



## Planning & Infrastructure

### Major Projects Assessment

#### Mining & Industry Projects

Contact: Paul Freeman

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Our Ref: 12/03807

Ms Mary-Anne Crawford  
Group Environmental Manager  
Centennial Coal Company Limited  
PO Box 1000  
TORONTO NSW 2283

Dear Ms Crawford

### **Centennial Western Coal Services Project (SSD-5579) Director-General's Requirements**

I have attached a copy of the Director General's environmental assessment requirements (DGRs) for the preparation of an Environmental Impact Statement (EIS) for the Centennial Western Coal Services Project (SSD-5579).

These requirements are based on the information you have provided to date, and have been prepared in consultation with relevant government agencies. I have attached a copy of the agency comments for your information (see Attachment 2). Please note that the Director-General may alter these requirements at any time, and that further consultation with the Department is required if you do not lodge a development application and EIS for the development within two years of the date of issue of these DGRs. The Department will review the EIS for the proposed development carefully before it is publically exhibited, and will require you to submit an amended EIS if the DGRs have not been adequately addressed.

I wish to emphasise the importance of effective and genuine community consultation and the need for proposals to proactively respond to the community's concerns. Accordingly a comprehensive, detailed and genuine community consultation and engagement process must be undertaken during preparation of the EIS. This process must ensure that the community, including key special interests, is both informed of the proposal and is actively engaged in issues of concern to them. Sufficient information must be provided to the community so that it has a good understanding of what is being proposed and of the potential impacts.

Your proposal may require separate approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Department encourages you to confirm whether such an approval is required as soon as possible. If an EPBC Act approval is required, I would appreciate it if you would advise the Department accordingly, as the Commonwealth approval process may be integrated with the NSW approval process, and supplementary DGRs may need to be issued.

As you are aware, there could be a significant expansion of coal mining development in the area of Blackmans Flat. In addition to the Western Coal Services Project, the Department is aware of Centennial's proposed Neubeck Coal Project, the proposed expansion of the existing Pine Dale Coal Mine and the proposed expansions of the Invincible and Cullen Valley Coal Mines. Further, the Mount Piper Power Station was given approval early this year to expand its ash emplacement areas adjacent to Blackmans Flat as well as concept approval to upgrade the power Station to produce up to 2000 MW.

As you can appreciate, this could result in a range of cumulative impacts on the residences of Blackmans Flat.

In this regard, you are required to include a detailed assessment in the EIS of the potential cumulative impacts of the project operating in conjunction with any existing, approved and/or proposed coal mining

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development and power generation in the vicinity of the site, and to carry out a suitable sensitivity analysis of this assessment.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit the development application and EIS for your development. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy and CD-ROM) of the EIS required for review.

If you have any enquiries about these requirements, please contact Paul Freeman at the details listed above.

Yours sincerely

 6/11/12

David Kitto

**Director, Mining and Industry**

As delegate of the Director-General

# Director General's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

## State Significant Development

<b>Application Number</b>	SSD 5579
<b>Development</b>	<p>The Centennial Western Coal Services Project, which includes:</p> <ul style="list-style-type: none"> <li>• use of existing systems and infrastructure to transport a combined total of up to 9.5 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal to the site from Springvale Colliery, Angus Place Colliery and the proposed Neubeck Coal Mine;</li> <li>• upgrade of the coal handling and preparation plant (CHPP) at the former Lamberts Gully Colliery site to wash up to 7 Mtpa of ROM coal;</li> <li>• delivery of ROM coal and product coal via an existing coal conveyor to the Lidsdale Siding, Mount Piper Power Station and Wallerawang Power Station;</li> <li>• delivery of coal by road to domestic customers;</li> <li>• disposal of coal reject material on-site;</li> <li>• construction of ancillary infrastructure, including a private haul road, road bridge and water management structures; and</li> <li>• decommissioning all site infrastructure on completion of operations, and rehabilitating the site.</li> </ul>
<b>Location</b>	Castlereagh Highway, Blackmans Flat
<b>Applicant</b>	Centennial Coal Company Limited
<b>Date of Issue</b>	6 November 2012
<b>General Requirements</b>	<p>The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in Clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>In addition, the EIS must include:</p> <ul style="list-style-type: none"> <li>• a detailed description of the development, including: <ul style="list-style-type: none"> <li>– need for the proposed development;</li> <li>– likely staging of the development - including construction, operational stage/s and rehabilitation;</li> <li>– likely interactions between the development and any approved and proposed mining operations, including detailed assessments of any required modifications to the approvals for these operations;</li> <li>– likely interactions with other approved developments/projects at the site; and</li> <li>– plans of any proposed building works;</li> </ul> </li> <li>• consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments;</li> <li>• a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment;</li> <li>• a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: <ul style="list-style-type: none"> <li>– a description of the existing environment, <u>using sufficient baseline data</u>;</li> <li>– an assessment of the potential impacts of all stages of the development, taking into consideration relevant guidelines, policies, plans and statutes;</li> <li>– a description of the measures that would be implemented to avoid, minimise and, if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment; and</li> <li>– an assessment of the potential cumulative impacts of the project operating, in this regard, you are required to include a detailed assessment in the EIS</li> </ul> </li> </ul>

	<p>of the potential cumulative impacts of the project operating in conjunction with any existing, approved and/or proposed coal mining development and power generation in the vicinity of the site, and to carry out a suitable sensitivity analysis of this assessment;</p> <ul style="list-style-type: none"> <li>• a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS.</li> </ul> <p>The EIS must be accompanied by a report from a qualified quantity surveyor providing:</p> <ul style="list-style-type: none"> <li>• a detailed calculation of the capital investment value (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposal, including details of all the assumptions and components from which the CIV calculation is derived;</li> <li>• a close estimate of the jobs that will be created by the development during the construction and operational phases of the development; and</li> <li>• certification that the information provided is accurate at the date of preparation.</li> </ul>
<b>Key Issues</b>	<p>The EIS must address the following specific issues:</p> <ul style="list-style-type: none"> <li>• <b>Land Use Planning</b> – including a clear description of: <ul style="list-style-type: none"> <li>- all approved and proposed developments for the site, the parties responsible for these developments and the potential interactions and/or conflicts of the approvals and consents for these developments; and</li> <li>- how any identified conflicts have been, or are proposed to be, resolved;</li> </ul> </li> <li>• <b>Land Resources</b> – including a detailed assessment of impacts to: <ul style="list-style-type: none"> <li>- soils and land capability (including salinisation and land contamination);</li> <li>- landforms and topography; and</li> <li>- land-uses, including forestry and agriculture;</li> </ul> </li> <li>• <b>Water Resources</b> – including: <ul style="list-style-type: none"> <li>- detailed assessment of potential impacts on the quality and quantity of existing surface water and ground water resources in accordance with the NSW Aquifer Interference Policy, including: <ul style="list-style-type: none"> <li>o impacts on affected licensed water users and basic landholder rights;</li> <li>o impacts on riparian, ecological, geo-morphological and hydrological values of watercourses, including groundwater dependent ecosystems and environmental flows;</li> <li>o a clear description of the interactions between surface and ground water resources on the site, including water within underground mine voids and pathways to water discharges from the site; and</li> <li>o whether the development can operate to achieve a neutral or beneficial effect on water quality in the drinking water catchment, consistent with the provisions of <i>State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011</i>;</li> </ul> </li> <li>- a detailed site water balance, including a description of site water demands, water disposal methods (inclusive of volume and frequency of any water discharges), water supply infrastructure and water storage structures; and</li> <li>- identification of any licensing requirements, including existing or future Environment Protection Licences (EPLs) or Pollution Reduction Programs (PRPs), and approvals under the <i>Water Act 1912</i> and/or <i>Water Management Act 2000</i>;</li> <li>- demonstration that water for the construction and operation of the development can be obtained from an appropriately authorised and reliable supply in accordance with the operating rules of any relevant Water Sharing Plan (WSP);</li> <li>- a description of the measures proposed to ensure the development can operate in accordance with the requirements of any relevant WSP or water source embargo;</li> <li>- a detailed description of the proposed water management system (including sewerage), water monitoring program and all other proposed measures to mitigate surface water and groundwater impacts;</li> </ul> </li> <li>• <b>Biodiversity</b> – including: <ul style="list-style-type: none"> <li>- measures that would be taken to avoid, reduce or mitigate impacts on biodiversity;</li> </ul> </li> </ul>

- accurate estimates of proposed vegetation clearing;
- a detailed assessment of potential impacts of the development on any:
  - o terrestrial or aquatic threatened species or populations and their habitats, endangered ecological communities and groundwater dependent ecosystems; and
  - o regionally significant remnant vegetation, or vegetation corridors; and
- an offset strategy to ensure the development maintains or improves the terrestrial and aquatic biodiversity values of the region in the medium to long term, having regard to any provisions for biodiversity enhancement under existing consents or approvals for the site;
- **Heritage** – including:
  - an Aboriginal cultural heritage assessment (including both cultural and archaeological significance) which must:
    - o demonstrate effective consultation with the Aboriginal community in determining and assessing impacts, and developing and selecting mitigation options and measures;
    - o outline any proposed impact mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures); and
  - a Historic heritage assessment (including archaeology) which must:
    - o include a statement of heritage impact (including significance assessment) for any State significant or locally significant historic heritage items; and,
    - o outline any proposed mitigation and management measures (including an evaluation of the effectiveness and reliability of the measures);
- **Air Quality** – including a quantitative assessment of potential:
  - construction and operational impacts, with a particular focus on dust emissions including PM<sub>2.5</sub> and PM<sub>10</sub> emissions and dust generation from coal transport;
  - reasonable and feasible mitigation measures to minimise dust emissions, including evidence that there are no such other available measures; and
  - monitoring and best practice management measures, in particular real-time air quality monitoring;
- **Greenhouse Gases** – including:
  - a quantitative assessment of potential Scope 1, 2 and 3 greenhouse gas emissions;
  - a qualitative assessment of the potential impacts of these emissions on the environment; and
  - an assessment of reasonable and feasible measures to minimise greenhouse gas emissions and ensure energy efficiency;
- **Noise** – including a quantitative assessment of potential:
  - construction, operational (including coal and reject truck haulage movements on the site) and off-site transport noise impacts, particularly for residents of Blackmans Flat;
  - reasonable and feasible mitigation measures, including evidence that there are no such measures available other than those proposed; and
  - monitoring and management measures, in particular real-time and attended noise monitoring;
- **Traffic & Transport** – including:
  - a detailed economic justification of transporting coal on public roads, including assessment of the costs and benefits of alternative transport methods;
  - a consideration of alternative locations for haul road access to the site, including alternative locations for the proposed haul road bridge crossing the Castlereagh Highway, and the impacts of each alternative for traffic on the Highway and noise and dust impacts for residents of Blackmans Flat;
  - an assessment of potential traffic impacts on the capacity, efficiency and safety of the road network; and
  - a description of the measures that would be implemented to maintain and/or improve the capacity, efficiency and safety of the road network in the surrounding area over the life of the development;

	<ul style="list-style-type: none"> <li>• <b>Visual</b> – including: <ul style="list-style-type: none"> <li>- a detailed assessment of the: <ul style="list-style-type: none"> <li>o changing landforms on site during the various stages of the development;</li> <li>o potential visual impacts of the development on private landowners in the surrounding area as well as from key vantage points in the public domain; and</li> </ul> </li> <li>- a detailed description of the measures that would be implemented to minimise the visual impacts of the development;</li> </ul> </li> <li>• <b>Waste</b> – including: <ul style="list-style-type: none"> <li>- accurate estimates of the quantity and nature of the potential waste streams of the development, including tailings and coarse reject;</li> <li>- a tailings and coarse reject disposal strategy, including contingency tailings disposal plans in the alternative to the proposed belt press dewatering facility; and</li> <li>- a description of measures that would be implemented to minimise production of other waste, and ensure that that waste is appropriately managed;</li> </ul> </li> <li>• <b>Hazards</b> – paying particular attention to public safety, including bushfires;</li> <li>• <b>Social &amp; Economic</b> – including an assessment of the: <ul style="list-style-type: none"> <li>- potential direct and indirect economic benefits of the development for local and regional communities and the State;</li> <li>- potential impacts on local and regional communities, including: <ul style="list-style-type: none"> <li>o any increased demand for local and regional infrastructure and services (such as housing, childcare, health, education and emergency services); and</li> <li>o impacts on social amenity, particularly impacts on residents of Blackmans Flat and other nearby landowners and residents;</li> </ul> </li> <li>- a detailed description of the measures that would be implemented to minimise the adverse social and economic impacts of the project, including any infrastructure improvements or contributions and/or voluntary planning agreement or similar mechanism; and</li> <li>- a detailed assessment of the costs and benefits of the development as a whole, and whether it would result in a net benefit for the NSW community; and</li> </ul> </li> <li>• <b>Rehabilitation</b> – including the proposed rehabilitation strategy for the site, having regard to the key principles in <i>Strategic Framework for Mine Closure</i>, including: <ul style="list-style-type: none"> <li>- rehabilitation objectives, methodology, monitoring programs, performance standards and proposed completion criteria;</li> <li>- nominated final land use, having regard to any relevant strategic land use planning or resource management plans or policies; and</li> <li>- the potential for integrating this strategy with any other rehabilitation and/or offset strategies in the region.</li> </ul> </li> </ul>
<b>Plans and Documents</b>	<p>The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>. These documents should be included as part of the EIS rather than as separate documents.</p>
<b>Consultation</b>	<p>During the preparation of the EIS, you must consult with relevant local, State and Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with the:</p> <ul style="list-style-type: none"> <li>• Commonwealth Department of Sustainability, Environment, Water, Population and Communities;</li> <li>• Office of Environment and Heritage (including the Heritage Branch);</li> <li>• Environment Protection Authority;</li> <li>• Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services;</li> <li>• Department of Primary Industries (including the NSW Office of Water, Forestry NSW, NSW Agriculture, Fisheries NSW and Catchments and Lands (Crown</li> </ul>

	<p>Lands Division));</p> <ul style="list-style-type: none"> <li>• Transport for NSW (including the Centre for Transport Planning, and Roads and Maritime Services);</li> <li>• NSW Health;</li> <li>• Sydney Catchment Authority;</li> <li>• Lithgow City Council;</li> <li>• Delta Electricity; and</li> <li>• relevant Aboriginal stakeholders</li> </ul> <p>The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, justification should be provided.</p>
<b>Further consultation after 2 years</b>	<p>If you do not lodge a DA and EIS for the development within 2 years of the issue date of these DGRs, you must consult further with the Director-General in relation to the lodgement requirements.</p>
<b>References</b>	<p>The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.</p>

## ATTACHMENT 1 Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>

<http://www.bookshop.nsw.gov.au>

<http://www.publications.gov.au>

### Policies, Guidelines & Plans

<b>Risk Assessment</b>	
	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203: 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
<b>Biodiversity</b>	
	Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians (DECCW 2009)
	Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DECC 2004)
	BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECCW 2008)
	The Threatened Species Assessment Guideline – The Assessment of Significance (DECC 2007)
	NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
	Principles for the Use of Biodiversity Offsets in NSW (OEH)
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
<b>Water Resources</b>	
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	State Water Management Outcomes Plan
	Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources 2011
<b>Surface Water</b>	
	NSW Government Water Quality and River Flow Objectives (OEH)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Managing Urban Stormwater: Soils & Construction (Landcom) and associated Volume 2E: Mines and Quarries.
	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Floodplain Development Manual (DIPNR)
	Floodplain Risk Management Guideline (DECC)
	A Rehabilitation Manual for Australian Streams (LWRRDC and CRCCH)
	Technical Guidelines: Bundling & Spill Management (DECC)
	Environmental Guidelines: Use of Effluent by Irrigation (DECC)



<i>Groundwater</i>	Office of Water Guidelines for Controlled Activities (2012)
	State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC, 1997)
	NSW State Groundwater Quality Protection Policy (DLWC, 1998)
	NSW State Groundwater Quantity Management Policy (DLWC, 1998)
	Murray-Darling Basin Groundwater Quality. Sampling Guidelines. Technical Report No 3 (MDBC)
	Murray-Darling Basin Commission. Groundwater Flow Modelling Guideline (Aquaterra Consulting Pty Ltd)
	Guidelines for the Assessment & Management of Groundwater Contamination (DECC, 2007)
	Any relevant Water Sharing Plan for groundwater and surface water resources
<b>Air Quality</b>	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	The Assessment and Management of Odour from Stationary Sources in NSW; Technical Framework and Notes (OEH)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
<b>Noise &amp; Blasting</b>	
	NSW Industrial Noise Policy (DECC)
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
	NSW Road Noise Policy (DECCW)
	Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZECC)
<b>Land Resources</b>	
	Draft Agricultural Impact Assessment Guidelines 2011 (DP&I)
	Agfact AC25: Agricultural Land Classification (NSW Agriculture)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
<b>Traffic &amp; Transport</b>	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
<b>Heritage</b>	
<i>Aboriginal</i>	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DEC 2005)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
<i>Historic</i>	NSW Heritage Manual (NSW Heritage Office)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
<b>Greenhouse Gases</b>	
	National Greenhouse Accounts Factors (Australian Department of Climate Change (DCC))
	Guidelines for Energy Savings Action Plans (DEUS)
<b>Waste</b>	
	Waste Classification Guidelines (DECC)
<b>Hazards</b>	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Hazardous and Offensive Development Application Guidelines - Applying SEPP 33
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard

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**Analysis**

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**Rehabilitation**

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Mine Rehabilitation – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)

Mine Closure and Completion – Leading Practice Sustainable Development Program for the Mining Industry (Commonwealth of Australia)

Strategic Framework for Mine Closure (ANZMEC-MCA)

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**Socio-Economic**

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Draft Economic Evaluation In Environmental Impact Assessment (DoP)

Techniques for Effective Social Impact Assessment: A Practical Guide (Office of Social Policy, NSW Government Social Policy Directorate)

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ENVIRONMENT PROTECTION AUTHORITY

Our reference:  
Contact:

LIC07/1083-09: DOC12/7973  
Andrew Helms, (02) 6332 7604

Mr Howard Reed  
A/Director Mining and Industry Projects  
Department of Planning and Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

8 March 2012

Dear Mr Reed

I refer to your letter dated 23 February 2012 requesting the Environment Protection Authority (EPA) provide input into the Director General requirements for the environmental impact statement (EIS) in regard to the proposed Centennial Coal Washery Upgrade and Logistics Project, Blackmans Flat (SSD-5164).

Please note that although the EPA was established as an independent statutory authority on 29 February 2012, the Bathurst Office of the EPA will be the primary point of contact for all matters relating to the EPA's area of responsibility and those of the Office of Environment and Heritage (OEH) which include Aboriginal cultural heritage, native vegetation, biodiversity and threatened species for this project.

The EPA has considered the details of the proposal as provided in the *Coal Services Washery Upgrade and Coal Distribution Project – Government Briefing Paper – January 2012* and has identified the information it requires in order to issue general terms of approval in Attachment A. In summary, the EPA and OEH's key information requirements for the proposal include an adequate assessment of:

- Air quality impacts;
- Noise impacts;
- Water Management including site water management and impact of the facility features (such as tailings dam and reject emplacement areas) on surface water and groundwater;
- Aboriginal cultural heritage; and
- Biodiversity (particularly in the Neubecks or Wangcol Creek area)

On the basis of the information submitted, the proposal is a scheduled activity (Coal Works) under the *Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted. Should project approval be granted, the proponent will need to make a separate application to the EPA for an EPL for the proposed facility prior to undertaking any on-site works including construction activities. The proponent will also need to submit applications to vary both the Angus Place and Springvale EPLs to align those licences with the proposed changes to the washery's operational footprint.

The regulatory responsibilities of the Office of Environment and Heritage (OEH) are now carried out by the Environment Protection Authority (EPA).

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Level 2, 203 – 209 Russell Street Bathurst NSW 2795  
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Should you have any queries regarding the EPA or OEH's requirements, please contact Andrew Helms at the Bathurst Regional Office of the EPA in the first instance, by telephoning (02) 6332 7604.

Yours sincerely



**DARRYL CLIFT**  
**Head Regional Operations Unit Bathurst**  
**Environment Protection Authority**

Enclosures      Attachment 1 – EPA/OEH's requirements for EIS  
Attachment 2 – General Guidance Material

## **ATTACHMENT 1: EPA/OEH REQUIREMENTS FOR EIS**

### **1. Environmental impacts of the project**

Environmental Impact Statements (EIS) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines is at **Attachment 2**.

### **2. Air issues**

The EIS should include a detailed air quality impact assessment (AQIA). The AQIA should:

1. Identify all potential discharges of fugitive and point source emissions of pollutants including dust for all stages of the proposal and assess the risk associated with those emissions. All processes that could result in air emissions must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided. Assessment of risk relates to environmental harm, risk to human health and amenity.
2. Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:
  - a. proposal location;
  - b. characteristics of the receiving environment; and
  - c. type and quantity of pollutants emitted.
3. Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited to:
  - a. meteorology and climate;
  - b. topography;
  - c. surrounding land-use; receptors; and
  - d. ambient air quality.
4. Include a consideration of 'worst case' emission scenarios and impacts at proposed emission limits.
5. Account for cumulative impacts associated with existing emission sources as well as any currently approved developments linked to the receiving environment.
6. Include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. Air dispersion modelling must be conducted in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2005)  
<http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf>.
7. Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act (1997)* and the *POEO (Clean Air) Regulation (2010)*.
8. Provide an assessment of the project in terms of the priorities and targets adopted under the NSW State Plan 2010 and its implementation plan Action for Air.
9. Detail emission control techniques/practices that will be employed by the proposal.

### 3. Noise and vibration

In relation to noise, the following matters should be addressed (where relevant) as part of the EIS.

1. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC, 2009).  
<http://www.environment.nsw.gov.au/noise/constructnoise.htm>
2. Operational noise from all industrial activities (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Industrial Noise Policy* (EPA, 2000) and *Industrial Noise Policy Application Notes*.  
<http://www.environment.nsw.gov.au/noise/industrial.htm>
3. Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *Environmental Criteria for Road Traffic Noise* (EPA, 1999). <http://www.environment.nsw.gov.au/noise/traffic.htm>
4. Noise from new or upgraded public roads should be assessed using the *Environmental Criteria for Road Traffic Noise* (EPA, 1999).  
<http://www.environment.nsw.gov.au/noise/traffic.htm>

In relation to blasting and blast vibration, the following matters should be addressed (where relevant) as part of the EIS.

5. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006). <http://www.environment.nsw.gov.au/noise/vibrationguide.htm>
6. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in *Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC, 1990). <http://www.environment.nsw.gov.au/noise/blasting.htm>

### 4. Waste, chemicals and hazardous materials and radiation

The EIS should:

1. Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste.  
**Note:** All waste must be classified in accordance with *DECCW's Waste Classification Guidelines*.
2. Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.  
**Note:** All waste must be classified in accordance with *DECCW's Classification Guidelines*.
3. Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with *DECCW's Waste Classification Guidelines*.

4. Provide details of how waste (including tailings) will be handled and managed onsite to minimise pollution, including:

- a) Stockpile location and management

- Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
- Proposed height limits for all waste to reduce the potential for dust and odour.
- Procedures for minimising the movement of waste around the site and double handling.
- Measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc.

- b) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as:

- Sediment traps
- Diversion banks
- Sediment fences
- Bunds (earth, hay, mulch)
- Geofabric liners
- Other control measures as appropriate

The Proponent should also provide details of:

- how leachate from stockpiled waste material will be kept separate from stormwater runoff;
- treatment of leachate through a wastewater treatment plant (if applicable); and
- any proposed transport and disposal of leachate off-site.

6. Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.
7. Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.
8. Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste.
9. Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by the EPA from time to time.
10. Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc.

## 5. Water and soils

### 5.1 Soil issues

The EIS should include:

1. An assessment of potential impacts on soil and land resources should be undertaken, being guided by *Soil and Landscape Issues in Environmental Impact Assessment* (DLWC 2000). The nature and extent of any significant impacts should be identified. Particular attention should be given to:
  - a. Soil erosion and sediment transport - in accordance with *Managing urban stormwater: soils and construction*, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008).
  - b. Mass movement (landslides) – in accordance with *Landslide risk management* guidelines presented in Australian Geomechanics Society (2007).
  - c. Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets which includes *Site Investigations for Urban Salinity* (DLWC, 2002).
2. A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the project. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

### Water

1. Describe water usage for the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
2. Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
3. Where relevant include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.
4. Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal.
5. State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters (<http://www.environment.nsw.gov.au/ieo/index.htm>). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.
6. State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality ([http://www.mincos.gov.au/publications/australian\\_and\\_new\\_zealand\\_guidelines\\_for\\_fresh\\_and\\_marine\\_water\\_quality](http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality)).
7. State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.
8. Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.



9. Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
  - protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
  - contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
10. Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.
11. Assess impacts on groundwater and groundwater dependent ecosystems.
12. Describe how stormwater will be managed both during and after construction.
13. Describe how predicted impacts will be monitored and assessed over time.

## 6. Aboriginal cultural heritage

The EIS report should contain:

1. A description of the Aboriginal objects and declared Aboriginal places located within the area of the proposed development.
2. A description of the cultural heritage values, including the significance of the Aboriginal objects and declared Aboriginal places, that exist across the whole area that will be affected by the proposed development, and the significance of these values for the Aboriginal people who have a cultural association with the land.
3. A description of how the requirements for consultation with Aboriginal people as specified in clause 80C of the *National Parks and Wildlife Regulation, 2009* have been met.
4. The views of those Aboriginal people regarding the likely impact of the proposed development on their cultural heritage. If any submissions have been received as a part of the consultation requirements, then the report must include a copy of each submission and your response.
5. A description of the actual or likely harm posed to the Aboriginal objects or declared Aboriginal places from the proposed activity, with reference to the cultural heritage values identified.
6. A description of any practical measures that may be taken to protect and conserve those Aboriginal objects or declared Aboriginal places.
7. A description of any practical measures that may be taken to avoid or mitigate any actual or likely harm, alternatives to harm or, if this is not possible, to manage (minimise) harm.
8. A specific Statement of Commitment that the proponent will complete an Aboriginal Site Impact Recording Form and submit it to the Aboriginal Heritage Information Management System (AHIMS) Registrar, for each AHIMS site that is harmed through the proposed development.

In addressing these requirements, the proponent must refer to the following documents:

- a) *Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010* (DECCW, 2010) - <http://www.environment.nsw.gov.au/licences/consultation.htm>. This document further explains the consultation requirements that are set out in clause 80C of the *National Parks and Wildlife Regulation, 2009*. The process set out in this document must be followed and documented in the EIS.

- b) *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010) - <http://www.environment.nsw.gov.au/licences/archinvestigations.htm>. The process described in this Code should be followed and documented where the assessment of Aboriginal cultural heritage requires an archaeological investigation to be undertaken.

#### Notes:

1. An Aboriginal Site Impact Recording Form (<http://www.environment.nsw.gov.au/licences/DECCAHiMSSiteRecordingForm.htm>) must be completed and submitted to the Aboriginal Heritage Information Management System (AHIMS) Registrar, for each AHIMS site that is harmed through archaeological investigations required or permitted through these EIS requirements.
2. Under section 89A of the *National Parks and Wildlife Act, 1974*, it is an offence for a person not to notify DECCW of the location of any Aboriginal object the person becomes aware of, not already recorded on the Aboriginal Heritage Information Management System (AHIMS). An AHIMS Site Recording Form should be completed and submitted to the AHIMS Registrar (<http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm>), for each Aboriginal site found during investigations.

## 7. Biodiversity

Biodiversity impacts can be assessed using **either** the BioBanking Assessment Methodology (scenario 1) or a detailed biodiversity assessment (scenario 2). The requirements for each of these approaches are detailed below.

The BioBanking Assessment Methodology can be used **either** to obtain a BioBanking statement, or to assess impacts of a proposal and to determine required offsets without obtaining a statement. In the latter instances, if the required credits are not available for offsetting, appropriate alternative options may be developed in consultation with OEH officers and in accordance with OEH policy.

*Scenario 1 - Where a proposal is assessed using the BioBanking Assessment Methodology (BBAM):*

1. Where the BioBanking Assessment Methodology is being used to assess impacts of a proposal and to determine required offsets, and a BioBanking Statement is not being obtained, the EIS should contain a detailed biodiversity assessment and all components of the assessment must be undertaken in accordance with the *BioBanking Assessment Methodology and Credit Calculator Operational Manual* (DECCW, 2008).
2. The EIS should include a specific statement which:
  - is informed by the outcomes of the proposed BioBanking assessment offset package;
  - sets out the ecosystem and species credits required by the BioBanking Assessment Methodology and how these ecosystem and/or species credits will be secured and obtained;
  - if the ecosystem or species credits cannot be obtained, provides appropriate alternative options to offset expected impacts, noting that an appropriate alternative option may be developed in consultation with OEH officers and in accordance with OEH policy;
  - demonstrates how all options have been explored to avoid red flag areas;
  - includes all relevant 'BioBanking files (e.g. \*.xml output files), data sheets and documentation (including maps, aerial photographs, GIS shape files, other remote sensing imagery etc.) to ensure OEH can conduct an appropriate review of the assessment.
3. Where appropriate, likely impacts (both direct and indirect) on any adjoining and/or nearby OEH estate reserved under the *National Parks and Wildlife Act 1974* or any marine and estuarine protected areas under the *Fisheries Management Act 1994* or the *Marine Parks Act*

1997 should be considered. Please refer to the Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010).

4. With regard to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, the assessment should identify and assess any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.

*Scenario 2 - Where a proposal is assessed outside the BioBanking Assessment Methodology:*

1. The EIS should include a detailed biodiversity assessment, including assessment of impacts on threatened biodiversity, native vegetation and habitat. This assessment should address the matters included in the following sections.
2. A field survey of the site should be conducted and documented in accordance with relevant guidelines, including:
  - the Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna -Amphibians (DECCW, 2009)
  - Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004), and
  - Threatened species survey and assessment guideline information on [www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlins.htm](http://www.environment.nsw.gov.au/threatenedspecies/surveyassessmentgdlins.htm).

If a proposed survey methodology is likely to vary significantly from the above methods, the proponent should discuss the proposed methodology with OEH prior to undertaking the EIS, to determine whether OEH considers that it is appropriate.

Recent (less than five years old) surveys and assessments may be used. However, previous surveys should not be used if they have:

- been undertaken in seasons, weather conditions or following extensive disturbance events when the subject species are unlikely to be detected or present, or
- utilised methodologies, survey sampling intensities, timeframes or baits that are not the most appropriate for detecting the target subject species,

unless these differences can be clearly demonstrated to have had an insignificant impact upon the outcomes of the surveys. If a previous survey is used, any additional species listed under the *TSC Act* since the previous survey took place, must be surveyed for.

Determining the list of potential threatened species for the site must be done in accordance with the Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004) and the Guidelines for Threatened Species Assessment (Department of Planning, July 2005). The OEH Threatened Species website <http://www.environment.nsw.gov.au/threatenedspecies/> and the *Atlas of NSW Wildlife* database must be the primary information sources for the list of threatened species present. The BioBanking Threatened Species Database, the Vegetation Types databases (available on OEH website at <http://www.environment.nsw.gov.au/biobanking/biobankingtsdpd.htm> and <http://www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm>, respectively) and other data sources (e.g. PlantNET, Online Zoological Collections of Australian Museums (<http://www.ozcam.org/>), previous or nearby surveys etc.) may also be used to compile the list.

3. The EIS should contain the following information as a minimum:
  - a. The requirements set out in the Guidelines for Threatened Species Assessment (Department of Planning, July 2005).
  - b. Description and geo-referenced mapping of study area (and spatial data files), e.g. overlays on topographic maps, satellite images and /or aerial photos, including details of map datum, projection and zone, all survey locations, vegetation communities (including classification and methodology used to classify), key habitat features and reported

- locations of threatened species, populations and ecological communities present in the subject site and study area.
- c. Description of survey methodologies used, including timing, location and weather conditions.
  - d. Details, including qualifications and experience of all staff undertaking the surveys, mapping and assessment of impacts as part of the EIS.
  - e. Identification of national and state listed threatened biota known or likely to occur in the study area and their conservation status.
  - f. Description of the likely impacts of the proposal on biodiversity and wildlife corridors, including direct and indirect and construction and operation impacts. Wherever possible, quantify these impacts such as the amount of each vegetation community or species habitat to be cleared or impacted, or any fragmentation of a wildlife corridor.
  - g. Identification of the avoidance, mitigation and management measures that will be put in place as part of the proposal to avoid or minimise impacts, including details about alternative options considered and how long term management arrangements will be guaranteed.
  - h. Description of the residual impacts of the proposal. If the proposal cannot adequately avoid or mitigate impacts on biodiversity, then a biodiversity offset package is expected (see the requirements for this at point 6 below).
  - i. Provision of specific Statement of Commitments relating to biodiversity.
4. An assessment of the significance of direct and indirect impacts of the proposal must be undertaken for threatened biodiversity known or considered likely to occur in the study area based on the presence of suitable habitat. This assessment must take into account:
    - a. the factors identified in s.5A of the EP&A Act, and
    - b. the guidance provided by *The Threatened Species Assessment Guideline – The Assessment of Significance* (DECCW, 2007) which is available at: <http://www.environment.nsw.gov.au/resources/threatenedspecies/tsaguide07393.pdf>
  5. Where an offsets package is proposed by a proponent for impacts to biodiversity (and a BioBanking Statement has not been sought) this package should:
    - a. Meet OEH's *Principles for the use of biodiversity offsets in NSW*, which are available at: [www.environment.nsw.gov.au/biocertification/offsets.htm](http://www.environment.nsw.gov.au/biocertification/offsets.htm).
    - b. Identify the conservation mechanisms to be used to ensure the long term protection and management of the offset sites.
    - c. Include an appropriate Management Plan (such as vegetation or habitat) that has been developed as a key amelioration measure to ensure any proposed compensatory offsets, retained habitat enhancement features within the development footprint and/or impact mitigation measures (including proposed rehabilitation and/or monitoring programs) are appropriately managed and funded.
  6. Where appropriate, likely impacts (both direct and indirect) on any adjoining and/or nearby OEH estate reserved under the *National Parks and Wildlife Act 1974* or any marine and estuarine protected areas under the *Fisheries Management Act 1994* or the *Marine Parks Act 1997* should be considered. Refer to the *Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water* (DECC, 2010).
  7. With regard to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, the assessment should identify any relevant Matters of National Environmental Significance and whether the proposal has been referred to the Commonwealth or already determined to be a controlled action.

## Attachment 2 – General Guidance Material

Title	Web address
<b><u>Relevant Legislation</u></b>	
<i>Coastal Protection Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+13+1979+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+13+1979+cd+0+N</a>
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	<a href="http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/">http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/</a>
<i>Contaminated Land Management Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1997+cd+0+N</a>
<i>Environmentally Hazardous Chemicals Act 1985</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N</a>
<i>Environmental Planning and Assessment Act 1979</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N</a>
<i>Fisheries Management Act 1994</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N</a>
<i>Marine Parks Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N</a>
<i>National Parks and Wildlife Act 1974</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N</a>
<i>Protection of the Environment Operations Act 1997</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N</a>
<i>Threatened Species Conservation Act 1995</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N</a>
<i>Water Management Act 2000</i>	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N</a>
<b><u>Licensing</u></b>	
OEH Guide to Licensing	<a href="http://www.environment.nsw.gov.au/licensing/licenceguide.htm">www.environment.nsw.gov.au/licensing/licenceguide.htm</a>
<b><u>Aboriginal Cultural Heritage</u></b>	
Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (2005)	Available from DoP.
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/licences/consultation.htm">http://www.environment.nsw.gov.au/licences/consultation.htm</a>
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	<a href="http://www.environment.nsw.gov.au/licences/archinvestigations.htm">http://www.environment.nsw.gov.au/licences/archinvestigations.htm</a>
Aboriginal Site Impact Recording Form	<a href="http://www.environment.nsw.gov.au/licences/DECCA_HIMSSiteRecordingForm.htm">http://www.environment.nsw.gov.au/licences/DECCA_HIMSSiteRecordingForm.htm</a>
Aboriginal Heritage Information Management System (AHIMS) Registrar	<a href="http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm">http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm</a>

Title	Web address
<b><u>Air Issues</u></b>	
<b>Air Quality</b>	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	<a href="http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf">http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf</a>
POEO (Clean Air) Regulation 2002	<a href="http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+642+2002+cd+0+N">http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+642+2002+cd+0+N</a>
<b><u>Biodiversity</u></b>	
BioBanking Assessment Methodology (DECC, 2008)	<a href="http://www.environment.nsw.gov.au/resources/biobanking/08385bbassessmethod.pdf">http://www.environment.nsw.gov.au/resources/biobanking/08385bbassessmethod.pdf</a>
BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECCW, 2008)	<a href="http://www.environment.nsw.gov.au/biobanking/operationalmanual.htm">http://www.environment.nsw.gov.au/biobanking/operationalmanual.htm</a>
Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna -Amphibians (DECCW, 2009)	<a href="http://www.environment.nsw.gov.au/resources/threatenedspecies/09213amphibians.pdf">http://www.environment.nsw.gov.au/resources/threatenedspecies/09213amphibians.pdf</a>
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004)	<a href="http://www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf">http://www.environment.nsw.gov.au/resources/nature/TBSAGuidelinesDraft.pdf</a>
OEH Threatened Species website	<a href="http://www.environment.nsw.gov.au/threatenedspecies/">http://www.environment.nsw.gov.au/threatenedspecies/</a>
Atlas of NSW Wildlife	<a href="http://wildlifeatlas.nationalparks.nsw.gov.au/wildlifeatlas/watlas.jsp">http://wildlifeatlas.nationalparks.nsw.gov.au/wildlifeatlas/watlas.jsp</a>
BioBanking Threatened Species Database	<a href="http://www.environment.nsw.gov.au/biobanking/biobankingtsdpd.htm">http://www.environment.nsw.gov.au/biobanking/biobankingtsdpd.htm</a>
Vegetation Types databases	<a href="http://www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm">http://www.environment.nsw.gov.au/biobanking/vegtypedatabase.htm</a>
PlantNET	<a href="http://plantnet.rbgsyd.nsw.gov.au/">http://plantnet.rbgsyd.nsw.gov.au/</a>
Online Zoological Collections of Australian Museums	<a href="http://www.ozcam.org/">http://www.ozcam.org/</a>
Threatened Species Assessment Guideline - The Assessment of Significance (DECCW, 2007)	<a href="http://www.environment.nsw.gov.au/resources/threatenedspecies/t saguide07393.pdf">http://www.environment.nsw.gov.au/resources/threatenedspecies/t saguide07393.pdf</a>
Principles for the use of biodiversity offsets in NSW	<a href="http://www.environment.nsw.gov.au/biocertification/offsets.htm">http://www.environment.nsw.gov.au/biocertification/offsets.htm</a>
<b><u>Noise and Vibration</u></b>	
Interim Construction Noise Guideline (DECC, 2009)	<a href="http://www.environment.nsw.gov.au/noise/constructnoise.htm">http://www.environment.nsw.gov.au/noise/constructnoise.htm</a>
Assessing Vibration: a technical guideline (DEC, 2006)	<a href="http://www.environment.nsw.gov.au/noise/vibrationguide.htm">http://www.environment.nsw.gov.au/noise/vibrationguide.htm</a>
Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990)	<a href="http://www.environment.nsw.gov.au/noise/blasting.htm">http://www.environment.nsw.gov.au/noise/blasting.htm</a>

Title	Web address
Industrial Noise Policy Application Notes	<a href="http://www.environment.nsw.gov.au/noise/traffic.htm">http://www.environment.nsw.gov.au/noise/traffic.htm</a>
Environmental Criteria for Road Traffic Noise (EPA, 1999)	<a href="http://www.environment.nsw.gov.au/noise/traffic.htm">http://www.environment.nsw.gov.au/noise/traffic.htm</a>
Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (DECC, 2007)	<a href="http://www.environment.nsw.gov.au/noise/railinfranoise.htm">http://www.environment.nsw.gov.au/noise/railinfranoise.htm</a>
Environmental assessment requirements for rail traffic-generating developments	<a href="http://www.environment.nsw.gov.au/noise/railnoise.htm">http://www.environment.nsw.gov.au/noise/railnoise.htm</a>
<b><u>Waste, Chemicals and Hazardous Materials and Radiation</u></b>	
<b>Waste</b>	
Environmental Guidelines: Solid Waste Landfills (EPA, 1996)	<a href="http://www.environment.nsw.gov.au/resources/waste/envguidlns/solidlandfill.pdf">http://www.environment.nsw.gov.au/resources/waste/envguidlns/solidlandfill.pdf</a>
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	<a href="http://www.environment.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf">http://www.environment.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf</a>
Waste Classification Guidelines (DECC, 2008)	<a href="http://www.environment.nsw.gov.au/waste/envguidlns/index.htm">http://www.environment.nsw.gov.au/waste/envguidlns/index.htm</a>
OEH Resource recovery exemption	<a href="http://www.environment.nsw.gov.au/waste/RRRecoveryExemptions.htm">http://www.environment.nsw.gov.au/waste/RRRecoveryExemptions.htm</a>
<b><u>Water and Soils</u></b>	
<b>Soils – general</b>	
Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000)	<a href="http://www.dnr.nsw.gov.au/care/soil/soil_pubs/pdfs/tech_rep_34_new.pdf">http://www.dnr.nsw.gov.au/care/soil/soil_pubs/pdfs/tech_rep_34_new.pdf</a>
Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008)	Vol 1 - Available for purchase at <a href="http://www.landcom.com.au/whats-new/publications-reports/the-blue-book.aspx">http://www.landcom.com.au/whats-new/publications-reports/the-blue-book.aspx</a> Vol 2 - <a href="http://www.environment.nsw.gov.au/stormwater/publications.htm">http://www.environment.nsw.gov.au/stormwater/publications.htm</a>
Landslide risk management guidelines	<a href="http://www.australiangeomechanics.org/resources/downloads/">http://www.australiangeomechanics.org/resources/downloads/</a>
Site Investigations for Urban Salinity (DLWC, 2002)	<a href="http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf">http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf</a>
Local Government Salinity Initiative Booklets	<a href="http://www.environment.nsw.gov.au/salinity/solutions/urban.htm">http://www.environment.nsw.gov.au/salinity/solutions/urban.htm</a>
<b>Water</b>	
Water Quality Objectives	<a href="http://www.environment.nsw.gov.au/ieo/index.htm">http://www.environment.nsw.gov.au/ieo/index.htm</a>
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	<a href="http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality">http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality</a>
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	<a href="http://deccnet/water/resources/AWQGuidance7.pdf">http://deccnet/water/resources/AWQGuidance7.pdf</a>
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	<a href="http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf">http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf</a>

12/10/12



PCU038710



Transport  
Roads & Maritime  
Services

SF2012/004566; WST12/00027 02

Manager  
Mining Projects  
Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Department of Planning  
Received  
12 OCT 2012  
Scanning Room

Dear Sir

**SSD5579 - Centennial Western Coal Services Project**

Thank you for your email received 26 September 2012 referring the revised Briefing Paper for the Centennial Western Coal Services Project to Roads and Maritime Services (RMS).

Following the review of the revised Briefing Paper, RMS recommends that the key issues identified in my letter dated 8 March 2012 (copy enclosed) be included in the Director General's requirements.

RMS also notes that the RTA Road Design Guide is included in the list of Policies, Guidelines & Plans in the draft Director General's requirements. The Road Design Guide is no longer in use and has been replaced by the Austroads Guides and RMS Supplements to the Austroads Guides. RMS requests that this change be reflected in the Director General's requirements.

RMS awaits receipt of the Environmental Impact Statement to comment further on the proposal.

Should you require any further information please contact Dave White on (02) 6861 1479.

Yours faithfully

Tony Hendry  
Road Safety & Traffic Manager  
Western

10 OCT 2012

Roads and Maritime Services

11-55 Carrington Street PARKES NSW 2870  
PO Box 334 PARKES NSW 2870 DX 20256  
www.rta.nsw.gov.au | 13 17 82





SF2012/004566; CR2012/001751; WST12/00027

Director  
Mining & Industry Projects  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

Dear Sir

**Centennial Coal washery upgrade (SSD-5164) request for input into  
Director-General's Requirements**

Thank you for your letter dated 23 February 2012 requesting input into the Director-General's Requirements for Centennial Coal washery upgrade from Roads and Maritime Services (RMS).

RMS representatives Tony Hendry and Fiona Francis met with Centennial Coal representatives on 28 February 2012 to discuss the project. As part of this meeting, the Centennial Coal representatives indicated that a workshop is proposed for planning road infrastructure in Blackmans Flat. RMS welcomes the opportunity to participate in the workshop.

RMS has identified the following key issues to be addressed in the environmental impact statement, by way of a traffic impact study prepared in accordance with the methodology set out in Section 2 of the *RTA Guide to Traffic Generating Developments* and including:

- A traffic study is to be undertaken which includes, but is not limited to, origin-destination of vehicles, including staff, contractors, construction, and maintenance personnel during both the construction and operation phases of the development. The study should include vehicle types, volumes and times of peak travel and include existing, proposed, and projected figures for the life of the project. The traffic study should also address internal traffic movement and parking facilities
- Intersection treatments and mitigation measures to cater for predicted traffic impacts. This is to include any required temporary or staged treatments and other measures. Treatments are to be provided for any proposed new junctions as well as any other temporary junctions or existing intersection upgrades. The intersections are to cater for

**Roads and Maritime Services**

all heavy and over dimensional vehicles that will be accessing the development. Concept plans for those improvements should be included in the study

- The traffic impact study and proposed intersection treatments are to include the cumulative impacts of existing approved developments in the vicinity of the site (Pine Dale mine, Lithgow waste project)
- Any proposed road facilities and intersection treatments are to be in accordance with the *Austroads Guide to Road Design* and RMS supplements, including the provision of safe intersection sight distance. The RMS supplements to the *Austroads Guide to Road Design* are available online at [www.rta.nsw.gov.au/doingbusinesswithus/ausroadsguides/road\\_design.html](http://www.rta.nsw.gov.au/doingbusinesswithus/ausroadsguides/road_design.html)
- The layout of the internal road network, parking facilities and infrastructure within the project boundary
- Details of local climate conditions that may affect road safety eg fog, ice, flood and any mitigating measures proposed

The design and construction of the overpass of the Castlereagh Highway will be administered through a Works Authorisation Deed or Deed of Agreement entered by the proponent with RMS. The Deed will provide for the specifications to be met in the design and construction of an overpass following consultation with RMS Project Services Manager.

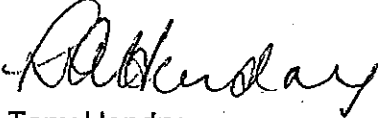
Minimum requirements for the design and construction of an overpass include:

- Compliance with *AS 5100 Bridge Design*
- Minimum vertical clearance of 6.5 metres from the highway centreline to the underside of the bridge
- Minimum horizontal clearance of 14 metres for a two lane highway. This clearance must be increased by the width of any additional lanes and any medians
- Wire rope safety barrier between the carriageway and a bridge structure will require 1.5 metres back clearance from the barrier to the bridge structure
- The applicant will be responsible for maintenance and subsequent removal of the proposed overpass structure at the completion of the mine operation and will be required to lodge a security deposit/bond adjusted annually for Building Price Index increase as part of the Deed to ensure this
- All arrangements for the control of traffic on a state road shall be in accordance with RMS publication *Traffic Control at Work Sites*. A Road Occupancy Licence will be required prior to any works commencing within three metres of the traffic lanes and submission of the Traffic Management Plan will be part of Road Occupancy Licence
- All works associated with the project including consultation and planning will be at no cost to RMS

Please forward a copy of the Director-General's Requirements to RMS at the same time they are sent to the applicant.

Should you require further information please contact Fiona Francis (02) 6861 1453.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'Tony Hendry', written in a cursive style.

8 MAR 2012

Tony Hendry  
Road Safety and Traffic Manager  
Western



Mr Howard Reed  
A/Director Mining Projects  
Department of Planning  
GPO Box 39  
SYDNEY NSW 2001

Attention: Paul Freeman

Dear Mr Reed

**Centennial Coal Washery and Logistics Project (SSD-5164)  
Request for input into Director General's Requirements**

I refer to your letter dated 23 February 2012 regarding the Centennial Coal Company Ltd request for Director General Requirements (DGRs) for the proposed Centennial Coal Washery Upgrade and Logistics Project.

NSW Trade & Investment, Regional Infrastructure & Services, Division of Resources & Energy (DRE) has reviewed the *Coal Services Washery Upgrade and Coal Distribution Project Government Briefing Paper* dated January 2012 and provides the following comments which are directed at specific areas of DRE's responsibility for this proposal:

**MINING TITLE**

As coal is a prescribed mineral under the *Mining Act 1992*, the proponent is required to hold appropriate mining titles from DRE in order to mine this mineral. DRE understands that this modification is wholly within Consolidated Coal Lease 733, Mining Lease 1569 and Mining Lease 1448 held by the proponent.

Any Environmental Assessment (EA) for this project should clearly identify existing coal titles.

**MINING ACTIVITIES AND INFRASTRUCTURE**

The EA should state the interaction between the proposed mining activities and the existing environment and so include a comprehensive description of the following activities and their impacts:

- Underground mine entries, and the mine layouts and scheduling
- Coal crushing and coal handling activities
- Surface facilities and storage requirements
- Mine ventilation and any methane gas capture and use management
- Water management
- Ensure that all disturbance associated with previous mining and processing is covered within the new project boundary or other existing consents. For any areas not covered by an existing or proposed consent, the proponent needs to demonstrate that mine related disturbance has been fully decommissioned and/or rehabilitated to the point where no further action is required
- Details of how the Kerosene Vale stockpile relates to the project
- Details of consideration of alternative options for reject emplacement

## REHABILITATION

The proponent should include a Rehabilitation section in the EA which addresses the following aspects:

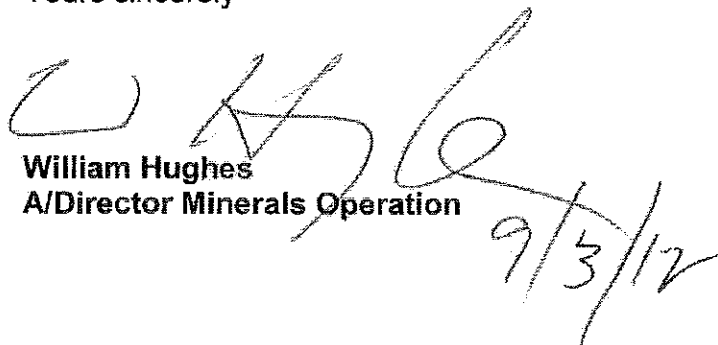
- **Post Mining Land Use** –the proponent should identify and assess post mining land use options and provide a statement of the preferred post mining land use outcome in the EA. This should include a discussion of the benefits of the post mining land use to a subsequent landowner, the local community and the state of NSW.
- **Rehabilitation Objectives and Domains** – a set of project rehabilitation objectives should be included that clearly define the environmental outcomes required to achieve the final land use. Identify each rehabilitation domain and describe rehabilitation objectives for each domain (including for example, rehabilitation areas, watercourses, waste emplacements, final voids, and infrastructure areas.)
- **Rehabilitation Methodology** – outline general rehabilitation methods and procedures that will be employed by the project to ensure the rehabilitation objectives for each domain are met.
- **Strategic Rehabilitation Completion Criteria** – nominate strategic completion criteria for the five phases of the rehabilitation process for natural systems and passive landuse, namely (1) Decommissioning; (2) Landform Establishment; (3) Growth Media Development; (4) Ecosystem Establishment; and (5) Ecosystem Development. If necessary, objective criteria may be presented as ranges rather than finite indicator levels. Subjective criteria may also apply where a gap in

technical knowledge is experienced. It is expected that further refinement of completion criteria will be undertaken and included in the Rehabilitation and Environmental Management Plan (REMP).

- **Conceptual Final Landform Design** – a drawing at an appropriate scale with final landform contours should be provided for directly impacted domain areas. This drawing should identify, but not be limited to, the following attributes of the final landform: vegetation types; habitat features; contaminated areas; final voids (if any); access and internal roads; fencing design; and other remaining infrastructure such as sheds, dams, bores and pipelines.

Should you have any enquires regarding this matter please contact Julie Moloney, Principal Adviser, Industry Coordination on (02) 4931 6549.

Yours sincerely



William Hughes  
A/Director Minerals Operation

9/3/12

15/3/12



Department of  
Primary Industries

OUT12/5239

Mr Howard Reed  
A/Director  
Mining & Industry Projects  
Department of Planning and Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

15 MAR 2012

Attention: Paul Freeman, Planner via email: [Paul.Freeman@planning.nsw.gov.au](mailto:Paul.Freeman@planning.nsw.gov.au)

Dear Mr Freeman

**Centennial Coal Washery Upgrade and Logistics Project (SSD-5164)**  
**Request for Director General Requirements (DGRs)**

Thank you for your letter of 23 February 2012 referring the above request to the Department of Primary Industries.

There are no issues related to agricultural land to raise in relation to the Washery Upgrade and Logistics Project proposal at Blackmans Flat in the Lithgow Local Government Area.

Yours sincerely

A handwritten signature in cursive script, appearing to read "Regina Fogarty".

**Dr Regina Fogarty**  
**Director Office of Agricultural Sustainability & Food Security**

A large handwritten checkmark.

SRE  
Environment and Development

12 March 2012



Major Projects Assessment  
Mining & Industry Projects  
Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Att. Paul Freeman,

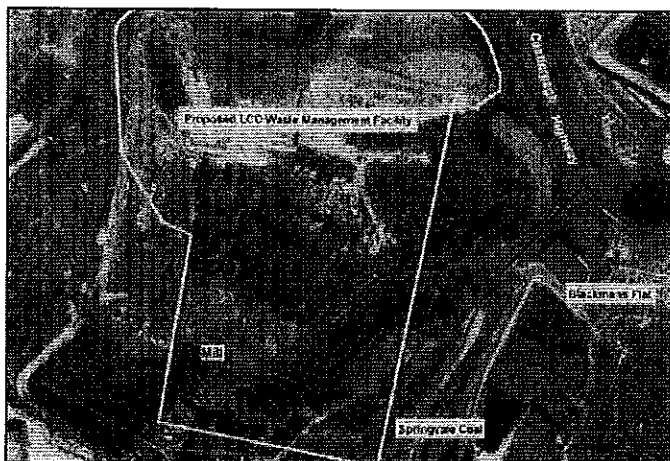
**(SSD-5164) CENTENNIAL COAL WASHERY UPGRADE & LOGISTICS PROJECT**

Thank you for your referral of the abovementioned project, which was received on 23 February 2012.

Council would like the following issues addressed within the Director-General's Requirements for the abovementioned project:

**Council's Waste Depot** – Council has approved a Waste Management Facility on Lot 42 DP 751636. The intent is to strategically close a number of rural tips and Lithgow's waste depot, and utilise the site in question to dispose of waste for the Lithgow Local Government Area.

At this stage no discussions have been held between Centennial and Council regarding the implications of the proposed washery upgrade and haul road extension, which would completely traverse Council's future Waste Management Facility site.



As part of the DGR's adequate consultation should be held with Council to ensure both projects could co-exist without impacting upon the ability for either project to effectively function.

(02) 6354 9999  
(02) 6351 4259

[www.lithgow.nsw.gov.au](http://www.lithgow.nsw.gov.au)  
[council@lithgow.nsw.gov.au](mailto:council@lithgow.nsw.gov.au)

ADDRESS CORRESPONDENCE  
TO GENERAL MANAGER  
PO BOX 19, LITHGOW NSW 2790



**Air Quality Assessment** – detailing how the development will comply with all relevant requirements throughout the life of the project including private haul road areas.

**Noise Assessment** – detailing how the development will comply with all relevant requirements throughout the life of the project. This includes any additional local noise impacts from truck and conveyor transportation.

**Visual Impact Assessment**– Assessment should focus on the ongoing visual impacts from nearby residences.

**Traffic & Transport Assessment –**

- Detailing the likely traffic impacts prior to completion of the proposed additional private haul road. This assessment should include details of the proposed transportation measures and traffic figures from each site.
- Traffic impacts on the Castlereagh Highway for the duration of the project and if traffic flows will be affected during construction of the new section of private haul road.
- Traffic routes for all trucking movements in and out of Angus Place, Springvale and Centennial Coal Services Site should be shown.
- Impacts on Pine Dale Coal Mine's onsite movements once the private haul road crosses Enhance Place. Safety precautions that are to be put in place along this road including speed limits etc.
- That appropriate assessment of site distances for crossing a highway are undertaken and considered.

**Biodiversity Assessment** – Detailed assessment of the likely impacts on existing flora and fauna, and in particular State and Nationally significant threatened species and any Ecologically Endangered Communities.

**Revegetation** – the full impacts on disturbing a rehabilitated area should be assessed and details provided on future rehabilitation of the site once the project is completed. This includes who is responsible for the rehabilitation of the private haul road which traverses Enhance Place.

**Cumulative Impact Assessment** – All impacts of the development should be considered in the context of the existing environment, and in terms of the overall cumulative impact to be experienced by local receivers. This includes Lidsdale and Blackmans Flat areas.

**Social & Economic Assessment** – should consider the potential impacts of the Project on the local and regional community and in particular discussion on the social/economic impact the development would have on local landowners due to visual, noise and dust impacts.

**Community Consultation** – Adequate consultation is to be undertaken with the community. This consultation is to include those likely to be affected by the proposed washery expansion/upgrade. Additionally, it should be made clear which mine should be contacted for concerns raised regarding the private haul road and conveyor systems.

**Blackmans Flat** – As you may be aware, the residents of Blackmans Flat have been concerned for some time now about the ongoing cumulative impacts on their amenity from mining and industry. Council requests the Environmental Assessment provide for the mitigation of any impacts on the village.

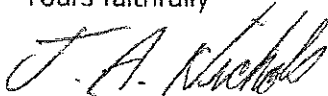
**Employment-**

- The additional 3 permanent employees for an increase of 5Mtpa at the Centennial Coal Services Site (being from 2Mtpa to 7Mtpa) seems unrealistic when there is currently 15 permanent staff for only 2Mtpa. However, these staffing arrangements do not consider contracting truck drivers and service providers. The full assessment and information on numbers of staff including truck drivers and service providers should be detailed.
- Information on the arrangements for a maximum of 120 additional employees during construction period of 18 months including parking, meal rooms and other services should be detailed for the project. The impact of these 120 employees should also be considered in all aspects of the development.

**Other Operations-** The briefing paper January 2012 refers to 'other potential sources' in section 2.1 and 'other potential small scale operations' in Section 4.5.1. It is unclear as to what sources or operations it is referring, accordingly this information should be detailed and considered in all aspects of the development.

Please do not hesitate to contact Skye Ellacott on (02) 6354 9991 in Council's Environment and Development Department should you have any queries in relation to this matter.

Yours faithfully



**Mr Jim Nichols**  
DEVELOPMENT MANAGER



PO Box 323 Penrith NSW 2750  
Level 4, 2-6 Station Street  
Penrith NSW 2750  
Tel 1300 722 468 Fax 02 4725 2599  
Email [info@sca.nsw.gov.au](mailto:info@sca.nsw.gov.au)  
Website [www.sca.nsw.gov.au](http://www.sca.nsw.gov.au)

Ref: D2012/17288

Mr. Howard Reed  
A/Director Mining & Industry Projects  
NSW Department of Planning & Infrastructure  
GPO Box 39  
SYDNEY NSW 2001

Dear Mr. Reed

**Centennial Coal Washery Upgrade and Logistics Project (SSD-5164)**

I refer to your letter dated 23 February 2012 requesting input into the Director General's Requirements (DGRs) for the Centennial Coal Washery Upgrade and Logistics Project. The Sydney Catchment Authority (SCA) appreciates the opportunity to provide input into the preparation of the Environmental Impact Statement (EIS) for the project.

The SCA believes the development has the potential to adversely impact on water quantity and quality. It is important the proposed development should be constructed, operated and rehabilitated in a manner which does not adversely affect the quantity and quality of surface and ground waters.

The proposed development application area is located wholly within the Upper Cox's River sub-catchment that is part of the Sydney Drinking Water Catchment. The documentation provided by the applicant has identified the key surface and ground water issues. The SCA considers that water quality issues should be comprehensively considered in the assessment process and that the *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011* (the SEPP) establishes appropriate assessment criteria. The SCA considers that the EIS of the Coal Washery Upgrade and Logistics Project must include an assessment of whether the proposal will have a neutral or beneficial effect on water quality and should also address the matters provided in Attachment A.

**The SCA notes the proposed Centennial reject emplacement areas for the proposed development overlap with Mount Piper power station's Lamberts North and Lamberts South ash placement areas (MP09\_0186)** recently approved by the Department on 16 February 2012. The SCA considers that the EIS must address this matter and the implications for both projects that flow from it. The SCA has addressed this matter in the SCA's input in to the DGRs.

The SCA would appreciate being involved in the further assessment of the application and would appreciate being provided with copies of any subsequent environmental impact statement documents.

If you wish to discuss any matter in this letter, please do not hesitate to contact Dr Girja Sharma on 47242459 or [girja.sharma@sca.nsw.gov.au](mailto:girja.sharma@sca.nsw.gov.au)

Yours sincerely



19/3/12

**DR PETER DAVIES**

**Senior Manager, Sustainability**

cc Neville Osborne, Infrastructure Projects, Department of Planning & Infrastructure

## **Appendix A**

### **Sydney Catchment Authority's Input into Director General's Requirements (SSD-5164)**

#### **General**

The Director-General's Requirements should include the following statement *"the EIS must assess potential risks to surface and ground water quality during construction and operation, demonstrating clear consideration to the principles of achieving a neutral or beneficial effect on water quality in the drinking water catchment, consistent with the State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011. The EIS must include a framework for the avoidance, mitigation, management and monitoring of water quality impacts during construction and operation."*

**The SCA notes the proposed Centennial reject emplacement areas for the proposed development overlap with Mount Piper power station's Lamberts North and Lamberts South ash placement areas (MP09\_0186)** recently approved by the Department on 16 February 2012. The EIS must address this matter and the implications for both projects that flow from it.

The EIS should also address the relevant SCA's Mining Principles (see Attachment B).

The EIS should contain the following:

- a clear description of each component of the development including
  - details of existing and proposed coal handling and processing, incorporating details of the existing and future coal production, and details of the existing and proposed rejects and tailing management
  - details of the construction of additional conveyors and transfer points and other coal handling requirements
  - details of the construction of the proposed haul road and crossing of Neubecks Creek
  - details of the existing water management for existing components of the development and how this will be affected by the additional components of the development
  - details of existing water management related approvals, licences and associated requirements
  - details of the outstanding elements of the rehabilitation of Lamberts Gully mine
  - details of the storage, use and management of fuel and chemicals, and
  - the practices proposed to ensure materials transported to and from the Centennial Coal Services Site by road or overland conveyors do not spill (as solid, liquid or dust).
- a detailed description of the existing environment of the development site and adjacent areas including:
  - geology and hydrogeology
  - natural and modified drainage features and patterns
  - surface hydrology of the development site and associated dependent aquatic ecosystems including details of surface water quantity and quality, in particular Huons Gully, Lamberts Gully, Neubecks Creek and Cox's River
  - ground water and associated dependent aquatic ecosystems including details of ground water quantity and quality, ground water stored within the old

Wallerawang underground workings and the surrounding aquifers, ground water flow direction and extraction of ground water from old Wallerawang underground workings

- a risk assessment of the potential environment impacts of the development and an identification of the key issues for assessment including:
  - management measures that are proposed to be implemented to avoid, minimise, mitigate, remediate and offset the impacts of the development. The SCA considers the priority should be to avoid impacts, with remediation and offsets being a last resort
  - existing and/or proposed monitoring programs.

The assessments should be based on existing scientifically valid monitoring data including longer-term data sets that are representative of the development area. It is essential that any predictions are soundly based on properly interpreted and modelled data.

The EIS should have regard for learnings from, and actual impacts, associated with Centennial's existing coal handling, processing and transport activities.

#### **Surface and Ground Water Assessment**

The EIS should assess the potential risks to surface and ground water quantity and quality and associated dependent ecosystems during both construction and operation activities, and demonstrate that the development can be designed and managed to achieve a neutral or beneficial effect on water quality in the drinking water catchment consistent with the SEPP.

The EIS should include a framework for the mitigation, management and monitoring of water quantity and quality impacts during construction and operation activities. In addition, the EIS should assess the potential for impacts to Huons Gully, Lamberts Gully, Neubecks Creek, Cox's River and any other watercourses within and adjoining the development site. The EIS should also include a strategy for the rehabilitation of any watercourses disturbed by the development to an existing or better standard.

The surface and ground water assessment should consider construction, operation and decommissioning stages of the development and should include but not be limited to:

- details of proposed water management system/s and a site water balance for each component of the development
- details of water quality of site ground water, and in Lamberts Gully, Neubecks Creek
- impacts of groundwater extraction from the old Wallerawang mine workings on:
  - ground water and surface water quality, in particular on Lamberts Gully, Neubecks Creek and its tributaries including changes to drainage patterns
  - groundwater levels and the quantity and flow of surface waters, in particular Neubecks Creek
  - on ground water flow direction, and
  - surface and ground water interaction within the site.
- the surface and ground water quality impacts should consider:
  - identification of the likely pollutants of concern including heavy metals, major cations and anions, and
  - for each pollutant of concern assess the pre and post-activity loads and concentrations under both wet and dry weather conditions.

- detail the proposed water quality protection measures for both surface and ground waters during the construction, operation and decommissioning stages of the development
- establish performance criteria for each measure and assess whether the water quantity and quality management measures are sustainable
- special consideration should be given to the separation of clean and dirty water and the management of water flow into and out of washery, including recycling to minimise impacts on receiving waters
- the soil and water management at the washery operations, reject emplacement areas and rehabilitation of mine site, and associated critical water management structures should be designed, constructed and maintained consistent with the requirements of the NSW Department of Environment & Climate Change (2008) *Managing Urban Stormwater Soils and Construction Volume 2E- Mines and Quarries*
- an assessment as to whether a neutral or beneficial effect on water quality of surface and ground waters will be achieved during the construction, operation and decommissioning stages of the washery, and
- the assessment of potential impacts on surface and ground water quantity and quality should be based on soundly modelled and interpreted information using appropriate and representative data.

#### **Other**

The SCA considers the EIS should also:

- provide details on any upgrade required to existing on-site (domestic) wastewater management systems and the basis for their sizing
- ensure on-site wastewater management systems are located, designed, managed and maintained in accordance to the SCA's *Water Quality Information Requirements* see <[http://www.sca.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0003/17796/Developments-in-Sydney.pdf](http://www.sca.nsw.gov.au/__data/assets/pdf_file/0003/17796/Developments-in-Sydney.pdf)>

#### **Cumulative Impacts**

The SCA considers the EIS should assess the cumulative environmental impacts of all components of the proposed development (including likely future activities) in the context of impacts from past activities on the locality. The SCA is particularly interested in the cumulative impact on the quality and quantity of surface and ground waters.

#### **Vegetation Clearing and Offsets**

The SCA considers the EIS should include the details of:

- vegetation clearing associated with all proposed construction and operation activities including the haul road, reject emplacement areas and additional conveyors and transfer points and other coal handling requirements
- the potential impacts of vegetation clearing including on surface and ground water quality and quantity, and
- the proposed measures to offset such potential impacts.

#### **Rehabilitation**

The SCA considers the EIS should include a description of proposed rehabilitation strategy for the development site which shall include objectives, procedures, final land use, performance standards, timelines and monitoring programs.

**Monitoring Program**

The EIS should detail the proposed monitoring program as part of a conceptual Operational Environmental Management Plan for both existing and proposed works. The program should nominate triggers for different response levels.

**Consultation**

The proponent should consult with the SCA in preparation of the EIS and describe the consultation process and issues raised by the consultation process in the EIS.



## **Appendix B**

### **SYDNEY CATCHMENT AUTHORITY PRINCIPLES FOR MANAGING MINING AND COAL SEAM GAS IMPACTS**

**1. Protection of water quantity**

Mining and coal seam gas activities must not result in a reduction in the quantity of surface and ground water inflows to storages or loss of water from storages or their catchments.

**2. Protection of water quality**

Mining and coal seam gas activities must not result in a reduction in the quality of surface and ground water inflows to storages.

**3. Protection of water supply infrastructure**

The integrity of the SCA's water supply infrastructure must not be compromised.

**4. Protection of human health**

Mining and coal seam gas activities must not pose increased risks to human health as a result of using water from the drinking water catchments.

**5. Protection of ecological integrity**

The ecological integrity of the Special Areas must be maintained and protected.

**6. Sound and robust evidence regarding environmental impacts**

Information provided by proponents, including environmental impact assessments for proposed mining and coal seam gas activities, must be detailed, thorough, scientifically robust and holistic. Potential cumulative impacts must be comprehensively addressed.



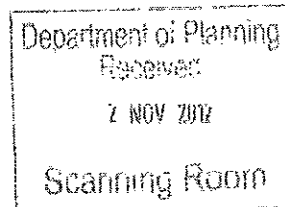
Department of  
Primary Industries



30 OCT 2012

OUT12/27182

Mr Paul Freeman  
Mining Projects  
NSW Department of Planning and Infrastructure  
GPO Box 39  
SYDNEY NSW 2001



Dear Mr Freeman

**Centennial Western Coal Services Project (SSD 12\_5579)  
Request for input into Director General Requirements**

I refer to your email of 29 September 2012 to the Department of Primary Industries in respect to the above matter.

Comment by Fisheries NSW

Fisheries NSW advises the proposed Director General Requirements are satisfactory.

For further information please contact David Ward, Fisheries Conservation Manager (Tamworth office) on 6763 1255 or at: david.ward@industry.nsw.gov.au.

Comment by NSW Office of Water

NSW Office of Water provides the following key issues to be addressed in the Environmental Assessment and the expanded list of assessment requirements detailed in Attachment A.

The key issues to be addressed are:

- Provision of an adequate and secure water supply for all activities for the life of the coal services area.
- Compliance with the rules in any relevant Water Sharing Plan (WSP) and legislation.
- Baseline monitoring (minimum of fortnightly data sampling for at least 2 years prior to mine operations) of all surface water and groundwater sources and dependent ecosystems within and adjacent to the coal services area for calibration of models and development of trigger criteria.
- Predictive assessments of potential impacts to surface water and groundwater sources, basic landholder's rights to water, adjacent licensed water users and dependent ecosystems and monitoring to enable comparison with ongoing monitoring.

- Mitigation strategies to address impacts on surface water and groundwater sources and dependent ecosystems for the operational and post coal handling phases of the proposal and final landform.

For further information please contact Dr Jodie Dabovic, Planning and Assessment Coordinator (Newcastle office) on 4904 2571 or at: [jodie.dabovic@water.nsw.gov.au](mailto:jodie.dabovic@water.nsw.gov.au).

Comment by Forests NSW

Forests NSW provides the following advices and requirements for the environmental assessment:

- The proponent is reminded of its statutory requirement to enter into an access arrangement with Forests NSW before entering upon State Forest land. For surface lands which are the subject of a Mining Lease the proponent must enter into a compensation agreement which will reasonably compensate Forests NSW for any disturbance to forestry activities.
- All maps showing proposed developments must include tenure information, particularly that of the legal boundary with Forests NSW.
- All associated developments/infrastructure (eg powerlines, roads, monitoring sites) must be identified in the environmental assessment. Forests NSW requests that such developments be kept to a minimum and where possible are located or confined to existing infrastructure. The area in which this proposal is situated receives heavy visitation for recreation and as such access to the State Forest should be afforded to the public in a disciplined and limited fashion to restrict the risk of misadventure, vandalism, arson and access to significant natural & heritage based features in the landscape.
- Any new Aboriginal or non-Aboriginal heritage, flora, fauna or endangered ecological community sites identified during the environmental assessment process on State Forest must be communicated at the time to Forests NSW and other relevant authorities for recording.
- Forests NSW reminds the proponent of the conditions of use for any area under occupation lease. Any proposed conflict between occupation conditions and the development must be outlined.

For further information please contact Jack Cotterill, Acting Stewardship Forester Macquarie Region (Bathurst office) on 6330 1025 or at: [jack.cotterill@sf.nsw.gov.au](mailto:jack.cotterill@sf.nsw.gov.au).

Yours sincerely



Tony Heffernan  
Acting Executive Director, Business Services

## **Attachment A**

### **Centennial Western Coal Services Project (SSD 12\_5579) Request for Input into Director General Requirements for Environmental Assessment**

#### **Detailed assessment requirements by NSW Office of Water**

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#### **Legislation**

Take into account the objects and regulatory requirements of the *Water Act 1912* and *Water Management Act 2000* (WMA 2000), as applicable.

#### **Water Sharing Plans**

The proposal is located within the plan area for the *Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources* and the *Water Sharing Plan for the Greater Metropolitan Region Unregulated River Water Sources*.

Demonstrate how the proposal is consistent with the relevant rules in any relevant WSP including rules for access licences, distance restrictions for water supply works and rules for the management of local impacts in respect of surface water and groundwater sources, ecosystem protection, water quality and surface-groundwater connectivity.

A description of the site water use (amount of water from each water source) and management including all sediment dams, clear water diversion structures and water use storages with detail on the location, design specifications and storage capacities for all the existing and proposed water management structures) and calculation of the maximum harvestable right dam capacity.

Provide analysis of the proposed water supply arrangements against the rules for access licences and other applicable requirements of any relevant WSP.

<http://www.water.nsw.gov.au/Water-management/Water-sharing/default.aspx>

#### **Policies**

Take into account the following policies (as applicable):

- NSW State Rivers and Estuary Policy (1993);
- NSW State Groundwater Policy Framework Document (1997);
- NSW State Groundwater Quality Protection Policy (1998);
- NSW State Groundwater Dependent Ecosystems Policy (2002);
- Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000);
- Australian and New Zealand Guidelines for Water Quality Monitoring and Reporting (2000);
- Guidelines for the Assessment and Management of Groundwater Contamination (2007);
- Guidelines for Groundwater Protection in Australia (1995);
- Rehabilitation Manual for Australian Streams CRC Catchment Hydrology (2000);
- NSW Aquifer Interference Policy (2012); and
- Office of Water Guidelines for Controlled Activities (2010/ 2011).

<http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/default.aspx>

#### **Licensing Considerations**

Provide detail of all proposed surface water and groundwater extraction and all water supply works to take water. Information is required on the purpose, location, construction and expected

annual extraction volumes including details on all existing and proposed water supply works which take surface water (pumps, dams, diversions, cuttings and levees) and details on all bores and excavations for the purpose of investigation, extraction, dewatering, testing and monitoring.

Water allocation account management rules, total daily extraction limits and rules governing environmental protection and access licence dealings also need to be considered.

### **Groundwater Assessment**

To ensure the sustainable and integrated management of groundwater sources, a groundwater assessment within and adjacent to the coal services area must include but is not limited to:

- Details of all groundwater sources and existing groundwater users within the area (including the environment) and details of any potential impacts on these users;
- Identification of potential Groundwater Dependent Ecosystems (GDEs);
- Baseline monitoring (minimum of fortnightly data sampling for at least 2 years prior to mine operations) for groundwater quantity and quality for all aquifers and GDEs;
- Description of aquifer hydraulic properties, chemical characteristics and connectivity (including to surface water sources);
- Assessment of GDEs for condition and water quantity and quality requirements for both terrestrial and aquatic systems (macroinvertebrate, macrophyte and stygofauna) and is to include diversity and abundance assessments;
- Details of the results of any models or predictive tools used to predict groundwater drawdown, inflows into the site and impacts on affected water sources and adjacent water users;
- Assessment of the potential effects of mining operations on the quality of groundwater both in the short and long term including any pollutants potentially infiltrating into the groundwater sources and proposed waste water disposal methods and approval from the relevant authority;
- Demonstration of how the groundwater extraction will be managed within defined limits, so that groundwater levels and quality which are critical for GDEs will not be disrupted and there is sufficient flow to sustain ecological processes and maintain biodiversity;
- Protective measures that will minimise any impacts on groundwater sources, users and GDEs; and
- Determination of critical thresholds for negligible impacts to groundwater sources and GDEs.

### **Surface Water Assessment**

To ensure the sustainable and integrated management of surface water sources and protection of riparian areas and *waterfront land*, as defined in the WMA 2000, an assessment of surface water sources within and adjacent to the mine area must include but is not limited to:

- Details of all watercourses and existing surface water users within the area (including the environment) and details of any potential impacts on these users;
- Baseline monitoring (minimum of fortnightly data sampling for at least 2 years prior to mine operations) for surface water quantity and quality for all watercourses;
- Geomorphic assessment of water courses including details of stream order (using the Strahler System), river style and energy regimes both in channel and on any adjacent floodplains;
- Detailed description of all potential environmental impacts in terms of vegetation, sediment movement, channel stability, water quality and hydraulic regime;
- Description of the design features and measures to be incorporated into the proposal to guard against long term actual and potential environmental disturbances, particularly in respect of maintaining the natural hydrological regime and sediment movement patterns and the identification of riparian buffers;

- Details of the impact on water quality and remedial measures proposed to address any possible adverse effects; and
- Determination of critical thresholds for negligible impacts to surface water sources and dependent ecosystems.

#### **Water Management Plan (WMP)**

The WMP is to include:

- Monitoring methodologies of all surface water and groundwater sources and dependent ecosystems within and adjacent to the mining operation area to enable verification of predictive modelling;
- Reporting procedures for any monitoring program including mechanism for transfer of information to the Office of Water;
- Site water balance for the proposal to confirm that water supplies for construction and operation of the mine and associated activities are sourced from an appropriately authorised and reliable supply in accordance with the rules of relevant WSP;
- Long term average extraction limits and available water determinations for the life of the mine and associated activities, then in to final landform and post mining hydrological configuration;
- Off site water transfers;
- Measures to minimise water use and maximise reuse of saline and contaminated waters.
- Develop a contingency plan based upon any potential exceedences in the identified threshold limits for potential impacts presented in the surface water and groundwater assessments (this includes surface water energy and water quality limits and thresholds, and any groundwater level triggers or a beneficial use category);
- A description of the remedial measures;
- A description of the adaptive management strategies which would be initiated if the predicted impacts detrimentally impacted or sterilised any surface water and ground water source as a consequence of the proposal;
- Any funding assurances covering the anticipated post development maintenance cost, for example, on-going groundwater monitoring for the nominated period and/or remediation.

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**End Attachment A**