

PART C

Updated commitments



21 Statement of commitments

The commitments made by CHC to manage potential environmental and social impacts are provided in Chapter 23 of the EA. These are updated below to address Project changes or in response to submissions.

21.1 Environmental management system

The Project environmental management system (EMS) will include: a construction environmental management plan (CEMP); an operations environmental management plan (OEMP); and contributions to partnerships with physical and social infrastructure providers.

21.1.1 Construction environmental management

The CEMP will detail the site-specific management measures to be implemented during construction, including timeframes and responsibilities. It will describe the management of all potential material construction impacts identified in this EA, being:

- Aboriginal heritage;
- air quality;
- biodiversity;
- groundwater;
- historic heritage;
- noise and vibration;
- surface water (including erosion and sediment control);
- traffic; and
- waste.

Rehabilitation will be undertaken based on the rehabilitation strategy.

The CEMP will be prepared by appropriate specialists in consultation with relevant government agencies. It will be approved by DP&I and be consistent with the conditions of Project approval.

21.1.2 Operations environmental management plan

The OEMP will detail the site-specific management measures to be implemented during operations, including timeframes and responsibilities. The OEMP will contain the following sub-plans:

- Aboriginal heritage;
- air quality;
- biodiversity (including bushfire);

- flood emergency;
- groundwater;
- historic heritage;
- land management;
- landscape;
- lighting;
- noise and vibration;
- rehabilitation (including soil management);
- spontaneous combustion;
- surface water (including erosion and sediment control);
- traffic; and
- waste.

A mine closure plan will be prepared in Year 15.

The OEMP will be prepared by appropriate specialists in consultation with relevant government agencies. It will be approved by DP&I and will be consistent with the conditions of Project approval.

21.2 Commitments summary

A summary of key commitments is provided in Table 21.1.

Table 21.1 Summary of key commitments

| Item | Commitment | Section |
|------------------------------|---|---------------------------------------|
| Ongoing | | |
| 1 | CHC will continue to work closely with local, State and Commonwealth authorities, service providers, community groups and affected landowners so that the Project meets community expectations to the greatest extent practical. | EA Chapter 5 |
| Geochemistry | | |
| 2 | An additional geochemistry assessment report will be provided to DP&I and published on CHC's website. | PPR&RTS ¹ Section 5.2.1 |
| Groundwater | | |
| 3 | If water levels in a private bore potentially impacted by the Project decrease more than 2 m (ie more than natural variability), the reason will be investigated. CHC will take corrective action if the decrease is a result of the Project. | EA sections 7.4 and 7.6 |
| 4 | Groundwater licences will be bought to match the quantity of water that enters the pits over the life of the mine. | PPR&RTS Section 6.2.6 |
| 5 | Groundwater will be monitored during and after the life of the mine. | |
| Surface water | | |
| 6 | As much water as practical will be recycled on site. | |
| 7 | Water will be managed to ensure sufficient is available for operations and that any excess water does not increase flooding or cause material downstream quality impacts. | |
| 8 | CHC will enter into an extraction strategy agreement with State Water Corporation to help minimise transmission losses in the Cudgegong River and maximise the use of excess flows in the lower reaches of the river. | EA sections 8.4 and 8.6 |
| 9 | Excess water access licence entitlements will be sold back into the market wherever practical. | |
| 10 | Surface water will be monitored upstream and downstream of the mine. | |
| Soils and agriculture | | |
| 11 | Disturbed areas will be progressively rehabilitated and will include agricultural land to replace impacted areas. | |
| 12 | No Rural Land Capability Class I land will be disturbed in the PAA and only about 3 ha of Class II land will be disturbed. | EA sections 9.4 and 9.6 |
| 13 | The same area of Class III land will be reinstated following mining as currently occurs in the disturbance footprint. | PPR&RTS Section 8.1.3 |
| 14 | Disruption to agricultural activities outside the disturbance footprint will be minimised by offering long-term leases to affected farmers. | |
| 15 | Rehabilitation will be regularly monitored and adapted as required to meet the final landform and landuse objectives. | |
| Ecology | | |
| 16 | Impacts on terrestrial and aquatic biodiversity will be avoided or minimised as far as practical. | |
| 17 | Native vegetation will be progressively cleared and rehabilitated, with only a proportion removed at any one time. | |
| 18 | Progressive rehabilitation will re-establish ecological communities. | EA sections 10.4, 10.6 and 10.7 |
| 19 | A biodiversity offset package will initially maintain and ultimately improve the ecological values of the region through the permanent conservation of lands that have no potential for coal mining. | PPR&RTS Section 9.5.3 |
| 20 | The biodiversity offset package will create or enhance vegetation corridors between remnant vegetation to the north, east and south of the mining area. | |
| 21 | Ecological monitoring will allow management to be progressively refined during the life of the Project and beyond. | |
| 22 | An aquatic monitoring strategy will be developed to detect changes to the quality and quantity of water in the semi-permanent pools in Laheys and Sandy creeks. A River Monitoring Committee | |

Table 21.1 Summary of key commitments

| Item | Commitment | Section |
|----------------------------|--|---------------------------|
| | (including Fisheries NSW, NSW Office of Water and other appropriate agencies) will be formed to review the results from this strategy and to assist formulate adaptive management measures. | |
| Bushfire | | |
| 23 | Asset protection zones will be provided around all buildings on bushfire-prone land. | EA sections 11.4 |
| 24 | CHC will maintain resources (water, equipment and personnel) for bushfire control. | |
| Road transport | | |
| 25 | Road capacity improvements, traffic management controls and road safety measures will minimise impacts to the road network and ensure that road and intersection services are maintained. | EA sections 12.4 and 12.6 |
| 26 | Roads that need to be closed will be replaced with new roads that will accommodate the predicted vehicle sizes and traffic frequencies. | |
| 27 | The Spring Ridge Road realignment will carry all of the heavy vehicle traffic and most of the light vehicle traffic to and from the mine via the Golden Highway. | PPR&RTS Section 11.2.3 |
| 28 | CHC will commit the necessary resources to set up and support a workplace travel plan to maximise car pooling for the shift and mine management workforce. | |
| Rail transport | | |
| 29 | CHC will work with ARTC, RailCorp and affected residents to mitigate any significant impacts along relevant sections of the rail system. | EA sections 13.5 and 13.7 |
| 30 | The rail spur will have no public level crossings. | |
| Air quality | | |
| 31 | CHC will offer to purchase privately owned residences where air quality criteria are predicted to be exceeded. | EA sections 14.4 and 14.6 |
| 32 | CHC-owned houses will not be leased if health-based criteria are likely to be exceeded. | |
| 33 | A predictive air quality management system using real-time continuous air quality monitoring and meteorological forecasts will be used to proactively manage short-term particulates emissions from the Project. | |
| Greenhouse gases | | |
| 34 | Most mining equipment will be new and designed to meet the latest emission standards. | EA sections 15.4 and 45.6 |
| 35 | Buildings will be designed to achieve high energy efficiencies. | |
| 36 | Greenhouse gas emissions will be monitored to ensure that emissions per tonne of product coal are minimised. | |
| Noise and vibration | | |
| 37 | Equipment will be fitted with contemporary noise suppression measures. | EA sections 16.4 and 16.6 |
| 38 | CHC will offer to purchase privately owned residences in the PAA where noise criteria are predicted to be exceeded. | |
| 39 | Where EPA noise criteria are predicted to be exceeded and owners do not want to sell or enter into amenity agreements, noise levels will be mitigated with acoustic barriers (eg along the rail spur) or acoustic treatments at the residence. | |
| 40 | Regular attended and unattended noise monitoring, including permanent real-time noise monitoring, will be undertaken. | |

Table 21.1 Summary of key commitments

| Item | Commitment | Section |
|---------------------|--|--|
| Visual | | |
| 41 | CHC will reach amenity agreements with private landholders and will use targeted planting or bunds to screen views of mine operations and train movements. | EA sections 17.4 and 17.6 PPR&RTS Section 16.2.3 and 16.2.5 |
| 42 | Views of the mine from public roads will be screened, generally by planted vegetation. | |
| 43 | Lighting will be installed mine that minimises spillage. | |
| 44 | Lighting will be designed in accordance with Australian Standards and Warrumbungle Development Control Plan No. 1 – Shire Lighting Control to Protect Siding Spring Observatory. | |
| 45 | Following discussions with representatives of AAO and Siding Springs Observatory, an experienced and suitably qualified expert organisation will be engaged to prepare a detailed light management plan which will be provided to AAO and ANU for comment. | |
| 46 | CHC will regularly report on its performance against the requirements of the lighting management plan. | |
| 47 | Bunding will be used to minimise light spillage from mobile plant operating on emplacement areas. | |
| Aboriginal heritage | | |
| 48 | All known Aboriginal objects in the disturbance area will be managed in accordance with the Aboriginal heritage management plan to be developed in consultation with the RAPs and OEH. | EA sections 18.4 and 18.6 |
| Historic heritage | | |
| 49 | Potentially impacted historic items will be conserved and/or managed appropriately so that their contribution to the historical record is preserved. | EA sections 19.4 and 19.6 |
| Social | | |
| 50 | Local industries and suppliers will be used where cost-effective. | EA sections 21.4 and 21.6 |
| 51 | Recruitment strategies will foster a local labour force. | |
| 52 | CHC will work closely with the Aboriginal community to promote ongoing employment. | |
| 53 | A temporary construction accommodation village will be built to minimise impacts to the local housing market. | |
| 54 | CHC will continue to work with agencies, councils, education providers and businesses to provide training and education places to create self-sustainable employment without compromising the labour pool available to existing local businesses. | |
| 55 | CHC will negotiate Voluntary Planning Agreements with the four councils (Warrumbungle, Mid-Western Regional, Wellington and Dubbo) to provide in kind and monetary contributions to mitigate potential social effects of the Project. | |
| 56 | CHC will be accountable for implementing these commitments and will regularly report its performance against them. | |
| Notes: | 1. PPR&RTS: Preferred project report and response to submissions (ie this report). | |

Acronyms

| | |
|---------|--|
| AAO | Australian Astronomical Observatory |
| ABS | Australian Bureau of Statistics |
| AC-OOP | Mine Area A and C out-of-pit (emplacement) |
| AEMO | Australian Energy Market Operator |
| AHMP | Aboriginal heritage management plan |
| AHIP | Aboriginal Heritage Impact Permit |
| AIS | agricultural impact statement |
| ALCAM | Australian Level Crossing Assessment Method |
| AMD | Acid and metalliferous mine drainage |
| ANC | Acid neutralising capacity |
| ANU | Australian National University |
| ANZECC | Australian and New Zealand Environment Conservation Council |
| APZ | Asset protection zones |
| ARRB | Australian Road Research Board |
| ARMCANZ | Agriculture and Resource Management Council of Australia and New Zealand |
| ARTC | Australian Rail Track Corporation Ltd |
| AS 1158 | Australian Standard – Lighting for Roads and Public Spaces |
| AS 4282 | Australian Standard – Control of Obtrusive Effects of Outdoor Lighting |
| BAL | bushfire attack level |
| BCA | Benefit cost analysis |
| B-OOP E | Mine Area B out-of-pit emplacement (east of Laheys Creek) |
| B-OOP W | Mine Area B out-of-pit emplacement (west of Laheys Creek) |
| BoM | Bureau of Meteorology |
| CCS | carbon capture and storage |
| CHC | Cobbora Holding Company Pty Limited |
| CHPP | Coal handling and preparation plant |
| CHL | channelized right turn |
| CHR | channelized left turn |
| CM | choice modelling |
| CMA | Catchment Management Authority |
| CTC | centralised train control |
| dB(A) | Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear |
| DCCEE | Commonwealth Department of Climate Change and Energy Efficiency |
| DEC | NSW Department of Education and Communities (formerly Department of Education and Training) |
| DEC | NSW Department of Environment and Conservation (now Office of Environment and Heritage) |
| DECCW | NSW Department of Environment Climate Change and Water (now Office of Environment and Heritage) |
| DGRs | Director General's environmental assessment requirements |
| DP&I | NSW Department of Planning and Infrastructure (formerly Department of Planning) |

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| DPI | NSW Department of Primary Industries (now Department of Trade and Investment, Regional Infrastructure and Services) |
| DRE | Division of Resources and Energy |
| DTIRIS | NSW Department of Trade and Investment Regional Infrastructure Services |
| EA | Environmental assessment |
| EEC | Endangered ecological community |
| EMM | EMGA Mitchell McLennan Pty Limited |
| EMS | Environmental management system |
| EPBC Act | <i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i> |
| EP&A Act | <i>NSW Environmental Planning and Assessment Act 1979</i> |
| EPA | NSW Environment Protection Authority |
| ESCP | Erosion and sediment control plan |
| EPL | Environment protection license |
| ESD | Ecologically sustainable development |
| ETS | emission trading scheme |
| FCO | full cut-off |
| GDE | Groundwater dependent ecosystem |
| GDP | gross domestic product |
| GHG | Greenhouse gas |
| GL | Giga litre |
| GPS | Global positioning system |
| GWh | Gigawatt hours |
| ha | Hectares |
| ICNG | Interim Construction Noise Guideline |
| IGANRIP | Interim Guideline for Assessment of Noise from Rail Infrastructure Projects |
| INP | Industrial Noise Policy |
| IPCC | Intergovernmental Panel on Climate Change |
| ITSR | Independent Transport Safety Regulator (post-2009) |
| ITSRR | Independent Transport Safety and Reliability Regulator (pre-2009) |
| JORC | Australasian Joint Ore Reserves Committee |
| km | Kilometre |
| km/h | Kilometres per hour |
| kV | Kilovolt |
| L_1 | The noise level exceeded for 1% of the time. |
| L_{10} | The noise level which is exceeded 10% of the time. It is roughly equivalent to the average maximum noise level |
| L_{90} | The noise level that is exceeded 90% of the time. Commonly referred to as the background noise level |
| LCSC | NSW Level Crossing Safety Council |
| L_{eq} | The energy average noise from a source. This is the equivalent continuous sound pressure level over a given period. The Leq (15min) descriptor refers to an Leq noise level measured over a 15-minute period |
| LGA | Local government area |
| L_{max} | The maximum sound pressure level received during a measuring interval |
| LMP | Lighting management plan |
| LPMA | Land Property and Management Authority |
| LRMC | long run marginal cost |
| m | Metre |

| | |
|-------------------|---|
| M | Million (1,000,000) |
| m/s | Metres per second |
| m ² | Square metre |
| m ³ | Cubic metre |
| m ³ /s | Cubic metres persecond |
| MAC | Mingaan Aboriginal Corporation |
| Mbcm | Million bank cubic metres |
| Mbgl | Metres below ground level |
| MDB | Murray Darling Basin |
| MDBA | Murray-Darling Basin Authority |
| MET | Meteorological monitoring station |
| mg/L | Milligrams per litre |
| MGATSIC | Murong Gialinga Aboriginal & Torres Strait Islander Corporation |
| MIA | Mine infrastructure area |
| ML | Megalitre |
| MIC | Maximum instantaneous charge |
| mL | Millilitre |
| ML/a | Mega litres per annum |
| ML/d | Mega litres per day |
| MLALC | Mudgee Local Aboriginal Land Council |
| mm | Millimetre |
| Mn | Manganese |
| MPA | maximum potential acidity |
| MR | Main Road |
| Mt | Million tonnes |
| Mtpa | Million tonnes per annum |
| MVA | Megavolt amperes |
| MW | Megawatts |
| MWR | Mid Western Regional (Council) |
| N ₂ O | Nitrous oxide |
| N | Total nitrogen |
| NAF | Non acid-forming |
| NAG | Net acid generation |
| NAPP | Net acid production potential |
| NEM | National Electricity Market |
| NEPC | National Environmental Protection Council |
| NEPM | National Environment Protection Measures |
| NEWCO | North-East Wiradjuri Corporation Ltd |
| NIOSH | National Institute for Occupational Safety and Health |
| NMP | Noise management plan |
| NOW | NSW Office of Water |
| NP | National Park |
| NPV | Net present value |
| NPWS | NSW National Parks and Wildlife Service |
| NSW | New South Wales |
| NSWSC | NSW Scientific Committee |
| NVMP | Noise and vibration management plan |

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|-----------------------------|---|
| OEH | NSW Office of Environment and Heritage |
| PAA | Project application area |
| PAF | Potentially acid-forming |
| PAF-LC | Potentially acid-forming low capacity |
| pH | Unit of acidity/alkalinity |
| PHA | Preliminary hazard assessment |
| PM ₁₀ | Particulate matter less than 10 microns in aerodynamic diameter |
| PM _{2.5} | Particulate matter less than 2.5 microns in aerodynamic diameter |
| pphm | Parts per hundred million |
| POEO Act | <i>NSW Protection of the Environment Operations Act 1997</i> |
| PBP | Planning for Bushfire Protection |
| PPR | Preferred project report |
| PSNL | The project-specific noise levels (PSNLS) are criteria for a particular industrial noise source or industry. The PSNL is the lowest of either the intrusive criteria or amenity criteria |
| RAP | Registered Aboriginal Party |
| RBL | The rating background level (RBL) is an overall single value background level representing each assessment period over the whole monitoring period. The RBL is used to determine the intrusiveness criteria for noise assessment purposes and is the median of the average background levels. |
| RFS | Rural Fire Service |
| RL | Reduced level |
| RMS | NSW Roads and Maritime Services |
| RNP | Road Noise Policy |
| ROM | Run of mine |
| RR | Regional Road |
| RTA | NSW Roads and Traffic Authority (now Roads and Maritime Services) |
| SCA | State Conservation Area |
| SF | state forest |
| SEPP | State Environmental Planning Policy |
| SEWPaC | Commonwealth Department of Sustainability, Environment, Water, Population and Communities |
| SH | State Highway |
| SIDRA | Signalised Intersection Design and Research Aid |
| Sound power level (L_w) | A measure of the total power radiated by a source. The sound power of a source is a fundamental property of the source and is independent of the surrounding environment |
| SRLUP | Strategic Regional Land Use Plan |
| SSD | State Significant Development |
| SSI | State Significant Infrastructure |
| SSO | Sliding Spring Observatory |
| TAFE | Technical and Further Education |
| TAL | Tonnes axle load limit for a section of rail track |
| TDS | Total dissolved solids |
| TEA | Tailings emplacement area |
| TEC | Threatened ecological community |
| TEOM | Tapered element oscillating microbalance |
| TFNSW | Transport for NSW |
| the Project | Cobbora Coal Project |

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| TMP | traffic management plan |
| TSP | Total suspended particulate |
| TSS | Total suspended solids |
| µg | microgram |
| µm | micrometres |
| µS/cm | micro siemens per centimetre |
| UC NAF | Uncertain to non acid-forming |
| UC PAF | Uncertain to potentially acid-forming |
| USEPA | United States Environmental Protection Agency |
| vkt | Vehicle kilometres travelled |
| VOC | Volatile organic compound |
| VPA | Voluntary Planning Agreement |
| VP | View points |
| WAD | works authorisation deed |
| WAL | Water Access License |
| WDCP1 | Development Control Plan No.1 – Shire Lighting Control to Protect Siding Spring Observatory |
| WDD | Wirrimbah Direct Descendants |
| WHO | <i>World Health Organisation</i> |
| WM Act | <i>NSW Water Management Act 2000</i> |
| WNTCAC | Warrabinga Native Title Claimants Aboriginal Corporation |
| WQO | Water quality objective |
| WSP | Water Sharing Plans |
| WVW | Wellington Valley Wiradjuri Aboriginal Corporation |

References

- Arche Consulting and Gillespie Economics, 2011, *Assessing the Local Economic Impacts of the Draft Basin Plan*, report prepared for MDBA.
- ANZECC 2000, Australian and New Zealand guidelines for fresh and marine water quality, Australia and New Zealand Environment and Conservation Council.
- Australian Bureau of Statistics (ABS) 2010, *ABS Data Series 13381DO001_201012 NSW and Regional Indicators: December 2010*, viewed 23 November 2011, <http://www.abs.gov.au/.rf>.
- ARTC 2012, *2012-2021 Hunter Valley Corridor Capacity Strategy*, Australian Rail Track Corporation.
- Australian Standard 3959-2009 (AS 3959-2009): Construction of buildings in bushfire prone areas.*
- Austroroads 2010, *Guide to Road Design*, Australia and New Zealand.
- Barber JR, Crooks KR, Fristrup KM 2009, 'The costs of chronic noise exposure for terrestrial organisms', *Trends in Ecology and Evolution*, 25 (3): 180–189.
- Boardman, A., Greenberg, D., Vining, A., Wiemer, D. 2001, *Cost-Benefit Analysis: Concepts and Practice*, Prentice Hall, USA.
- Bond AR, Jones DN 2008, 'Temporal trends in use of fauna-friendly underpasses and overpasses', *Wildlife Research* 35: 35-43.
- Bowen ME, McAlpine CA, Seacrook LM, House APN, Smith GC 2009, 'The age and amount of regrowth forest in fragmented brigalow landscapes are both important for woodland dependent birds', *Biological Conservation* 142: 3051-3059.
- Bureau of Resource and Energy Economics (BREE) 2011, *Australian energy projections to 2034–35*, Commonwealth of Australia.
- CARE 2009, *Regional Economic Impacts of National Parks in the Riverina Bioregion*, prepared for NSW DECCW.
- Centre for Mined Land Rehabilitation 2009, *Community lead issues at Camberwell NSW*, University of Queensland.
- Clean Energy Regulator 2013, About the carbon pricing mechanism, viewed 23 January 2013, <<http://www.cleanenergyregulator.gov.au/Carbon-Pricing-Mechanism/About-the-Mechanism/Pages/default.aspx>>
- CSIRO and BoM 2007, *Climate Change in Australia – Technical Report*, Commonwealth Scientific and Industrial Research Organisation and Bureau of Meteorology.
- Cristescu RH, Frere C, Banks PB 2012, 'A review of fauna in mine rehabilitation in Australia: Current state and future directions', *Biological Conservation*, 149: 60-72.
- Cunningham G M, Higginson F R, Riddler A M H, Emery K A 1988, *Systems Used to Classify Rural Lands in New South Wales*, Soil Conservation Service of NSW, Sydney, NSW.

DECC 2009, *Interim Construction Noise Guideline*, Department of Environment and Climate Change.

DECCW 2010a, *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010*, Office of Environment and Heritage.

DCCEE 2011, *National Greenhouse Accounts Factors (NGAF) Workbook*, Department of Climate Change and Energy Efficiency.

DEC 2006, *Using the ANZECC Guidelines and Water Quality Objectives in NSW*, Department of Environment and Conservation NSW.

DEC 2005, *Approved methods for the modelling and assessment of air pollutants in New South Wales*. Department of Environment and Conservation.

DEC 2004, *Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities, Working Draft*, Department of Environment and Conservation.

DECCW 2008, *Managing Urban Stormwater – Soils and Construction – Volume 2E Mines and Quarries*, Department of Environment, Climate Change and Water.

DECCW 2010, *Guidelines for developments adjoining land and water managed by the Department of Climate Change and Water*, Department of Environment, Climate Change and Water NSW.

Department of Finance 2006, *Handbook of Cost –Benefit Analysis*, AGPS, Canberra.

DP&I 2012, *Delivery of the Strategic Regional Land Use Policy*, Department of Planning and Infrastructure.

DTIRIS 2012, *Aquifer Interference Policy*, NSW Department of Trade and Investment, Regional Infrastructure and Services.

DWE 2008, *Farm Dams in NSW*, Department of Water & Energy.

ENVIRON 2012, *Pollution Reduction Program (PRP) 4 – Particulate Emissions from Coal Trains*.

EPA and DP&I 2007, *Interim Guideline for Assessment of Noise from Rail Infrastructure Projects*, Environment Protection Authority and Department of Planning and Infrastructure.

EPA 2000, *Industrial Noise Policy*, Environment Protection Authority.

EPA 2013, *Rail Infrastructure Noise Guideline (draft)*, Environment Protection Authority.

ERM, 2009, *Cobbora Coal Project Preliminary Environmental Assessment*. Report prepared by ERM for Cobbora Holding Company Pty Limited.

Hays IF, Goldingay RL 2009, 'Use of fauna road-crossing structures in north-eastern New South Wales', *Australian Mammalogy* 31: 89-95.

Heritage Office NSW 2006, *Statements of Heritage Impact*, NSW Heritage Branch.

Journal of Australian Archaeology 2011, Australian Archaeological Association, vol. 73.

Landcom 2004, *Managing Urban Stormwater – Soils and Construction – Volume 1*, Landcom.

Lucas S, Coombes P, Planner J, Welchman S 2009, 'Rainfall harvesting and coal dust: the potential health impacts of trace elements in coal dust in rainwater', *Air Quality and Climate Change*, vol. 43, Issue 2 pp 23-30.

Meat and Livestock Australia 2013a, Cattle – Australia's beef industry, viewed 28 January 2013, www.mla.com.au/About-the-red-meat-industry/Industry-overview/Cattle.

Meat and Livestock Australia 2013b, Sheep – Australia's sheepmeat industry, viewed 28 January 2013, www.mla.com.au/About-the-red-meat-industry/Industry-overview/Sheep.

Minerals Council Australia (MCA) 2006, *Workforce Skills, Education & Training*, MCA, Australia.

Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (RMR) 2009, Standard Method of Calculation II laid down in the Reken and Meetvoorschriften Railverkeerslawaa (RMV.96).

National Resource Management Ministerial Council (NRMMC) 2011, Guidelines Paper 6 National Water Quality Management Strategy. National Health and Medical Research Council, National Resource Management Ministerial Council, Commonwealth of Australia, Canberra.

NSW Agriculture & Fisheries 1990, *Agricultural Suitability Maps – Uses and Limitations*, Agfact AC.9 second edition, NSW Government, Orange.

NSW Health 2010, Analysis of BEACH general practitioner encounter data to examine the potential health effects of the mining industry and other exposures in Singleton, Muswellbrook and Denman, http://www.health.nsw.gov.au/pubs/2010/beach_report.html

NSW Health 2007, *Rainwater Tanks*, NSW Government, http://www0.health.nsw.gov.au/pubs/2007/pdf/rainwater_tanks.pdf.

NSW Land and Property Information (LPI) 2013, SIX Lite, viewed 14 January 2013, <http://maps.six.nsw.gov.au/>.

NSW Rural Fire Service, *PBP Appendix 2 – APZ Calculator*, viewed 14 January 2013, <https://bfaa.rfs.nsw.gov.au/apz/apzcalc.html>.

NSW Rural Fire Service 2006, *Planning for bushfire protection*, RFS, NSW Government.

NSW Rural Fire Service Cudgegong Bush Fire Management Committee (CBFMC) 2012, *Bush Fire Risk Management Plan*, CBFMC, NSW Government.

RTA, 2002, *Guide to Traffic Generating Developments*, Roads and Traffic Authority.

Sinden, J., Thampapilla, D. 1995, 'Introduction to Benefit Cost Analysis', Longman, Australia.

Trade & Investment 2013. Electricity generation, viewed 23 January 2013, <http://www.trade.nsw.gov.au/energy/electricity/generation>.

