



Mt Piper Power Station Ash Placement Project

ENVIRONMENTAL ASSESSMENT
CHAPTER 9 – INDIGENOUS HERITAGE

■ August 2010



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9. Indigenous Heritage

The Director-General's requirements for indigenous heritage are:

For Neubecks Creek and Ivanhoe No 4 sites (concept plan application only), include an analysis of potential heritage constraints to the development of these sites including available mitigation measures and/or management options that may be applied to achieve acceptable environmental outcomes, with consideration of cumulative impacts from the project and other existing or proposed activities in close proximity to the project site. Key heritage constraints and/or design criteria that would require further detailed investigation prior to the development of these sites must be identified. For the Lamberts North and Lamberts South sites (project application), include a detailed assessment of indigenous heritage values (archaeological and cultural) that may be impacted by the project. Consideration should be given to the significance of the impacts of the project in the context of the surrounding indigenous heritage sites to the project site. The Environmental Assessment must describe the actions that will be taken to avoid, mitigate, manage and/or offset impacts.

The Environmental Assessment must demonstrate effective consultation with indigenous stakeholders regarding the potential impacts of the concept plan as a whole and the particular impacts of the project application sites, including developing mitigation options, consistent with the draft Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation (DEC, July 2005).

9.1. Introduction

This chapter provides an analysis of potential indigenous heritage constraints associated with Neubecks Creek and Ivanhoe No 4 as well as a detailed assessment of the indigenous heritage values of Lamberts North and Lamberts South. It describes the existing environment, including the archaeological context of the sites and the methodology used to assess potential impacts to heritage values, including indigenous stakeholder consultation. The full indigenous heritage assessment undertaken by OzArk Environmental & Heritage Management Pty Limited (OzArk) is provided in **Appendix F**.

9.2. Methodology

OzArk EHM was commissioned to undertake an indigenous heritage assessment for the Lamberts North and Lamberts South sites as well as an analysis of likely indigenous heritage constraints associated with Neubecks Creek and Ivanhoe No. 4.

The heritage assessment comprised:

- A literature and database review for all proposed sites (Concept and Project Approval);
- A surface survey of the proposed Lamberts North and Lamberts South ash placement areas with particular focus on sites identified in previous studies and recorded with a DECC AHIMS number. The site visit was made in the company of a representative of the Bathurst Local Aboriginal Land Council (BLALC) on the 4th of March 2010.
- Consultation with the local indigenous stakeholders (see Chapter 4).

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 assess the levels of disturbance and check on the presence / condition of the two sites known to have remained and protected by the CHMP.

The study area within Lamberts North and Lamberts South 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 full access to the site for occupational health and safety reasons. Through vehicle inspection as many accessible sections of Lamberts South and Lamberts North as feasible were assessed, although access to the previously recorded Aboriginal sites was not possible.

9.3. Existing Environment

9.3.1. Project Approval Sites

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.

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.

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.

9.3.2. Regional Archaeological Context

There has been extensive archaeological research undertaken in the western Blue Mountains including survey and excavation of open sites, rock shelter deposits and recording of rock art, chiefly in association with rock shelters.

At a regional level, the 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. A number of surveys have however been undertaken in the region since 1985 when 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.

Further surveys in the region have been undertaken, including an assessment of the Mt Piper to Angus Place Colliery haul road which resulted in the recording of two open sites and one isolated find. 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.

The above mentioned studies are discussed in more detail in **Appendix F**.

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 recently, heritage assessment was undertaken for proposed extensions to the Mt Piper Power Station. 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.

9.3.3. Local Archaeological Context

As seen in **Table 9-1**, the search of the DECCW AHIMS (26th February, 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 are in reality only 34 sites. Searches were conducted of relevant databases and the results are summarised in **Table 9-1**.

Table 9-1 – Desktop database search results

Name of database searched	Date of search	Type of search	Comment
Australian Heritage Database http://www.environment.gov.au/heritage/ahdb/	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.. No places on the search are within the Study Area.
National Native Title Claims Search http://www.nntt.gov.au/Applications-And-Determinations/Search-Applications/Pages/Search.aspx	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; http://www.environment.gov.au/erin/ert/epbc/index.html	21.4.10	Lithgow LGA	None of the Aboriginal or Non-Indigenous places on the RNE occurs 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.

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 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 9-2** provides a breakdown of the types of recorded sites.

Table 9-2 Number, type and percentage frequency of sites within a 5 x 5 km² area centred on the Lamberts Gully area

Site type	Total	Percentage Frequency
Open camp site	28	82
Isolated finds	5	15
Stone arrangement	1	3
Total	34	100

Several investigations have been previously undertaken in the immediate vicinity of the existing Lamberts Gully mine and are outlined in detail in Appendix F. The most relevant, recent investigation was undertaken in 2005 and surveyed 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 Lamberts South Study Areas (**Figure 9-1**). The fate of these sites is as follows and is summarised in **Table 9-3**.

In summary, it can be said that the entire current study areas of Lamberts North and Lamberts 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 located outside the area proposed for ash placement and are currently protected under a CHMP and it is intended that they continue to be protected during the Mt Piper Ash Placement Project.

Table 9-1 - Sites recorded during previous assessments over the Lamberts South and Lamberts North Study Areas

Site name	DECCW AHIMS #	Site type	Fate	Relocated 2006	Relationship to Ash Emplacement Project
Site 5	45-1-0208	OS: 2 Q flakes on a track	Still present. (Permit #361).	N/A	N/A
POS 2 (Lamberts Creek 6)	45-6-2355	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	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	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	Open site: 4 quartz artefacts along vehicle track.	Consent to Destroy issued (Permit #467)	N/A	N/A
Site 13	45-1-0244	Open site	Consent to Destroy issued (Permit #467)	N/A	N/A
POS A Lamberts Creek 7	45-6-2354	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	Open site	Consent to Destroy issued (Permit #428)	N/A	N/A
SVW – OS1 with PAD	45-1-2601	Open Site	Remains extant	First recorded.	Well outside Impact Footprint.

9.3.4. Neubecks Creek and Ivanhoe No 4 Sites

A desktop analysis of the potential indigenous heritage sites located within Neubecks Creek and Ivanhoe No. 4 has been undertaken. These results are outlined in this section with a detailed description of these studies provided in **Appendix F**.

The Neubecks Creek area has already undergone complete Aboriginal heritage assessment including survey of the proposed construction of a haul road between Angus Place Colliery and Mt Piper Power Station and a survey of the proposed Boulder Road coal mine, which comprises the western extent of the current Neubecks Creek area between the Castlereagh Highway and Ben Bullen State Forest. In 2005, a heritage survey of a proposed open cut coal mine was undertaken in the Neubecks valley (Benton, 2005).

A search of the DECCW AHIMS shows there are nine (9) recorded sites within the area proposed for ash placement at Neubecks Creek although it is believed that site # 45-1-0217 was destroyed during development of the nearby electricity easement. AHIMS sites known to have previously been recorded near Neubecks Creek are shown on **Figure 9-1**.

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. Haglund (1982) 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). Artefacts of quartz and chert were recorded at both sites. Further survey for the proposed Stage 4 of the Ivanhoe Mine was undertaken by Mills in 1998. A total of six open camp sites, two isolated finds and eight Potential Archaeological Deposits (PADs) were recorded however these sites are to the south of the area identified for ash placement at Ivanhoe No. 4. AHIMS sites known to have previously been recorded near Ivanhoe No 4 are shown on **Figure 9-1**.

Further research and mapping of previously assessed locations at both Neubecks Creek and Ivanhoe No.4 would be required to identify any gaps, which should then be surveyed prior to any impacts occurring. Previously recorded sites would also require ground-truthing to determine whether they remain extant and then management recommendations be devised for their management. The understanding is that such work would precede future ash emplacement.

9.4. 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.

9.4.1. 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 affected. 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 placement project. This site is nonetheless described below, was discussed with the mine manager and is reported as being protected as required in the CHMP.

Site # 45-1-0218

This open camp site was recorded 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 area of possible impact). 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 several of the previously recorded artefacts were found as well as three artefacts not previously recorded. These were:

- 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.

Overall impacts to this site are potentially minimal in terms of disturbance, and 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 remainder were broken flakes of quartzite and quartz.

This site was flagged in the field with a wooden marker post so that the proponent would be aware of its location and hence able to protect the site under the previous CHMP.

9.5. Predicted Impacts to Indigenous Heritage

9.5.1. Lamberts North and Lamberts South Sites

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 has been omitted.

The previously recorded sites were assessed in 2005. As a result a CHMP now governs the management of these sites and this document should be revised and updated to cover the protection of these sites into the future.

No Aboriginal sites would be affected at Lamberts North or Lamberts South study areas as part of the Mt Piper Ash Placement Project. The proximity of the two previously recorded sites will require the use of appropriate measures to avoid any inadvertent impact.

9.5.2. Neubecks Creek and Ivanhoe No 4 Sites

Future development of the Neubecks Creek and Ivanhoe No. 4 sites has the potential to affect indigenous heritage values of the sites. Previously recorded sites identified on AHIMS are present within both areas and can be seen on **Figure 9-1**. A detailed indigenous heritage impact assessment including detailed field surveys would need to be undertaken either before or as part of any project application for ash placement at these sites.

9.6. Management Options

With regards to the general results over the study area (all sites) the following general management would be implemented:

- Avoidance of impact - If this can be done, then a suitable curtilage around the recorded sites would 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;
- If impact is unavoidable - then an Aboriginal Heritage Impact Permit – (AHIP) may be applied for from the NSW DECCW and approval would 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 necessary. Consultation with the Indigenous community is required for all AHIP applications.

In reference to Neubecks Creek and Ivanhoe No. 4 Concept Approval areas:

- There is already known evidence of Aboriginal 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;
- 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.

9.7. Conclusion

Previous surveys of the Lamberts North and South Study Areas demonstrate that this area was used in the past by Aboriginal people. However, as a result 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 very low / zero potential for intact archaeological deposits over the proposed ash placement study area.

The two previously identified sites, one just west of the Lamberts South (Sites # 45-1-0218) and one to the east of Lamberts South (# 45 -1-2601), remain intact and are currently protected by a CHMP. For the purpose of this project, these two previously registered sites remain as constraints and would be avoided by project impacts.

Surveys undertaken at both Neubecks Creek and Ivanhoe No. 4 also identify these areas as having been used in the past by indigenous groups with a number of sites known to occur in areas where ash placement could potentially occur. Further assessment and survey of the Ivanhoe No. 4 Concept Area would eventually be required to ensure all indigenous heritage has been adequately identified and documented.