

Appendices

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Appendix 1

Development Application

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Department of
Infrastructure, Planning
and Natural Resources

Development application

Date received: ___/___/___ DA no:

You can use this form to apply for development approval for proposals that needs the Minister Infrastructure Planning consent. The Minister's consent is needed to carry out certain developments such as those declared to be of state significance.

If you are proposing a development, please contact us to arrange a pre-lodgement consultation before completing this form. Phone our Planning Centre on 02 9762 8044.

The **DA Supplement** that accompanies this form will help you complete the application. To complete the form, please place a cross in the boxes and fill out the white sections.

To minimise delay in receiving a decision about your application, please ensure you submit all relevant information.

You can lodge your application at any of the listed Infrastructure, Planning and Natural Resources offices. Contact details are at the end of this form.

When your application has been assessed, you will receive a Notice of Determination.

1. Details of the applicant

NAME

Mr Ms Mrs Dr Other

First name

Family name

Company/organisation

East Boggabri Joint Venture
- Whitehaven Coal Mining Limited
- Idemitsu Boggabri Coal Pty Ltd

ABN

65 086 426 253

ABN

65 001 787 711

STREET ADDRESS

Unit/street no.

Street name

Suburb or town

State

Postcode

POSTAL ADDRESS (or mark 'as above')

PO Box 2440

Suburb or town

FORTITUDE VALLEY

State

QLD

Postcode

4006

CONTACT DETAILS

Daytime telephone

07 3000 5693

Fax

07 3000 5694

Mobile

0419 658 268

Email

kross@whitehaven.net.au

How would you prefer to be contacted?

Mobile



2. Identify the land you propose to develop

Unit/street no.

Street or property name

"Thuin", "Nagero", "Forest View",
"Tarrawonga", "Kyalla",
"Bungalow", "Whitehaven"

Suburb, town or locality

Postcode

Local government area

Narrabri

Lot/DP or Lot/Section/DP or Lot/Strata no.

Please ensure that you put a slash (/) between lot, section, DP and strata numbers. If you have more than one piece of land, you will need to separate them with a comma eg 123/579, 162/2.

Project Site:

- 10/754940, 15/754940, 16/754940, 24/754940, 25/754940, 29/754940 and 31/754940.
- Part 11/754940 and Part 25/759940.
- Part 83/754953.
- Part 1/970060.

Proposed Transport Route:

- Private Land comprising: 26/754940, 1/1037347 and 2/1037347, 1/434333, 140/754926, 138/754926 and 1/1015797.
- Crown Road Reserves comprising:
 - a crown road between 26/754940 and 2/ 1037347; and
 - a crown road between 1/434333 and 140/754926.
- Public Roads: Goonbri Road, Manilla Road and Hoads Lane.

Note: You can find the lot, section, DP or strata number on a map of the land or on the title documents for the land, if title was provided after 30 October 1983. If you have documents older than this, you will need to contact Department of Lands for updated details.



3. Describe what you propose to do

Briefly describe your proposal, including all major components. See [Section 2](#) of the DA Supplement.

Develop and operate a medium-scale open cut mine approximately 15km northeast of Boggabri. The proposal would include:

- mining and associated activities;
- processing (crushing and screening) of coal;
- construction of roads which would form part of the transport route between the Project Site and the Whitehaven Coal Handling and Preparation Plant (CHPP) and rail loading facility;
- Use of road construction materials produced at the Whitehaven Coal Mine;
- upgrading sections of existing public roads;
- transportation of coal from the Project Site to the Whitehaven CHPP and rail loading facility;
- the backloading of coarse reject produced from the washing of East Boggabri coal to the mine for disposal in the mine void; and
- progressive rehabilitation of the areas of disturbance within the Project Site and establishment of additional areas of native vegetation as part of an off-set strategy for mine-related disturbance.

The mine would produce up to 2.0 million tonnes (Mt) of coal annually, averaging 1.6Mtpa over its 8 to 10 year mine life.

Will this involve:

- erecting, altering or adding to a building or structure
 > Is it a temporary building or structure? Yes No
- subdividing land
 Please specify the no. of lots
- subdividing a building into strata lots
 Please specify the no. of lots
- demolition
- changing the use of land or a building or the classification of a building under the Building Code of Australia (without building, subdividing or demolishing)
- other work (without building, subdividing or demolishing)?

Please indicate the number of jobs this will create. This should be expressed as a proportion of full time jobs over a full year. See [Section 2](#) of the DA Supplement.

Construction jobs (full-time equivalent)

Operational jobs (full-time equivalent)

4. Crown development

Specific Provisions apply to development by the Crown under Part 5A of the *Environmental Planning and Assessment Act 1979*.

Is this proposal Crown development in accordance with the provisions of the *Environmental Planning and Assessment Act 1979*?

- Yes > Identify Crown agency
- No



5. Staged development

You can apply for development consent for only part of your proposal now, and for the remaining part(s) at a later stage.

Are you applying for development consent in stages?

No

Yes ➤ Please attach:

- information which describes the stages of your development
- a copy of any consents you already have for part of your development.

6. Plans of the land and development

You need to provide a number of different plans that show what you intend to do. [Section 3](#) of the **DA Supplement** sets out which plans to provide and the details to include. Contact us to find out the number of copies of plans required.

Please attach:

- a site plan of the land, drawn to scale
- plans or drawings of the proposal, drawn to scale

and, where relevant:

- an A4 size plan of the proposed building and other structures on the site
- a plan of the existing building, drawn to scale.

7. Environmental effects of your development

To assess your proposal, we need to understand the impacts it will have. Depending upon the nature and scale of your proposal, you need to provide one or more of the statements listed below to explain the environmental effects of your proposal. See [Section 4](#) of the **DA Supplement**.

Is your proposal **designated development**?

Yes ➤ Please attach an environmental impact statement.

No ➤ Please attach a statement of environmental effects.

Is your proposal likely to have a significant effect on **threatened species**, populations, ecological communities or their habitats?

Yes ➤ Please attach a species impact statement.

No

8. Concurrences from state agencies

Do you need the concurrence of a state agency to carry out the development? See [Section 5](#) of the **DA Supplement**.

No

Yes ➤ Please list any agencies whose concurrence you need.

Please attach sufficient information for the agency(ies) to assess your application.



9. Approvals from state agencies

If you need a development consent and one or more of the approvals listed in **Attachment A** of the **DA Supplement**, your development is known as integrated development. The relevant state agency will be involved in the assessment of your proposal. See [Section 6](#) of the **DA Supplement**.

Is your application for integrated development?

No

Yes > Please complete **Attachment A** of the **DA Supplement** and submit with your application. Please attach:

- sufficient information for the approval body(ies) to assess your application
- additional copies of your application for each agency. Contact us to find out the number of copies required.

10. Supporting information

You can support your application with additional material, such as photographs, including aerial photographs, slides and models to illustrate your proposal. Please list what you have attached:

The EIS submitted with this development application incorporates a comprehensive set of figures, aerial photographs, and proposed site layouts of all components of the proposal.

11. Application fee

For development that involves a building or other work, the fee for your application is based on the estimated cost of the development.

If your application is for integrated development or requires concurrence from another state agency, you need to include an additional processing fee payable to the Department of Infrastructure, Planning and Natural Resources of up to \$110. You may also need to include up to \$250 for each agency that will need to look at your proposal. Cheques should be made out separately to each relevant agency, and lodged with your application. We will forward them on. Note: An agency may require less than \$250 to consider your application or may waive their fee entirely.

If your development needs to be advertised to the public you may also need to include an advertising fee. Clauses 246 to 263 of the Environmental Planning and Assessment Regulation 2000 provide a schedule of fees.

Note: Advertising fees attract GST, all other fees do not. Contact us if you need help to calculate the fee for your application.

Estimated cost of the development

\$38 155 000.00

Total fees lodged

\$52 570.95



12. Signatures

The owner(s) of the land to be developed must sign the application.

If you are not the owner of the land, you must have all the owners sign the application. If the land is Crown land, an authorised officer of the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) must sign the application.

As the owner(s) of the above property, I/we consent to this application:

Signature

[Signature box]

Name

[Name box]

Date

[Date box]

Signature

[Signature box]

Name

[Name box]

Date

[Date box]

Signed Lease agreements have been reached with property owners of:

- Lots 1 and 2, DP 1037437 on the "Tarrawonga" property owned by R. & R. McGregor;
- Lot 1, DP 434333 on the "Kyalla" property owned by R. & P. Crosby; and

Lot 140, DP 754926 on the "Bungalow" property and Lot 138, DP 754926 on the "Whitehaven" property are owned by Whitehaven Coal Mining Limited.

The development application would affect several Crown roads and the Department of Lands has provided consent for the lodgement of the development application.

The applicant, or the applicant's agent, must sign the application.

Signature

[Signature: K. Ross]

Name, if you are not the applicant

[Name: KEITH ROSS]

In what capacity are you signing if you are not the applicant

[Capacity: MANAGING DIRECTOR, WHITEHAVEN COAL MINING LTD.]

Date

[Date: 18TH MAY 2005]

13. Privacy policy

The information you provide in this application will enable us, and any relevant state agency, to assess your application under the *Environmental Planning and Assessment Act 1979* and other applicable state legislation. If the information is not provided, your application may not be accepted.

If your application is for designated development or advertised development, it will be available for public inspection and copying during a submission period. Written notification of the application will also be provided to the neighbourhood. You have the right to access and have corrected information provided in your application. Please ensure that the information is accurate and advise us of any changes.

14. Lodgement

Before submitting your application, please ensure you have attached all the information the consent authority needs to assess your proposal. You can use the following checklist. Please place a cross in the box next to any items you have attached:

Land details

- A map that sets out the lot, DP/MPS and volume/folio no.s
- A schedule that sets out the lot, DP/MPS and volume/folio no.s
- A registered plan of lease boundaries

Staged development

- Information which describes the stages of the development



Attachment A Integrated development — approvals from state agencies

Some proposals need other kinds of approvals (eg licences, permits). Your proposal is known as integrated development if you need development consent and one or more of the approvals that have been set out in this attachment. Follow through each group of questions to decide whether you need any of these approvals. If you have identified you need one or more approvals, please include this attachment with your application. ([Section 6](#) of this Supplement.)

Aboriginal relics and places

Will your development destroy, damage or otherwise harm an Aboriginal relic that is known to exist on the land you want to develop?

No

Yes > Are you going to do so in accordance with Aboriginal tradition?

Yes

No > You need an approval under section 90 of the *National Parks and Wildlife Act 1974* from the National Parks and Wildlife Service

Will your development destroy, damage or otherwise harm land that has been declared to be an Aboriginal place?

No

Yes > You need an approval under section 90 of the *National Parks and Wildlife Act 1974* from the National Parks and Wildlife Service.

Aquaculture

Do you want to carry out aquaculture?

No

Yes > You need a permit under section 144 of the *Fisheries Management Act 1994* from NSW Fisheries.

Bushfires

Do you want to subdivide 'bushfire prone land' ⁽¹⁾ that could lawfully be used for residential or rural residential purposes?

No

Yes > You need a bushfire safety authority issued under section 100B of the *Rural Fires Act 1997*.

Do you propose to develop 'bushfire prone land' ⁽¹⁾ for a special fire protection purpose ⁽²⁾?

No

Yes > You need a bushfire safety authority issued under section 100B of the *Rural Fires Act 1997*.

Notes

1. *Bush fire prone land*, in relation to an area, means land recorded for the time being as bush fire prone land on a bush fire prone land map for the area

2. *Special fire protection purpose* means the purpose of the following:

- a school
- a child care centre
- a hospital (including a hospital for the mentally ill or mentally disordered)
- a hotel, motel or other tourist accommodation
- a building wholly or principally used as a home or other establishment for mentally incapacitated persons
- housing for older people or people with disabilities within the meaning of State Environmental Planning Policy No. 5 – Housing for Older People or People with a Disability
- a group home within the meaning of State Environmental Planning Policy No. 9 – Group Homes
- a retirement village
- any other purpose prescribed by the Rural Fires Regulation 2002.



3. The above provisions do not include the carrying out of internal alterations to any building in 'bush fire prone land'

Dredging or reclamation

Do you want to carry out dredging or reclamation work in a waterway (a stream, river, lake, lagoon, estuary or marine waters)?

No

Yes ➤ You need a permit under section 201 of the *Fisheries Management Act 1994* from NSW Fisheries.

Heritage

Does your development involve a building, a place or land that has a permanent conservation order, an interim conservation order or an interim heritage order protecting it, or which is listed on the State Heritage Register?

No

Yes ➤ You need an approval under section 57 of the *Heritage Act 1977* from the NSW Heritage Office.

Marine vegetation

Will your development harm any mangroves or seagrasses in a public waterway or on the shore of a public waterway?

No

Yes ➤ You need a permit under section 205 of the *Fisheries Management Act 1994* from NSW Fisheries.

Do you want to take sea lettuce or blackfish weed to use as bait from a public waterway or the shore of a public waterway?

No

Yes ➤ You need a permit under section 205 of the *Fisheries Management Act 1994* from NSW Fisheries.

Mine subsidence

Do you want to build, subdivide, make roads, paths or driveways, or put in any pipelines, water, sewage, telephones, gas or other service mains in a mine subsidence district, or alter any of these types of development in a mine subsidence district?

No

Yes ➤ You need an approval under section 15 of the *Mine Subsidence Compensation Act 1961* from the Mine Subsidence Board.

Pollution

Is your development designated development?

No ➤ Will the development cause the pollution of water?

No

Yes ➤ You can apply for a licence under section 43(d) of the *Protection of the Environment Operations Act 1997* from the Environment Protection Authority so that you cannot be convicted of an offence of polluting water.

Yes ➤ You are likely to need a licence from the Environment Protection Authority. Is your land already designed to carry out the activity?

No ➤ You may need a licence under section 47 of the *Protection of the Environment Operations Act 1997* from the Environment Protection Authority.

Yes ➤ You may need a licence under section 48 of the *Protection of the Environment Operations Act 1997* from the Environment



Protection Authority.

Rivers and lakes

Is your development within 40 metres of a stream, river, lake or lagoon?

No

Yes ➤ Are you going to excavate the land, remove material from the land or anything which will obstruct or detrimentally affect the water flowing in a stream, river, lake or lagoon?

No

Yes ➤ You need a permit under Part 3A of the *Rivers and Foreshores Improvement Act 1948* from the Waterways Authority if the development will affect Sydney Harbour or its tributaries, Botany Bay (east of Captain Cook Bridge) or the Ports of Newcastle, Kembla, Eden or Yamba, and from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) in any other case.

Roads

Will your development affect a public road, a Crown road, a highway, a main road, a freeway or a tollway?

No

Yes ➤ You need a consent under section 138 of the *Roads Act 1993* from the Roads and Traffic Authority, the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) or the council.

Using water

NB: The following approvals are taken from the *Water Act 1912*. It is proposed that the review of the Water Act, which is currently taking place, will consolidate and reduce the number of these approvals.

➤ Licences and permits for occupiers of land

Is your development going to be used for conserving water, irrigation, water supply, drainage or changing the course of a river?

No

Yes ➤ Will your development affect the quantity or use of water in a river, lake or swamp, or water flowing into or from a river, lake or swamp?

No

Yes ➤ If you occupy the land on which you propose to build the development, you need a licence under section 10 of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) to build and use your development, and take, use and dispose of the water for any purpose.

➤ If you own or occupy the land on which you propose to build the development, and you will be irrigating less than 4 hectares of land, you can apply for a permit under section 18F of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) to build and use your development and take, use and dispose of the water for anything other than irrigation.

➤ Licence for non-occupiers of land

1. Do you propose to build pumps (or the like) to obtain water, or build pipes (or the like) to carry water?

No

Yes ➤ Is your development going to be used for conserving water, irrigation, water



supply, drainage, changing the course of a river, or preventing the course of a river from changing?

No

Yes > Go on to question 2

Will your development affect the quantity or use of water in a river, lake or swamp, or water flowing into or from a river, lake or swamp?

No

Yes > Do you propose to use the water for household use, stock use or irrigation?

No

Yes > Go on to question 3

3. Do you occupy the land on which you propose to build the pumps (or the like)?

Yes > Go on to question 4

No > Can you obtain occupation of the land?

No > You need a licence under section 13A of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) to build the pumps and take and use the water.

Yes > Go on to question 4

4. Do you occupy all the land on which you propose to build pipes (or the like) to carry the water from the pumps to the land where you will use the water?

Yes

No > Can you obtain occupation of the land?

Yes

No > You need a licence under section 13A of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) to build the pumps and take and use the water.

> *Joint water supply scheme*

1. Is your development going to be used for conserving water, irrigation, water supply, drainage, changing the course of a river or preventing the course of a river from changing?

No

Yes > Will your development affect the quantity or use of water in a river, lake or swamp, or water flowing into or from a river, lake or swamp?

No

Yes > Go on to question 2

2. Is the development going to be used by two or more occupiers of land to supply water to their lands?

No

Yes > Go on to question 3

Is the development going to supply water to irrigate land(s) other than the land on which the development is built?

No

Yes > Go on to question 3

Will the development involve pipes (or the like) to carry water to irrigate your land and the land of other occupiers?

No

Yes > Go on to question 3

3. Will the development be built on land that is occupied by those who will use the water?

Yes > Go on to question 4

No > You need an authority under section 20B of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) to build and use the



development and take and use the water?

4. Do the occupiers of land who will use the water wish to build and use the development to supply water for household use, stock water use or irrigation?

No

Yes ➤ Do they occupy all of the land on which the development will be built, and the land on which the pipes (or the like) will be built?

Yes

No ➤ Can they obtain occupation of the land?

Yes

No ➤ You need an authority under section 20CA of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation) to build the development and take and use the water.

➤ *Group licences*

Are you a Board of Management elected under the *Private Irrigation Districts Act 1973*?

No

Yes ➤ Do you want to build and use the development to take water from a river or lake for occupiers of land in a private district to use?

No

Yes ➤ You need a group licence under section 20L of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation).

➤ *Bores*

Do you want to sink a bore or enlarge, deepen or alter a bore?

No

Yes ➤ Is the work to be carried out by the Crown?

Yes

No ➤ You need a licence under section 116 of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation).

➤ *River banks and floodplains*

1. Do you want to build an earthwork, embankment or levee, or a road, railway or bridge?

No

Yes ➤ Go on to question 2

2. Will the development be on land that is the bank of a river or lake, forms part of a bank of a river or lake or is within a floodplain?

No ➤ Go on to question 3

Yes ➤ Do you have a licence, authority, permit or consent under the *Water Act 1912*?

Yes

No ➤ You may need an authority under Part 8 of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation).

3. Will the development affect the flow of water to or from a river or lake and prevent land being flooded by water?

No

Yes ➤ Do you have a licence, authority, permit or consent under the *Water Act 1912*?



Yes

No > You need an authority under Part 8 of the *Water Act 1912* from the Department of Infrastructure, Planning and Natural Resources (previously known as Department of Land and Water Conservation).



Appendix 2

Director-General's Requirements

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Director-General's Requirements

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Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
GENERAL			
Key Issues	DIPNR	The EIS must assess the following potential impacts of the proposal and describe what measures would be implemented to manage, mitigate or off-set these potential impacts:	4.8.4, 4.8.5, 4.9.4, 4.9.5
		• noise, blasting and vibration;	4.10.5, 4.10.6
		• air quality;	4.13.3, 4.13.4, 4.13.5
		• traffic and transport;	4.14.3, 4.14.4, 4.14.5
		• land use;	2.4.3, 4.3.4, 4.3.5, 4.3.6
		• soil;	4.1.4, 4.1.5, 4.2.4, 4.1.6, 4.2.5
		• surface and groundwater quality;	4.4.4, 4.4.5, 4.5.6, 4.5.7
		• flora and fauna;	4.6.5, 4.6.6, 4.7.2, 4.7.3
		• heritage, both aboriginal and non;	Throughout EIS
		• hazards;	4.11.3, 4.11.4
		• visual;	2.11
		• waste management;	2.7
		• utilities and services;	4.12.3, 4.12.4
• social and economic; and	4.2.5.9, 4.4.5.4.3, 4.5.7.2, 4.8.5.4, 4.13.4.2, 4.14.5.3, 5.1.2.2		
Description of the Proposal	DIPNR	Describe the proposal in detail, identifying the resource, the proposed site, the proposed works, the proposed intensity of operations, the proposed on-site reduction and screening of coal, and the proposed transport of coal to Whitehaven Coal Handling and Preparation Plant (CHPP).	Section 2
Social Issues	DIPNR	Detail any potential impacts on neighbouring landowners from noise, vibration, air quality, visual impacts, lighting, social impacts such as employment generation, and impact of increased traffic on access roads.	4.8.5, 4.9.5, 4.10.6, 4.11.4, 4.14.5, 4.12.4, 4.13.5, 2.10
Permissibility	DIPNR	Demonstrate the proposal is permissible with consent.	4.15
Administration	DIPNR	Notify the Department at least 3 weeks before you lodge the DA. When you lodge the DA include: <ul style="list-style-type: none"> • at least 20 hard copies and 10 CD copies of the EIS; • an electronic copy of the Executive Summary; • a cheque made payable to the Department • a cheque for \$250, to each of the integrated approval bodies. 	Noted
Executive Summary	DEC	Provide and Executive Summary in the EIS.	Pg XV



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
GENERAL CONT'D			
Location	DEC	Provide an overview of the local environment to enable the proposal to be assessed in terms of its local and regional environmental context including	Section 3 Section 4
		<ul style="list-style-type: none"> meteorological data 	3.3
		<ul style="list-style-type: none"> topography 	3.1
		<ul style="list-style-type: none"> surrounding land uses 	3.4.3
		<ul style="list-style-type: none"> soil types and properties 	4.3.2, 4.3.3
		<ul style="list-style-type: none"> ecological information 	4.4.2.1, 4.4.2.2, 4.4.2.3, 4.5.2, 4.5.4, 4.5.5
		<ul style="list-style-type: none"> availability of services and the accessibility of the site; and surrounding land uses and planning zonings. 	2.6.1, 2.6.2, 2.7., 2.8, 1.3.3 3.4, 1.5
	DEC	Fully describe and provide detailed plans of the site and how the proposal is to be constructed and operated.	Section 2, Figure 2.1
Objectives of the Proposal	DEC	Objectives of the Proposal: The objectives of the proposal should be clearly stated and include: <ul style="list-style-type: none"> size and type of the operation, life cycle approach to the production use and disposal of products, anticipated level of performance, staging and timing, and proposed relationship to any other industry or facility. 	2.1.1
	DEC	Determine environmental objectives for proposal including closure and rehabilitation objectives.	2.13.2
Description of Proposal	DEC	Description of the proposal must include: <ul style="list-style-type: none"> details of the plant, equipment and management processes (including coalmining area and associated waste dumps, coal processing area, haul roads, conveyor systems, coal storage, handling and loading facility and rail systems), supported by detailed site layout and locality maps; 	1.3.2, 1.3.3, 2.1.2, 2.4, 2.8, Figure 1.2, Figure 2.1
		<ul style="list-style-type: none"> an outline of the production process including mass balances and life cycle strategies; 	2.5.2
		<ul style="list-style-type: none"> cleaner production actions including <ul style="list-style-type: none"> measures to minimise waste, 	2.11
		<ul style="list-style-type: none"> - use or recycling of by-products, 	2.11
		<ul style="list-style-type: none"> - disposal methods for solid and liquid waste 	2.11
		<ul style="list-style-type: none"> - air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points, 	4.10.3, 4.10.4, 4.10.5



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
GENERAL CONT'D			
Description of Proposal	DEC	- water management systems including all potential sources of water pollution, proposals for re-use, treatment etc, emission levels of any wastewater discharged, discharge points, and	4.1.3, 4.1.4, 4.1.6
		- soil contamination treatment and prevention.	4.3.4, 4.3.5
		• an outline of construction works, including - actions to address soil contamination	2.8.2, 2.8.3.2 2.4.3
		- any earthworks or site clearing; re-use and disposal of cleared material	2.4.2
		- construction timetable and staging, hours of construction, proposed construction methods; and	2.1.6, 2.8.3
		• any environmental protection measures during that time.	Section 4
Identification and Prioritisation of Issues	DEC	Provide an overview of methodology used to identify and prioritise issues and provide a summary of the outcomes.	1.6
Administrative Issues	DEC	Outline and identify all licences required under Protection of the Environment Operations Act.	2.1.5
		Obtain an environmental protection licence from the EPA. Any storage, production and/or transport of waste may also require a licence.	Noted 2.1.5
General	DEC	Describe both the site specific environments and the wider environments that will be affected by the proposal.	Section 3 Section 4
		Assess the entire development area, all service corridors and ancillary development involved in both the construction and operation of the proposal.	Section 4
		Describe the nature and location of the proposal?	Section 2 Section 3
		Define the areal extent and location of disturbance.	2.1.2, 2.1.3
		Consider the significance of all potential impacts in the regional context.	Throughout Section 4
		Consider the cumulative impact of the proposal in light of both existing and proposed mines within both the Liverpool Plains province and wider Brigalow Belt South (BBS) bioregion.	4.4.5.4
		Analysis all potential off-site impacts that may result from the development. Particular attention should be paid to the issue of dust and its impact on vegetation surrounding the mining area.	Throughout Section 4 (4.10.6.9, 4.10.6.10)
		Assess any potential hazards to wildlife.	4.5.7
		Detail all mitigation measures.	Section 4
Specify the methods of pest control to be utilised.	2.13.6.5		



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
STATUTORY CONTROLS			
Statutory Issues	DIPNR	Pursuant to Schedule 2 and clause 72 of the <i>Environmental Planning and Assessment Regulation 2000</i> , the EIS must include:	
		1. a summary of the environmental impact statement;	Pg. XV
		2. a statement of the objectives of the development;	2.1.1
		3. an analysis of any feasible alternatives including the consequences of not carrying out the development or activity;	2.14, 5.4
		4. a) a full description of the proposal; b) a general description of the environment likely to be affected by the development and a detailed description of the environment that are likely to be significantly affected;	Section 2 Section 3, Section 4
		5. a compilation of the mitigation measures (in one section); and the reasons justifying the carrying out of the development in the manner proposed, having regard to biophysical, economic and social considerations, including ecologically sustainable development.	Section 6 5.1, 5.2
EPBC Act	DIPNR	If your proposal contains any actions that could have a significant impact on matters of National Environmental Significance, then it will require an additional approval under the <i>Commonwealth Environment Protection Biodiversity Conservation Act 1999</i> (EPBC Act).	4.5.5.4, 4.5.7.1.2 and Parts 4a & 4b of the Specialist Consultant Studies Compendium
Statutory Requirements	DEC	Obtain Environment Protection Licence schedule under the <i>Protection of the Environment Operations Act</i> .	2.1.5
	DEC	Assess the development in relation to the requirements of Section 5A of the <i>Environmental Planning and Assessment Act 1979</i> .	4.4.5, 4.5.7
	RTA	Obtain approvals under Section 61 and 138 of the <i>NSW Roads Act 1993</i> .	2.1.5
	DPI	Obtain a mining title in accordance with the <i>Mining Act, 1992</i> in order to mine coal. Once a mining title is granted a Mining Operations Plan and Annual Environmental Management review should be prepared. Health and safety issues will need to be dealt with in accordance with the requirements of the <i>Coal Mine Health and Safety Act 2002</i> and the <i>Coal Mines Regulation Act, 1982</i> .	2.1.5, 2.12
Native Vegetation Act	DEC	Consider the provisions of native vegetation legislation.	4.4.3, 4.5.7.1.4



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
PLANNING CONTROLS			
Environmental Planning Instruments	DIPNR	The EIS must assess the proposal against relevant environmental planning instruments, including the provisions of: <ul style="list-style-type: none"> • <i>State Environmental Planning Policy No. 11 – Traffic Generating Developments;</i> • <i>State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development;</i> • <i>State Environmental Planning Policy No. 44 – Koala Habitat Protection;</i> • <i>Draft Orana Regional Environmental Plan No. 1 – Siding Spring;</i> • <i>Narrabri Local Environmental Plan 1992;</i> • <i>Gunnedah Local Environmental Plan 1998; and</i> • any relevant development control plans and section 94 plans. 	1.5.1, 4.15.2 1.5.1, 4.15.2 1.5.1, 4.15.2 1.5.2, 4.15.3 1.5.3, 4.15.4 1.5.3, 4.15.4 1.5.3
Planning Issues	DIPNR	Consider impacts from lighting of the development on the Siding Springs Observatory.	4.11.4.3, 4.11.4, 4.15.3
		Address the potential impact on public infrastructure, such as roads and how their maintenance will be ensured.	4.13.3.3, 4.14.4
Guidelines	DIPNR	Consult the Department's <i>EIS Guideline: Coal Mines & Associated Infrastructure</i> .	Noted
Integrated Development	DIPNR	Any development proposal that requires additional approvals under the <i>Roads Act 1993</i> , <i>Water Act (1912)</i> , <i>Protection of the Environment Operations Act 1997</i> and <i>National Parks and Wildlife Act 1974</i> it is strongly suggested that all potential Departmental concerns for the issuing of a permit are addressed in the EIS.	Noted 2.1.5
State Significant Development	DIPNR	• Nominate a contact person to answer public enquiries;	Appendix 1
		• Provide Department with an electronic copy of the Executive Summary of the EIS when you lodge the DA; and	Noted
		• Advise the Department of the relevant newspapers circulating in the area affected by the proposal.	Noted
	Gunnedah Shire Council	Consider undertaking modifications of the various consents relating to the Coal Handling and Preparation Plant.	Noted but not required (1.4.7)
SEPP No. 44 Koala Habitat Protection	DEC	Consider the requirements of the SEPP regarding Koala habitat protection.	1.5.1, 4.4.3.5, 4.5.7.1.4, 4.15.2
SAFETY			
	DPI	Nominate a person(s) as Operator and Manager as required by the Coal Mine Health and Safety Act 2002 and Coal Mines Regulation Act 1982.	On receipt of development consent
	DPI	Detail procedures to adopt in addressing any safety issues identified by an Inspector or Mine Safety Officer or an authorised Government Official as specified in the Coal Mine Health and Safety Act, 2002.	2.11.2.1



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
SAFETY CONT'D			
Dangerous Goods and Chemical Transport, Handling and Storage	DEC	Outline all details regarding the transport, handling, storage and use of dangerous goods, chemicals and production both on the site and with ancillary activities.	2.7.6 2.7.7 2.11.2.2
ENVIRONMENTAL MANAGEMENT			
Environmental Monitoring and Management	DIPNR	Describe in detail how environmental performance of this proposal would be monitored and managed over time.	Section 4
Cumulative Impacts	DIPNR	Consider cumulative impacts which may result from a number of activities with similar impacts interacting with the environment.	Section 4
Cumulative Impacts	DEC	Assess cumulative impacts including; <ul style="list-style-type: none"> • the extent the receiving environment is already stressed by existing development and background levels to which this proposal will contribute; • the proposal against long-term air, noise and water quality objectives • infrastructure requirements; and • likely impacts from additional infrastructure. 	Section 4 4.10.6, 4.8.5, 4.1.7.2, 4.2.5 4.12.2 4.12.4
Geochemical Analysis	DPI	To understand and enable efficient management of the overburden and coal, the material should be analysed by a certified laboratory for: <ul style="list-style-type: none"> • acid generation potential – overburden 	2.4.4.2
		<ul style="list-style-type: none"> • salinity potential – overburden 	2.4.4.2
		<ul style="list-style-type: none"> • spontaneous combustion potential – coal. 	2.2.4
	DPI	Address the progressive cumulative effects of all mines in the vicinity during the predicted life of the East Boggabri Open cut mine.	Section 4
Rehabilitation and Soil Contamination Issues	DEC	Provide details of site history considering the possibility of soil contamination.	4.3.2.2 1.4
Environmental Management Plan and Monitoring	DEC	Prepare an Environmental Management Plan and outline what is intended for the development.	1.8.2
	DEC	Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner.	1.8.2
	DEC	Mitigation strategies should include the environmental management and cleaner production principles. Include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.	This is provided in each subsection of Section 4 as (i) Operational safeguards, design features, mitigation measures, or similar; and (ii) monitoring. It is summarised in Section 6.



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
GROUNDWATER			
Groundwater Issues	DIPNR	Include a groundwater assessment report including: <ul style="list-style-type: none"> a description of the existing groundwater environment; 	Part 2 of the Specialist Consultant Studies Compendium 4.2.2
		<ul style="list-style-type: none"> details of any potential changes to existing groundwater regime as a result of the development; 	4.2.2.6, 4.2.5.3
		<ul style="list-style-type: none"> a description of all current bores and any new bores proposed including annual extraction amounts and an aquifer interference licence; 	4.2.5
		<ul style="list-style-type: none"> an assessment of groundwater contamination issues and cumulative impacts; and 	2.1.5, 4.2.2.6
		<ul style="list-style-type: none"> details of the proposed groundwater monitoring program and any potential licence requirements. 	4.2.5.7
	DEC	Groundwater information should include but not be restricted to, depth to watertable, depth to other groundwater, flow direction and gradient, groundwater quality, and reliance on groundwater by surrounding users and environment.	4.2.2
		Accurately map the location of all aquifers likely to be affected by the proposal.	Part 2 of the Specialist Consultant Studies Compendium
		Provide details of water management including groundwater management and pollutant concentrations that may be released into the environment.	4.2.4, 4.2.6 4.2.5.7
		Determine all cumulative changes to hydrology (including hydrologic regimes and groundwater).	4.2.5.9
		Prepare a groundwater hydrogeological model for the proposal.	4.2.5.2 Part 2 of the Specialist Consultant Studies Compendium
		Identify any potential impacts on quality or quantity of groundwater.	4.2.5
	SURFACE WATER		
Surface Water Issues	DIPNR	Detail the potential impacts on surface water, the potential for water harvesting and how surface water flow relates to an Erosion and Sediment Control (ESC) Plan. Address the Department's current position on issuing surface water harvesting licences.	4.1.4.2, 4.1.4, 4.1.7
	DEC	Provide details of the project relevant to any water impacts of the development such as drainage works and associated infrastructure; land forming and excavations; working capacity of structures and water resource requirements of the proposal.	4.1.4
		Outline site layout demonstrating steps to avoid proximity to water resources and show potential areas of modification to contours and drainage.	Figure 2.1, 4.1.4, Figure 4.4



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
SURFACE WATER CONT'D			
Surface Water Issues	DEC	Outline how total water cycle configurations have been addressed showing total water balances for the development, including water requirements and proposed storm and waste water disposal.	4.1.4.2.3, 4.1.4.3
		Describe the catchment including proximity of the Project Site and any water ways and an assessment of their sensitivity from the public health, ecological, and/or economic perspective.	4.1.2
		Provide details of water management including controlled catchments, clear water by-passes, stormwater management, discharge points, likely range of flow rates and pollutant concentrations that may be released into the environment.	4.1.3, 4.1.4, 4.1.6
		Determine all cumulative changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, hydrologic regimes and groundwater).	4.1.6
		Detail potential impacts on the existing habitat values, hydrology and water quality of all watercourses proposed to be impacted by the proposed activities and their downstream receiving waters.	4.1.6
		Quantify and describe the effects and significance of any pollutant loads on the receiving environment.	4.1.6
		Outline pollution control measures including: <ul style="list-style-type: none"> • stormwater management at the source to contain pollutants on site; 	4.1.4.1.4.3
		<ul style="list-style-type: none"> • sediment and erosion control measures' 	4.1.4.3
		<ul style="list-style-type: none"> • waste water management appropriate to the type and volume of waste water based on hierarchy of avoiding generation, capturing contaminated water including stormwater reuse/recycling and treating any unavoidable discharge; and 	4.1.4.3
		<ul style="list-style-type: none"> • relating to storage of material, possible accidental spills, appropriate disposal methods and generation of leachate 	4.1.4.3.6
Fully analyse stormwater management and present plans for the treatment and management of stormwater captured on site. This management/impact analysis should include a range of scenarios including managing the volume of water captured from the design storm/s in wet year scenarios. Identify the likely failure scenarios and analyse impacts.	4.1.4.3, 4.1.4.2.3		



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
SURFACE WATER CONT'D			
Surface Water Issues	DEC	Produce a fully integrated water balance (including nutrient and salt balance where applicable) for the premises. Include calculations with associated plans and details of environmental impact assessment of system failure and justification. The water balance should also assess the availability of water for dust management. The use of annual averages in preparing the water balance is not acceptable. Daily rainfall and evaporation data must be used if available but weekly may be acceptable. Discuss possible errors associated with data extrapolation/transposition. The water balance analysis should also test a full range of rainfall/evaporation scenarios.	4.1.4.2.3
		Fully address precautions to be incorporated to protect and monitor adjacent water environments, the catchments of the Namoi River and groundwaters.	4.1.7.4
		Identify all treatment options proposed to be utilised that do not comply with current best practice.	None
		Undertake assessment of impacts in a total catchment management context and with reference to the catchment targets of the Namoi Catchment Management Authority.	4.1.7.4
		Assess all impacts with reference to ANZECC 2000 Water Quality Guidelines Water Quality and River Flow Interim Environmental Objectives – Namoi river Catchment 1999.	4.1.7
FLORA AND FAUNA			
Flora and Fauna Issues	DIPNR	Include a threatened species assessment under the Eight Part Test for any relevant species listed on the Threatened Species Conservation Act 1995 and the Fisheries species listed on the Environment and Biodiversity Conservation Act 1999 (EPBC Act).	4.4.5, 4.5.7.1.1
		Include a flora and fauna survey of the area and detail how much flora will be cleared including a description of the affected communities.	4.4.2.3, 4.5.4, 4.4.5.4
Flora, Fauna and Threatened Species, Populations, Communities and their Habitats	DEC	Describe all the vegetation communities on the site, and the portions of those communities subject to proposed disturbance. Include details of the vegetation type, condition and quality, habitat values, location in the landscape, and amount of each community remaining in the Liverpool Plains Province and BBS bioregion. A map of the site depicting all vegetation communities, and connectivity in the broader landscape is also required.	4.4.2.3, Figures 4.14 & 4.15
		Assess the biodiversity of the site, and consider the values that will be lost and how this loss will be ameliorated.	4.4.3, 4.4.4, 4.5.5, 4.5.6
		Consider not only those flora and fauna populations that occur within the Project Site, but also those populations in surrounding areas that may also be impacted as a result of the project.	4.4.5.4, 4.5.7



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
FLORA AND FAUNA CONT'D			
Flora, Fauna and Threatened Species, Populations, Communities and their Habitats	DEC	Undertake comprehensive flora and fauna surveys by suitably qualified persons.	Parts 4a, 4b and 5 of the Specialist Consultant Studies Compendium
		Identify and map all Endangered Ecological Communities (EEC) listed in the <i>NSW Threatened Species Act 1995</i> .	4.4.3.3, 4.5.5, Figures 4.14 & 4.15
		Complete comprehensive "8-part tests" under section 5A of the EP&A Act for those threatened flora and fauna species, population and Endangered Ecological Communities (EEC) which are predicted to occur, as well as those which are known or found in the area.	4.4.5, 4.5.7
		Consider whether the proposed activity requires approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).	Parts 4a, 4b and 5 of the Specialist Consultant Studies Compendium
		Assess the occurrence and condition of EECs on the site in the broader context (local and regional) to assist in ascertaining the significance of the impacts on these EECs.	4.4.3.3, 4.5.7
		Recognise the other impacts which the proposal may have on the White Box-Yellow box-Blakely's Red Gum EEC and Belah Community.	4.4.3.3, 4.4.5
		The Key Threatening Processes of particular relevance to the current proposal are:	
		<ul style="list-style-type: none"> human-caused climate change; and 	4.5.7.1.5
		<ul style="list-style-type: none"> clearing of native vegetation. 	4.4.5, 4.5.7.1.4
		Other KTPs that might be relevant and which should be considered are:	
		<ul style="list-style-type: none"> removal of dead wood and dead trees; 	4.3, 4.5.6.2
		<ul style="list-style-type: none"> bushrock removal; 	Not Relevant
<ul style="list-style-type: none"> invasion of native plant communities by exotic perennial grasses; 	4.4.5		
<ul style="list-style-type: none"> predation by feral cats; 	4.5.7.1.5		
<ul style="list-style-type: none"> predation by the European red fox; and 	4.5.7.1.5		
<ul style="list-style-type: none"> competition and grazing by the feral European rabbit. 	4.5.7.1.5		
Report Requirements	DEC	The EIA documentation should include a report on the flora that includes the following:	
		<ul style="list-style-type: none"> detailed location map and identification of the area surveyed; 	Figure 4.14
		<ul style="list-style-type: none"> at least one of the following: a land satellite image, vegetation communities map, aerial photograph, or a remnant vegetation map; 	Figure 4.14
		<ul style="list-style-type: none"> a complete plant list of all tree, shrub, ground cover and aquatic species, categorised according to country of origin; 	Parts 4a, 4b and 5 of the Specialist Consultant Studies Compendium



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
FLORA AND FAUNA CONT'D			
Report Requirements	DEC	<ul style="list-style-type: none"> a detailed description of vegetation structure and spatial distribution on the site, including a vegetation map; 	4.4.2.3, Figure 4.14
		<ul style="list-style-type: none"> describe the conditions and integrity of the vegetation including a description of any past disturbance; 	4.4.2.3
		<ul style="list-style-type: none"> an account of the likely original vegetation communities, and an assessment of the likely regional distribution of the original communities; 	Parts 4a, 4b and 5 of the Specialist Consultant Studies Compendium
		<ul style="list-style-type: none"> an assessment of whether the plant communities are adequately represented in conservation reserves or otherwise protected; 	4.4.5.2
		<ul style="list-style-type: none"> a list of known and likely threatened species as listed under Schedules 1 & 2 (Threatened Species Conservation Act 1995) which might occur at the site. The DEC database needs to be accessed and the likelihood of occurrence of threatened flora species determined; 	4.4.3
		<ul style="list-style-type: none"> an assessment of the impacts of the proposal on flora, on-site and off-site and measures to mitigate these impacts; 	4.4.4.5, 4.4.5
		<ul style="list-style-type: none"> an assessment of the significance of the impact of the development at both the site and at the regional scale; 	4.4.5
		<ul style="list-style-type: none"> a detailed rehabilitation/management plan including a list of the plant species to be used during rehabilitation; 	2.13.6
		<ul style="list-style-type: none"> detail methodologies used and a list of the reference literature cited, and 	4.4.2
		<ul style="list-style-type: none"> any other issues that may be considered relevant. 	4.4, 4.5
		<p>The EIA documentation should include a report on the fauna that includes the following.</p> <ul style="list-style-type: none"> detailed location map and identification of the area surveyed; 	4.5.3, Figure 4.15
		<ul style="list-style-type: none"> at least one of the following: a land satellite image, vegetation communities map, aerial photograph, or a remnant vegetation map; 	Figure 4.15
		<ul style="list-style-type: none"> a complete plant list all known and likely terrestrial and aquatic species. It is suggested that invertebrates also be considered as they form part of the food chain; 	Parts 4a, 4b and 5 of the Specialist Consultant Studies Compendium
		<ul style="list-style-type: none"> those species which are protected, threatened or listed under any international agreements, as well as introduced species; 	4.5.5
<ul style="list-style-type: none"> those species known or likely to breed in the area; 	4.5.5		



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
FLORA AND FAUNA CONT'D			
Report Requirements	DEC	<ul style="list-style-type: none"> any species which have specific habitat requirements found within the project area; 	4.5.5
		<ul style="list-style-type: none"> those species or populations which may be near the limit of their geographic range or are a disjunct/isolated population; 	4.5.7
		<ul style="list-style-type: none"> assessment of the importance or otherwise of the location as a corridor, migratory route or drought refuge, in relation to other remnant vegetation, riparian and wetland areas or habitat in the region; 	4.5.6
		<ul style="list-style-type: none"> assessment of the impacts of the proposal on all fauna and its habitat, at both the site and at the regional scale, and 	4.5.7
		<ul style="list-style-type: none"> identification of any mitigation measures proposed to limit or ameliorate the impact of the proposal; 	4.5.6
		<ul style="list-style-type: none"> detailed methodologies used and a list of the reference literature cited, and 	4.5.3
		<ul style="list-style-type: none"> any other issues that may be considered relevant. 	Parts 4a, 4b and 5 of the Specialist Consultant Studies Compendium
Threatened Species of Fauna and Flora	DEC	Consider the provisions of the Threatened Species Conservation Act (1995). The TSC Act contains lists of threatened species. This Act also allows for the declaration of critical habitat, key threatening processes and the preparation of both Recovery Plan and Threat Abatement Plans. These listings and plans must be considered as part of the EIA process.	4.5.5, 4.5.7
Eight Part Test & Species Impact Statement	DEC	If during the flora and fauna assessment or survey, threatened species are found or are likely to occur in the area, the proponents must undertake an "Eight Part Test of Significance".	4.4.4.5, 4.5.7
		<p>The proponent will need to prepare a SIS in the following circumstances:</p> <ul style="list-style-type: none"> If the flora/fauna assessment concludes that there is likely to be a significant impact to threatened species, or The proposed development is likely to affect critical habitat declared under the TSC ACT. 	4.4.5, 4.5.7 and Parts 4a, 4b and 5 of the Specialist Consultant Studies Compendium
SOIL			
Soil and Salinity Issues	DIPNR	Include a description of soil types in the area and any salinity or contamination issues that may arise as a result of the development.	4.3.2
	DIPNR	Include an Erosion and Sediment Control Plan detailing control practices and include impacts associated with mine infrastructure, operations and earthworks, both pre and post rehabilitation.	4.3.2.3.4, 4.3.5



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
SOIL CONT'D			
Erosion and Sediment Control Issues	DPI	Apply "Best Practice" or soil handling and management. Complete extensive soil profiling prior to stripping of vegetation. Selectively strip topsoil and subsoil to secure and maintain the current available resources. Review utilisation of cleared vegetation in the rehabilitation program.	2.4.3, 4.3.2, 4.3.4
AIR			
	DEC	Details that are essential for predicting and assessing air impacts including quantitative and physio-chemical parameters of materials, an outline of procedures for handling, transport, production and storage of materials, management of waste streams with potential for significant air impacts must be included.	Section 2 and 4.10.3, 4.10.4, 4.10.5
		Provide a description of topography and surrounding land uses and exact location of sensitive receptors such as dwellings.	3.1, 3.4, 4.10.6.2
		Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data. The use of particular meteorological monitoring data sets should be justified. Include an analysis of temperature and humidity; rainfall and evaporation; wind speed and direction.	3.3, 4.10.2
		Identify all sources of air emissions from the development.	4.10.3
		Provide a description of existing air quality using existing information and site representative ambient monitoring data Include dust deposition; total suspended particulates; and PM ₁₀ particulate matter.	4.10.2
		Incorporate a full assessment/modelling by a suitably qualified and experienced person of air quality impacts to ensure all relevant requirements of the <i>Protection of the Environment Operations Act 1997</i> (POEO) and the <i>Clean Air (Plant and Equipment) Regulation 1997</i> will be complied with.	4.10.6 and Part 8 of the Specialist Consultant Studies Compendium
		Outline specifications of pollution control equipment and management protocols for both point and fugitive sources.	4.10.5
		Outline and discuss any management strategies to minimise the impacts on local air quality.	4.10.5
		Include details of an air quality monitoring program to determine effectiveness of mitigation and to verify predictions, including provision for investigations in response to complaints.	4.10.7
		Where odour emission is identified as a potential pollution source, a detailed assessment of odour must be provided.	Not applicable
		Technical analysis and information provided must follow EPA guidelines including " <i>Approved methods for the sampling and analysis of air pollutants in New South Wales</i> " and " <i>Approved methods and guidance for the modelling and assessment of air pollutants in NSW</i> ".	4.10.6 and Part 8 of the Specialist Consultant Studies Compendium



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
AIR CONT'D			
	RTA	Assess the impact on air quality and road traffic noise in accordance with EPA guidelines for the haulage route.	4.10.6.7
	DPI	Detail the management plan for dust suppression, including the method of covering the trucks whilst hauling to the Whitehaven CHPP.	4.10.5.2
NOISE			
	DEC	Carry out noise assessment following procedures outlined in the EPA's "New South Wales Industrial Noise Policy".	4.8.5.1
		Provide methods and results from noise assessment. The assessment must be based on the maximum proposed processing and extraction rate and include the following. <ul style="list-style-type: none"> A baseline description of existing noise environment. 	4.8.2
		<ul style="list-style-type: none"> Identify any noise sensitive locations likely to be affected. 	4.8.5.2
		<ul style="list-style-type: none"> Identify and assess all noise sources from the development. 	4.8.5
		<ul style="list-style-type: none"> Specify the times of operations for all phases of development. 	2.9
		Determine the expected noise levels and character likely to be generated from noise sources during site establishment, construction, operational and rehabilitation phases, and transport including road and rail noise generated by the proposal and other services.	4.8.5
		Determine the noise levels likely to be received at the most sensitive locations.	4.8.5
		Assess noise levels for possible affects on sleep. Reference should be made to "Environmental Criteria for Road Traffic Noise".	4.8.5.3.4
		Provide noise contours if there is to be a significant level of noise impact paying particular attention to any potential impulsive and tonal noise characteristics. Consideration needs to be given to prevailing meteorological conditions, times of operation, and all noise producing activities.	Part 8 of the Specialist Consultant Studies Compendium
		Determine the most appropriate noise mitigation measures including both noise controls and management of impacts for both construction and operational noise.	Section 2 and 4.8.4
		Demonstrate that ground vibration and overpressure levels recommended by ANZECC will be achieved during blasting.	4.9.5.3
		For rail and road noise impacts, provide a description of the ameliorative measures considered, reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Appropriate ameliorative measures may include: Reference should be made to "Environmental Criteria for Road Traffic Noise": <ul style="list-style-type: none"> use of alternative transportation modes and alternative routes; 	2.14.3



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
NOISE CONT'D			
	DEC	<ul style="list-style-type: none"> control of traffic 	4.13.3.2
		<ul style="list-style-type: none"> the use of quieter surfaces on roads; 	4.13.3.1, 4.13.3.3
		<ul style="list-style-type: none"> use of noise barriers or bunds; and 	Not required
		<ul style="list-style-type: none"> treatment of buildings to reduce internal noise levels where night-time criteria are a major concern 	Not required
TRAFFIC AND TRANSPORT			
	Narrabri Shire Council	Consider impacts from the development's transport strategy issues such as: <ul style="list-style-type: none"> numbers and types of vehicle movements; 	2.8.3.4, 4.13.4
		<ul style="list-style-type: none"> proposed routes and time for vehicle movements; 	2.8.3, 2.9.1
		<ul style="list-style-type: none"> impacts like noise, traffic congestion, pavement deterioration, and dust generation; 	4.8.5, 4.13.3.3, 4.10.6
		<ul style="list-style-type: none"> locations of proposed widening to accommodate trucks on local roads and the impact this widening will have on roadside and adjacent property owners; and 	4.13.3
		<ul style="list-style-type: none"> public consultation strategy prior to any roadworks and commencement of haulage. 	4.13.3
	Gunnedah Shire Council	Undertake a detailed analysis of the Blue Vale haulage route, with particular attention to expected life of the current road formation and strategies to rehabilitate or reconstruct the road during mining development. Also consider extent of maintenance regimes and agreements in respect of the haul road.	4.13.3, 4.13.4
	RTA	Undertake a major traffic impact study to assess the impact on the road network's safety, efficiency and to identify the necessary infrastructure required. The impact on junctions should be assessed with an appropriate modelling program.	4.13.4
WASTE			
	DEC	Identify and discuss the quantity and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises or off site in accordance with the "Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes".	2.11.1, 2.11.2, 2.11.3
		Manage liquid waste and non-liquid waste including: <ul style="list-style-type: none"> the transportation, assessment and handling of the waste arriving at or generated at the site; 	2.11.3
		<ul style="list-style-type: none"> any stockpiling of wastes or recovered materials at the site; 	2.11.3, 2.4.4
		<ul style="list-style-type: none"> any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on and off site; 	2.11
		<ul style="list-style-type: none"> the method of disposing of all wastes or recovered materials at the facility; 	2.4.4, 2.11.2



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
WASTE CONT'D			
	DEC	<ul style="list-style-type: none"> the proposed controls for managing the environmental impacts of these activities; 	2.11.2
		<ul style="list-style-type: none"> quantifying all wastes to be removed from the premises and outlining where each will be treated or disposed of; and 	2.11.2
		<ul style="list-style-type: none"> provide contingencies for waste disposal should on-site treatment facilities not be available or fail to perform to the required standards of environmental protection. 	2.11.2
		Fully quantify, describe and assess any utilisation of solid or liquid waste on the premises and demonstrate the long term sustainability of any waste utilisation system.	2.11.3, 2.4.4, 2.13
MITIGATION MEASURES AND REHABILITATION			
	DPI	Detail the conceptual rehabilitated final landform of the void and emplacements, including: <ul style="list-style-type: none"> maximising efficient placement of the emplacement; 	2.13.3
		<ul style="list-style-type: none"> design of the final void to achieve revegetation, slope stability, erosion and sediment control; and 	2.13.3
		<ul style="list-style-type: none"> conceptual long term water management of the void including quantity and quality. 	2.13.6.3
		Outline the proposed rehabilitation and revegetation measures for this site, including proposals for the re-establishment and maintenance of pastures, water storages, shade, shelter and biodiversity.	2.13.6
Rehabilitation and Soil Contamination Issues	DEC	Provide considerations of site maintenance, and proposed plans for the final condition of the site.	2.13.3, 2.13.5
		Provide information on the physical and chemical stability of the final landform.	2.4.4.2, 2.13.3, 2.13.6
Amelioration, Compensatory Measures and Rehabilitation	DEC	Define all proposed measures to minimise environmental impacts and evaluate the likely effectiveness of these measures in achieving environmental protection.	2.13.6.5, 2.13.6.7
		Demonstrate the ability and experience to ameliorate impacts, and rehabilitate disturbed areas.	2.13.6.1
		Prepare all appropriate environmental management plans relating to rehabilitation and amelioration of the site.	1.8
		Include details of how the impacts of the project and the effectiveness or rehabilitation and amelioration measures will be monitored on an on-going basis.	Sections 4 and 6
		Identify those impacts that are unavoidable and include measures of ameliorating unavoidable impacts in the form of compensatory lands (and habitat) that will be required.	2.13.6.7



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
MITIGATION MEASURES AND REHABILITATION CONT'D			
Amelioration, Compensatory Measures and Rehabilitation	DEC	Demonstrate a firm commitment to applying any off set arrangements. Define the arrangements necessary to secure suitable tenure and conservation land use of compensatory lands/offset areas into the future.	2.13.6.7
		Prepare a detailed proposal from the proponent regarding the disposal of land following mine decommissioning, in terms of tenure and use.	2.13.5
		Prepare a comprehensive landscape rehabilitation plan to accompany the EIS. This plan should: <ul style="list-style-type: none"> cover rehabilitation of all area impacted by all aspects of the proposal; 	2.13
		<ul style="list-style-type: none"> include monitoring procedures for assessment of the effectiveness of revegetation, along with measures for on-going weed and pest control; 	2.13.6.5, 2.13.6.6, Section 6
		<ul style="list-style-type: none"> provide any relevant examples of successful rehabilitation of mining sites in similar environments; 	2.13.6.1
		<ul style="list-style-type: none"> ensure that as far as possible cleared vegetative material should remain on site and be utilised in the rehabilitation program for habitat provision and protection of the soil from erosion; 	2.13.6
		<ul style="list-style-type: none"> contain specifications for revegetation of all disturbed sites using locally endemic species of trees, shrubs, and ground layer plants as far as possible. The EIS should stratify and map landscape elements to ensure that suitable suites of endemic species are re-established in suitable positions in the local catchment/landscape context; 	2.13.6, Figure 2.17
		<ul style="list-style-type: none"> specify and demonstrate methods to ensure that the majority of woody plant to be used in regeneration will be grown from seed collected on site and that regeneration areas will be protected from grazing by both native fauna and domestic stock; 	2.13.6
		<ul style="list-style-type: none"> include measures to connect existing habitat and future areas of habitat rehabilitation to form a network of wildlife corridors; and 	2.13.6.7
<ul style="list-style-type: none"> specify how long the monitoring or maintenance or rehabilitation work will go on for after the mine has closed. 	2.13.6.5		



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
LAND USE			
	DPI	The EIS should clearly identify all potential impacts on current agricultural enterprises in the locality and future agricultural productivity including: <ul style="list-style-type: none"> agricultural land suitability within the proposed mining lease and immediately adjoining areas; 	4.14.5
		<ul style="list-style-type: none"> existing agricultural activities in the locality; 	3.4.3
		<ul style="list-style-type: none"> proposals for any continuation of agricultural production on any properties which adjoin the proposed mine lease area and are owned or purchased by the mining company or its subsidiaries; 	4.14.3.1
		<ul style="list-style-type: none"> potential impacts on agricultural activities which may arise from mining or associated operations, including surface and ground water changes, noise, dust, vehicle movements, blasting and access impacts; and 	4.14.5
		<ul style="list-style-type: none"> any potential impacts from changes of ownership and management of any properties. 	None
CULTURAL HERITAGE			
Cultural Heritage Issues	DIPNR	Include an assessment of Aboriginal and non indigenous heritage on the site and detail any direct or indirect impacts on such heritage items. Include impacts caused by subsidence, vibration and changes to hydrological patterns.	4.6, 4.7
Aboriginal Cultural Heritage	DEC	Undertake a search of the Aboriginal Heritage Information Management System.	4.6.2, 4.6.3, 4.7.1
		Undertake a full and comprehensive study on the Aboriginal heritage values in the area. Address the impacts that the proposed mine may have on these values, and the development of appropriate mitigation measures to manage any impact.	4.6.6, 4.7.3
		All objects identified within the site will require clear management guidelines. It is imperative that justification for the impacts be clearly articulated.	4.6.3, 4.6.5, 4.6.6
		Consider the potential for ground vibration associated with blasting and excavations, soil movement associated generally with open-cut mining to damage, deface or destroy Aboriginal cultural heritage objects.	4.6.6
		Ensure that thorough consultation with the Aboriginal community is undertaken. The DEC strongly recommends that the proponent consider appointing a professional facilitator to achieve successful community consultation outcomes.	4.6.2, 4.7.2 and Part 6 of the Specialist Consultant Studies Compendium
		An Aboriginal Heritage Management Plan may also be required. As a minimum, the DEC requires the development of the framework or key issues of this plan within the EIS.	Noted



Environmental Aspect	Government Agency	Paraphrased Requirement	Relevant EIS Section(s)
CULTURAL HERITAGE CONT'D			
Cultural Heritage	DEC	The EIS should consider:	
		<ul style="list-style-type: none"> accessing the DEC's Aboriginal Heritage Information Management System (AHIMS) in the initial planning stage; 	4.6.2 and Part 6 Consultant Studies Compendium
		<ul style="list-style-type: none"> the Aboriginal community needs to be consulted; 	4.6.2 and Part 6 Consultant Studies Compendium
		<ul style="list-style-type: none"> an assessment of the need for an archaeological survey, a Section 87 Permit from the DEC may be needed for sub-surface testing. 	Noted
		<ul style="list-style-type: none"> the outcome of the survey is to determine what sites can be avoided, and what ones can not. 	4.6.5, 4.6.6
SOCIO-ECONOMIC			
	Gunnedah Shire Council	Undertake a socio-economic analysis on potential impact on the Gunnedah town from employment generation and ancillary support industry having particular regard to potential housing and infrastructure pressure.	4.12.3, 4.12.4
CONSULTATION			
Consultation	DIPNR	Consult the relevant local, State and Commonwealth government authorities, service providers and community groups, and address any issues that may raise in the EIS. In particular, consult the surrounding landowners.	1.6, 4.14.4
Social Issues	DIPNR	Undertake further consultation through Community Workshops in Narrabri, Boggabri and Gunnedah to ensure proponents are aware of all the potential issues facing the community.	1.6
	DPI	Consult with all neighbours within the near vicinity of the mine and the proposed haul road.	4.14.4, 1.6
		Conduct public information meetings within the Boggabri, Gunnedah and Ban Baa Communities, with a possible open day being held at the Project Site.	1.6.2.1
		Provide regular updates to the community via newsletters or letter-drops.	Noted
		Form a Community Consultative Committee.	4.14.4



Appendix 3

The Boggabri Coal Project

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A3.1 Introduction

The Boggabri Coal Project was approved on 22 August 1989 by the then Department of Planning. The Proponent at the time of the approval was a joint venture comprising BHP Minerals Limited (BHP), AGIP Coal Australia Pty Ltd (AGIP) and Idemitsu Boggabri Coal Pty Ltd. The development consent for the project was enacted upon within the nominated period, however, full development has not yet commenced. In 1991, Idemitsu Boggabri Coal Pty Ltd acquired the equity held in the Boggabri Coal Project by BHP and AGIP and proceeded to finalise the plans to develop and operate the mine.

This appendix presents a range of information about the Boggabri Coal Project that is relevant to the development of the proposed East Boggabri Coal Mine. It is largely drawn from the 1987 Environmental Impact Statement prepared for the project.

A3.2 Location and Layout

The Boggabri Coal Project mine site is located within Coal Lease (CL) 368 wholly within the Leard State Forest, adjacent to the Namoi River floodplain and approximately 15km northeast of the town of Boggabri. The principal site components are shown on **Figure A3.1** and include:

- an open cut mine (approximately 12km²);
- coal preparation, storage and handling facilities (both initial and final); and
- mine infrastructure.

Figure A3.1 also illustrates the proximity of the Boggabri Coal Project mine site and the proposed East Boggabri Coal Mine.

A3.3 Project Development and Operation

Resources and Production Rates

CL 368 has a total in-situ resource of 650Mt of coal contained in 12 seams to a depth of 500m. Of this, it is estimated 210Mt is recoverable by open cut mining methods, 90Mt of which is planned to be recovered from the open cut mine site presented in **Figure A3.1**.

The Boggabri Coal Project would initially produce approximately 1.5Mt of saleable coal per annum increasing to the approved level of 5.0Mtpa, however, achievement of this rate of production is unlikely over the life of the proposed East Boggabri Coal Mine. The life of the Boggabri Coal Project could exceed 50 years.

Construction

The construction of the mine facilities and other works required to achieve a 1.5Mtpa saleable coal production rate is expected to take approximately 6 months. This construction period is considerably less than the 16 months nominated within the EIS which was expected for full scale production.



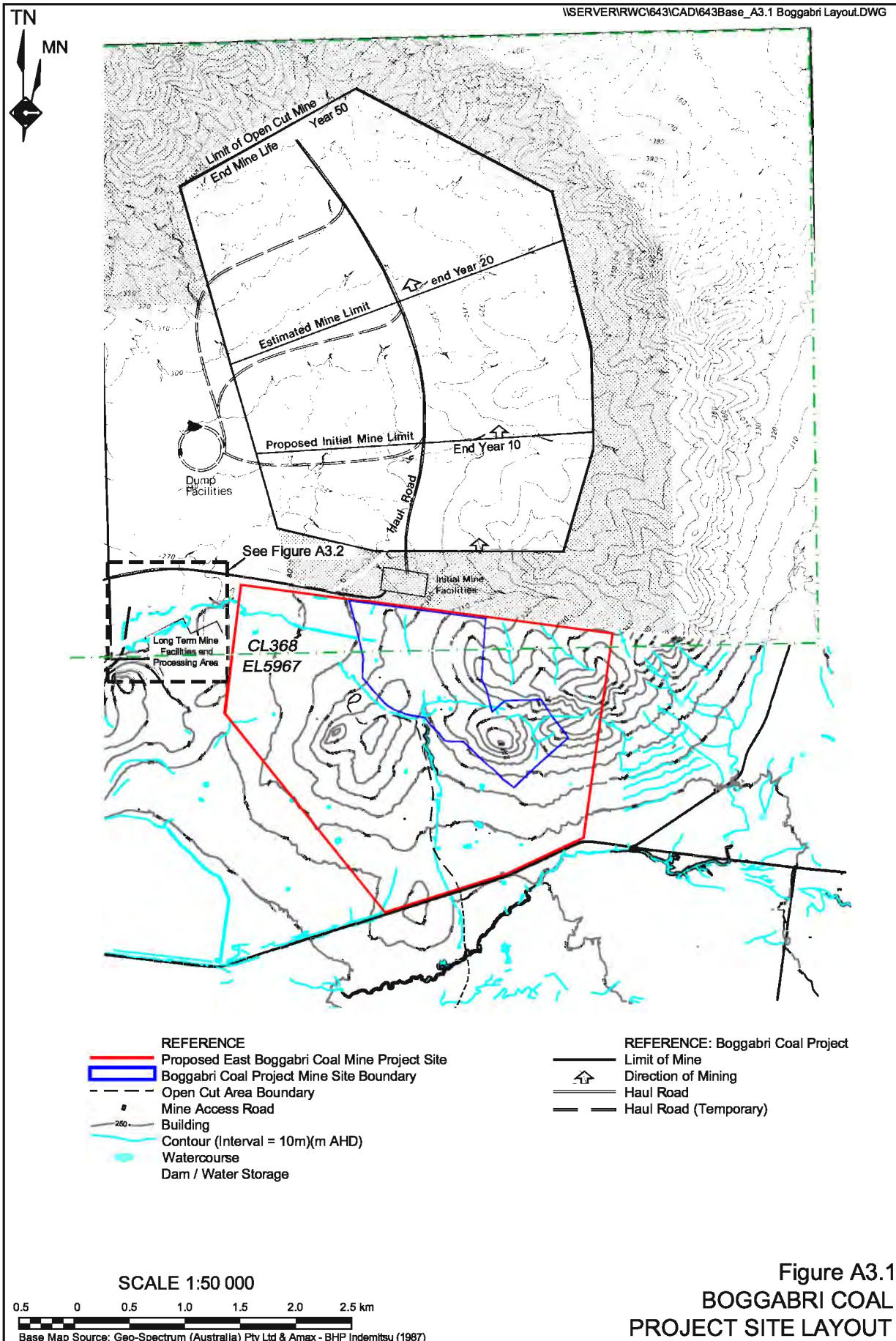


Figure A3.1
BOGGABRI COAL
PROJECT SITE LAYOUT

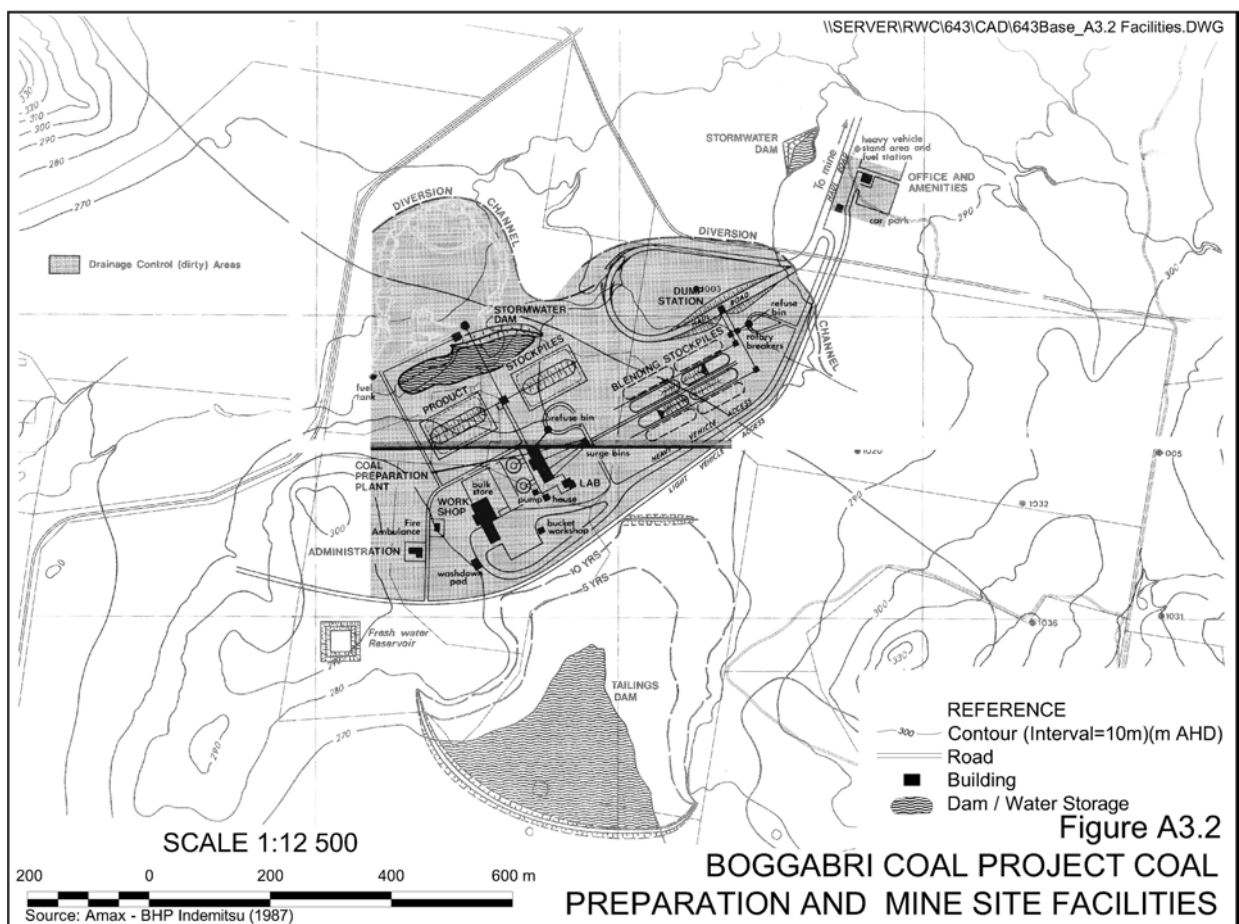


Mining Operations

The Boggabri Coal Project will begin as a high productivity, small scale open cut mining operation which will initially recover the shallower recoverable coal reserves down to the Merriown Seam at a production rate of approximately 1.5Mtpa. Initial mining will be by excavator and truck with annual production rates consistent with market demands. Ultimately, the Boggabri Coal Project will be a medium scale open cut mining operation recovering the deeper coal reserves in order to maintain production rates up to 5.0Mtpa. The higher production rates will be achieved by using both large dragline and haulback methods. The open cut mine site presented on **Figure A3.1** would enable the recovery of up to 90Mt of saleable coal to a total depth of 140m.

Coal Preparation

Production will require the construction of a relatively simple coal crushing and sizing plant and a coal handling and preparation plant (washery) for the washing of coal, where appropriate, to provide a low ash product (see **Figure A3.2**). Coarse and fine rejects from the coal preparation plant will be disposed of in the mine spoil piles and a tailings dam located south of the plant respectively.



Transportation

Product coal will be transported from the mine site to a train loading facility approximately 5km north of Boggabri, using a purpose-built access road (see **Figure A3.3**) which will extend from an intersection approximately 6km north of Boggabri, through to the mine site facilities area. A low level bridge will be built over the Namoi River for road access. It is proposed that the road will be unsealed initially, but be sealed as production levels increase.

All coal delivered via the access road will be loaded to trains at the train loading facility and delivered by rail to the Port of Newcastle for export via the Northwestern Railway.

Hours of Operation

Mining operations will proceed on a 24 hour basis. Road transportation of coal will initially be restricted to daylight hours. However, as production rates increase additional shifts may be required. Train loading and despatch will be subject to the Hunter Valley Coal Chain Logistics Team scheduling and therefore potentially a 24 hour operation.

Employment

The workforce will number approximately 70 with a similar number required for construction. Current planning is for the mine workforce to increase as production increases from the initial production levels. It is believed that a substantial proportion of the mine workforce could be recruited locally, particularly during the initial production period. Boggabri and the surrounding area are still expected to be the major residential areas for employees during the initial production period.

Rehabilitation and Water Management

Rehabilitation plans are being developed to return disturbed areas to, as near as practical, their original native forest land use. The mine plan allows for the handling and storage of topsoil for future use in the best possible manner, selective handling of overburden to ensure burial of materials with undesirable characteristics, return of a rooting medium beneath the topsoil, and a return to a topography suitable to maintain viable forestation.

A water management plan would be incorporated into the Boggabri Coal Project to optimise the use of water, control water pollution and soil erosion, protect the mining operation against flooding and protect the water rights of downstream users. The plan provides for runoff water from dirty areas to be separated from clean areas, enabling collection and treatment or storage. A closed circuit water system will be provided which will be supplemented from on-site water sources to satisfy project water requirements. The water balance studies have shown that the mining development will be a net water consumer except during periods of heavy rainfall or prolonged wet weather. Maximum use will be made of on-site water before external sources are used. Water make up to the system will be met from a bore field established on a property near the Namoi River bridge crossing owned by IBC or commercially purchased on the operating water trading market.



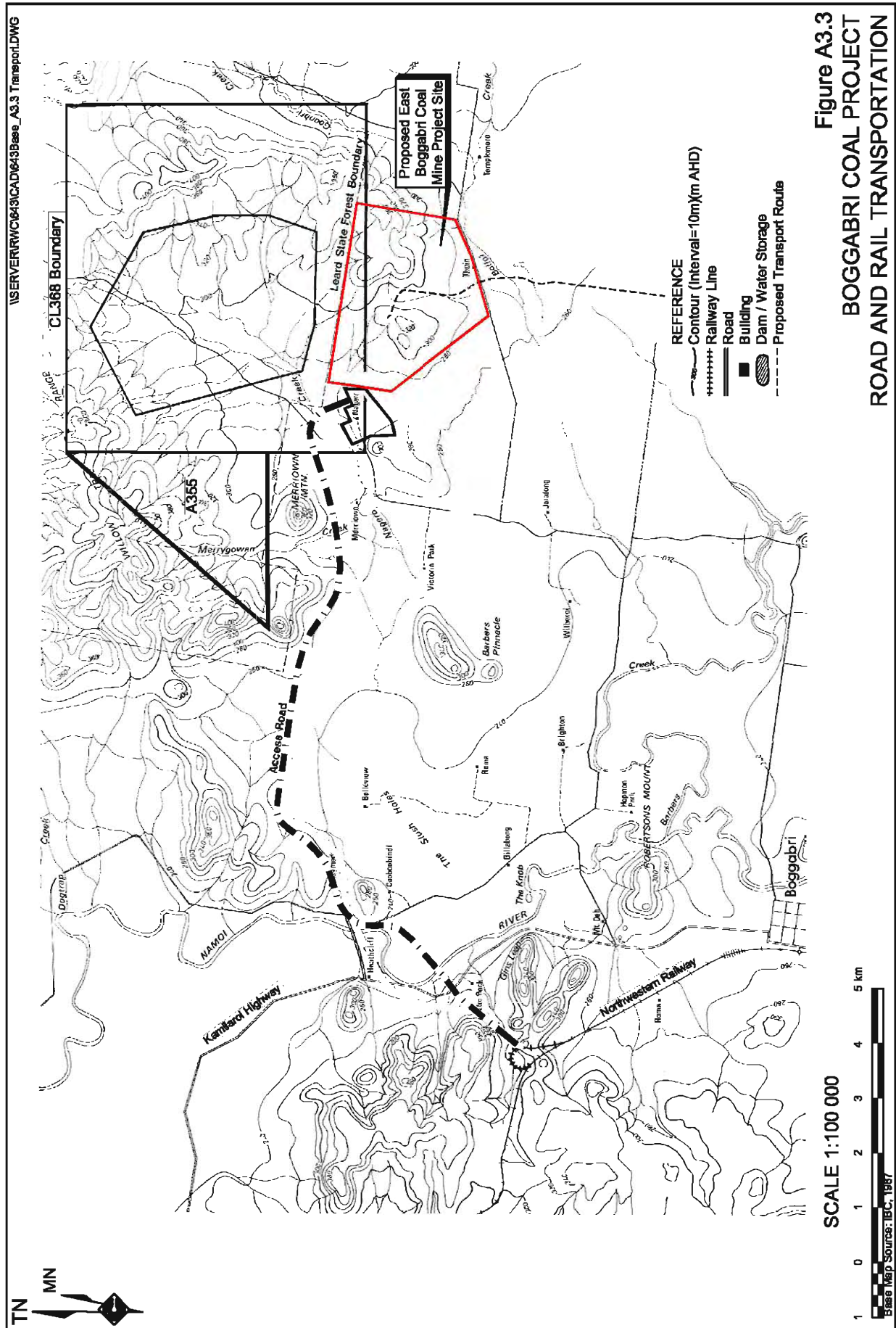


Figure A3.3
BOGGABRI COAL PROJECT
ROAD AND RAIL TRANSPORTATION

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