts North or South Study Areas as part of the Mt Piper Ash Emplacement Project. However, the proximity of the two previously recorded sites already will require the use of mitigation measures to avoid any inadvertent impact.

4.9 Management Options

With regards to the general results over the Study Area the following general management is recommended.

- <u>Avoid impact</u> If this can be done, then a suitable curtilage around the recorded sites must be determined so as to ensure their protection both during the short term construction phase of development and in the long term use of the area. Specific mitigative measures may be designed to minimise potential adverse impacts and should be incorporated into a CHMP as Conditions of Approval. If plans are altered, care must be taken to ensure that sites previously assessed as not impacted, remain so. This may be facilitated where necessary through the fencing off of sites during construction so as to minimise inadvertent impacts.
- <u>If impact is unavoidable</u> then an Aboriginal Heritage Impact Permit (AHIP)³ may be applied for from the NSW DECCW and approval will depend on many factors including the assessed significance of the recorded sites. Sites of moderate to high significance and/or potential may require either test or salvage excavation, or more detailed recording, as part of the conditions of an AHIP being granted. Sites of low significance may have an AHIP approved with no further archaeological assessment being required, or with an approved monitoring programme. Once granted, the local Aboriginal communities may wish to collect or relocate artefacts, whether temporarily or permanently, if necessary⁴. Consultation with the Indigenous community as per the *DECC Interim Community Consultation Guidelines* is required for all AHIP applications.

4.10 Relevant Legislation

Cultural heritage is managed by a number of State and National Acts.

Baseline principles for the conservation of heritage places and relics can be found in the Burra Charter⁵, which recognizes that there are places worth keeping because they can enrich our lives on many levels. The significance of such places may be embodied in fabric (physical material), environmental setting, contents, use or its meaning to people, and should be assessed through methodical data collection. Since its adoption in 1979, The Burra Charter has become the standard of best practice in the conservation of heritage places in Australia, and heritage organisations and local government authorities have incorporated the inherent principles and logic into guidelines and other conservation planning documents. The Burra Charter generally advocates a cautious approach to changing places of heritage significance. This conservative notion embodies the basic premise behind legislation designed to protect our heritage, which operates primarily at a State level.

³ The developer must to apply to the Director-General of DECCW to obtain an AHIP under Section 90 or Section 87(1), before any impact to the site/object is affected. This process usually takes at least eight weeks.

⁴ The fate of all artefacts remains within the statutory control of the NSW DECC. A care and control permit may be issued to local Aboriginal groups or, with Aboriginal community consent, to other parties, for educational or display purposes.

⁵ The Burra Charter defines the basic principles and procedures to be followed in the conservation of all kinds of places such as monuments, buildings, Aboriginal sites, roads, archaeological sites, whole districts or even regions. It was first adopted in 1979, based on the Australian ICOMOS (International Council on Monuments and Sites) review (1977) of the 1966 Venice Charter (Australian ICOMOS Inc. 1998).

A number of Acts of parliament provide for the protection of Aboriginal heritage at various levels of government⁶. The three most important statutes in New South Wales are the:

- Environmental Planning and Assessment Act 1979 (EP&A Act), amended by the Environmental Planning and Assessment Amendment (Infrastructure and Other Planning Reform) Act 2005 (EP&AA Act).
- National Parks and Wildlife Act 1974 (NPW Act).

While at Commonwealth level, the following statute is relevant:

Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) amended by the Environment and Heritage Legislation Amendment Act (no. 1) 2003.

4.10.1 State legislation

Environmental Planning and Assessment Act 1979 (EP&A Act)

This Act established requirements relating to land use and planning. The four areas controlled by the Act are:

- Part 3: environmental planning instruments, including cultural heritage;
- Part 3A: approvals process for Major Projects;
- Part 4: local government development assessments, including heritage. May include schedules of heritage items; and
- Part 5: environmental impact assessment requirements (for those developments not assessed under Part 3A or requiring consent under Part 4). State owned heritage items listed on LEPs are governed by Part 5.

National Parks and Wildlife Act 1974 (NPW Act)

This Act is administered by NSW Department of Environment, Climate Change and Water (DECCW). DECCW manages NSW parks, natural heritage and cultural heritage. The National Parks and Wildlife Act 1974 contains provisions for the protection of Indigenous archaeological items and sites and register of Indigenous sites is maintained by DECCW.

This Act provides statutory protection for all Aboriginal relics and places, regardless of significance, land tenure or whether they have been previously recorded in the DECCW AHIMS. Areas may be gazetted as Aboriginal 'places' when the Minister is satisfied that sufficient evidence exists to demonstrate that the area is or was of special significance to Aboriginal people.

Under Section 90 of this Act it is an offence to knowingly damage, deface or cause or permit the destruction of an Aboriginal relic or place without the prior written consent of the Director-General of the NSW DECCW. Prosecution for such offences may include the imposition of financial penalties and/or imprisonment. Reporting the discovery of previously unknown Aboriginal sites to the Director-General of the DECCW within a reasonable time of discovery is also obligatory under Section 91 of the Act.

⁶ NSW Heritage Office 1998: *Living with Aboriginal Culture*, p. 3.

Unless relating to a Part 3A EP&A Act proposal, Indigenous cultural material is managed under Section 91 (reporting) of the NPW Act, and Section 90 (excavation). Cultural heritage is grounds for a Stop Work order under the provisions of the NPW Act.

4.10.2 Commonwealth legislation

Environmental Protection and Biodiversity Conservation Act 1999.

Amendments in 2003 established the National Heritage List and the Commonwealth Heritage List, both administered by the Commonwealth Department of the Environment, Water, Heritage and the Arts (DEWHA). Ministerial approval is required for proposals involving significant impacts to National/Commonwealth heritage places. Additionally, the Australian Heritage Council maintains the Register of the National Estate (RNE).

Australian Heritage Council Act 2003

This Act established the Australian Heritage Council as an independent advisory body regarding National/Commonwealth heritage places. The Council conducts assessments of listing nominations, advises the Minister for Environment and Heritage, maintains the RNE, and promotes the assessment and conservation of heritage items.

4.10.3 Applicability to the Study Area

State legislation

The current project is governed by Part 3A of the EP&AA Act.

Commonwealth legislation

No places or sites within the Study Area are governed by the EPBC Act.

5 Non-Indigenous Heritage

5.1 Database Searches

Several items of European heritage in the vicinity of the current Study Area are recorded on various State and National databases. The following data provides the listing and the physical relationship of the listed item to the current Study Area.

- Both the State Heritage Inventory and hence the Greater Lithgow LEP 1994 the listed the following heritage items in the proximity of the Study Area;
 - > Cemetery (Mead Street), Meadow Flat, Lithgow;
 - > Sunny Corner General Cemetery. Dark Corner Road, Sunny Corner; and
 - Sunny Corner Smelter Ruins. Sunny Corner PO 1 km north/east. Sunny Corner.
- Greater Lithgow LEP 1994 also lists the following Schedule 1 heritage items:
 - > Railway Cottage, Portland Road, Pipers Flat.
- The Department of Environment Australian Heritage Database revealed one Indicative Place on the Register of the National Estate in proximity to the Study Area;
 - > Meadow Flat General Cemetery (#100888). Scotts Creek Road, Meadow Flat

In summary, these results demonstrate that no heritage items have been previously recorded within the current Study Area.

5.2 European Settlement in the Area

Following the construction of the initial rough road from Sydney over the Blue Mountains to the west in 1815, came the period of initial settlement in the Lithgow region. In 1822 James Walker took up over a million acres of land at Wallerawang (meaning in local Aboriginal language, a place of wood and water). He was followed by Andrew Brown, who received the first land grant of 200 acres in 1824 (Kelton 2002: 42).

The road to Mudgee was surveyed by Major Edmund Lockyer in 1828, and with the discovery of gold in the Bathurst district in 1851 traffic between the Blue Mountains and the goldfields vastly increased (Lithgow City Council 2001 as quoted in Navin Officer 2005).

The area of Neubecks and Pipers Creeks saw the early establishment of agricultural industries with Peter McPherson being granted 260 ha of land and William Russell being granted land in the early 1830's. Closer to the Study Area, at Blackmans Flat, settlement is said to have begun during the 1850's in an area c. 1 km south of the current Study Area. According Kelton (2002)⁷ Alois Neubeck took up land in what is now known as the Neubecks Creek area in the 1880's and built a cottage of wattle and daub in 1888. Heritage assessment of Neubecks Creek in 2005 (Benton 2005) reported the remains of some European buildings and it is possible that these may represent some of those discussed in this history.

⁷ During his 2002 Boulder Road study, Jim Kelton interviewed Mrs Martin, a Blackmans Flat local, and obtained much of the information regarding Alois Neubeck that is reproduced in this review

According to Genders (1967) coal mining began in Wallerawang around 1873 with a number of mines being opened on the Lithgow seam at Mount Piper, mid-way between Wallerawang and Lidsdale. The primary mines at Wallerawang included: The Irondale Colliery; Cullen Bullen Colliery; The Ivanhoe Colliery; The Commonwealth Colliery; The Great Western Mine and The Invincible Colliery. Blackmans Flat Colliery had been established by 1875 and was undertaking underground mining operations, as was the Irondale Colliery at Pipers Flat by 1883. Black Diamond Colliery (later known as Huon Mine) was established within the Boulder section in 1902, and a detailed history of this mine is provided by Kelton (2002: 44) and will not be repeated here.

The Lithgow area also has the longest history of copper mining in NSW and developed three smelters for copper ore (Heritage Office and Department of Urban Affairs and Planning HO & DUAP 1996). In 1876 Sunny Corner Mine began copper mining. Sunny Corner (north of the Great Western Highway) was originally exploited as a gold mine, however the discovery of silver lodes in 1885 prompted a "rush" to the area which had previously not been settled and a town grew up on Crown Land adjacent to the mining leases. Prior to 1883 when Broken Hill Mine opened, Sunny Corner mine was Australia's richest silver operation. The village of Sunny Corner was formally gazetted on 2nd October 1885 (as R No 122). Sunny Corner and Dark Corner produced gold, silver, zinc, antimony and copper. According to HO & DUAP (1996) the order of mining is chronologically set out below;

- There was a minor gold rush in the decade following 1865;
- copper mining from 1876;
- silver smelting from 1883; and
- zinc and silver from 1917 onwards.

Subsequently, the coal and lime industries have prospered in the Blackmans Flat / Portland areas from the mid to late nineteenth century, utilising the rich geological resources of the Illawarra Coal Measures (Lithgow City Council 2001). Between 1870 and 1905 collieries were established at Pipers Mount, Blackmans Flat, Lidsdale, Wallerawang and Angus Place, generally following the railway line (Brown 1989 as cited in Navin Officer 2005).

5.3 Survey Results

No non-Indigenous items of heritage have ever been recorded over Lamberts North or South as far as research undertaken can determine.

There are remains of European heritage over the Neubecks Creek site (Benton 2005) and as assessment of the Ivanhoe No. 4 area has not been completed, it is unknown as to whether European heritage is present on this site.

5.4 Discussion

Given the high levels of disturbance of the Lamberts North and South Study Areas, it was expected that no items of non-Indigenous items of heritage would remain. The lack of non-Indigenous heritage items at this location is consistent with the fact that while Europeans have settled the general region for nearly 200 years (**section 5.1**), the area has since been extensively mined.

As noted above European heritage evidence is present at Concept Approval areas Neubecks Creek and possibly at Ivanhoe No. 4. Further assessment of these areas to determine the presence of European heritage would be required prior to any impacts occurring.

5.4.1 Assessment of significance – general principals

As no objects were recorded over the Lamberts North or South Project Areas, the rest of this chapter has been omitted.

After future assessment of Neubecks Creek and Ivanhoe No. 4, this significance assessment process should be completed for all items recorded, such that appropriate management can be devised.

It is understood that this process will precede mining of these areas and hence be managed well before the area may ever be used for ash emplacement.

6 Recommendations

Under Section 91 of the NP&W Act (1974 as amended) it is mandatory that all Aboriginal sites recorded under any auspices be registered with the NSW DECCW Aboriginal Heritage Information and Management System (AHIMS). As a professional in the field of cultural heritage management it is the responsibility of OzArk EHM to ensure this process is undertaken. To this end it is noted that no new Aboriginal sites were recorded as part of the current survey.

The following recommendations are made on the basis of:

- Legal requirements under the terms of the *National Parks and Wildlife Act of 1974* (as amended) whereby it is illegal to damage, deface or destroy an Aboriginal relic/object without the prior written consent of the Director, DECCW;
- The findings of the current investigations undertaken within the Study Area; and,
- The interests of the Aboriginal and wider community.

In reference to Lamberts North and South Project Areas, it is recommended that:

- No physical evidence of Aboriginal occupation was recorded over the Lamberts North or South Study Areas. Disturbance has been wholesale and no Aboriginal sites have potential to remain extant within the Impact Footprints for the ash emplacement project. No further assessment of these areas is considered requisite on Aboriginal heritage grounds.
- 2. Two previously recorded Aboriginal sites, DECCW # 45-1-0218 and 45-1-2601, are located outside the impact footprint for the current ash emplacement project and are currently protected by a Cultural Heritage Management Plan (CHMP). It is recommended that a new CHMP be developed for the Ash Emplacement Project that ensures that these sites remain protected into the future. With respect to managing these areas, it is considered that both sites can be avoided by the proposed works through the implementation of mitigation measures including:
 - (a) Mine management and construction crew induction to inform all of the legislative protection of the sites under the NPW Act; and
 - (b) Through the erection of high visibility fencing and heritage exclusion notifications during nearby activity to ensure that there are no inadvertent impacts to these sites. These measures should form part of the conditions of approval of the CHMP;
- Should any 'relics' or other Aboriginal sites be identified anywhere in the Study Area during the course of construction, work in that area should cease and the DECC Western Region Office and the Bathurst LALC be contacted to discuss how to proceed.
- 4. Two copies of this report (one CD and one hard copy) should be sent to

Department of Environment, Climate Change and Water Central Environment Protection and Regulation Division PO Box 1967 HURSTVILLE, NSW, 2221 In reference to Neubecks Creek and Ivanhoe No. 4 Concept Areas, it is recommended that:

- 5. Further assessment and survey of the Ivanhoe No. 4 Concept Area would eventually be required to ensure all heritage has been adequately identified and documented.
- 6. There is already known evidence of Aboriginal and early European occupation over both the Neubecks Creek and Ivanhoe No. 4 Concept Areas and hence any proposed impacts would need to be assessed against known heritage values of these locations such that appropriate heritage management measures could be devised.
- 7. A significant component of this process would be Aboriginal community consultation in relation to the assessment for sites, the cultural significance of any recorded locations and with regards to mitigation and management measures.

7 References

AICOMOS 1998	Understanding the Burra Charter: A guide to the principles of heritage conservation in Australia. Brochure produced for Australia ICOMOS.				
Appleton, J. 2004.	Aboriginal Heritage Assessment Pine Dale Coal Mine Proposal. Report to R.W. Corkery & Co.				
Barton, H. and McDonald, .	J. 1995. Archaeological investigation of sites affected by augmentation works at Lyell Dam, near Lithgow, NSW. Salvage and test excavation report. Report prepared for Pacific Power.				
BOM 2010	Commonwealth Bureau of Meteorology 2010 www.bom.gov.au				
Benton 2003	Benton, J. 2003 Test Excavations at Site L2 – # 45-1-2573 & 2574, within the Proposed Corridor the New Castlereagh Highway 86, Lidsdale, NSW. July 2003. Report to the NSW Roads and Traffic Authority, Parkes.				
Benton 2004	Benton, J. 2004 Salvage Excavations at Site L2 – # 45-1-2573 & 2574, within the Proposed Corridor the New Castlereagh Highway 86, Lidsdale, NSW. July 2004. Report to the NSW Roads and Traffic Authority, Parkes.				
Benton 2005	Benton, J. 2005. <i>Heritage Assessment: Proposed Neubecks Open Cut Coal Mine, Blackmans Flat, NSW</i> . Report to International Environmental Consultants on behalf of Centennial Coal.				
Bowdler 1983	Bowdler, S. 1983 <i>Aboriginal sites on the Crown timber lands of NSW</i> . Report to the Forestry Commission of NSW.				
Brayshaw, H and Haglund, L. 1992a. Western Main Colliery Proposed Open Cut Western Blue Mountains, NSW. Report to Novacoal Australia Pty Ltd.					
Brayshaw, H and Haglund,	L. 1992b. Lamberts Creek - Western Main Colliery Archaeological investigation of two potential open sites. Report to Novacoal Australia Pty Ltd.				
Brayshaw, H and Haglund, M. 1992c. Angus Place Colliery to Mt Piper Power Station Proposed Haul Road: Archaeological Investigation. Report to Coal Link P/L					
Brayshaw, H and Dallas, M	1. 1993. <i>Mt Piper to Marulan 500kV Transmission line Archaeological Investigation.</i> Report to Pacific Power.				
Brayshaw, H. 1993.	Western Main Colliery Proposed Open Cut Extension. Archaeological Survey for Aboriginal Sites. Report to Novacoal Australia Pty Ltd.				
Brown, J.W. 1989.	Bent backs: an illustrated social and technological history of the Western Coalfields. Industrial Printing Company, Lithgow.				
Gay, L. 1999.	Proposed Realignment of the Castlereagh Highway, Lidsdale, NSW: Indigenous Heritage Assessment. Report to the RTA.				

- Gay, L. 2000.Proposed Realignment of the Castlereagh Highway, Lidsdale, NSW:
Supplementary Report on the Indigenous Heritage Assessment. Report
to the RTA.
- Genders, B. W. 1967. *Coal Mines in the Western District Coalfield*. Lithgow District Historical Society- Occasional Papers, No.5.
- Kelton, J 1999 An Archaeological survey of the proposed silicon plant at Wallerawang, near Lithgow, Central tablelands of NSW. Report to R.W. Corkery, Orange.
- Kelton, J 2000 An Aboriginal Archaeological study of the Marrangaroo Department of Defence site, Lithgow, NSW. Report to Dames and Moore Pty Ltd, North Sydney.
- Kelton, J. 2002An Aboriginal Archaeological Study & Non-Indigenous Heritage
Overview of the Proposed Boulder Road Coal Mine, Near Cullen
Bullen. A report to International Environmental Consultants P/L.
- Mills, R. 1996 An Archaeological Survey Arch survey for Stage 4 of Ivanhoe Mine, Portland.
- Navin Officer 2005Navin Officer 2005. Mt Piper Power Station Extension: Cultural heritage
Assessment. Report to Delta Electricity.
- 2005 OzArk 2005 Flora, Fauna & Heritage Assessment: ML 1448, Lamberts Gully, NSW. A Report to International Environmental Consultants on behalf of Centennial Coal.
- Rich (= White), E. 1988. Proposed prison at Marrangaroo Creek near Lithgow, NSW: archaeological survey for Aboriginal sites. Report prepared by Brayshaw McDonald Pty Ltd for the Public Works Department of NSW.
- Rich (= White), E. & Gorman, A, 1992 Proposed Springvale Colliery and Conveyor, Wallerawang: Archaeological Survey for Aboriginal Sites. Report prepared for Sinclair Knight.
- Rich (= White), E. 1993a Springvale Coal Project, Wallerawang, NSW: Archaeological inspection of Aboriginal sites affected by construction works. Report prepared for Howie Herring and Forsyth Pty Ltd.
- Rich (= White), E. 1993b Additional Archaeological Survey for the Proposed Springvale Colliery and Conveyor, Wallerawang: Archaeological Survey for Aboriginal Sites. Report prepared for Howie Herring and Forsyth Pty Ltd.
- Silcox 1988 Silcox, R, 1988. Archaeological Survey of Cox's River diversion State Highway 5, Lithgow, NSW. Report to Dept of Main Roads.
- Tindale, A. 1974 Aboriginal Tribes of Australia. University of California Press.
- SKM 2009. Sinclair, Knight Merz. Mt Piper Power Station Ash Placement Project. Project description and preliminary environmental assessment.

8 Plates



Plate 1: View east of the area proposed for Lamberts North ash emplacement. The entire area has been mined and there are no undisturbed surfaces remaining.



Plate 2: View east of the southern end of the proposed Lamberts North ash emplacement area. This remnant of regrown vegetation around the coal conveyor belt will not be impacted by the project. Note this area has been significantly previously disturbed.



Plate 3: View west across proposed Lamberts South ash emplacement area. The ash will only be placed in the disturbed areas in the foreground and will not impact the remnant vegetated area in the background. Site 45-1-0218 is within the vegetated area beyond the limit of disturbance, but was not accessible at the time of survey. The Mine Manager has assured OzArk that the site remains intact as per the active CHMP for the site.



Plate 4: View north from the southern end of the proposed Lamberts North ash emplacement area. Again the entire footprint has been mined.



Plate 5: Location of Site 45-1-0218 is within the vegetated area beyond the limit of disturbance. Photo from previous assessment.



Plate 6: Artefacts of Site 45-1-0218. Photo from previous assessment.



Plate 7: Site 45-1-2601. Photo from previous assessment.



Plate 8: Artefacts of Site 45-1-2601. Photos from previous assessment.

Appendix 1: Aboriginal Site Descriptions

Open Sites

Often called stone artefact scatters, these sites (for the purposes of the DECCW AHIMS database) were in the past defined by the presence of two or more stone artefacts located within 50 m of one another. Current guidelines, however, delineate no hard and fast determinations on requisite artefact numbers, more loosely describing these campsites as places exhibiting evidence of past human activity. This can be, and is most frequently, in the form of stone artefacts, but may also include other evidence such as hearths or midden material. Such sites provide evidence for the range of activities that may have been undertaken at a particular place, including the production of stone tools and the preparation of food including the butchering of animals or grinding of seeds. However, the distinction between a single, isolated artefact versus a place where numerous artefacts have been recorded together provides a necessary division in terms of the possible information that a site can reveal about past activities. Further information recorded about open sites includes assessments of the sites' integrity (how intact the site is) and subsequently whether sub-surface deposits are thought to be present.

Isolated Finds

An artefact, usually of stone, but possibly of other materials, that is located but has no relationship to other identifiable archaeological features.

Modified Trees

Any tree that has undergone physical alteration by Aboriginal people is referred to as a modified tree. These traditionally include tress scarred for the removal of bark to make implements (coolamons, shields, cradles or canoes — see scarred trees below), but can also include trees that have been impacted in the gathering of resources such as scars in the base of the tree for digging out grubs; scars used as toeholds for tree climbing, areas cut into a hollow tree to smoke out food resources etc. Also included in this group are trees marked or carved as boundary or grave markers or Bora Ground carved tees.

Scarred Trees

This site type results from the deliberate removal of bark (and sometimes wood) from trees, for the purpose of obtaining raw material for the manufacture of various items of material culture – i.e. shields, coolamons, shelters, canoes, and cradles. They may also result from foraging and hunting; for instance, toe holes cut in trees to allow access to upper branches and hollows, and axe marks around natural hollows for the extraction of small tree-living fauna (such as possums or birds) or honey.

The identification and interpretation of a scar as being Aboriginal in origin can often be difficult, as bark can be removed from trees by a variety of means e.g. animal and bird foraging, the natural breaking off of tree limbs, lightning strikes to the tree, the result of machinery damage to trunks and the removal of bark by Europeans to define land boundaries. To assist archaeologists in the accurate identification of Aboriginal scarred trees, the DECCW Western region provides a set of criteria against which each scar must be assessed.

These diagnostic criteria are as follows:

 The scar must not touch the ground — (scars resulting from fire, fungal attack or lightning nearly always reach the ground). Such a termination does not necessarily preclude an Aboriginal origin. Ethno-historic accounts of canoe manufacture occasionally demonstrate scarring to ground level. If the scar does run to the ground, the sides must be relatively parallel (i.e. not triangular). It must be noted that discussion with Aboriginals from other areas suggests that scars may indeed extend to the ground, especially when the bark is planned for use in a shelter. This information is derived from oral histories recorded in Dubbo and observations from further afield;

- 2. The ends of the scar should be squared off or evenly tapered Different shapes at the top and bottom (e.g. pointed at top, squared at bottom; round at top, flaring at bottom) are suggestive of natural processes (e.g. branch loss);
- 3. The sides of the scar should be parallel or symmetrical Few natural scars are likely to have these properties, with the possible exception of fire scars which may be symmetrical but are usually wider at their base. Modern surveyors' marks are typically triangular and often adzed. These also (regardless of shape) usually have a number carved in the wood within the scar;
- 4. The length of the scar must be on the same axis as the tree and not oblique or slanting across the tree or the branch Scars which are natural in origin tend to have irregular outlines, sometimes have irregular regrowth and may occur against the axis of the tree.
- 5. The tree should be reasonably old i.e. over 100 years The tree upon which the scar is found should be old enough (i.e. of sufficient age) to have been used by Aboriginal people in (at least) a semi-traditional manner. This means the tree should be at least approximately 100 years old. The age of the scar should also be reflected in the thickness of the regrowth. Young scars (e.g. some natural scars caused by branches falling or birds or horses gnawing, have characteristically thin regrowth);
- There must be no obvious natural or other artificial cause such as a branch rip, lightening strike, cockatoo chewed bark or healed bark tears from machinery damage or car impact. Any signs that the scar may not be Aboriginal should be carefully assessed; and,
- 7. The tree must not be an introduced species For obvious reasons, the tree upon which the scar is found should be endemic to the region. This excludes historic (exotic) plantings.

Also helpful in scarred tree identification, but not within the DECCW criteria are the following points:

- 8. Axe or adze marks A scar with cut marks on the original wood is likely to be anthropogenic in nature (i.e. as a result of human actions). The location and shape/size may lend support to the scar's origin. For example stone axe marks would indicate an Aboriginal origin, while steel axe marks post-date the arrival of Europeans. These of course could still have been made by an Aboriginal person in the post-contact era; and,
- 9. *The presence of epicormal growth* Many scars of Aboriginal origin tend to have an epicormal shoot originating at the base of the scar. This is a new branch shooting from the point of damage and is part of the trees self preservation mechanism.

As noted in the DECCW criteria, any tree that does not fit these rules cannot be accepted as likely to be of Aboriginal origin. This may mean that a few authentic scars are omitted from the Aboriginal Sites register, but it is the only means to establish consistency in identification.

However, even when applied, the above criteria cannot always provide a definitive classification and a natural origin for the scar cannot be ruled out. For this reason interpretations of Aboriginal origin are qualified by the recorder's degree of certainty. The following categories are used:

DEFINITE ABORIGINAL SCAR

This is a scar which conforms to all of the criteria stated above and/or has in addition a feature or characteristic that provides definitive identification, such as diagnostic axe or adze marks, or a historical identification. All conceivably natural causes of the scar can be reliably discounted.

ABORIGINAL SCAR

This is a scar which conforms to most of the criteria, and where an Aboriginal origin is considered to be the most likely. Despite this, a natural origin cannot be completely ruled out.

POSSIBLE ABORIGINAL SCAR

This is a scar which conforms to most of the criteria but where an Aboriginal origin would appear unlikely.

Carved Trees

The graves of some individuals were marked by carved trees. These had a section of the bark removed from the trunk and geometric designs carved into the exposed wood. The designs resemble rectilinear or curvilinear motifs which were also found decorating wooden weapons and skin cloaks. It is possible that these motifs signified totemic or kinship affiliations of the deceased. Very few such trees remain due to the wholesale land clearance since the advent of European land-use practices. These trees are most common in the territory of the Wiradjuri and Kamilaroi, although a few are found further afield.

Trees were also carved around Bora Grounds or as boundary markers.

Natural Mythological Sites

Natural mythological sites can be any natural feature and like a cultural/spiritual are not detectable without the traditional knowledge of specific areas.

Axe Grinding Grooves

Aboriginal axe heads were usually made from very hard igneous rock which was first flaked roughly to the appropriate shape and then pecked or ground to an even surface. To keep the edges of these axes sharp, they were ground on the surface of a relatively softer stone (usually sandstone). As the axe is rubbed repeatedly in the same location a groove forms to fit the shape of the axe. This groove has a roughly elliptical shape and a smooth, regular surface along its base. Spearheads may also have been sharpened in grooves, which generally appear narrower and deeper.

Grinding groove sites are most often located on the floodplains of rivers and creeks, although they can be in elevated positions above water as well. Sometimes, sandstone flats near water may exhibit hundreds of such grooves and it is thought that once an axe blank has its edge ground in a groove, then it can only be sharpened in the same groove. Hence, if the owner of the axe is away from its place of origin, then a new groove has to be created for the sharpening of that particular axe head⁸.

⁸ As read at the Terramungamine Reserve grinding groove interpretation sign.

Grooves are also frequently recorded in smaller groups, especially along more ephemeral water courses.

Grooves may also be found in association with larger ground areas that may have been used to grind foodstuffs, seeds, tubers etc.

Burials

Human skeletal remains can occur as either single individual burials or as cemeteries containing multiple individuals. Several have been recorded in the local region (Section 4.3). Individuals may be buried either in a standing or sitting position, often oriented to the east and sometimes marked by carved trees.

Rockshelter Sites

Rockshelters occur as weathered overhangs or recesses in sandstone cliffs or boulder outcrops. To have archaeological potential they should be sheltered (i.e. dry inside), large enough for people to sit or stand and possess a reasonably flat floor. Occupation deposits, stone tools, food remains and hearths may build up as a layer on the floor depending on the length or frequency of occupation. Burials may also occur in rock shelter sites. A suitable shelter with a build up of deposit but without visible Aboriginal artefacts is known as a shelter with Potential Archaeological Deposit (PAD). Paintings, drawings or stencils may be found on the walls or roofs of rockshelters, usually where the stone is smooth and provides an appropriate surface.

Ceremonial – Bora Grounds

Bora grounds are ceremonial areas usually consisting of large, ring-shaped mounds where Aborigines of south-eastern Australia performed religious ceremonies called *Bora*. Carved trees surround some of the grounds. Aborigines participated in the *Bora* ceremonies throughout their lives, starting with their initiation (ceremony of acceptance into the adult group) as teenagers. Most descriptions of the Bora Grounds (also called Bora rings) and ceremonies come from non-Aboriginal observers of the 1800s. Although Aborigines no longer perform the *Bora* ceremonies, many believe the grounds remain sacred.



1143 Mariahaid Sheet Shite New 2033 PO Ray tu, Gishe SSM 2013 R os agés 6327 f. es ggés 6936

Cheryl Burke Administration Officer OzArk Environmental & Heritage Management P/L PO Box 2069 Dubbo NSW 2830

Dear Cheryl,

Re: Request - Search for Registered Aboriginal Owners

I refer to your letter dated 22 January 2010 regarding an archaeological project in the Lithgow area in NSW.

I apologise for the delay in responding.

I have searched the Register of Aboriginal Owners and the project area described does not appear to have Registered Aboriginal Owners pursuant to Division 3 of the *Aboriginal Land Rights Act* 1983 (NSW).

I trust that you are in contact with the Bathurst Local Aboriginal Land Council. They may also be able to assist you in identifying other Aboriginal stakeholders for this project.

Yours sincerely

per Courtney Field Administrative Officer Office of the Registrar, Aboriginal Land Rights Act (1983)

9 February 2010

From:	Eddy Neumann [en@eddyneumann.com.au]
Sent:	Tuesday, 9 February 2010 7:48 PM
То:	Cheryl Burke
Cc:	Jodie
Subject:	Gundungurra People and Aboriginal Heritage Assessment Mt Piper Power Station Ash Placement Project

Dear Cheryl,

We act for the Gundungurra People and refer to your letter dated 22 January 2010 concerning the above.

Our clients have cultural interests in the project area and should be included in the consultation process with regard to Indigenous heritage issues

Please treat this as our clients' notification of their interest in and desire to be involved in the management of Indigenous heritage matters as traditional owners and registered native title claimants.

Our clients contact person is Sharon Brown Tele 0411146063.

Yours faithfully,

Eddy Neumann.

Eddy Neumann PRINCIPAL



Level 1, 255 Castlereagh Street SYDNEY NSW 2000 PH 02 9264 9933 FAX 02 9264 9966 DX 11501 Sydney Downtown EMAIL en@eddyneumann.com.au

Liability limited by a scheme approved under Professional Standards Legislation

Important Notice: If you have received this email by mistake, please advise the sender and delete the message and attachments immediately. This email, including attachments, may contain confidential, sensitive, legally privileged and/or copyright information. Any review, retransmission, dissemination or other use of this information by persons or entities other than the intended recipient is prohibited

08/02/2010 14:44 0263411656

NEIGHBOURHOOD CENTRE

PAGE 01/02

Neville Williams P O Box 70 Cowra NSW 2794

8 th February 2010

Ozark E H M P O Box 2069 DUBBO NSW 2830

Dear Cheryl

Expression of Interest Indigenous Heritage Assessment for the proposed Mount Piper Power Station Ash Placements Projects near Lithgow, NSW

We wish to register our cultural/historical and spiritual expression of interest for the following people Neville Williams, Shawn Williams 95 Ballendella Rd Toongabbie NSW, Wayne Williams 26 Stewart St Cowra 2794 NSW, Sharon Williams 26 Stewart St Cowra NSW 2794.

We have bloodline back to country and would like to be consulted and involved in any Indigenous Archaeological investigation associated with this project. We wish to be registered as individuals.

Yours Sincerely

Neville Williams Wayne Williams Shawn Williams Sharon Williams

Signed for and on behalf of above



GW:JKH Regional Services 19 February 2010

Attn: Cheryl Burck PO Box 2069 Dubbo NSW 2830

Dear Madam

ABORIGINAL HERITAGE ASSESSMENT FOR THE PURPOSED MOUNT PIPER POWER STATION ASH PLACEMENT PROJECT NEAR LITHGOW, NSW

I refer to your letter dated 22 January 2010 in regards to Aboriginal groups, stakeholders or traditional knowledge holder in the Lithgow area. Please find this information below:

- Mingaan Aboriginal Corporation 38 Tweed Road LITHGOW NSW 2790 Phone 6352 2473
- Central Aboriginal Heritage Unit Cultural Heritage Division NSW NPWS, DEC PO Box 1967 HURTSVILLE NSW 2040 Phone 95856470
- Bathurst Local Aboriginal Lands Council PO Box 1500
 BATHURST NSW 2795
 Phone 63326835
- Mr Bill Hardie Gundungurra Tribal Council 14 Oak Street KATOOMBA NSW 2780

Please do not hesitate to contact me 8.30 am and 10.30 am on (02) 63549999, in Council's Regional Services Department should you have any queries in relation to this matter.

Yours faithfully A Mr Gary Wallace **TEAM LEADER - DEVELOPMENT**

 (02) 6354 9999
 (02) 6351 4259
 www.lithgow.nsw.gov.au council@lithgow.nsw.gov.au
 ADDRESS CORRESPONDENCE TO GENERAL MANAGER
 PO BOX 19, LITHGOW NSW 2790 15 Feb 10 12:25p Lyn Syme

0263734875

p.2



15th February, 2010 OzArk EHM PO Box 2069 DUBBO. NSW. 2830

Dear Cheryl,

Expression of Interest Aboriginal Heritage Assessment – proposed Mt. Piper Power Station Ash Placement Project.

North East Wiradjuri Co. Ltd. wish to register our interest in the Aboriginal Heritage Assessment for the proposed Mount Piper Power Station Ash Placement Project near Lithgow.

North East Wiradjuri Co. Ltd. is a company that was established to represent the North Eastern Wiradjuri Native Title Party of the Bathurst, Lithgow, Mudgee area. The company was established to conduct business associated with a number of successful N.T. negotiations via Section 31 Ancilliary Deed Agreements. These agreements were the outcome of the Right to Negotiate Process after having passed the Registration Test in the NNTT. Our NT Party has passed the registration test on at least six occasions.

I can be contacted on the 63734875 or 0427610209, should you require any further information.

Yours faithfully,

Lyn Syme.

Secretary

112 - 114 Main St, Ulan. NSW. 2850 Phone: 0263734611 Fax: 0263734613 ABN: 18125329526 Stuart Cutmore 8 Nelson Street Cowra 2794

13th February 2010

Ozark EHM PO Box2069 Dubbo 2830

Re; Expression of Interest Indigenous Heritage Assessment for the proposed Mount Piper Power Station Ash Placements Projects near Lithgow NSW.

We wish to register our Cultural Historical and Spiritual expression of interest for the following people Stuart Cutmore and Mitchell Cutmore.

We have bloodline back to country and would like to be consulted and involved in any Indigenous Archaeological investigation associated with this project. We wish to be registered as individuals.

Yours sincerely

Stuart Cutmore Stuart a Trone Mitchell Cutmore

15 Feb 10 12:25p Lyn Syme

0263734875

WARRABINGA

Native Title Claimants Aboriginal Corporation PO Box 771 Picton NSW 2574 MOBILE: 0409 966 371 or 0409 966 163 FAX: 02 4677 0454



15th February, 2010

Ozark EHM PO Box 2069 DUBBO. NSW 2830

Re: Expression of Interest – Aboriginal Heritage Assessment – Mt. Piper Power Station Ash Placement Project.

I write to advise you of this organisation's interest in any work you may be undertaking in NSW in relation to Native Title and Aboriginal cultural heritage issues particularly the above project.

Membership of our organisation is open to adult Aboriginal persons who are descendants of Dabee, Mudgee, Capertee, Coxes River, Goulburn River, Cudgegong River, Gulgong, Cassilis, Bylong, Lithgow, Abercrombie, Jenolan and Wombeyan Caves and Wollemi and Oberon Clans.

Warrabinga Native Title Claimants Aboriginal Corporation was established to represent the interests of a large number of individual Aboriginal clan groups in the areas outlined above.

Broadly our organisation has members with native title interests over the lands and waters associated with the Cox's River, Goulburn River and the Cudgegong River and other waterways within these boundaries.

Our organisation consists of a number of members with knowledge essential to completing Aboriginal cultural heritage assessments and our executive committee make determinations for the most suitably qualified individual(s) for any field work.

Warrabinga is fully insured for both Public Liability and Workers Compensation (Certificates of currency are available upon request, should they be required for any work).

We would therefore request that you maintain contact with us, consult with us and we can provide expertise services under contract should you require such services.

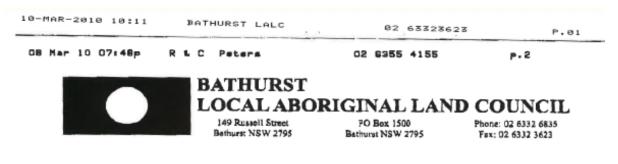
I can be contacted on 0409966052.

Yours in Indigenous spirit,

Cheves

Wendy Lewis - Hon. Secretary

1



DELTA POWER STATION ASH PLACEMENT PROJECT

LAMBERTS GULLY GROUND TRENCHING REPORT

A walk through inspection was conducted on Thursday the 4th March 2010 for Delta Power Station purposed Ash Placement Project at Lamberts Gully Blackmans Flat approximately 14km north-west of Lithgow NSW.

The area designated for the Ash Dump has been completely destroyed due to the ongoing Open Cut mining. Pervious Surveys were conducted in 1992 and three times in 2005.

The area at Site 7 could not be accessed due to the rehabilitation in the area. Pervious roads are no longer visible. Discussions were held on Thursday 24th October 2005 with Springvale Coal representatives to ensure the safety of Site 7, 45-1-0208 the area would be taped off. The Mines representative Wayne Vought assured both Ozark Environmental & Heritage Management and Bathurst Local Aboriginal Land Council representatives that this is the case and the area has been protected and not impacted upon as per the Caltural Heritage Management Plan agreement.

The Bathurst Local Aboriginal Land Council has no objections to the proposed Ash Placement Project by Delta Power Station commencing within the walk through inspection areas providing existing bushland areas surrounding the Ash Placement site are not impacted upon.

Present at this walk through inspection were:

Jodie Benton Wayne Vought Richard Peters Archaeologist Ozark Environmental & Heritage Management Representative Sites Officer Bathurst Local Aboriginal Land Council

RICHARD J PETERS SITES OFFICER 4 March 2010

Lambers Gully 04.03-10

1

PO Box 70 COWRA NSW 2794

Mobile: 0477 841 560

11 April 2010

Dr Jodie Benton OzArk EHM P/L PO Box 2069 DUBBO NSW 2830

Dear Dr Benton

Methodology for the Aboriginal Heritage Assessment for the proposed Mt Piper Ash Emplacement Project, Blackman's Flat, NSW

I refer to your letter of 22 March 2010 about this proposed project.

Unfortunately we are unable to comment on the draft methodology without visiting the proposed site, even though you state that the study areas of Lamberts North and Lamberts South have been completely surveyed in the past and are now highly disturbed. Even if sites are disturbed they may have cultural and social significance to Aboriginal people.

Should you wish to discuss this further with me, I am available on the above mobile phone number most of the time or by email at backstreetmission@yahoo.com.au

Sincerely W With -

Neville Williams

Mount Piper Ash Placement Project				
STAGE 1 – NOTIFICATION & REGISTRATION – ADVERT	DATE AD WRITTEN	DATE AD APPEARS	EOI CLOSURE	COMMENTS
Lithgow Mercury	13.01.10	23.01.10 (Saturday)	08.02.10	13.01.10 Emailed sample advert & Stage 1 letter to SKM for approval. 21.01.10 SKM advised Delta had given go ahead. Placed ad 22.01.10
STAGE 1 LETTERS	DATE SENT			
DECCW	22.01.10	Mr P Houston Aboriginal Heritage Planning Officer DECCW PO Box 2111 Dubbo NSW 2830	10.02.10	Sent Stage 1 letter requesting information on known Indigenous organisations in the Lithgow area that should be informed of this project.
NTSCORP	22.01.10	Administration / Notification Team NTSCORP PO Box 2105 Strawberry Hills NSW 2012	10.02.10	Sent Stage 1 letter requesting information on known Indigenous organisations in the Lithgow area that should be informed of this project.
Office of the Registrar, ALRA	22.01.10	Courtney Field Office of the Registrar, ALRA Tranby Aboriginal College 11 - 13 Mansfield Street Glebe NSW 2037	10.02.10	Sent Stage 1 letter requesting information on known Indigenous organisations in the Lithgow area that should be informed of this project.
Lithgow City Council	22.01.10	Attn: Mr R Bailey General Manager Lithgow City Council PO Box 19 (180 Mort Street) Lithgow NSW 2790	10.02.10	Sent Stage 1 letter requesting information on known Indigenous organisations in the Lithgow area that should be informed of this project.
Bathurst LALC	22.01.10	Members: Bathurst LALC c/- Mr W Peckham 149 Russell Street (PO Box 1500) Bathurst NSW 2795	10.02.10	Sent Stage 1 letter advising of project and inviting EOI.
STAGE 1 – RESPONSES				
Mingaan Aboriginal Corp Lithgow	27.01.10	Helen Riley / Jill Bower E: 'helenriley44@yahoo.com' Helen Ph: 6352 2473 Jill Ph: 6334 4183 38 Tweed Road Lithgow NSW 2790		Jill Bower phoned to express interest on behalf of Mingaan and advised they wished to be part of the registered stakeholder group. Noted they had current insurance which will be renewed in March and many experienced sites officers.
DECCW	01.02.10	Mr P Houston Aboriginal Heritage Planning Officer DECCW	17.02.10	Received letter from DECCW recommending we contact the following groups *Dhuuluu-Yala Ab.Corp *Mingaan Aboriginal Corp *BLALC *Aboriginal Reference Grp

		PO Box 2111 Dubbo NSW 2830	Hawkesbury-Nepean CMA *Mooka Traditional Owners Council *Warrabinga NTCAC *Wiradjuri Council of Elders CHC *North East Wiradjuri *Gundungurra Aboriginal Heritage Assoc. *Gundungurra Tribal Council Ab Corp *Wiradjuri Traditional Owners CWAC *Bill Allen All correspondence sent out EOI date closure 17th February 2010
Bathurst LALC	03.02.10	Members: Bathurst LALC c/- Mr W Peckham 149 Russell Street (PO Box 1500) Bathurst NSW 2795	Received verbal confirmation of interest in project and request to join list of Registered Stakeholders.
Mitchell Cutmore	04.02.10	Mr M Cutmore 8 Nelson Street Cowra NSW 2794	Esther Cutmore phoned to speak on behalf of her nephew Mitchell who would like to express interest in the project and wishes to be a Registered Stakeholder. This response was prompted by correspondence Neville received as per advice by DECCW. 15.02.10 Received formal written response via fax.
Stuart Cutmore	04.02.10	Mr S Cutmore 8 Nelson Street Cowra NSW 2794	Esther Cutmore phoned to speak on behalf of her nephew Stuart who would like to express interest in the project and wishes to be a Registered Stakeholder. This response was prompted by correspondence Neville received as per advice by DECCW. 15.02.10 Received formal written response via fax.
Neville Williams	05.02.10	Mr N Williams PO Box 70 Cowra NSW 2794 Ph: 0447 841 560	Expressed interest and wishes to be part of the Registered Stakeholder Group.
Wayne Williams	05.02.10	26 Stewart Street Cowra NSW 2794 PH: 6341 2604	Expressed interest and wishes to be part of the Registered Stakeholder Group.
Sharon Williams	05.02.10	26 Stewart Street Cowra NSW 2794 PH: 6341 2604	Expressed interest and wishes to be part of the Registered Stakeholder Group.
Shawn Williams	05.02.10	95 Ballendella Road Toongabbie NSW 2146	Expressed interest and wishes to be part of the Registered Stakeholder Group.
Eddy Neumann / Gundungurra People	09.02.10	Gundungurra People Sharon Brown Ph: 0411146063	Dear Cheryl, We act for the Gundungurra People and refer to your letter dated 22 January 2010 concerning the above.
Level 1, 255 Castlereagh Street SYDNEY NSW 2000 PH 02 9264 9933 FAX 02 9264 9966 DX 11501 Sydney Downtown EMAIL en@eddyneumann.com.au			Our clients have cultural interests in the project area and should be included in the consultation process with regard to Indigenous heritage issues Please treat this as our clients' notification of their interest in and desire to be involved in the management of Indigenous heritage matters as traditional owners and registered native

				title claimants. Our clients contact person is Sharon Brown Tele 0411146063. Yours faithfully, Eddy Neumann.
Bill Allan (individual)	11.02.2010	Mr B Allen 75 Corry Place Windradyne NSW 2795		Bill phoned to express interest and wishes to become part of the registered stakeholder group.
Warrabinga NTCAC	15.02.10	Wendy Lewis WNTCAC PO Box 771 Picton NSW 2574	Fax	Received letter via fax advising WNTAC's interest in the project, their organisation wish to be registered stakeholders.
North East Wiradjuri Co Ltd	15.02.10	Lyn Syme NEW 112-114 Main St Ulan NSW 2850	Fax	Received letter via fax advising NEW's interest in the project, their organisation wish to be registered stakeholders.
Lithgow City Council	22.02.10	Mr Gary Wallace Lithgow City Council PO Box 19 Lithgow NSW 2790	post	Received letter recommending we contact *Mingaan Aboriginal Corp *DECCW *Bathurst LALC *Gundungurra Tribal Council – all these organisations / groups have been previously contacted.
LIST OF REGISTERED STAKEHOLDERS				
Mingaan Aboriginal Corp Lithgow		Helen Riley / Jill Bower E: 'helenriley44@yahoo.com' Helen Ph: 6352 2473 Jill Ph: 6334 4183 38 Tweed Road Lithgow NSW 2790		
Mitchell Cutmore		Mr M Cutmore 8 Nelson Street Cowra NSW 2794		
Stuart Cutmore		Mr S Cutmore 8 Nelson Street Cowra NSW 2794		
Neville Williams		Mr N Williams PO Box 70 Cowra NSW 2794 Ph: 0447 841 560		
Wayne Williams		26 Stewart Street Cowra NSW 2794 PH: 6341 2604		

Sharon Williams		26 Stewart Street	
		Cowra NSW 2794	
		PH: 6341 2604	
Shawn Williams		95 Ballendella Road	
		Toongabbie NSW 2146	
Eddy Neumann / Gundungurra People		Gundungurra People Sharon Brown	
Level 1, 255 Castlereagh Street		Ph: 0411146063	
SYDNEY NSW 2000			
PH 02 9264 9933 FAX 02 9264			
9966 DX 11501 Sydney Downtown EMAIL en@eddyneumann.com.au			
EMAL encedayneumann.com.au			
Bill Allan (individual)		Mr B Allen	
		75 Corry Place	
		Windradyne NSW 2795	
Warrabinga NTCAC		Wendy Lewis	
		WNTCAC	
		PO Box 771	
		Picton NSW 2574	
North East Wiradjuri Co Ltd		Lyn Syme	
		NEW	
		112-114 Main St Ulan NSW 2850	
Bathurst LALC		Members: Bathurst LALC	
Buildist Bileo		c/- Mr W Peckham	
		149 Russell Street (PO Box	
		1500)	
		Bathurst NSW 2795	
FIELD ASSESSMENT			
Bathurst LALC	01.03.10	Toni-Lee / Wal	Phoned to ask if BLALC were able to send a rep on Thursday 4 th March, Wal is unavailable however advised we
		Ph: (02) 6332-6835	should phone Rick Peters and ask if he is able to attend.
Bathurst LALC		Rick Peters	Phoned and left message on home number and left OzArk
		Ph: 6355 4155	office number on mobile service. Messaged indicated we
		Mob: 0408 617 153 (Carol)	require sites officer 4/3/10 from BLALC. Phoned Rick back in
			afternoon and he has advised he is available for FW on the day.
Bathurst LALC			Fieldwork with Dr Jodie Benton (OzArk)
			Rick Peters (BLALC)
			Rick Peters
			Ph: 6355 4155
			Mob: 0408 617 153 (Carol)

STAGE 2 METHODOLOGY LETTER	MAILED		RESPONSE DUE	These comments can either be verbal or in writing, but should be received no later than 21 days after receipt of this letter.
Mingaan Aboriginal Corp Lithgow	22.03.10	Attn: Helen Riley / Jill Bower 38 Tweed Road Lithgow NSW 2790	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Mitchell Cutmore	22.03.10	Mr M Cutmore 8 Nelson Street Cowra NSW 2794	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Stuart Cutmore	22.03.10	Mr S Cutmore 8 Nelson Street Cowra NSW 2794	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Neville Williams	22.03.10	Mr N Williams PO Box 70 Cowra NSW 2794	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Wayne Williams	22.03.10	26 Stewart Street Cowra NSW 2794	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Sharon Williams	22.03.10	26 Stewart Street Cowra NSW 2794	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Shawn Williams	22.03.10	95 Ballendella Road Toongabbie NSW 2146	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Gundungurra People	22.03.10	Attn: Gundungurra People c/- Eddy Neumann Level 1 / 255 Castlereagh St Sydney NSW 2000	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South

				Attachment 3 – Photographs from recent groundtruthing visit
Bill Allan (individual)	22.03.10	Mr B Allen 75 Corry Place Windradyne NSW 2795	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Warrabinga NTCAC	22.03.10	Wendy Lewis WNTCAC 525 Pheasants Nest Road Pheasants Nest NSW	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
North East Wiradjuri Co Ltd	22.03.10	Lyn Syme NEW 112-114 Main St Ulan NSW 2850	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Bathurst LALC	22.03.10	Members: Bathurst LALC c/- Mr W Peckham 149 Russell Street (PO Box 1500) Bathurst NSW 2795	14.04.10	Stage 2 methodology letter sent with Attachments x 3 Attachment 1 – Figures Attachment 2 – Site and survey summary for Lamberts North and South Attachment 3 – Photographs from recent groundtruthing visit
Warrabinga NTCAC	06.04.10	Wendy Lewis		Wendy phoned relating to another matter and did note availability for the work on the Mt Piper project. I re- confirmed her address and noted that correspondence has been sent and she should expect it, if not have already received it.
Bathurst LALC	09.04.10	Wal Peckham Ph (02) 6332-6835		During a conversation relating to another project Wal was asked to confirm that the methodology correspondence had been received, due to the lack of response it was a concern. Wal said they had received it and he has it on file.
Neville Williams	11.04.10	Mr N Williams PO Box 70 Cowra NSW 2794		Received via fax correspondence from Neville Williams advising he was unable to comment on the methodology as, although the sites are disturbed, they may still have cultural and social significance to Aboriginal people.
Bill Allan (individual)	19.05.10	Mr B Allen 75 Corry Place Windradyne NSW 2795	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
Bathurst LALC	19.05.10	Members: Bathurst LALC c/- Mr W Peckham	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not

		149 Russell Street (PO Box 1500) Bathurst NSW 2795		be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
Gundungurra People	19.05.10	Attn: Gundungurra People c/- Eddy Neumann Level 1 / 255 Castlereagh St Sydney NSW 2000	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
Mingaan Aboriginal Corp Lithgow	19.05.10	Attn: Helen Riley / Jill Bower 38 Tweed Road Lithgow NSW 2790	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
Mitchell Cutmore & Stuart Cutmore	19.05.10	Mr M Cutmore / Mr S Cutmore 8 Nelson Street Cowra NSW 2794	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
Neville Williams	19.05.10	Mr N Williams PO Box 70 Cowra NSW 2794	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
North East Wiradjuri Co Ltd	19.05.10	Lyn Syme NEW PO BOX 29 Kandos NSW 2848	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
Shawn Williams	19.05.10	95 Ballendella Road Toongabbie NSW 2146	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
Warrabinga NTCAC	19.05.10	Wendy Lewis WNTCAC 525 Pheasants Nest Road Pheasants Nest NSW	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.

Wayne Williams & Sharon Williams	19.05.10	26 Stewart Street Cowra NSW 2794	03.06.10	Sent copy of draft report inviting comment for inclusion in final report. Noted in correspondence 'Should our office not be contacted within this two week time frame, we will presume that you are happy with the contents of the report as it stands'.
				NO COMMENT ON DRAFT REPORT RECEIVED FROM ANY REGISTERED STAKEHOLDERS BY CLOSURE DATE 03.06.10