



NSW GOVERNMENT
Department of Planning

**Mining & Extractive Industries
Major Development Assessment**
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Level 4 Western Gallery
23-33 Bridge Street
GPO Box 39
SYDNEY NSW 2001

Mr Richard Walsh
BHP Billiton Illawarra Coal Holdings Pty Ltd
PO Box 514
UNANDERRA NSW 2526

Our ref: S03/01563

Dear Richard

**Director-General's Requirements –
Environmental Assessment for the
Douglas North Substation Project**

The Department has received your application for the Douglas North Substation Project in the Wollondilly local government area (reference number: 06_0287).

I have attached a copy of the Director-General's requirements (DGRs) for the Environmental Assessment for the project. These requirements have been prepared in consultation with the relevant Government authorities, and are based on the information you have provided to date. I have also attached a copy of the Government authority comments for your information.

Please note that under section 75F(3) of the *Environmental Planning and Assessment Act 1979*, the Director-General may alter these requirements at any time.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit your Environmental Assessment for the project to determine the:

- fees applicable to the application;
- consultation and public exhibition arrangements that will apply; and
- number and format (hard-copy or CD-ROM) of the Environmental Assessment that will be required.

As you may know, the Department will review the Environmental Assessment in consultation with the relevant authorities to determine if it adequately addresses the Director-General's requirements. If the Director-General considers the Environmental Assessment to be inadequate, you will be required to revise it prior to public exhibition.

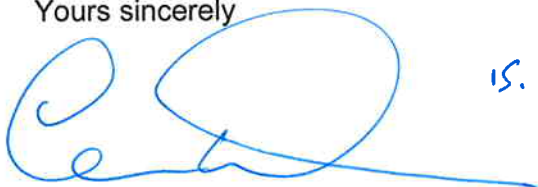
The Director-General's requirements will be placed on the Department's website along with other relevant information which becomes available during the assessment of the project. As a result, the Department would appreciate it if the documents submitted to the Department are in a suitable format for the web, and if you would arrange for an electronic version of the Environmental Assessment for the project to be hosted on a suitable website with a link to the Department's website.

Finally, if your proposal contains any actions that could have a significant impact on Matters of National Environmental Significance, it will require an additional approval under the Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). This

approval would be in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Commonwealth Department of Environment and Heritage in Canberra (6274 1111 or <http://www.deh.gov.au>).

If you have any enquiries about these requirements, please contact Howard Reed of the Department's Mining & Extractive Industries team (02 9228 6308).

Yours sincerely



15.12.06

Chris Wilson
Executive Director
Major Project Assessments
As delegate for the Director-General

Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Application number	06_0287
Project	The Douglas North Substation project, involving construction and operation of a new 66/11 kV substation and associated infrastructure to supply and distribute power to underground mine workings.
Location	Appin Douglas coal mine, approximately 25 kilometres northwest of Wollongong
Proponent	BHP Billiton Illawarra Coal Holdings Pty Ltd
Date of Issue	December 2006
Date of Expiration	December 2008
General Requirements	The Environmental Assessment must include • an executive summary; • a detailed description of the project including the: – need for the project; – alternatives considered; – various components and stages of the project; and – the likely inter-relationship between the proposed operations and the existing or approved mining operations; • consideration of any relevant statutory provisions; • a general overview of the environmental impacts of the project, identifying the key issues for further assessment, and taking into consideration the issues raised during consultation; • a detailed assessment of the key issues specified below, and any other significant issues identified in the general overview of environmental impacts of the project (see above), which includes: – a description of the existing environment; and – an assessment of the potential impacts of the project. • a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage and/or monitor the impacts of the project; • a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures; • a conclusion justifying the project, taking into consideration the environmental impacts of the proposal, the suitability of the site, and the benefits of the project; and • a signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading.
Key Issues	• Surface Water; • Noise; • Traffic; • Flora and Fauna – including impacts on critical habitats, threatened species, populations or ecological communities; • Heritage – including Aboriginal and non-Aboriginal heritage; and • Visual – including lighting.
References	The Environmental Assessment must take into account relevant State Government technical and policy guidelines. While not exhaustive, guidelines which may be relevant to the project are included in the attached list.
Consultation	During the preparation of the Environmental Assessment, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups or affected landowners. The consultation process and the issues raised must be described in the Environmental

	Assessment. In particular you must consult with: • Department of Environment and Conservation; • Department of Natural Resources; • Department of Primary Industries; • NSW Roads and Traffic Authority; • Integral Energy; and • Wollondilly Council. The consultation process and the issues raised must be described in the Environmental Assessment.
Deemed refusal period	30 days

State Government Technical and Policy Guidelines - For Reference

Aspect	Policy /Methodology
Soil and Water	
	• <i>Managing Urban Stormwater: Soils & Construction</i> (Landcom); • <i>Guidelines for Fresh and Marine Water Quality</i> (ANZECC); • the various <i>State Groundwater Policy</i> documents (DNR); • <i>Approved Methods for the Sampling and Analysis of Water Pollutants in NSW</i> (DEC);
Flora and Fauna	
	• draft <i>Guidelines for Threatened Species Assessment</i> (DEC); • <i>Threatened Biodiversity Survey and Assessment: Guidelines for Development and Activities</i> (DEC); • <i>NSW Groundwater Dependent Ecosystem Policy</i> (DNR)
Noise	
	• <i>NSW Industrial Noise Policy</i> (DEC); • <i>Environmental Criteria for Road Traffic Noise</i> (DEC); • <i>Environmental Noise Control Manual</i> (DEC);
Heritage	
	• draft <i>Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation</i> (DEC); • <i>Assessing Heritage Significance</i> (NSW Heritage Office); • <i>NSW Heritage Manual</i> (NSW Heritage Office); • <i>Archaeological Assessment Guidelines</i> (NSW Heritage Office, 1996)
Traffic	
	• <i>RTA Road Design Guide</i> (RTA); • relevant Austroad standards;
Waste	
	• <i>Environmental Guidelines: Assessment and Classification and Management of Liquid and Non-Liquid Wastes</i> (DEC).

Our reference : FIL06/1167:(DOC 06/54417):DOC06/55241:KH
Contact : Kate Hopkins, (02) 4224 4100

Department of Planning
(Attention: Mike Young)
GPO Box 39
SYDNEY NSW 2001

Dear Sir

ENVIRONMENTAL ASSESSMENT REQUIREMENTS
PROPOSED DOUGLAS NORTH SUBSTATION - APPIN/DOUGLAS COAL MINE

We refer to your request for the Department of Environment and Conservation (DEC) to identify key requirements for the environmental assessment (EA) in regard to the above proposal for the development of information to seek a Project Approval.

Based on the presented information there are a number of environmental issues that warrant close investigation as part of the EA process. These have been identified in Attachment A. However, the following are considered some of the key environmental issues based on the limited information presented on the project at this point of time:

- Threatened species
- Water quantity and quality
- Aboriginal cultural heritage
- Noise and vibration.

The DEC is particularly concerned in regards to the remnant vegetation and its associated threatened species on site. The Hawkesbury Nepean Catchment Action Plan highlights the remnant as part of an important corridor and the remnant includes an endangered ecological community, shale sandstone transitional forest which is listed under the *Threatened Species Conservation Act 1995*. The development should avoid clearance of vegetation on site and consider options to secure the remnant through an appropriate conservation measure. The EA should fully address these concerns.

Should you require any further information please contact the officer listed above.

Yours sincerely



15-11-06

PETER JAMIESON
A/Manager Illawarra
Environment Protection and Regulation

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Department of **Environment and Conservation** NSW

Attachment A

The following are Department of Environment and Conservation's (DEC) key environmental requirements to be addressed in the development of an Environmental Assessment (EA) for the proposed development.

Environmental Impacts of the Project

1. The following environmental impacts of the project need to be assessed, quantified and reported on:
 - Threatened species
 - Water quantity and quality
 - Aboriginal cultural heritage
 - Noise and vibration.
2. These should be assessed in accordance with the relevant guidelines listed in Attachment B.
3. Details are required on the location of the proposed development including the affected environment to place the proposal in its local and regional environmental context including surrounding landuses, planning zonings, potential sensitive receptors, surface and sub-surface area/ features of conservation significance and environmental sensitivity. These should include areas containing natural and cultural heritage values.
4. Describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

Impacts of the project on threatened species and their habitat

A field survey of the site should be conducted and documented in accordance with the draft 'Guideline for Threatened Species Assessment'.

Likely impacts on threatened species and their habitat need to be assessed, evaluated and reported on. The assessment should specifically report on the considerations listed in Step 3 of the draft guideline. The EA should include consideration of impacts due to clearance required for fire protection and the introduction of weeds to the site.

The EA must describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project, including the placement of the substation, access road and borehole on threatened species and their habitat. The EA should be extended to any new powerlines that may be constructed in association with the proposed substation. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

The EA needs to clearly state whether it meets each of the key thresholds set out in Step 5 of the draft guideline.

The vegetation on site has been acknowledged in the Hawkesbury Nepean Catchment Action Plan as part of an important remnant corridor. The EA should consider options for securing this important remnant. The Cumberland Plain is known to include numerous threatened species and Endangered Ecological Communities (EEC). A preliminary review of DEC records has identified that the site includes remnants of Shale Sandstone Transition Forest which is listed as an EEC under the *Threatened Species Conservation Act 1995*. Due to the significance of the Threatened Species on site the EA should include details of measures to secure these conservation values.

Impacts on water quantity and quality

The goal of the project should ensure:

- there is no pollution of waters (including surface and groundwater)
- Polluted water (including process waters, wash down waters, polluted stormwater or sewage) is captured on the site and directed to reticulated sewer where available or else collected, treated and beneficially reused, where this is safe and practicable to do so
- there is consistency with any relevant Statement of Joint Intent established by the Healthy Rivers Commission
- it contributes to the protection or achievement over time of River Flow Objectives and Water Quality Objectives.

An assessment needs to be provided in the EA demonstrating how the above objectives will be achieved. The proponent should confirm in the EA the catchment that the development occurs in to determine the requirements that should apply. The EA should clearly identify any sensitive areas nearby and provide details on any potential impact this proposal may have on these areas including any associated mitigation measures. Consultation with the Sydney Catchment Authority is suggested.

The EA also needs to address stormwater issues. The site is within close proximity of the Nepean River and as such potential impacts and mitigation measures should be outlined. The EA should also address erosion and sediment controls applicable to construction of the site.

Impacts of the project on Aboriginal cultural heritage values

The EA should address and document the information requirements set out in the draft "Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation" involving surveys and consultation with the Aboriginal community.

Identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area.

Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

The EA needs to clearly demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

Impacts of noise and vibration

The development should be designed in accordance with the NSW Government's *Industrial Noise Policy* with the identification and assessment of all potential noise sources associated with the development. This assessment should include but is not limited to; the location of sensitive receptors; assessment of the background noise; project specific noise limits; the potential impact of any transport noise and the proposed hours of operation.

ATTACHMENT B

Guidance Material

Threatened Species

- Draft Guidelines for Threatened Species Assessment July 2005.
- Draft Threatened Species Survey and Assessment Guidelines for Developments and Activities (DEC 2004).

Information on these guidelines can be obtained found on the DEC website.

Water quality

- National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC 2000)
- NWQMS Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC 2000)
- NSW Government Interim Water Quality and River Flow Environmental Objectives See <http://www.environment.nsw.gov.au/leo/>
- State Environmental Planning Policy No 58 - Protecting Sydney's Water Supply and other relevant Government policies
- Sustaining the Catchment Regional Plan, REP
- The relevant targets within the State Water Management Outcomes Plan
- EPA technical guidelines '*Bunding and Spill Management*'

Wastewater

- National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC 1997)
- National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC 2000)
- Environmental Guidelines for the Utilisation of Treated Effluent by Irrigation (NSW DEC 2004)
- Environment and Health Protection Guidelines: 'Onsite Sewage Management for Single Households', February 1998 (Silver Book)

Stormwater

(Note: some of these documents will be revised in 2006)

- Managing Urban Stormwater: Soils and Construction (NSW Landcom, 2004)
- Managing Urban Stormwater: Source Control (EPA 1998)
- Managing Urban Stormwater: Treatment Techniques (EPA 1998)

Groundwater

- State Groundwater Policy Framework Document (DLWC 1997)
- The NSW State Groundwater Quality Protection Policy (DLWC 1998)
- (Draft) NSW State Groundwater Quantity Management Policy
- NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002)
- National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ & ANZECC, 1995)

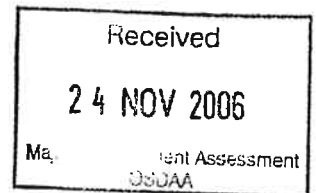
Aboriginal Cultural Heritage

- Draft Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation - Available from Dept of Planning.
- Aboriginal Cultural Heritage Standards and Guidelines Kit
http://www.nationalparks.nsw.gov.au/PDFs/aboriginal_heritage_guidelines_kit_final.pdf
- Interim Community Consultation Requirements for Applicants
<http://www3.environment.nsw.gov.au/npws.nsf/Content/Protecting+Aboriginal+objects+and+places>

Noise and vibration

- NSW Industrial Noise Policy (EPA, 1999)
- NSW Environmental Criteria for Road Traffic Noise (EPA, 1999)
- Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC 1990)
- Environmental Noise Control Manual, (EPA, 1994)
 - Section 171 Construction Noise Guideline
 - Section 19.3 Sleep Arousal Criteria
- Assessing Vibration: A Technical Guideline (DEC, 2006)

Our Reference: 1148 DS
Your Reference: 06_0287



Mr Mike Young
Manager, Mining and Extractive Industries
Department of Planning
GPO Box 39
SYDNEY NSW 2001

22 November, 2006

Dear Mr Young,

PROPOSED DOUGLAS NORTH SUBSTATION – APPIN/DOUGLAS COAL MINE

Thank you for your letter dated 2 November, 2006. I apologise that we were not able to meet your request to reply by 15 November, 2006.

Generally it is considered that the preliminary environmental assessment has identified the relevant issues to be addressed in the Environmental Assessment. It is requested that details of construction works hours be included in the environmental assessment.

It is noted that a flora and fauna study and an archaeological are to be undertaken and Council particularly requests that copies of these be provided to Council and be made available to the public.

It is requested that the environmental assessment detail how vegetation removal for the access road and car park will be minimised. Further as part of the flora study it is requested that the trees that are to be removed be specifically marked and identified by a suitably qualified person. The environmental assessment should also detail the proposed methods of ensuring that good quality vegetation surrounding the construction site and cable route will be protected during construction. It is also requested that the environmental assessment include details of replacement planting to offset vegetation removed and include a species list for such planting using local native species.

It is noted that a Biocycle septic system is to be installed for the toilet at the switchyard. It is requested that the environmental assessment include details of the regulatory regime for this system. That is, will a separate application be submitted to Wollondilly Council for the septic system, and subsequent approval to operate, or will it form part of the assessment undertaken by the Department for this project. The environmental assessment should also include a full assessment and waste water report for this system.

Yours faithfully,

David Smith
Manager Development Services
LAND USE PLANNING & ENVIRONMENT

Land Use Planning & Environment Fax: 02 4677 1831
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