Notice of Modification

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

As delegate for the Minister for Planning and Infrastructure, I modify the project approval referred to in Schedule 1, subject to the conditions in Schedule 2.

Chris Wilson
Executive Director
Development Assessment Systems and Approvals

Sydney 4 December 2013

SCHEDULE 1

The Project Approval (05_0136) for the Abel Coal Project, granted by the Minister for Planning, on 7 June 2007.

SCHEDULE 2

Delete all words after "Abel Coal Project", where first occurring, and replace with the following:

TABLE OF CONTENTS

DEFINITIONS

Adaptive management	Adaptive management includes monitoring subsidence effects and impacts and, based on the results, modifying the mining plan as mining proceeds to ensure that the effects, impacts and/or associated environmental consequences remain within predicted and/or designated ranges and in compliance with the conditions of this approval
Annual Review	The review required by condition 3 of Schedule 6
Approved mine plan	The mine plans depicted in the figures in Appendix 2
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
Bloomfield site	The Bloomfield Coal Handling and Preparation Plant, the Bloomfield Rail Loading Facility, Rail Loop and Rail Spur, and the Bloomfield Colliery open-cut pits which are used to emplace coal reject and tailings from the project
Built features	Includes any building or work erected or constructed on land, and includes dwellings and infrastructure such as any formed road, street, path, walk, or driveway; any pipeline, water, sewer, telephone, gas or other service main
CCC	Community Consultative Committee
Cliff	A continuous rock face, including overhangs, having a minimum length of 20 metres, a minimum height of 10 metres and a minimum slope of 2 in 1 (>63.4º)
Conditions of this approval	Conditions contained in Schedules 2 to 6 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department, or delegate
DRE	Division of Resources and Energy, within the Department of Trade & Investment, Regional Infrastructure & Services
EA	Environmental assessment titled *Abel Underground Mine Part 3A Environmental Assessment Application No. 05_0136 – Volumes 1 to 5,* dated June 2005, including the associated response to submissions (dated January 2007)
EA (MOD 1)	Modification application 05_0136 MOD 1 and accompanying Environmental Assessment titled *Abel Underground Mine May 2010 Modification (Downcast Ventilation Shaft) Environmental Assessment,* prepared by Donaldson Coal Pty Limited and dated May 2010
EA (MOD 2)	Modification application 05_0136 MOD 2 and accompanying Environmental Assessment titled *Abel Underground Mine March 2011 Modification (Upcast Ventilation Shaft) Environmental Assessment,* prepared by Donaldson Coal Pty Limited and dated March 2011
EA (MOD 3)	Modification application 05_0136 MOD 3 and accompanying Environmental Assessment titled *Abel Upgrade Modification Environmental Assessment, Volumes 1 and 2* prepared by Resource Strategies Pty Limited and dated December 2012, including the Response to Submissions document titled *Abel Upgrade Modification Environmental Assessment Response to Submissions* dated July 2013
Environmental consequences	The environmental consequences of subsidence impacts, including: damage to built features; loss of surface flows to the subsurface; loss of standing pools; adverse water quality impacts; cliff falls; rock falls; damage to Aboriginal heritage sites; impacts on aquatic ecology; and ponding
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPL	Environment Protection Licence issued under the POEO Act
Executive Director Mineral Resources	Executive Director Mineral Resources within DRE, or the equivalent role
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build or to implement
First workings	Development of main headings, longwall gate roads, related cut throughs and the like
GDE	Groundwater Dependent Ecosystem
Ha	Hectare
Incident	A set of circumstances that: • causes or threatens to cause material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in this approval

Land	As defined in the EP&A Act, except for where the term is used in the noise and air quality conditions in Schedules 3 and 4 of this approval where it is defined to mean the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Material harm to the environment	Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial
Mining area	The area identified on the 2nd figure in Appendix 2
Mining operations	Includes all extraction, processing, handling, storage and transportation of coal carried out on the site
Minister	Minister for Planning and Infrastructure, or delegate
Minor	Not very large, important or serious
Minor cliff	A continuous rock face, including overhangs, having a minimum height of 5 metres and a minimum slope of 2 in 1 (>63.4^{o})
Mitigation	Activities associated with reducing the impacts of the project prior to or during those impacts occurring
MSB	Mine Subsidence Board
Negligible	Small and unimportant, such as to be not worth considering
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NOW	NSW Office of Water
OEH	Office of Environment and Heritage
POEO Act	*Protection of the Environment Operations Act 1997*
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Project	The project described in the EA, EA (MOD 1), EA (MOD 2) and EA (MOD 3)
Proponent	Donaldson Coal Pty Ltd, or its successors in title
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Reasonable costs	The costs agreed between the Department and the Proponent for obtaining independent experts to review the adequacy of any aspects of the Extraction Plan, or where such costs cannot be agreed, the costs determined by a dispute resolution process
Rehabilitation	The treatment or management of land disturbed by the project for the purpose of establishing a safe, stable and non-polluting environment
Remediation	Activities associated with partially or fully repairing or rehabilitating the impacts of the project or controlling the environmental consequences of this impact
RMS	Roads and Maritime Services
Rock face feature	A rock face having a minimum length of 20 metres, heights between 3 metres and 5 metres and a minimum slope of 2 in 1 (>63.4º)
ROM coal	Run-of-mine coal
Safe, serviceable & repairable	Safe means no danger to users who are present, serviceable means available for its intended use, and repairable means damaged components can be repaired economically
Second workings	Extraction of coal from longwall panels, shortwall panels or pillar extraction
Site	The land referred to in Schedule 1, and listed in Appendix 1
Statement of commitments	The Proponent's commitments in Appendix 3
Steep slope	An area of land having a gradient between 1 in 3 (33% or 18.3º) and 2 in 1 (200% or 63.4º)
Subsidence	The totality of subsidence effects, subsidence impacts and environmental consequences of subsidence impacts
Subsidence effects	Deformation of the ground mass due to mining, including all mining-induced ground movements, such as vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
Surface facilities sites	The Abel pit top area; all associated ventilation shaft sites; sites for other mining purposes infrastructure; and any other site subject to existing or proposed surface disturbance (excluding subsidence impacts) by the project

SCHEDULE 2
ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

1. In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.

TERMS OF APPROVAL

2. The Proponent shall carry out the project generally in accordance with the:
   (a) EA;
   (b) EA (MOD 1);
   (c) EA (MOD 2);
   (d) EA (MOD 3);
   (e) statement of commitments; and
   (f) conditions of this approval.

   Notes:
   - *The general layout of the project is shown on the figures in Appendix 2.*
   - *The statement of commitments is reproduced in Appendix 4.*

3. If there is any inconsistency between the above documents, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.

4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
   (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this approval; and
   (b) the implementation of any actions or measures contained in these documents.

LIMITS ON APPROVAL

Mining Operations

5. The Proponent may carry out mining operations on site until the end of December 2030.

   Note: Under this approval, the Proponent is required to rehabilitate the site and perform additional undertakings to the satisfaction of either the Director-General or the Executive Director, Mineral Resources. Consequently this approval will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and these additional undertakings have been carried out satisfactorily.

Coal Extraction

6. The Proponent shall not extract more than 6.1 million tonnes of ROM coal from the site per calendar year.

Coal Processing

7. The Proponent shall not process more than 8.5 million tonnes of ROM coal at the Bloomfield site per calendar year.

Coal Transport

8. The Proponent shall transport all ROM coal from the Abel pit-top area to the Bloomfield site via the private haul road, or by coal conveyor, or by a combination of both methods.

9. The Proponent shall transport all product coal produced on the Bloomfield site via the Bloomfield Rail Loop, and Rail Spur and the Main Northern Railway, except in an emergency. In an emergency, product coal may be transported from the Bloomfield site by road, with the prior written approval of the Director-General, and subject to any restrictions that the Director-General may impose.

   Note: The alignment of the approved coal conveyor is shown in Figure 3 of Appendix 2.

Hours of Operation

10. The Proponent shall comply with the operating hours in Table 1.

Table 1: Operating hours

Activity	***Operating Hours***
Mining Operations	24 hours a day, 7 days per week
Construction activities	7.00 am to 6.00 pm, Monday to Friday; and 8.00 am to 1.00 pm, Saturdays, unless noise from these activities does not exceed 35dB(A)$_{LAeq(15\ min)}$ at any privately-owned residence
Maintenance activities	24 hours a day, 7 days per week, providing maintenance activities are inaudible at any privately-owned residence

STRUCTURAL ADEQUACY

11. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures that are part of the project are constructed in accordance with:
    (a) the relevant requirements of the BCA; and
    (b) any additional requirements of the MSB where the building or structure is located on land within declared Mine Subsidence Districts.

Notes:

- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.*
- *Under Section 15 of the Mine Subsidence Compensation Act 1961, the Proponent is required to obtain the MSB's approval before constructing any improvements within a Mine Subsidence District.*

DEMOLITION

12. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures,* or its latest version.

OPERATION OF PLANT AND EQUIPMENT

13. The Proponent shall ensure that all plant and equipment used at the site is:
    (a) maintained in a proper and efficient condition; and
    (b) operated in a proper and efficient manner.

STAGED SUBMISSION OF STRATEGIES, PLANS OR PROGRAMS

14. With the approval of the Director-General, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis. Strategies, plans or programs approved before 31 October 2013 continue to apply to the project, until revised strategies, plans or programs required under the terms of this modified approval are approved by the Director-General.

Notes:

- *While any strategy, plan or program may be submitted on a progressive basis, the Proponent will need to ensure that the existing operations on site are covered by suitable strategies, plans or programs at all times.*
- *If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program must clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages, and the trigger for updating the strategy, plan or program.*

SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS – UNDERGROUND MINING

SUBSIDENCE

Performance Measures – Natural and Heritage Features, etc

1. The Proponent shall ensure that the project does not cause any exceedances of the performance measures in Table 2, to the satisfaction of the Director-General.

Table 2: Subsidence Impact Performance Measures

Water Resources	
• Hexham Swamp; • Blue Gum Creek and Alluvium; and • Long Gully.	• Negligible environmental consequences, including: - *negligible* reduction in the quantity of water entering the swamp or the creeks (ie baseflow or environmental flows); - *negligible* reduction in the quality of water entering the swamp or the creeks; and - *negligible* reduction in creek bed or bank stability. • No connective cracking between the surface and the mine.
• All other watercourses in the mining area.	• No greater environmental consequences than predicted in the EA and EA (MOD 3).
Land	
• Cliffs.	• Minor environmental consequences (that is, occasional rockfalls, displacement of or dislodgement of boulders or slabs, or fracturing, that in total do not impact more than 3% of the total face area of cliffs within the mining area).
• Minor cliffs • Rock face features; and • Steep slopes.	• Minor environmental consequences (that is, occasional rockfalls, displacement or dislodgement of boulders or slabs, or fracturing, that in total do not impact more than 5% of the total face area of each such type of feature within the mining area).
• Pambalong Nature Reserve.	• Negligible environmental consequences.
Biodiversity	
• Threatened species; and • Endangered ecological communities (including unspecified Lowland Rainforest EEC).	• Negligible environmental consequences.
Heritage Sites	
• Aboriginal heritage sites.	• No greater subsidence impacts or environmental consequences than predicted in the EA and EA (MOD 3).
• Historic heritage.	• No greater subsidence impacts or environmental consequences than predicted in the EA and EA (MOD 3).
Mine workings	
• First workings under an approved Extraction Plan beneath any feature where performance measures in this table require negligible subsidence impacts, negligible environmental consequences.	• To remain long-term stable and non-subsiding.
• Second workings.	• To be carried out only in accordance with an approved Extraction Plan.

Notes:

- *The Proponent will be required to define more detailed performance indicators (including impact assessment criteria) for each of these performance measures in the various management plans that are required under this approval.*
- *Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Director-General will be the final arbiter.*

- *The requirements of this condition only apply to the impacts and consequences of mining operations, construction or demolition undertaken following the date of approval of MOD 3.*

Offsets

2. If the Proponent exceeds the performance measures in Table 2 and the Director-General determines that:
   (a) it is not reasonable or feasible to remediate the impact or environmental consequence; or
   (b) remediation measures implemented by the Proponent have failed to satisfactorily remediate the impact or environmental consequence;

   the Proponent shall provide a suitable offset to compensate for the impact or environmental consequence, to the satisfaction of the Director-General.

   Note: Any offset required under this condition must be proportionate with the significance of the impact or environmental consequence.

Performance Measures – Built Features

3. The Proponent shall ensure that the project does not cause any exceedances of the performance measures in Table 3, to the satisfaction of the Director-General. Any dispute between the Proponent and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 3 is to be settled by the Director-General, following consultation with the MSB and the Executive Director Mineral Resources. Any decision by the Director-General shall be final and not subject to further dispute resolution under this approval.

Table 3: Subsidence Impact Performance Measures

Built Features	
Key Public Infrastructure: • F3 Freeway; • Hunter Expressway; • 330kV transmission line and transmission towers; and • 132kV and 66kV powerlines.	• Always safe and serviceable. • Damage that does not affect safety or serviceability must be fully repairable, and must be fully repaired.
Other Public Infrastructure: • Timber power poles; • Roads; • Fibre-optic cables; and • Telecommunication cables.	• Always safe and serviceable. • No greater subsidence impact or environmental consequences than predicted in the EA and EA (MOD 3). • Damage that does not affect safety or serviceability must be fully repairable, and must be fully repaired.
Key Privately-Owned Built Features • Principal residences; • All buildings and structures on, or built in the future on: - the Black Hill Public School; - Catholic High School site (Lot 131 DP1057179); - Black Hill Church and Cemetery; - Coal & Allied Operations Pty Limited site (Lot 30 DP870411); and • The 4 largest dams at the commercial orchard on Lots 11 and 12 DP877937 and Lots 610 and 611 DP1035588, while this land is used for this purpose.	• First workings only within a 26.5^{o} angle of draw of the structure, except with the prior written agreement of the relevant landowner. • Always safe. • Serviceability should be maintained wherever practicable. • Damage must be fully repairable, and must be fully repaired, or else replaced or fully compensated.
Other Privately-Owned Built Features • Rural buildings; • Farm dams; • Tracks and fences; • Black Hill Quarry; and • Stockrington Quarry.	• Always safe. • Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated. • Damage must be fully repairable, and must be fully repaired or else replaced or fully compensated.
Public Safety	
• Public safety.	• Negligible additional risk.

Notes:

- *The Proponent will be required to define more detailed performance indicators for each of these performance measures in Built Features Management Plans or a Public Safety Management Plan (see condition 4 below).*
- *Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in*

which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Director-General will be the final arbiter.

- *The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of this approval.*
- *Requirements under this condition may be met by measures undertaken in accordance with the Mine Subsidence Compensation Act 1961.*
- *Requirements regarding safety or serviceability do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes.*

Extraction Plan

4. The Proponent shall prepare and implement an Extraction Plan for all second workings on site to the satisfaction of the Director-General. Each extraction plan must:
   (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
   (b) be approved by the Director-General before the Proponent carries out any of the second workings covered by the plan;
   (c) include detailed plans of existing and proposed first and second workings and any associated surface development;
   (d) include detailed performance indicators for each of the performance measures in Tables 2 and 3;
   (e) give particular consideration to any proposed multi-seam mining;
   (f) include a detailed investigation of any overlying or adjacent West Borehole Seam workings, in consultation with DRE, which:
      - assesses the stability of remnant coal pillars in the former West Borehole Seam workings;
      - includes revised multi-seam subsidence predictions for the second workings areas;
      - gives particular consideration to the risks of irregular subsidence and for pillar run leading to subsidence outside of the predicted angle of draw; and
      - recommends final design of the second workings panels and any necessary adaptive management measures;
   (g) provide revised predictions of the potential subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this approval;
   (h) describe the measures that would be implemented to ensure compliance with the performance measures in Tables 2 and 3, and manage or remediate any impacts and/or environmental consequences;
   (i) include a Built Features Management Plan, which has been prepared in consultation with DRE and the owners of affected built features, to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings, and which:
      - addresses in appropriate detail all items of key public infrastructure (with particular consideration of angle towers on transmission lines and powerlines), other public infrastructure and all other built features;
      - has been prepared following appropriate consultation with the owner/s of potentially affected feature/s;
      - recommends appropriate remedial measures and includes commitments to mitigate, repair, replace or compensate all predicted impacts on potentially affected built features in a timely manner; and
      - in the case of all key public infrastructure, and other public infrastructure except roads, trails and associated structures, reports external auditing for compliance with ISO 31000 (or alternative standard agreed with the infrastructure owner), and provides for annual auditing of compliance and effectiveness during extraction which may impact the infrastructure;
   (j) include a Water Management Plan, which has been prepared in consultation with EPA and NOW, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on watercourses and aquifers, including:
      - surface and groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse impacts on water resources or water quality;
      - a program to monitor and report stream flows, assess any changes resulting from subsidence impacts and remediate and improve stream stability;
      - a program to monitor and report groundwater inflows to underground workings;
      - a program to predict, manage and monitor impacts to groundwater bores on privately-owned land; and
   (k) include a Biodiversity Management Plan, which has been prepared in consultation with OEH, which provides for the management of the potential impacts and/or environmental consequences of the proposed second workings on aquatic and terrestrial flora and fauna, with a specific focus on threatened species, populations and their habitats; endangered ecological communities; and water dependent ecosystems;
   (l) include a Land Management Plan, which has been prepared in consultation with any affected public authorities, to manage the potential impacts and/or environmental consequences of the proposed

second workings on land in general, with a specific focus on cliffs, rock face features and steep slopes;

(m) include a Heritage Management Plan, which has been prepared in consultation with OEH and relevant stakeholders for both Aboriginal and historic heritage, to manage the potential environmental consequences of the proposed second workings on both Aboriginal and non-Aboriginal heritage items, and reflects the requirements of condition 21 of schedule 4;

(n) include a Public Safety Management Plan, which has been prepared in consultation with DRE, to ensure public safety in the mining area;

(o) include a Subsidence Monitoring Program, which has been prepared in consultation with DRE; to:
- provide data to assist with the management of the risks associated with subsidence;
- validate the subsidence predictions;
- analyse the relationship between the predicted and resulting subsidence effects and predicted and resulting impacts under the plan and any ensuing environmental consequences; and
- inform the contingency plan and adaptive management process;

(p) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Tables 1 and 2, or where any such exceedance appears likely;

(q) proposes appropriate revisions to the Rehabilitation Management Plan required under condition 28 of Schedule 4; and

(r) include a program to collect sufficient baseline data for future Extraction Plans.

Notes:
- *To identify the second workings mining domains referred to in this condition, see Appendix 2.*
- *In accordance with Condition 14 of Schedule 2, the preparation and implementation of Extraction Plans may be staged, with each plan covering a defined area of underground workings. In addition, these plans are only required to contain management plans that are relevant to the specific underground workings that are being carried out.*
- *An SMP that is substantially consistent with this condition and which is approved by DRE prior to 31 October 2013 is taken to satisfy the requirements of this condition.*

5. The Proponent shall ensure that the management plans required under conditions 4(h)-(m) above include:
   (a) an assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this approval; and
   (b) a detailed description of the measures that would be implemented to remediate predicted impacts.

First Workings

6. The Proponent may carry out first workings on site, other than in accordance with an approved Extraction Plan, provided that DRE is satisfied that the first workings are designed to remain long-term stable and non-subsiding, except insofar as they may be impacted by approved second workings.

   Note: The intent of this condition is not to require an additional approval for first workings, but to ensure that first workings are built to geotechnical and engineering standards sufficient to ensure long term stability, with zero resulting subsidence impacts.

Alternative Mining Methods

7. The Proponent may carry out bord and pillar mining and pillar extraction in the longwall mining and shortwall mining areas shown in Figure 2 of Appendix 2, subject to any necessary Extraction Plan.

Payment of Reasonable Costs

8. The Proponent shall pay all reasonable costs incurred by the Department to engage suitably qualified, experienced and independent experts to review the adequacy of any aspect of an Extraction Plan.

SURFACE INFRASTRUCTURE MANAGEMENT

Gas Drainage

9. The Proponent shall ensure that all gas drainage pipelines (other than connection points, monitoring points, dewatering facilities, regulation or isolation points) between gas drainage plants are buried, unless otherwise agreed with the relevant landowner or unless burial is inappropriate for safety or other reasons, to the satisfaction of the Director-General.

10. The Proponent shall prepare and implement a Gas Drainage Management Plan in respect of construction and use of future gas drainage infrastructure (ie for any gas drainage not subject to approval at the date of approval of MOD 3), to the satisfaction of the Director-General. This plan must be submitted to the

Director-General for approval prior to the construction of any future gas drainage infrastructure and must include details of the Proponent's commitments regarding:

(a) community consultation;
(b) landholder agreements;
(c) assessment of noise, air quality, traffic, biodiversity, heritage, public safety and other impacts in accordance with approved methods;
(d) avoidance of significant impacts and minimisation of impacts generally;
(e) beneficial re-use or flaring of drained hydrocarbon gases, wherever practicable;
(f) achievement of applicable standards and goals;
(g) mitigation and/or compensation for significant noise, air quality and visual impacts; and
(h) rehabilitation of disturbed sites.

Service Boreholes

11. The Proponent shall prepare and implement a Service Boreholes Management Plan in respect of construction and use of future service boreholes (ie any service boreholes not subject to approval at the date of approval of MOD 3) to the satisfaction of the Director-General. This plan must be submitted to the Director-General for approval prior to the construction of any future service borehole and must include details of the Proponent's commitments regarding:

(a) community consultation;
(b) landholder agreements;
(c) assessment of noise, air quality, traffic, biodiversity, heritage, public safety and other impacts in accordance with approved methods;
(d) avoidance of significant impacts and minimisation of impacts generally;
(e) achievement of applicable standards and goals;
(f) mitigation and/or compensation for significant noise, air quality and visual impacts; and
(g) rehabilitation of disturbed sites.

Personal Emergency Device (PED) Communications

12. The Proponent shall prepare and implement a PED Communications Management Plan in respect of construction and use of future PED communications infrastructure (ie for any PED communications infrastructure not subject to approval at the date of approval of MOD 3) to the satisfaction of the Director-General. This plan must be submitted to the Director-General for approval prior to the construction of any future PED communications infrastructure and must include details of the Proponent's commitments regarding:

(a) community consultation;
(b) landholder agreements;
(c) assessment of noise, air quality, traffic, biodiversity, heritage, public safety and other impacts in accordance with approved methods;
(d) avoidance of significant impacts and minimisation of impacts generally;
(e) achievement of applicable standards and goals;
(f) mitigation and/or compensation for significant noise, air quality and visual impacts; and
(g) rehabilitation of disturbed sites.

SCHEDULE 4
SPECIFIC ENVIRONMENTAL CONDITIONS – GENERAL

NOISE

Operational Noise Criteria

1. The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 4 at any residence on privately-owned land.

Table 4: Operational noise criteria dB(A)

Location	***Receiver Area***	***Day***	***Evening***	***Night***	
		$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{A1\ (1\ min)}$
Location I	Lord Howe Drive, Ashtonfield	36	36	36	45
Location K	Catholic Diocese Land	37	37	37	45
Location L	Kilshanny Avenue, Ashtonfield	40	40	40	47
All other locations	All other privately-owned residences	35	35	35	45

Notes:

- *To interpret the locations referred to Table 4, see the plan in Appendix 3.*
- *Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy. Appendix 4 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.*

However, these noise criteria do not apply if the Proponent has an agreement with the relevant landowner to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

Construction Noise Criteria

2. The Proponent shall ensure that the noise generated during the construction of the downcast ventilation shaft as described in EA (MOD 3) does not exceed the criteria in Table 5.

Table 5: Construction noise criteria dB(A)

Location	***Receiver***	***Day***
		$L_{Aeq\ (15\ min)}$
Location R	281 Lings Road, Buttai	50
Location S	189 Lings Road Buttai	43

Notes:

- *The criteria in Table 5 apply only whilst the downcast ventilation shaft is being constructed, and for a maximum of 12 weeks from the commencement of construction.*
- *To interpret the locations referred to Table 5, see the plan in Appendix 3.*
- *Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.*

However, these noise criteria do not apply if the Proponent has an agreement with the relevant landowner to generate higher construction noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.

Rail Noise Criteria

3. The Proponent shall ensure that the noise from rail movements on the Bloomfield Rail Spur does not exceed the limits in Table 6 at any residence on privately-owned land.

Table 6: Rail Spur noise criteria dB(A)

Location	Day	Evening	Night
	$L_{Aeq\ (period)}$		
All privately-owned land	55	45	40

Cumulative Noise Criteria

4. The Proponent shall implement all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines in the area does not exceed the criteria in Table 7 at any residence on privately-owned land.

Table 7: Cumulative noise criteria dB(A)

Location	Day	Evening	Night
	$L_{Aeq\ (period)}$		
All privately-owned land	55	45	40

Note: Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy. Appendix 4 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.

Operating Conditions

5. The Proponent shall:
   (a) implement best management practice to minimise the construction, operational, road and rail noise of the project;
   (b) operate an on-site noise management system to ensure compliance with the relevant conditions of this approval;
   (c) minimise the noise impacts of the project during meteorological conditions under which the noise limits in this consent do not apply (see Appendix 4);
   (d) only receive and/or dispatch locomotives and rolling stock either on or from the site that are approved to operate on the NSW rail network in accordance with the noise limits in ARTC's EPL (No. 3142);
   (e) carry out regular monitoring to determine whether the project is complying with the noise criteria and other relevant conditions of approval,

   to the satisfaction of the Director-General.

Noise Management Plan

6. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:
   (a) be prepared in consultation with EPA, and submitted to the Director-General for approval within 6 months of the date of approval of MOD 3;
   (b) describe the measures that would be implemented to ensure compliance with the noise criteria and operating conditions in this approval;
   (c) describe the proposed noise management system in detail; and
   (d) include a monitoring program that:
      - uses attended monitoring to evaluate the compliance of the project against the noise criteria in this approval;
      - evaluates and reports on:
        - the effectiveness of the on-site noise management system; and
        - compliance against the noise operating conditions; and
      - defines what constitutes a noise incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any noise incidents.

AIR QUALITY & GREENHOUSE GAS

Odour

7. The Proponent shall ensure that no offensive odours are emitted from the site, as defined under the POEO Act.

Greenhouse Gas Emissions

8. The Proponent shall implement all reasonable and feasible measures to minimise the release of greenhouse gas emissions from the site to the satisfaction of the Director-General.

Air Quality Criteria

9. The Proponent shall implement all reasonable and feasible mitigation measures to ensure that the particulate emissions generated by the project do not exceed the criteria listed in Tables 8, 9 and 10 at any residence on privately-owned land.

Table 8: Long-term criteria for particulate matter

Pollutant	***Averaging period***	***[d] Criterion***
Total suspended particulate (TSP) matter	Annual	[a] 90 µg/m^3
Particulate matter < 10 µm (PM_{10})	Annual	[a] 30 µg/m^3

Table 9: Short-term criterion for particulate matter

Pollutant	***Averaging period***	***[d] Criterion***
Particulate matter < 10 µm (PM_{10})	24 hour	[a] 50 µg/m^3

Table 10: Long-term criteria for deposited dust

Pollutant	***Averaging period***	***Maximum increase in deposited dust level***	***Maximum total deposited dust level***
[c] Deposited dust	Annual	[b] 2 g/m^2/month	[a] 4 g/m^2/month

Notes to Tables 8-10:

- *[a] Total impact (ie incremental increase in concentrations due to the project plus background concentrations due to other sources);*
- *[b] Incremental impact (ie incremental increase in concentrations due to the project on its own);*
- *[c] Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method*; *and*
- *[d] Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed to by the Director-General.*

Operating Conditions

10. The Proponent shall:
    (a) implement best practice air quality management at the site, including all reasonable and feasible measures to minimise off-site odour and dust emissions generated by the project, including from any spontaneous combustion on site;
    (b) operate an air quality management system on site to ensure compliance with the relevant conditions of this approval;
    (c) minimise the air quality impacts of the project during adverse meteorological conditions and extraordinary events (see note d to Tables 8-10 above); and
    (d) co-ordinate the air quality management on site with the air quality management of the Bloomfield Colliery, to minimise cumulative air quality impacts,

    to the satisfaction of the Director-General.

Air Quality & Greenhouse Gas Management Plan

11. The Proponent shall prepare and implement a detailed Air Quality & Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with EPA, and submitted to the Director-General for approval within 6 months of the date of approval of MOD 3;
    (b) describe the measures that would be implemented to ensure compliance with the relevant air quality criteria and operating conditions of this approval;
    (c) describe the measures that would be implemented to minimise the greenhouse gas emissions from the site;
    (d) describe the proposed on-site air quality management system; and
    (e) include an air quality monitoring program that:
        - is capable of evaluating the operating conditions of this approval;
        - evaluates and reports on:
            - the effectiveness of the air quality management system; and
            - compliance against the air quality operating conditions; and

- defines what constitutes an air quality incident, and includes a protocol for identifying and notifying the Department and relevant stakeholders of any air quality incidents.

METEOROLOGICAL MONITORING

12. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that:
    (a) complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South* Wales guideline; and
    (b) is capable of continuous real-time measurement of temperature lapse rate in accordance with the *NSW Industrial Noise Policy*, unless a suitable alternative is approved by the Director-General following consultation with the EPA.

SOIL & WATER

Note: Under the Water Act 1912 and/or the Water Management Act 2000, the Proponent is required to obtain the necessary water licences for the project.

Water Supply

13. The Proponent shall ensure that it has sufficient water for all stages of the development, and if necessary, adjust the scale of mining operations to match its available water supply, to the satisfaction of the Director-General.

Compensatory Water Supply

14. The Proponent shall provide a compensatory water supply to any landowner of privately-owned land whose water entitlements are adversely impacted (other than an impact that is negligible) as a result of the project, in consultation with NOW, and to the satisfaction of the Director-General.

    The compensatory water supply measures must provide an alternative long-term supply of water that is equivalent to the loss attributed to the project. Equivalent water supply must be provided (at least on an interim basis) within 24 hours of the loss being identified.

    If the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

    If the Proponent is unable to provide an alternative long-term supply of water, then the Proponent shall provide alternative compensation to the satisfaction of the Director-General.

Surface Water Discharges

15. The Proponent shall not discharge any water from the site or cause any pollution of waters except as expressly provided for in an EPL.

Surface Water Transfer

16. The Proponent may transfer water between the site, the Donaldson Open-Cut Coal Mine and the Bloomfield Colliery, in accordance with the Water Management Plans for these operations.

Water Management Plan

17. The Proponent shall prepare and implement a Water Management Plan for the project, for all areas that are not, or will not, be subject to condition 4 of schedule 3, to the satisfaction of the Director-General. This plan must be prepared in consultation with NOW and EPA, by suitably qualified and experienced persons whose appointment has been endorsed by the Director-General, and submitted to the Director-General for approval within 6 months of the date of approval of MOD 3. This plan must include:
    (a) a comprehensive water balance for the project that includes details of:
        - sources and security of water supply;
        - water make in the underground workings;
        - water use; and
        - any water discharges; and
    (b) management plans for the Surface facilities sites, that include:
        - a detailed description of water management systems for each site, including:
            - clean water diversion systems;
            - erosion and sediment controls; and
            - any water storages;

- measures to minimise potable water use and to reuse and recycle water; and
- monitoring and reporting procedures.

Note: This plan can be integrated with the Water Management Plans prepared for the Donaldson Open-Cut Mine and the Bloomfield Colliery.

BIODIVERSITY

Biodiversity Offset Strategy

18. The Proponent shall develop and implement a Biodiversity Offset Strategy as summarised in Table 11, prior to the commencement of construction of the coal conveyor or the vegetation clearing described in the EA, whichever is sooner, in consultation with OEH, and to the satisfaction of the Director-General.

Table 11: Biodiversity Offset Strategy

Area	***Offset Type***	***Minimum Size/Amount***
Biodiversity Offset Area	Lower Hunter Spotted Gum-Ironbark Forest EEC	10 ha
	Remnant native woodland vegetation	10 ha

Long Term Security of Offset

19. Within 12 months of the commencement of construction of the coal conveyor, or the vegetation clearing described in the EA, whichever is sooner, unless the Director-General agrees otherwise, the Proponent shall make suitable arrangements to provide appropriate long term security for the biodiversity offset area identified in Table 11, to the satisfaction of the Director-General.

Note: In order of preference, mechanisms to provide appropriate long term security to the land within the Biodiversity Offset Strategy include incorporation into the nearby State Conservation Areas, Biobanking Agreement, Voluntary Conservation Agreement, or restrictive covenant on land titles.

Biodiversity Management Plan

20. The Proponent shall prepare and implement a Biodiversity Management Plan for the project, for all areas that are not, or will not, be subject to condition 4 of schedule 3, to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with OEH, and be approved by the Director-General prior to the commencement of construction of the coal conveyor;
    (b) establish baseline data for the existing habitat in the biodiversity offset area and on the site;
    (c) describe the short, medium, and long term measures that would be implemented to:
        - manage vegetation clearing;
        - manage the remnant vegetation and habitat in the biodiversity offset area and on the site; and
        - implement the biodiversity offset strategy, including detailed performance and completion criteria;
    (d) include a program to monitor and report on the effectiveness of these measures, and progress against detailed performance and completion criteria;
    (e) identify the potential risks to the successful implementation of the Biodiversity Offset Strategy, and the contingency measures that would be implemented to mitigate these risks; and
    (f) include details of who would be responsible for monitoring, reviewing, and implementing the plan.

Conservation Bond

21. Within 6 months of the commencement of construction of the coal conveyor, or the vegetation clearing described in the EA, whichever is sooner, the Proponent shall lodge a conservation bond with the Department to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria described in the Biodiversity Management Plan. The sum of the bond shall be determined by:
    (a) calculating the full cost of implementing the offset strategy (other than land acquisition costs); and
    (b) employing a suitably qualified quantity surveyor to verify the calculated costs.

    If the offset strategy is completed generally in accordance with the completion criteria in the Biodiversity Management Plan to the satisfaction of the Director-General, the Director-General will release the bond.

    If the offset strategy is not completed generally in accordance with the completion criteria in the Biodiversity Management Plan, the Director-General will call in all or part of the conservation bond, and arrange for the satisfactory completion of the relevant works.

HERITAGE

Aboriginal Cultural Heritage Management Plan

22. The Proponent shall prepare and implement an Aboriginal Cultural Heritage Management Plan for the project, for all areas that are not, or will not, be subject to condition 4 of Schedule 3, to the satisfaction of the Director-General. This plan must:
    (a) be prepared in consultation with OEH and the Aboriginal community;
    (b) be submitted to the Director-General for approval within 6 months of the date of approval of MOD 3;
    (c) identify any actions required to ensure that the performance measures in Table 1 are met;
    (d) include the following program/procedures for Aboriginal cultural heritage management:
        - managing Aboriginal cultural heritage sites, and the discovery of any new Aboriginal cultural heritage sites, objects or skeletal remains;
        - maintaining consultation with, and the involvement of, the Aboriginal community in the conservation and management of Aboriginal heritage sites, and managing access for the Aboriginal community to Aboriginal heritage sites and culturally significant areas; and
        - a trigger action response plan to manage unexpected subsidence impacts.

TRANSPORT

Monitoring of Coal Transport

23. The Proponent shall:
    (a) keep accurate records of the amount of coal transported from the site (on a monthly basis); and
    (b) make these records publicly available on its website at the end of each calendar year.

VISUAL

Visual Amenity and Lighting

24. The Proponent shall:
    (a) implement all reasonable and feasible measures to minimise the visual and off-site lighting impacts of the project;
    (b) ensure no unshielded outdoor lights shine above the horizontal; and
    (c) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting* or its latest version,
    to the satisfaction of the Director-General.

WASTE

25. The Proponent shall:
    (a) minimise and monitor the waste generated by the project;
    (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of;
    (c) manage on-site sewage treatment and disposal in accordance with the requirements of Council; and
    (d) report on waste management and minimisation in the Annual Review,
    to the satisfaction of the Director-General.

BUSHFIRE

26. The Proponent shall:
    (a) ensure that the project is suitably equipped to respond to fires on site; and
    (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire in the vicinity of the site.

REHABILITATION

Rehabilitation Objectives

27. The Proponent shall rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA, and comply with the objectives in Table 12.

Table 12: Rehabilitation Objectives

Feature	***Objective***
• Mine site (as a whole).	• Safe, stable & non-polluting; and • Final land use compatible with surrounding land uses.
• Surface infrastructure.	• To be decommissioned and removed, unless the Executive Director Mineral Resources agrees otherwise.
• Portals and ventilation shafts.	• To be decommissioned and made safe and stable; and • Retain habitat for threatened species (eg bats), where practicable.
• Watercourses within project area.	• Hydraulically and geomorphologically stable.
• Cliffs.	• No additional risk to public safety compared to prior to mining.
• Other land affected by the project.	• Restore ecosystem function, including maintaining or establishing self-sustaining ecosystems comprised of: - local native plant species (unless the Executive Director Mineral Resources agrees otherwise); and - a landform consistent with the surrounding environment .
• Built features damaged by mining operations.	• Repair to pre-mining condition or equivalent unless: - the owner agrees otherwise; or - the damage is fully restored, repaired or compensated under the *Mine Subsidence Compensation Act 1961*
• Community.	• Ensure public safety; and • Minimise the adverse socio-economic effects associated with mine closure

Notes:

- *These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by mining taking place after the date of this approval; and to all surface infrastructure sites and other disturbance which forms part of the project, whether constructed prior to or following the date of this approval.*
- *Rehabilitation of subsidence impacts and environmental consequences caused by mining which took place prior to the date of this approval may be subject to the requirements of other approvals (eg under a mining lease or a Subsidence Management Plan approval).*

Progressive Rehabilitation

28. The Proponent shall carry out the rehabilitation of the site progressively, that is, as soon as reasonably practicable following disturbance.

Rehabilitation Management Plan

29. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project, in consultation with OEH, NOW, Cessnock City Council, Maitland City Council and Newcastle City Council, and the CCC, and to the satisfaction of the Director-General and the Executive Director Mineral Resources. This plan must:
    (a) be submitted to the Director-General and the Executive Director Mineral Resources for approval within 9 months of the date of approval of MOD 3;
    (b) be prepared in accordance with any relevant DRE guideline and be consistent with the rehabilitation objectives in the EA, EA (MOD 3) and in Table 11;
    (c) describe how the performance of the rehabilitation would be monitored and assessed against the objectives in Table 11;
    (d) describe the process whereby additional measures would be identified and implemented to ensure the rehabilitation objectives are achieved;
    (e) provide for detailed mine closure planning, including measures to minimise socio-economic effects due to mine closure, to be conducted prior to the site being placed on care and maintenance; and
    (f) be integrated with the other management plans required under this approval.

    Note: The Rehabilitation Management Plan should address all land impacted by the project, and should be suitably integrated with the approved Rehabilitation Management Plans for the Donaldson Open-Cut Mine and the Bloomfield Colliery.

SCHEDULE 5
ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. As soon as practicable after obtaining monitoring results which show:
   (a) an exceedance of any relevant criteria in Schedule 4, the Proponent shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the Proponent is again complying with the relevant criteria; and
   (b) an exceedance of any relevant air quality criteria in Schedule 4, the Proponent shall send a copy of the NSW Health fact sheet entitled "Mine Dust and You" (as may be updated from time to time) to the affected landowners and/or existing tenants of the land (including the tenants of any mine-owned land).

INDEPENDENT REVIEW

2. If an owner of privately-owned land considers that the Proponent is exceeding the relevant criteria in Schedule 4, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.

   If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision the Proponent shall:
   (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:
      (i) consult with the landowner to determine his/her concerns;
      (ii) conduct monitoring to determine whether the Proponent is complying with the relevant criteria in Schedule 4; and
      (iii) if the Proponent is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
   (b) give the Director-General and landowner a copy of the independent review.

SCHEDULE 6
ENVIRONMENTAL MANAGEMENT, REPORTING & AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Strategy

1. The Proponent shall prepare and implement an Environmental Management Strategy for the project to the satisfaction of the Director-General. This strategy must:
   (a) be submitted to the Director-General for approval within 6 months of the date of approval of MOD 3;
   (b) provide the strategic framework for environmental management of the project;
   (c) identify the statutory approvals that apply to the project;
   (d) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;
   (e) describe the procedures that would be implemented to:
      (i) keep the local community and relevant agencies informed about the operation and environmental performance of the project;
      (ii) receive, handle, respond to, and record complaints;
      (iii) resolve any disputes that may arise during the course of the project;
      (iv) respond to any non-compliance;
      (v) respond to emergencies; and
   (f) include:
      (i) copies of any strategies, plans and programs approved under the conditions of this approval; and
      (ii) a clear plan depicting all the monitoring required to be carried out under the conditions of this approval.

Management Plan Requirements

2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:
   (a) detailed baseline data;
   (b) a description of:
      (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);
      (ii) any relevant limits or performance measures/criteria;
      (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;
   (c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;
   (d) a program to monitor and report on the:
      (i) impacts and environmental performance of the project;
      (ii) effectiveness of any management measures (see c above);
   (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;
   (f) a program to investigate and implement ways to improve the environmental performance of the project over time;
   (g) a protocol for managing and reporting any:
      (i) incidents;
      (ii) complaints;
      (iii) non-compliances with statutory requirements; and
      (iv) exceedances of the impact assessment criteria and/or performance criteria; and
   (h) a protocol for periodic review of the plan.

   Note: The Director-General may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.

Adaptive Management

3. The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedules 3 and 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.

   Where any exceedance of these criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity:
   (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;

(b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
(c) implement remediation measures as directed by the Director-General,
to the satisfaction of the Director-General.

Annual Review

4. By the end of March each year, or other timing as may be agreed by the Director-General, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:
   (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the current calendar year;
   (b) include a comprehensive review of the monitoring results and complaints records of the project over the past calendar year, which includes a comparison of these results against the:
      (i) relevant statutory requirements, limits or performance measures/criteria;
      (ii) requirements of any plan or program required under this approval;
      (iii) monitoring results of previous years; and
      (iv) relevant predictions in the EA and EA (MOD 3);
   (c) identify any non-compliance over the past calendar year, and describe what actions were (or are being) taken to ensure compliance;
   (d) identify any trends in the monitoring data over the life of the project;
   (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
   (f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the project.

Revision of Strategies, Plans and Programs

5. Within 3 months of:
   (a) the submission of an annual review under Condition 4 above;
   (b) the submission of an incident report under Condition 7 below;
   (c) the submission of an audit report under Condition 9 below; or
   (d) any modification to the conditions of this approval, (unless the conditions require otherwise),
   the Proponent shall review the strategies, plans, and programs required under this approval, to the satisfaction of the Director-General. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Director-General.

   Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.

Community Consultative Committee

6. The Proponent shall continue to operate a Community Consultative Committee (CCC) for the project to the satisfaction of the Director-General. This CCC must be operated in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version).

   Notes:
   - *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval.*
   - *In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council/s, recognised environmental groups and the local community.*
   - *In operating the CCC, the Department will accept the continued representation from existing CCC members.*

REPORTING

Incident Reporting

7. The Proponent shall notify, at the earliest opportunity, the Director-General and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the project, the Proponent shall notify the Director-General and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

8. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

INDEPENDENT ENVIRONMENTAL AUDIT

9. By the end of March 2015 (or other such timing as agreed by the Director-General), and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
   (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;
   (b) include consultation with the relevant agencies;
   (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
   (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and
   (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.

   Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Director-General.

10. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

ACCESS TO INFORMATION

11. From the end of December 2013, the Proponent shall:
   (a) make copies of the following publicly available on its website:
      - the EA, EA (MOD 1), EA (MOD 2) and EA (MOD 3);
      - all current relevant statutory approvals for the project;
      - approved strategies, plans and programs required under the conditions of this approval;
      - a comprehensive summary of the monitoring results of the project, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;
      - a complaints register (updated monthly);
      - minutes of CCC meetings;
      - the Annual Reviews of the project;
      - any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit;
      - any other matter required by the Director-General; and

   (b) keep this information up-to-date,

   to the satisfaction of the Director-General.

APPENDIX 1
SCHEDULE OF LAND

1. ABEL SITE

Abel Underground Mining Area – South of John Renshaw Drive

Lot	DP	Lot	DP	Lot	DP
94	755260	120	755260	1	228477
942	817442	101	755260	1	986196
1	858353	100	755260	2	602610
94	755260	11	11875	91	828299
11	804925	13	11875	92	828299
12	804925	122	567150	951	600488
1	583620	21	1019282	202	626192
8	1048112	22	1019282	2011	812939
7	1048112	1	120851	2012	812939
3	237431	A	418390	952	600488
210	833717	11	877937	A	155698
211	833717	12	877937	101	837562
5	237431	610	1035588	100	837562
1	1003988	611	1035588	1	602610
932	816814	2	219167	1	179002
1	189884	A	181350	2	228477
83	629112	1	536570	3	228477
3	1003988	1	957782	12	528093
2	1003988	8110	867955	21	1043285
223	841899	8111	867955	22	1043285
224	841899	810	730001	111	1035921
84	629112	1	951843	1	174428
116	755260	2	951843	10	837813
121	755260	1	119630	1	910932
122	755260	1	123945	1	359638
113	755260	1	505578	680	545657
112	755260	72	755260	683	619758
110	755260	79	755260	686	619758
111	755260	82	755260	685	619758
2	449834	83	755260	3	214493
21	773883	84	755260	2	214493
22	1080823	89	755260	1	214493
23	1080823	96	755260	4	214493
24	1080823	125	755260	684	619758
220	836874	1	877416	1	123949
2	531623	2	877416	2	123949
219	836874	3	877416	70	755260
218	836874	4	877416	82	627799
107	755260	101	881099	1131	1057179
1061	855759	13	1072499	1	811514
1062	855759	2	503566	10	829154
105	755260	1	433355	11	829154
118	755260	21	801283	11	746684
11	873821	22	801283	41	811191
8	873821	2	285375	8	755232
9	873821	100	881099	7	850020
5	873821	1	285375	8	850020
7	873821	3	285375	4	1049753
6	873821	4	285375	43	811191
104	755260	5	285375	6	850020
103	755260	6	285375	101	860867
102	755260	3	602610	13	1072499
14	1059212	1	34665		

Abel Surface Facilities Site – North of John Renshaw Drive

Landowner	Lot	Deposited Plan
Donaldson Coal Pty Limited	PT92	755260
Donaldson Coal Pty Limited	PT13	11875
Donaldson Coal Pty Limited	121	567150
Donaldson Coal Pty Limited	PT11	11875
Donaldson Coal Pty Limited	21	1019282
Donaldson Coal Pty Limited	22	1019282
Donaldson Coal Pty Limited	81	627799
Donaldson Coal Pty Limited	1	838310
Donaldson Coal Pty Limited	PT13	755260
Hunter Water		2487-3070

2. BLOOMFIELD SITE

Bloomfield Lease Area

Landowner	Lot	Deposited Plan
Ashtonfield Holdings	1	1045723
Ashtonfield Holdings	9	755237
Ashtonfields Pty Limited	223	755237
Ashtonfields Pty Limited	1	456999
Ashtonfields Pty Limited	15	241097
Ashtonfields Pty Limited	14	241097
Ashtonfields Pty Limited	1	982215
Hunter Water	1	724270
Ashtonfields Pty Limited	1	1045720
Ashtonfields Pty Limited	2	1045720
Ashtonfields Pty Limited	1	1045722
Hunter Water		2487-3070
Ashtonfields Pty Limited	2	1045722
Ashtonfields Pty Limited	13	241097
Ashtonfields Pty Limited	10	755237
Ashtonfields Pty Limited	11	755237
Ashtonfields Pty Limited	18	755237
Ashtonfields Pty Limited	20	755237
Ashtonfields Pty Limited	19	755237
Ashtonfields Pty Limited	30	755260
Ashtonfields Pty Limited	29	755260
Ashtonfields Pty Limited	28	755260
Ashtonfields Pty Limited	27	755260
Ashtonfields Pty Limited	26	755260
Ashtonfields Pty Limited	PT34	755260
Ashtonfields Pty Limited	1	722210
Ashtonfields Pty Limited	PT48	755260
Ashtonfields Pty Limited	PT35	755260
Ashtonfields Pty Limited	PT36	755260
Ashtonfields Pty Limited	1	42349
Ashtonfields Pty Limited	1	69246
Ashtonfields Pty Limited	3	1045720
Ashtonfields Pty Limited	4	1045720
Ashtonfields Pty Limited	1	58967
Ashtonfields Pty Limited	1	136865
Hunter Water	1	617909
Ashtonfields Pty Limited	2	136865
Ashtonfields Pty Limited	PT31	755237
Four Mile	35	755237
Four Mile	36	755237
Ashtonfields Pty Limited	23	755237
Ashtonfields Pty Limited	29	755237
Ashtonfields Pty Limited	1	1045719
Ashtonfields Pty Limited	PT37	755237
Ashtonfields Pty Limited	PT38	755237
Ashtonfields Pty Limited	PT39	755237

Ashtonfields Pty Limited	25	755260
Ashtonfields Pty Limited	24	755260
Ashtonfields Pty Limited	23	755260
Ashtonfields Pty Limited	22	755260
Ashtonfields Pty Limited	12	241097
Ashtonfields Pty Limited	43	755260
Ashtonfields Pty Limited	44	755260
Ashtonfields Pty Limited	45	755260
Ashtonfields Pty Limited	46	755260
Ashtonfields Pty Limited	2	456999
Hunter Water pipeline	1	241097
Hunter Water pipeline	2	241097
Hunter Water pipeline	3	241097
Hunter Water pipeline	4	241097
Hunter Water pipeline	5	241097
Hunter Water pipeline	6	241097
Hunter Water pipeline	7	241097
Hunter Water pipeline	8	241097
Hunter Water pipeline	9	241097
Hunter Water pipeline	10	241097
Hunter Water pipeline	2	42349
Hunter Water pipeline	3	42349
Hunter Water pipeline	1	814843

3. OUT OF LEASE AREAS

Landowner	Lot	Deposited Plan
Donaldson Coal	PT92	755260
Big Ben Holdings	4	11988
Big Ben Holdings	849	852072
Cant Family Partnership	30	577638
Cant Family Partnership	101	616161
Four Mile	5	866929
Donaldson Coal	12	1007491
Ashtonfield Holdings	43	755237
Ashtonfield Holdings	44	755237
Ashtonfield Holdings	50	755237
Ashtonfield Holdings	51	755237
Big Ben Holdings	42	755237
Ashtonfield Holdings	45	755237
Ashtonfield Holdings	49	755237
Big Ben Holdings	41	755237
Hunter Water		2487-3070
Hunter Water pipeline	11	241097

APPENDIX 2
PROJECT LAYOUT

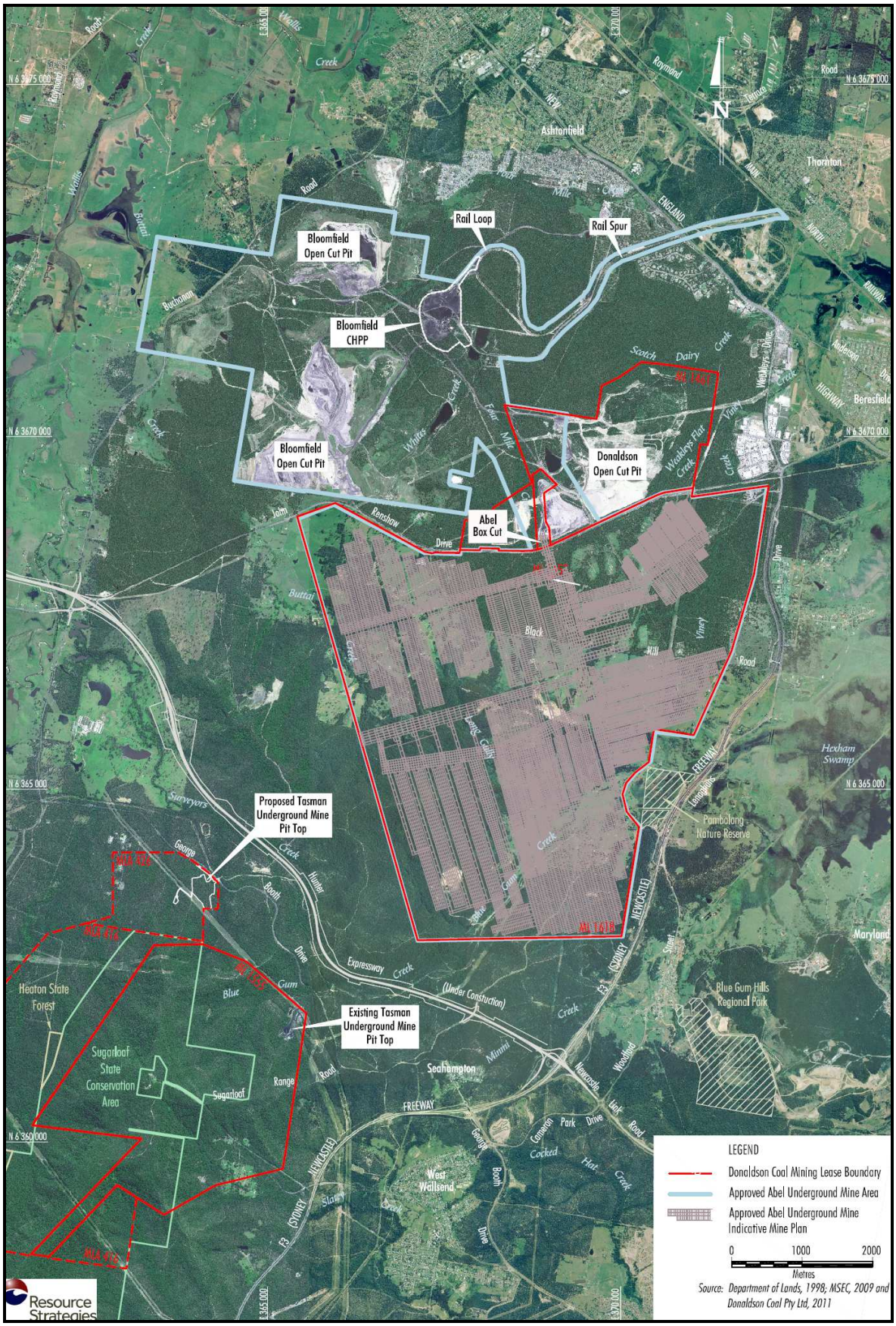

Figure 1: *Project area*

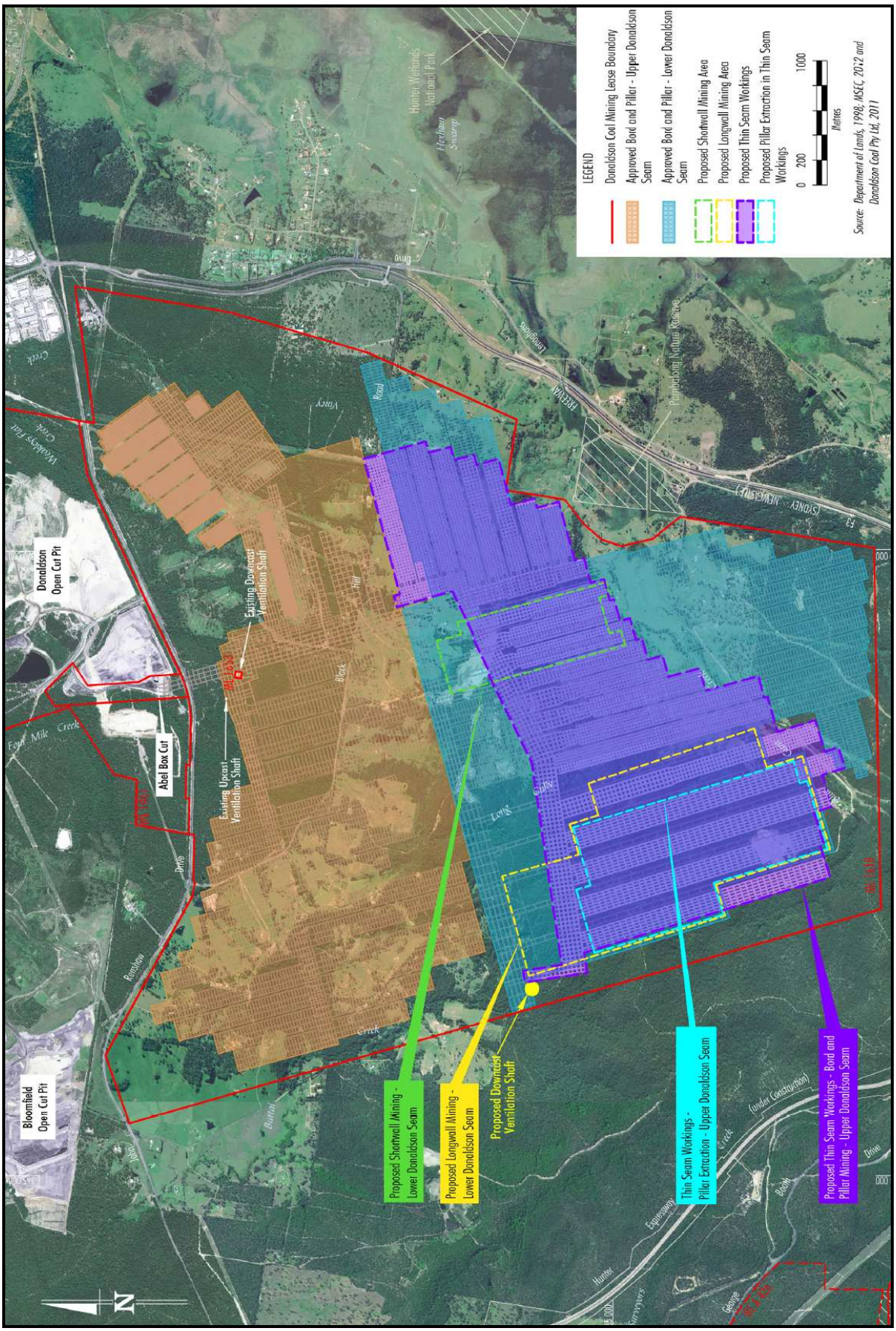

Figure 2: *Approved mine plan*

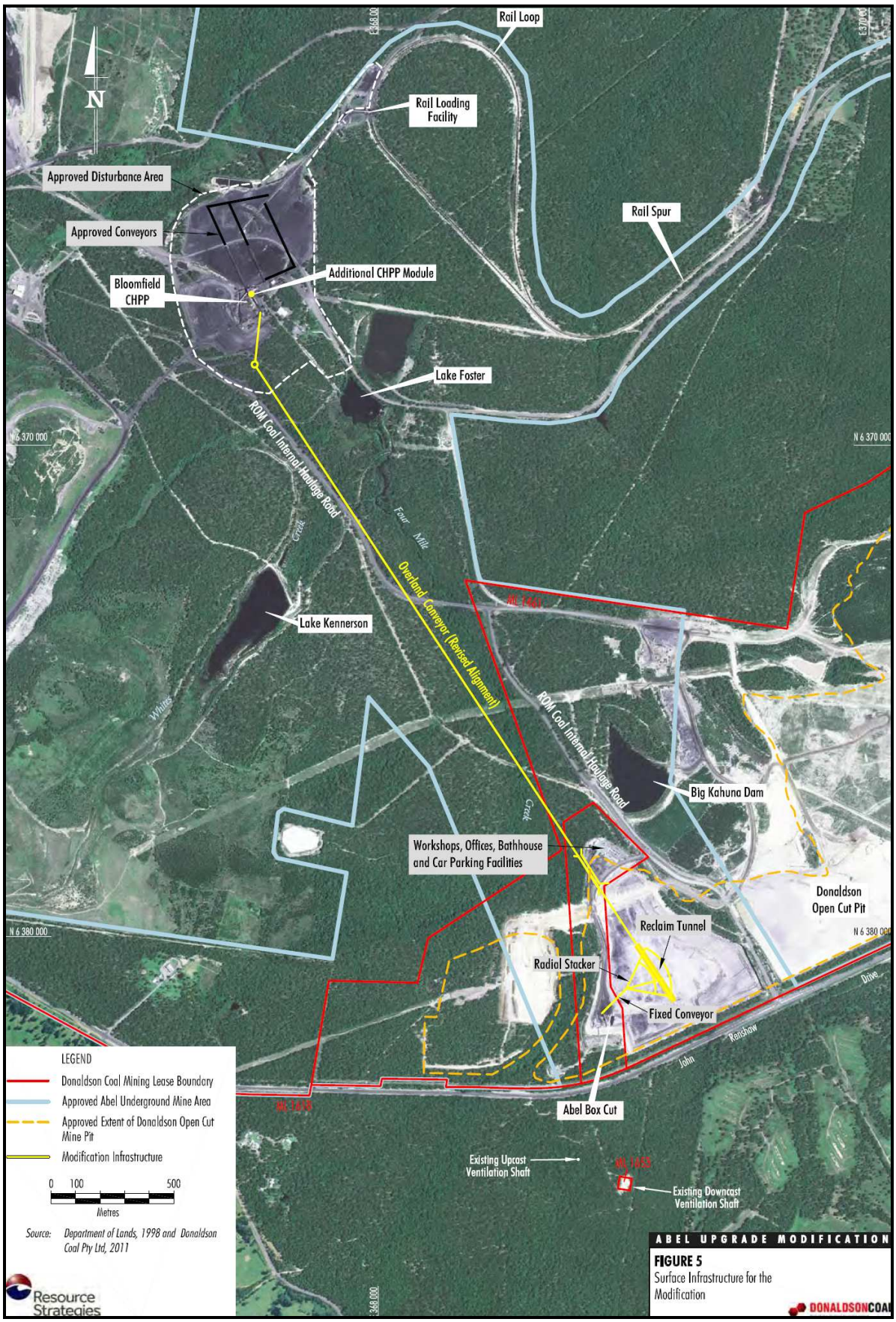

Figure 3: *Surface facilities*

APPENDIX 3
RECEIVERS AND MONITORING LOCATIONS

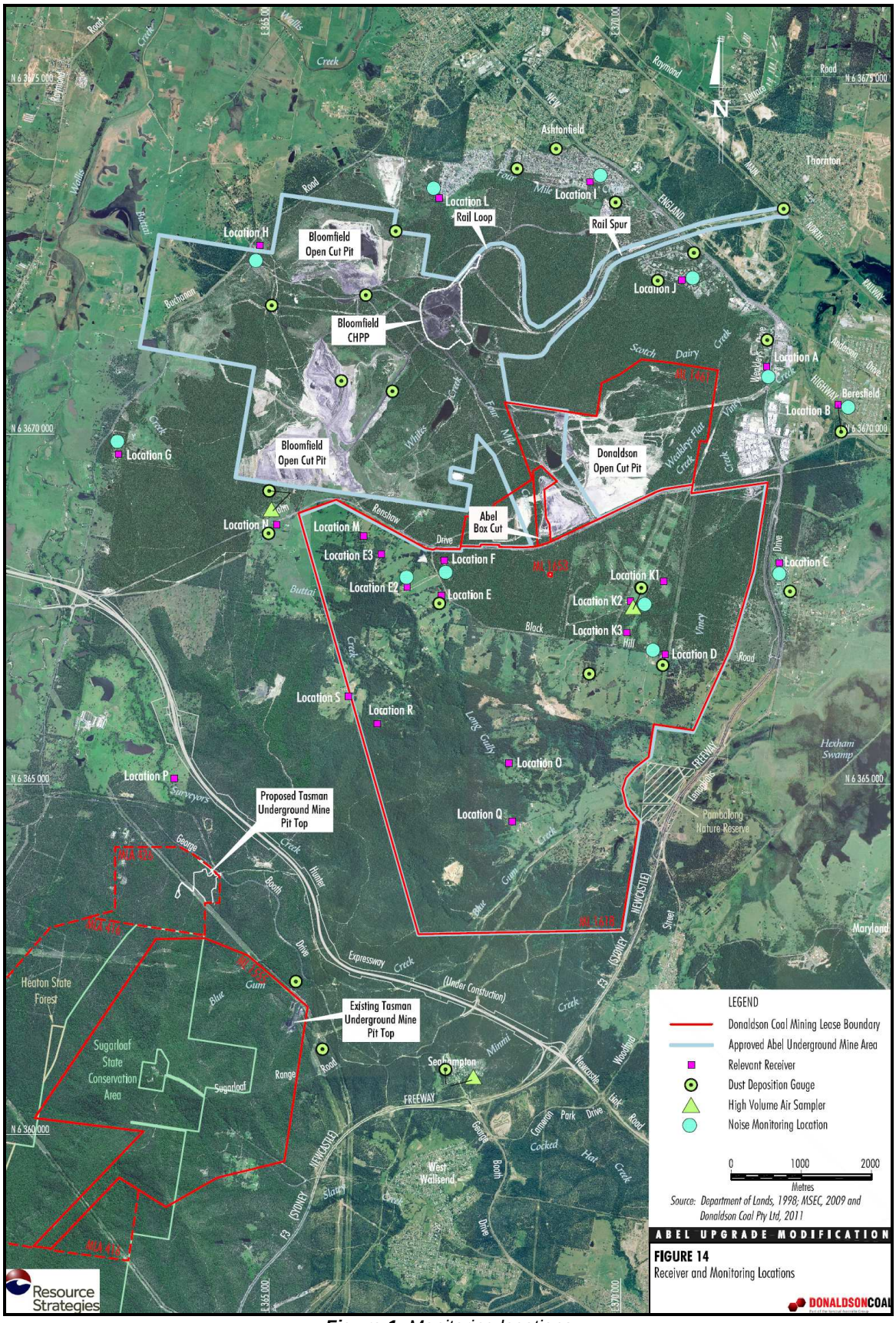

Figure 1: *Monitoring locations*

APPENDIX 4
NOISE COMPLIANCE ASSESSMENT

Applicable Meteorological Conditions

1. The noise criteria in Tables 4 and 7 are to apply under all meteorological conditions except the following:
   (a) during periods of rain or hail;
   (b) average wind speed at microphone height exceeds 5 m/s;
   (c) wind speeds greater than 3 m/s measured at 10 m above ground level; or
   (d) temperature inversion conditions greater than 3℃/100 m.

Determination of Meteorological Conditions

2. Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site.

Compliance Monitoring

3. Attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.

4. Unless otherwise agreed with the Director-General, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the *NSW Industrial Noise Policy* (as amended from time to time), in particular the requirements relating to:
   (a) monitoring locations for the collection of representative noise data;
   (b) meteorological conditions during which collection of noise data is not appropriate;
   (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and
   (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.

APPENDIX 5
STATEMENT OF COMMITMENTS

Donaldson Coal Pty Ltd ('**the Company**') will commit to the following controls for construction and operation of the Abel Underground Mine.

0. General	The Company shall carry out the development generally in accordance with the: (a) Abel Underground Mine Part 3A Environmental Assessment. (b) modification application 05_0136 – MOD 1 and the accompanying Environmental Assessment prepared by the Company and dated May 2010; (c) modification application 05_0136 – MOD 2 and the accompanying Environmental Assessment prepared by the Company and dated March 2011; (d) modification application 05_0136 – MOD 3 and the accompanying Environmental Assessment prepared by the Company and dated February 2013 and Response to Submissions dated July 2013. If there is any inconsistency between the conditions of this Statement of Commitments and a document listed above the conditions of this Statement of Commitments shall prevail to the extent of the inconsistency.
1. Production	1.1 No more than 6.1 million tonnes of ROM coal a year will be mined from the Abel Underground Mine. 1.2 No more than 8.5 million tonnes of ROM coal a year will be processed at the Bloomfield CHPP. 1.3 No more than 6.5 million tonnes per annum of product coal will be transported on the Bloomfield Rail Loop.
2. Hours of Operation	2.1 The Abel Underground Mine will operate 24 hours per day, seven days per week. 2.2 The Bloomfield CHPP will operate 24 hours per day, seven days per week. 2.3 The Bloomfield Rail Loop will operate 24 hours per day, seven days per week.
3. Noise	**3.1 Construction Activities** The following noise control measures will be implemented prior to commencement of construction of the Abel Underground Mine or the upgrade of the Bloomfield CHPP: (a) Maintain all machinery and equipment in working order; (b) No construction activities at the Abel pit top will take place on Sundays or Public Holidays; (c) Where possible locate noisy site equipment behind structures that act as barriers or at the greatest distance from noise sensitive areas; and (d) Orientate equipment so that noise emissions are directed away from noise sensitive areas. **3.2 Noise Control Measures** (a) The following noise control measures will be implemented prior to the mining of coal from the Abel Underground Mine: • Orientation of the ventilation fans away from residential receivers and angle the output parallel to the ground. • The sound power level of the front end loader to be used near the portal should not exceed 113 dBA and will be fitted with a noise sensitive reversing alarm. (b) The following noise control measures will be implemented prior to the Bloomfield CHPP receiving any ROM coal from the Abel Underground Mine: • Noise mitigation works including partial enclosure and noise screening of drives and conveyors of the Bloomfield CHPP to screen residences to the north of the site.

	3.3 Monitoring The Company will implement a Noise Monitoring Program for the Abel Underground Mine and the Bloomfield CHPP, to the satisfaction of the Director-General. The Noise Monitoring Program shall include a combination of real-time and supplementary attended monitoring measures, and a noise monitoring protocol for evaluating compliance with the noise environmental assessment. This plan will be integrated with the monitoring plans for the Tasman, Donaldson and Bloomfield Mines to provide a single integrated Noise Monitoring Program for all 4 mines. **3.4 Continuous Improvement** The Company shall: (a) report on these investigations and the implementation of any new noise mitigation measures on site in the AEMR, to the satisfaction of the Director-General. The operator of the Bloomfield CHPP shall: (b) investigate ways to reduce the noise generated by the Bloomfield CHPP, including maximum noise levels which may result in sleep disturbance; (c) implement all reasonable and feasible best practice noise mitigation measures on the site; and (d) report on these investigations and the implementation of any new noise mitigation measures on site in the AEMR, to the satisfaction of the Director-General.
4. Air Quality	**4.1 Construction** The following actions shall be adopted in relation to dust control on the site during construction of the proposed Abel Underground Mine and the modifications to the Bloomfield CHPP: • Minimise the area to be disturbed; • Progressively rehabilitate disturbed areas as soon as practicable; • Restrict vehicle movements to specified routes; • Provide speed limited signage around the mine site; • Dust suppression using water sprays; • Commence landscaping as soon as practicable; • Install dust gauges to monitor dust deposition levels at sensitive receptors. A minimum of 11 locations are proposed. **4.2 Air Quality Control Measures** (a) The following actions would be adopted in relation to dust control on the site during operation of the proposed Abel Underground Mine and the operation of the Bloomfield CHPP: • All mobile equipment will be maintained in good working order to limit exhaust fumes. • Regular watering of all roads. • Use water sprays periodically on open stockpile areas and regular visual inspection will be undertaken and water sprays activated as required. (b) Dust emissions generated by the Abel Underground Mine and the Bloomfield CHPP will not exceed any statutory limits. (c) Dust control on site is to be aimed at prevention of air pollution and prevention of the degradation of local amenity. (d) Dust controls on the site will comply with all relevant NSW EPA guidelines and any applicable Environment Protection Licence issued under the POEO Act 1997. (e) Regular inspections for excessive visible dust generation will be undertaken and appropriate controls will be implemented when such events occur. This will include ceasing operations during high wind conditions if necessary to ensure effective dust control.

	4.4 Monitoring (a) The Company will implement a Air Quality Monitoring Program for the Abel Underground Mine and the Bloomfield CHPP, to the satisfaction of the Director-General. The Air Quality Monitoring Program shall include a combination of real-time and supplementary attended monitoring measures (including real-time air quality monitoring for 24-hour average PM10 and the recording of required meteorological monitoring data) and an air quality monitoring protocol for evaluating compliance with the air quality environmental assessment. This plan will be integrated with the existing monitoring plans for the Tasman, Donaldson and Bloomfield Mines to provide a single integrated Air Monitoring Program for all 4 mines. (b) The Company shall ensure that there is a suitable meteorological station operating in the vicinity of the development in accordance with the requirements in Approved Methods for Sampling of Air Pollutants in New South Wales.
5. Surface Water Management – Abel Underground Mine	**5.1 Schedule 1 Streams** (a) Schedule 1 streams (as defined in the DIPNR 2005 guideline, "Management of stream/aquifer systems in coal mining developments") will be managed via the implementation of mitigation and remediation works where needed to ensure that: • stream stability is maintained where subsidence occurs; • stream fractures are minimised; • stream channels are maintained with minimal incision from bed grade change; and • stream bed grade change is minimised to provide stable stream length. (b) Where any stream stability controls are required they will be designed in accordance with the Rehabilitation Manual for Australian Streams (Land and Water Resources Research and Development Corporation, 2000) and will be provided primarily by vegetation. **5.2 Schedule 2 Streams** (a) Schedule 2 streams (as defined by DIPNR, 2005) will be managed so as to ensure that: • they maintain pre-mining course, and maintain bed channel gradients which do not initiate erosion; • they maintain pool riffle sequences where they pre-existed, or have pool riffle sequences installed where appropriate; • they maintain connectivity to underground workings, and flow loss to fracture zones in similar levels to pre-mining; • they maintain geomorphic integrity of the stream; • the ecosystem habitat values of the stream are protected; • no significant alteration of the water quality occurs in the stream. (b) The above commitments for Schedule 2 streams will be achieved by: • the provision of a minimum barrier of 40m between the 20 millimetre line of subsidence and the bank of any Schedule 2 streams; or • the carrying out of further detailed studies and the development of a Surface Water Management Plan for the Abel Underground Mine which clearly demonstrates that the above commitments can be met prior to any mining occurring which will impact on any Schedule 2 streams. **5.3 Pambalong Alluvium** For the lower reach of Blue Gum Creek (from the confluence of Long Gully and Blue Gum Creek downstream), a buffer will be provided which provides for no more than 20mm of subsidence at 40m from the edge of the alluvium will be adopted, and within the buffer zone no significant subsidence will occur.

5.4 Rainforest Communities

Subsidence in the rain forest protection zones identified on Figure 2.2 of the EA will be limited to 20mm of subsidence at the edge of the zone identified unless further studies can demonstrate that there will be no significant impact on the rainforest communities within the buffer zone with greater subsidence impacts.

5.5 Surface Water Management Plan

Prior to mining occurring that will impact on any Schedule 1 streams the Surface Water Management Plan for the Abel Underground Mine will be developed so as to address the following in relation to schedule 1 streams:

- detailed identification of risk factors on a case-by-case basis;
- setting up of permanent monitoring locations along watercourses as well as regular inspection regimes;
- continuation of baseline data collection on water flow conditions and health indicators (such as macro- invertebrates);
- establishment of trigger levels that will be used to assess whether any changes observed through monitoring warrant responsive action; and
- details of responsive and remedial action to be undertaken if required.
- require the identification of any existing degradation in the streams prior to mining to allow differentiation of that degradation induced by the mining.
- provide for a post-mining assessment of any streams within the area of mine subsidence within six (6) months of the initial subsidence.
- provide for a subsequent assessment within eighteen (18) months of the initial subsidence to confirm that post-mining degradation resulting from the mining is successfully remediated.
- require any remediation works to be implemented to a standard approved by NOW, where the assessment has indicated degradation of the streams in the area of mining induced subsidence, and thereafter on an annual basis until any mining induced stream instability is addressed to the standard approved.
- require a photographic record of stream stability for areas where either fracturing is detected (at maximum strain points), or at maximum tilts within the subsidence envelope.

Where it is proposed not to leave a barrier around a Schedule 2 stream a detailed assessment will be undertaken for the stream and provided to NOW addressing the proposed impacts on it. The detailed assessment will include as a minimum:

- assessment of the geomorphic and vegetation condition and aquatic habitat for the stream;
- selective measurements of channel boundary sediment size;
- predications of subsidence and cracks/fractures throughout the stream;
- a detailed photographic record of the existing stream condition;
- a map of the spatial distribution of alluvium and colluvial aprons throughout the stream;
- collection of background data for the main areas of alluvium for the shallow alluvial aquifer by the installation and regular monitoring of a network of piezometers and/or wells in the main areas of alluvium for the shallow alluvial aquifer;
- assessment of the location and activity of springs, pipes/tunnels and/or salt seepages/efflorescences;
- measurement of current bed slope and any pool-riffle sequences on each channel and periodic assessments of changes over time;
- an assessment of likely erosion points, fracturing or seepage zones from the mining area to the stream, along the stream channel occurring as a result of mining activities.

	• an assessment of any required remedial works on the affected stream, including: - options considered for the remediation program - anticipated lifetime of the remedial works - details of the engineering design or process for engineering - design of the remediation works - long term remediation requirements, including revegetation. • details of the proposed monitoring regime. It will provide for: - post-mining assessment, to a standard approved by NOW, within six (6) months of the initial subsidence. - provide for a subsequent assessment within eighteen (18) months of the initial subsidence to confirm that post-mining degradation resulting from the mining is successfully remediated. Following consultation with NOW on the above assessment for each schedule 2 stream the Surface Water Management Plan for the Abel Underground Mine will be developed to implement the findings of the above assessment.
6. Surface Water Management – Bloomfield CHPP and the Abel Underground Pit Top Facilities	6.1 Separate surface water management systems will be designed for the Bloomfield CHPP and the Abel Underground Pit Top Facilities which provide for: • Separation of clean and dirty water; • Management and control of stormwater flows; • Minimisation of sediment generation, soil erosion and transport off site; • Recycling of water where to minimise demand for potable water; and • Provision of water for fire fighting. • Maintain water supply for the coal handling and preparation plant and for dust suppression at all times; • Minimise discharge to the environment from Big Kahuna; • Minimise discharge from the Stockpile Dam; • Minimise discharge from Lake Foster and Lake Kennerson; and • Where controlled discharge is necessary, preference is given to Lake Kennerson. 6.2 The surface water management systems shall be based on the following principles: • Minimise demand for fresh water supply by recycling water collected on the site; • Store recycled water on site to reduce water consumption during operation of the proposed development; • Design drainage and sediment control for the operation in accordance with the Landcom (2004) guidelines; • Provide a water supply for fire fighting and provision for containment of firewater; • Use of a first flush system to ensure “dirty” water is captured in accordance with EPA guidelines. 6.3 The surface water management systems will include an Erosion and Sediment Control Plan (ESCP). The ESCP will outline the measures that will be implemented to ensure that no undue pollution of receiving waters occurs during any earthworks construction or during the operation of the facilities.

	6.4 The following erosion and sediment control works will be implemented as part of the project: • All works for the Abel box cut and subsequent construction of surface facilities will be undertaken within the boundaries of the existing Donaldson Mine lease area. These activities will be undertaken in accordance with the approved procedures for erosion protection and sediment control for the Donaldson Mine. • The majority of works in the vicinity of the stockpile area for the Bloomfield CHPP will be undertaken within an area that reports to the existing Stockpile Dam and Dam F. These facilities provide adequate erosion and sediment control for those areas. For minor bunding works to be undertaken on the southern boundary of the enlarged stockpile area, standard erosion control practices such as silt fences will be used. • For any earthworks associated with increasing the capacity of the bypass channel around Lake Foster, standard erosion control practices such as silt fences will be used. • If a conveyor is eventually constructed between the Abel box cut and the Bloomfield CHPP, a separate Erosion and Sediment Control Plan will be prepared that takes account of the details of the conveyor, particularly the crossing of Four Mile Creek.
7. Surface Water Monitoring Program	7.1 An integrated surface monitoring program will be undertaking for the Abel Mine, Donaldson Mine and the Bloomfield CHPP covering all potentially affected catchments including Four Mile Creek, Blue Gum Creek and other creeks on the land overlying the Abel underground lease area. 7.2 Monitoring of surface water in the creeks that overlie the Abel Underground Mine will commence just prior to mining and continue until one year after mining has passed the contributing catchment and will be undertaken at the following locations: • Four Mile Creek at John Renshaw Drive (same as existing Donaldson site); • Weakleys Flat Ck at John Renshaw Drive (same as existing Donaldson site); • Buttai Creek at Lings Road; • Blue Gum Creek at Stockrington Road; and • Long Gully (downstream). 7.3. The following monitoring regime is proposed: • Routine monthly baseline sampling; • Daily water samples collected from the discharge point on any occasion when there is controlled discharge from Lake Kennerson. Water samples will also be collected at the flow gauging station behind the Four Mile Workshops. These samples will be analysed for: total suspended solids, conductivity, pH and filterable Iron; • Daily water samples will be collected from any overflow from the Stockpile Dam. Water samples will also be collected at the flow gauging station behind the Four Mile Workshops. These samples will be analysed for: total suspended solids, conductivity, pH and filterable Iron. • Collection of extensive baseline data prior to mining, including the ability to collect at least 15 years of baseline data for Blue Gum Creek and Pambalong Nature Reserve; • Monthly monitoring during any substantial subsidence period for each monitoring site, and annual monitoring for all sites; • Water quality sampling from each of the sampling locations shown in Figure 8.2 in the EA with analytes measured including pH, Electrical Conductivity, Total Dissolved Solids, Total Suspended Solids, Chloride, Sulfates, Alkalinity (Bicarbonate), Alkalinity (Carbonate), Calcium,

	Magnesium, Sodium and Potassium; • Flow gauging stations established on Blue Gum Creek to monitor water flow and level; and • Macro-invertebrate monitoring within Blue Gum Creek and Pambalong Nature Reserve, including the use of AUSRIVAS (Australian River Assessment System) to assess biological health.
8. Groundwater Monitoring Program	8.1 The Company will implement a Groundwater Monitoring Program. The Program will comply with all relevant guidelines and will address: • Groundwater management within the Abel Underground Mine area, including protection, management, mitigation and remediation of groundwaters as required; • Groundwater management within the area of proposed tailings disposal within Bloomfield Colliery; • Proposed groundwater monitoring program; • Proposed groundwater reporting schedule; and • Feedback mechanisms to alter mining methods if documented groundwater monitoring values are triggered. 8.2 The following response plan will be implemented in the event of significant unforeseen variances from the predicted inflow rates and/or groundwater level impacts: • Additional sampling and/or water level measurements to confirm the variance from expected behaviour. • Immediate referral to a competent hydrogeologist for assessment of the significance of the variance from expected behaviour. The review hydrogeologist would be requested to recommend an appropriate remedial action plan or amendment to the mining or water management approach. If appropriate, this recommended action plan would be discussed with NOW and other agencies for endorsement. 8.3 The groundwater monitoring program will be an integrated monitoring program for the Abel Mine, Tasman Mine, Donaldson Mine and the Bloomfield CHPP (including the tailings disposal area) and will include: • Monthly measurement of water levels in a representative network of piezometers. Initially, all piezometers currently available would be monitored, however it is recommended that the representativeness of the piezometers be reviewed after the first two years of the project, and an appropriate suite of piezometers be selected on the basis of this review for ongoing monitoring. All piezometers located around Pambalong Nature Reserve would continue to be monitored through the life of the project. • Quarterly sampling of all standpipe piezometers, for laboratory analysis of electrical conductivity (EC), total dissolved solids (TDS) and pH. • Annual collection of water samples from all standpipe piezometers for laboratory analysis of a broader suite of parameters - Physical properties (EC, TDS and pH) - Major cations and anions - Nutrients - Dissolved metals • Additional sampling and/or water level measurements to confirm any variance from expected behaviour. • Additional regional monitoring piezometers will be installed in the following areas: - Multi-level piezometers to the north and west of Pambalong Nature Reserve, to provide additional data on groundwater pressures in the intervening strata between the Donaldson seams and the alluvium (supplementing the existing data from piezometers C081A and B and

	C082). - Multi-level piezometers along the eastern side of the Abel Underground Mine area, located at nominally 3 sites between the F3 Freeway and the lease boundary, to resolve the apparent anomalous water levels below sea level at C063A and B, and to provide additional data on groundwater pressures in the intervening strata between the Donaldson seams and the Hexham Swamp alluvium. - Multi-level piezometers near the western and southern boundaries of the Abel project area to provide information on groundwater pressures at various depths, as this area currently lacks monitoring points. These piezometers would also aim to provide information on the current status of groundwater in the West Borehole seam near the former workings, prior to mining of the Donaldson seams approaching that area. • The additional Pambalong and Hexham Swamp monitoring bores will be installed prior to commencement of coal extraction. The western piezometers will be installed at least five years prior to mining reaching that part of the lease. • The subsidence/fracturing monitoring piezometer network should comprise the following: − Multi-level piezometers situated centrally within the extraction panels (at least 2 locations per panel) with vibrating wire piezometers set at nominally 30m intervals from the surface down to 30m above the Upper Donaldson roof level. − Shallow standpipe piezometers adjacent to each of the above multi-level piezometers, set to the base of the colluvium/weathered bedrock zone, to monitor any impact on the surficial unconfined aquifer. Standpipe piezometers will allow repeat hydraulic testing and water quality sampling, as well as water level monitoring. • The above monitoring network will be implemented prior to commencement of each extraction panel, and would be monitored closely before, during and after extraction. Based on the monitoring results during extraction of the first 4 or 5 panels, an appropriate ongoing monitoring program would be developed for the subsequent deeper panels as the mining progresses downdip. 8.4 At the end of the second year of underground mining, a comprehensive review will be undertaken of the performance of the groundwater system. This would include re-running the groundwater model in transient calibration mode, to verify that the actual inflow rates and groundwater level impacts are in accordance with the model predictions described in this report. If necessary, further adjustment would be made to the model at that time, and new forward predictions of mine inflows and water level impacts be undertaken. 8.5 The current groundwater model will be expanded to include deeper layers and a larger area that will incorporate the Bloomfield operations and areas of possible groundwater impact around Bloomfield. It is proposed to calibrate this expanded model with ongoing monitoring data from Bloomfield, and more detailed simulation of the Donaldson mining and backfilling. Details of this model and scheduling for completion will be included in the Groundwater Monitoring Program.
9. Visual Amenity	Visual impacts of the Abel Underground Mine portal and the Bloomfield CHPP will be ameliorated by the following strategies: (a) The access portals for the Abel underground Mine will be located in the high wall of the existing Donaldson Open Cut Pit. (b) If the overland conveyor to the Bloomfield CHPP to the Abel Underground Mine portal is constructed its maximum height will not exceed 15 metres so to ensure that it is concealed from view by the surrounding tree cover. Where possible the route will follow the existing haul roads and tree clearing will be minimised where possible to reduce the visual impact of the conveyor. (c) New buildings and structures, as well as existing buildings and structures at the Bloomfield CHPP, visible from the surrounding areas will be painted a dark charcoal colour.

	(d) All reasonable measures will be taken to design the stockpiles at the Bloomfield CHPP so as to minimise their visual impact on the surrounding East Maitland and Ashtonfield Areas. (e) Existing lighting will be redesigned and new lighting be designed, so as to minimise, via the use of directional lighting, light spill affecting residents in the East Mainland, Ashtonfield Areas and Black Hill areas.
10. Flora and Fauna	A Flora and Fauna Management Plan for the proposed conveyor corridor and stockpile expansion areas will be developed and implemented prior to any clearing occurring for the conveyor corridor and stockpile expansion: This plan will include: • a vegetation clearance protocol that describes the measures to be taken in order to minimise and ameliorate any impact on flora and fauna in general, and threatened species in particular, during the clearing process. • a commitment to conduct pre-clearance surveys of areas to be cleared of vegetation by a suitably qualified biologist. Searches will be conducted for threatened species of flora or fauna, trees having potential habitat hollows and any habitat assets such as large hollow logs or rocks which could be used in later rehabilitation. If any threatened species of flora are found in the planned clearing areas the Flora and Fauna Management will provide for the consideration of the following options to minimise any impact to the threatened species of flora: - modification of the area to be cleared in order to leave the flora in place. - translocation of the flora to an area of similar habitat within the Donaldson or Bloomfield properties, applying the best available knowledge about the ecology and translocation of the species. • the pre-clearing survey will be conducted about 7 days prior to commencement and involve the following: - Trees having potential habitat hollows should be clearly marked with a band of survey paint around the stem; - Habitat trees watched at dusk to determine what if any fauna are using the hollows; - At a minimum all marked trees will be left standing for at least 2 nights following the clearing to allow any mammals to vacate the trees. However as most of the areas to be cleared are narrow or in close proximity to standing forest, it cannot be guaranteed that the mammals will leave and a person experienced in capturing and handling native fauna should be in attendance when these trees are pushed over; - Any trees found to contain bats should be left standing and soft-felled at dusk after the bats have left the hollows. This should be conducted under the supervision of a suitably experienced fauna ecologist. An Ecological Monitoring Plan will be drafted and implemented prior to any mining which will impact on the areas of sub-tropical rainforest above Abel Underground Mine, and for Pambalong Nature Reserve, outside of the mining area to the south-east. These two areas will be monitored as follows: **Sub-tropical Rainforest Monitoring plan** The collection of the following data: • At suitable locations, record the outer boundary between the rainforest and the surrounding dry forest in order to monitor the stability of the community; • Establish groundwater piezometers at suitable locations and record water depth; • Establish permanent transects along which floristic content is recorded; and • Monitor the stability of selected major rock formations that occur in or near the rainforest.

	Pambalong Nature Reserve Monitoring The data to be collected would be as follows: • Rainfall in the catchments supplying water to Pambalong Nature Reserve (PNR); • Water levels in PNR; • Annual fauna monitoring with emphasis on birds and amphibians; and • Broad vegetation communities and their boundaries
11. Aboriginal Heritage	11.1 During any construction phase if any Aboriginal sites or relics are uncovered the NSW OEH will be informed. In the event that a site or relic is found then work in the area of the find will cease until it is assessed for significance and an appropriate management strategy is devised if necessary, in accordance with the Aboriginal Heritage Management Plan. 11.2 An Aboriginal Heritage Management Plan will be implemented in consultation with the relevant Aboriginal stakeholders to specify the policies and actions required to mitigate and manage the potential impacts of the proposal on Aboriginal heritage. 11.3 The plan will provide procedures for: (a) ongoing Aboriginal consultation and involvement, (b) maintenance of an Aboriginal site database, (c) management of recorded sites within the investigation area, (d) further archaeological investigation prior to undermining, The plan will be regularly verified to establish that it is functioning as designed (ie. policies adhered to and actions implemented) to the standard required. 11.4 Continued use of surface infrastructure and construction of new surface infrastructure will be assessed against the location of identified Aboriginal heritage evidence and where impacts may occur, mitigation measures will be implemented as specified in the Aboriginal Heritage Management Plan. 11.5 The Company will seek to minimise impacts to identified and potential Aboriginal heritage evidence within the northern investigation area and to conserve identified evidence where impacts are not required to occur for operational reasons. 11.6 The Company will seek to mitigate impacts to identified and potential Aboriginal heritage evidence within the northern investigation area where impacts must occur for operational reasons. 11.7 Staged systematic archaeological survey of each section proposed to be undermined in the southern investigation area will occur with the participation of an appropriately qualified archaeologist and the Aboriginal stakeholders prior to any underground mining in that section. The survey will sample the geographic extent of each section. The nature, level of integrity, potential impacts and scientific and cultural significance of any evidence identified will be assessed in consultation with the Aboriginal stakeholders and mitigation measures implemented as per the Aboriginal Heritage Management Plan. 11.8 Where site types susceptible to subsidence impacts (grinding grooves and rock shelters) are identified within the southern investigation area, an assessment of the potential impacts of subsidence will be undertaken by an appropriately qualified expert. Where it is determined that subsidence may impact a grinding groove or rock shelter site (including shelters with 'Potential Archaeological Deposits'), mitigation measures will be implemented in accordance with the Aboriginal Heritage Management Plan.

	11.9 A regional monitoring network for Aboriginal heritage across the Abel, Tasman, Donaldson and Bloomfield sites will be established, including continuation of the existing programme of monitoring in the Donaldson Bushland Conservation Areas, monitoring before and after undermining for a sample of Aboriginal sites within the southern investigation area for which it is not anticipated that subsidence related impacts will occur, monitoring before and after undermining for all Aboriginal sites for which it is inferred that undermining may result in impacts in order to ensure the adequacy of conservation measures around those sites, and documentation of the results of all monitoring in an annual report. 11.10 The Company will continue to consult with and involve the registered Aboriginal stakeholders, particularly the Local Aboriginal Land Councils, in the ongoing management of the heritage resources within the investigation area as per the Aboriginal Heritage Management Plan. 11.11 Should any previously unrecorded Aboriginal heritage evidence be identified within the lease area during the course of operations, the Company will ensure that this evidence is subject to temporary conservation and is recorded and appropriate management strategies are implemented in consultation with the Aboriginal community as per the Aboriginal Heritage Management Plan. The Company will maintain a current database providing details of all identified Aboriginal heritage evidence within the lease area so that the Aboriginal Heritage Management Plan can be effectively implemented and records for any Aboriginal sites identified and copies of all reports prepared in relation to ongoing monitoring and archaeological studies associated with the project will be lodged in a timely manner with OEH. 11.12 In order to form an integrated monitoring network for Aboriginal heritage across the Abel, Tasman, Donaldson and Bloomfield sites, it is proposed for the duration of the mining leases to: (a) Continue the existing programme of monitoring in the Donaldson Bushland Conservation Areas to ensure that the condition of a sample of Aboriginal heritage sites that occur within the northern investigation area is regularly assessed. This will involve monitoring on an annual basis the seven existing datum points within the Conservation Area by a qualified archaeologist and representatives of the Mindaribba LALC; (b) A sample of Aboriginal heritage sites within the southern investigation area, comprising site types for which it is not anticipated that subsidence related impacts will occur, will be monitored before and after undermining in their vicinity to confirm the accuracy of these predictions. This will involve inspections prior to undermining then at set periods after undermining by a qualified archaeologist and representatives of the relevant LALC; (c) All Aboriginal heritage sites for which it is inferred that undermining may result in impacts (ie. rock shelter and grinding groove sites) will be monitored before and after undermining in their vicinity to ensure the adequacy of conservation measures around those sites. This will involve inspections prior to undermining then at set periods after undermining by a qualified archaeologist and representatives of the relevant LALC; (d) An annual report documenting the results of monitoring will be prepared and provided to the relevant LALC and OEH detailing the methodology of the inspections, conditions of the environment and Aboriginal heritage evidence at the relevant sites, comparisons with previously reported descriptions of each site, identification of any natural and/or human impacts during the intervening period, and identification of any implications for ongoing management and protection of the Aboriginal heritage evidence throughout the lease areas.

12. Environmental Management System	The EMS will address, separately for the Abel Underground Mine and the Bloomfield CHPP (unless otherwise specified), the following specific issues for both construction and operation of the proposed mine: • Construction Management Plan; • Community Involvement Plan; • Noise Monitoring Program; • Water Management Plan; • Waste Management Plan; • Air Quality Monitoring Program; • Erosion and Sediment Control Plan; • Flora and Fauna Management Plan; • Aboriginal Heritage Management Plan; • Landscape Management Plan; • Rehabilitation Management Plan; • *Tetratheca juncea* Management Plan; • Groundwater Monitoring Program; • Subsidence Management Plan; • Surface Water Management Plan; • Dam Monitoring and Management Strategy; • Gas Management Plan; and • Bloomfield CHPP and RLF Environmental Management Plan Where appropriate the above plans will be integrated plans which will apply across the following mining operation areas: • Abel Underground Mine; • Tasman Underground Mine; • Donaldson Open Cut Mine; and • Bloomfield Coal Handling and Preparation Plant (CHPP) and Rail Loading Facility (RLF). The Environmental Management System will include: • The Company Environmental Policy that guides the direction of environmental management and provides Company commitment to environmental protection, mitigation and management. • Objectives, including legislative requirements to be met and relevant guidelines and Standards; • Work procedures, which detail in practical terms what will be undertaken, when and by whom; • Monitoring, including what will be monitored, when and where this will occur, and reporting of results; • Review procedures, being when the management plan and contents will be reviewed; • Feedback mechanisms, to ensure that any required changes to the Plan, due to a review or other mechanism such as other risk assessment, are made and the plan updated; • Training, describing how employees and contractors are trained in the documented procedures and updated on an ongoing basis when changes are made; and • Emergency response procedures.

	The Company will prepare and implement an Environmental Due Diligence Training Program which will focus on the following matters: • The EMS; • Environment Protection legislation; • Understanding Due Diligence; • Specific Environmental Impacts of construction and operation of the mine; • The Company Safety Health Environmental Policy; • Reporting and recording environmental incidents; • Site environmental management. The mine Site Manager or his/her nominee shall be responsible for implementing the EMS.
12. Rehabilitation	The Company commits to rehabilitating the Abel Underground Mine area and Abel pit top in accordance with DP&I and DRE guidelines. This includes ongoing rehabilitation in response to mine subsidence as well as rehabilitation of pit top areas after completion of mining. The Company will provide a Mine Closure Plan as part of the MOP required under the relevant condition of the mining lease for the Abel Underground Mine. This Mine Closure Plan will be produced in consultation with DP&I, DRE and other stakeholders as required.
13. Site Security	Unauthorised entry of people into the Abel Underground Mine Portal Surface works and the Bloomfield CHPP is to be prevented to ensure site security and to prevent damage to components of the mine particularly damage which may result in harm to the environment.
14. Community Consultation	A Community Consultative Committee will be created which will meet on a regular basis to review environmental performance of the Abel Underground Mine and the Bloomfield CHPP. Membership of the Committee is to be determined by the Company and the Committee is o be chaired by an Independent Facilitator and will include representatives of the local community and adjoining property holders, DP&I and local councils. The Environment Protection Licence for the mine will require the Company to keep a record of all complaints made in relation to pollution arising from any activity to which this Licence applies and will also specify the details to be provided in the record and a complaints handling procedure. The Environment Protection Licence for the mine will require that a telephone complaints line operates during the operating hours of the premises for the purpose of receiving any complaints from members of the public and that the telephone number of this line be notified to the community. A 24 hour telephone complaints line will be maintained and the local community will be notified of the phone number. Complaints received would be recorded. All information from the complainant, including the nature of the complaint would also be recorded. The appropriate site manager or his/her nominee will undertake an immediate investigation into the cause of any complaint relating to operations of the site and in particular environmental issues and will ensure that corrective action is taken as required. The appropriate site manager or his/her nominee will provide the complainant with an explanation of the cause of any environmental incident and details of any actions taken to mitigate its effect. If necessary, the appropriate site manager would initiate further corrective action, such as introducing changes in operational procedures, work instructions or modifications to equipment etc as may be required to reduce the possibility of further environmental incidents. A record of all complaints received will be kept on site for 4 years.

15. Environmental Incidents	15.1 A Pollution Incident Response Management Plan (PIRMP) would be implemented for the site which will describe the general policy and approach to be adopted by the Company when managing and responding to an emergency or incident at the site. The PIRMP will contain a specific definition of 'incident' and 'environmental incident' which is to be consistent with the definition of 'incident' in the POEO Act. 15.2 In accordance with Part 5.7 of the POEO Act , the appropriate site manager must notify the NSW EPA of 'incidents' which occur in the course of operations of the Abel Underground Mine where material harm to the environment is caused or threatened, as soon as practicable after they become aware of the incident or threatened material harm. 15.3 Initial notification of an 'incident' (as defined) is to be made by telephoning the NSW EPA's Pollution Line. 15.4 The following information will be required by the Company: • The time, date, nature, duration and location of the incident; • The location of the place where pollution is occurring or is likely to occur; • The nature, the estimated quantity or volume and the concentration of any pollutants involved; • The circumstances in which the incident occurred (including the cause of the incident, if known); • The action taken or proposed to be taken to deal with the incident and any resulting pollution or threatened pollution; and • Other relevant information. 15.5 The appropriate site manager will assess specific incidents taking into consideration the impact(s) on the environment, to determine whether what resources are required to determine what response is required, or to assist in responding to the impacts. The appropriate site manager would contact an outside agency if required. 15.6 All employees working on the site will be responsible for ensuring that the appropriate site manager is informed of any environmental incidents. All environmental incidents would be recorded on an Environmental Incident Report form. As required by Part 5.7 of the POEO Act and the EPL, the Site Manager must notify the NSW EPA of incidents, or the threat of material harm to the environment, as soon as practicable after they become aware of the incident or threat of material harm. 15.7 The management strategies for responding to and controlling incidents/emergencies will include the following: General Procedures • Provide adequate resources including staffing and fire fighting equipment; • Training of staff so that a high level of preparedness is maintained by all people who could be involved in an emergency; • Provide a first aid station which would be fully equipped and maintained at the site; and • Periodic review and update of emergency procedures for the site. Fire • Consultation has been initiated with the NSW Rural Fire Service and this would be ongoing; • Consult with adjoining landholders; • Undertake hazard reduction as required; • Provide fire fighting equipment at site buildings; • Provide clear signposting and access for all fire fighting equipment; • Make available water for fire fighting from water holding tanks or mains; and

	• Regularly inspect and maintain fire fighting equipment.
	Chemicals • Store all chemicals in appropriately bunded areas in accordance with their Material Safety Data Sheets (MSDS) and the relevant Australian Standards; and • Store all fuels or flammable solvents in adequately ventilated areas 15.8 All environmental incidents are to be recorded on an Pollution Incident Notification form. 15.9 An Environmental Incident Folder is to be maintained and shall contain the following: • Copies of work instructions on how to deal with particular situations; • Incident contact names/numbers; and • Pollution Incident Notification form containing all the details required in the PIRMP procedure.

Company Contribution Initiatives

Donaldson Coal Pty Ltd committed in 2007 to providing the following monetary contributions towards environmental and community enhancements:

No.	Proposed Activities	Monetary Value
1.	**Conservation** The company will contribute $1,000,000 to be distributed over ten years from the commencement of the Abel Underground Mine by a community trust to be established for the purpose. These monies will be able to be expended by the trust on environmental education or research or environmental management works or activities in State Conservation Area lands or other environmentally valuable lands that lie within or above Donaldson's mining leases and exploration licences or other land owned by the company.	$1,000,000
2.	**Community Welfare** The company will contribute $250,000 over 5 years from the commencement of the Abel Underground Mine to be spent as decided by a community trust on educational needs, community works or other works or activities of benefit to the community within the Abel underground mine area.	$250,000
3.	**Road Safety** The company will contribute $250,000 towards the cost of upgrading the intersection of Black Hill Rd and John Renshaw Drive, provided that construction of the upgrade is initiated by June 2009.	$250,000
4.	**Employment Generation** The Company also operates the **Donaldson Job Creation Trust,** a charitable trust already in operation set up to distribute $1,000,000 over ten years. Monies are expended on job training, job creation and Youth at Risk programs in the Lower Hunter. $500,000 of these monies remained to be spent at the time of project approval.	$500,000
Total		**$2,000,000**

Subsidence Specific Commitments by the Company

A. Principal Residences	The Company commits to producing and implementing a plan of management for each Principal Residence existing at the date of approval of this project. A Principal Residence is defined as an existing building capable of being occupied as a separate domicile and used for such purpose. The plan of management will be produced and implemented as follows: A1. Each Principal Residence will be individually assessed by the Mine Subsidence Board (MSB) /structural engineer who will determine tolerable levels for individual subsidence parameters. Tolerable limits are those limits which will result in no mitigation works being required to the Principal Residence due to subsidence impacts from the Abel Underground Mine. A2. Each Principal Residence will have a pre-mining survey to identify and record pre-existing imperfections that will not be covered by the MSB. A3. Such assessments will be done as and when the progression of the mining process dictates – i.e. mining may have commenced in other areas prior to the individual Principal Residence assessment being undertaken. A4. Tolerable levels will be set according to such factors as dwelling construction (e.g. brick veneer, clad), type (single, double storey), size (length and width), footings (slab, strip footings, piers), surface conditions (sand, rock, clay, steep slope) etc, with reference to the MSB Graduated Guidelines (compatible with AS 2870 and the Building Code of Australia). A5. The mine plan in proximity to each Principal Residence will be modified by the Company to maintain subsidence parameters within the tolerable levels determined above for each Principal Residence. A6. The mine plan will be reviewed by the MSB and the DRE prior to any Subsidence Management Plan being approved under the relevant lease. A7. Each Principal Residence will have a specific subsidence monitoring plan to monitor subsidence impacts before and after mining at the Principal Residence and to ensure that tolerable limits are achieved in practice. A8. The MSB has the responsibility to rectify any impacts to structures that may occur as a result of mining. In cases where the owner of the Principal Residence and the Company can agree to terms which permit second workings under the Principal Residence greater than those permitted above, the Company agrees to negotiate a plan of management similar to that proposed in the section of this Statement of Commitments titled "All Other Surface Structures".
B. Future Principal Residence	If there is no existing residence on a landholding and a residence is planned to be built, the site for this Future Principal Residence will be protected in the same way as that proposed above for Principal Residences. This commitment applies to a maximum of one Future Principal Residence per landholding. NOTE: Once the Mine Subsidence District is declared for the area all Future Principal Residences will require approval from the Mine Subsidence Board and must comply with the Mine Subsidence Compensation Act 1961.
C. Black Hill School	All buildings and structures located at Black Hill School will be managed as if they were a Principal Residence.
D. Black Hill Church and Cemetery	The Black Hill Church and cemetery will be managed as if they were a Principal Residence.
E. All Other Surface Structures	“All Other Surface Structures” is defined as any building or structure impacted by mining-induced subsidence from the Abel Underground Mine Project which is not categorised as a Principal Residence, Future Principal Residence, Black Hill Church and Cemetery or Black Hill School. The Company shall prepare and implement plans of management for the mitigation and remediation of any damage to All Other Surface Structures prior to any mining occurring that would impact on them. The plan of management will include: (a) pre-mining audit of the structure;

	(b) the provision of a plan of management as part of the SMP approval process which requires the Company to mitigate/remediate any damage to improvements associated with the structure in conjunction with the Mines Subsidence Board; (c) post-mining monitoring of the improvements associated with the Structure. The mitigation/remediation measures to be undertaken will be related to the extent of damage experienced – see Schedule 1 for details.
F. Dams	A Dam Monitoring and Management Strategy (DMMS) will be formulated for all dams prior to any mining occurring which will impact on the dams. The DMMS will provide for: F1. The individual inspection of each dam by a qualified engineer for: • current water storage level; • current water quality (EC and pH); • wall orientation relative to the potential cracking; • wall size (length, width and thickness); • construction method and soil/fill materials; • wall status (presence of rilling/piping/erosion/vegetation cover); • potential for safety risk to people or animals; • downstream receptors, such as minor or major streams, roads, tracks or other farm infrastructure; and • potential outwash effects. F2. Photographs of each dam will be taken prior to and after undermining, when the majority of predicted subsidence has occurred. F3. Dam water levels, pH and EC will be monitored prior to and after undermining to assess the baseline and post mining dam water level and water quality in order to determine whether rehabilitation is required. F4. In the event that subsidence/crack development monitoring indicates a significant potential for dam wall failure, dam water will be managed in one of the following manners: • pumped to an adjacent dam to lower the water level to a manageable height that reduces the risk of dam wall failure, • discharged to a lower dam via existing channels if the water cannot be transferred, or • not transferred if the dam water level is sufficiently low to pose a minor risk. An alternate water supply will be provided to the dam owner until the dam can be reinstated. F5. In the event of subsidence damage to any dams the Company shall remediate the damage and reinstate the dam in conjunction with the Mine Subsidence Board.
G. Public Roads	The Company shall prepare and implement a plan of management as part of the SMP process implemented under the mining lease for the Abel Underground Mine. This plan of management will ensure the safety and serviceability of public roads and 4WD tracks and existing fire fighting access tracks.
H. Powerlines	The Company shall prepare and implement a plan of management as part of the SMP process which will ensure the safety and serviceability of powerlines.
I. Gas Pipeline	The Company shall prepare and implement a plan of management as part of the SMP process which will ensure the safety and serviceability of the gas pipeline.
J. Survey Marks	At the completion of subsidence or otherwise as required by Government Authorities, the functionalities of any survey marks affected by subsidence will be fully restored to the satisfaction of the Government Authorities.
K. Cliffs	Trigger-action response plans (TARPs) will be developed by the Company based on consultation with DRE and Local Councils to ensure the general public and employees

	working in the vicinity of the cliffs are not exposed to rock falls caused by mine subsidence damage. Appropriate rock fall hazard controls may include such items as rock fall catch ditches, barrier fencing, earth mounds and warning signs installed at appropriate locations to promote awareness that a rock fall hazard could exist along the top and bottom of cliff lines that will be undermined.
L. Water Supply	In the event of interruptions to water supplies due to subsidence impacts on farm dams, water tank pipelines, water mains and irrigation systems within the application area, the Company commits to providing water supplies of equivalent quality and quantity to locations convenient to those affected until such time that the affected farm dams, water tanks, pipelines, water mains and irrigation systems are restored.
M. General Surface Water Flow	The Company shall prepare and implement a plan of management to maintain the surface drainage of areas surrounding any dwellings and other structures or infrastructure, where required. This plan shall include but not be limited to monitoring, mitigation or remediation of mining-induced ponding, drainage pattern changes and any resulting serviceability difficulties and/or hazards to the public. NOTE: Also see Water Supply.
N. Public Safety	The Company shall prepare and implement a surface safety management program to ensure public safety in any surface areas that may be affected by subsidence arising from the proposed underground mining. This program shall include, but not be limited to, regular monitoring of areas posing safety risks, erection of warning signs, entry restrictions, backfilling of dangerous surface cracks and securing of unstable man-made structures or rockmass, where required and appropriate, and the provision of timely notification of mining progress to the community and any other relevant Stakeholders where management of public safety is required.
O. Landowner Agreements	The Company will enter into separate arrangements with Coal and Allied for its Black Hill land and with the Catholic Diocese of Maitland and Newcastle with regard to an agreed mining schedule underneath these respective lands. These arrangements will set timeframes for the completion of mining beneath these areas.

Schedule 1 - Subsidence Effects on All Other Surface Structures

This Schedule only applies to All Other Surface Structures and does not apply to Principal Residences as they are protected in accordance with the above commitments which relate only to them.

The main features that determine impact on buildings/structures are tilt and strain. Subsidence effects on buildings/structures are categorised according to the degree of structural damage that is likely to result from underground mining (Tables 1 and 2). These tables have been developed to assist the categorising of the subsidence impacts of this project. Accordingly, to determine the appropriate Preventative Mitigation Measures the following must occur in relation to the relevant surface structure:

1. Look at Table 1 and determine the appropriate Strain Damage Category
2. Look at Table 2 and determine the appropriate Tilt Damage Category
3. Look at Table 3 and using the Strain Damage Category from Table 1 and the Tilt Damage Category from Table 2 determine the appropriate Preventative Mitigation Measures.
4. Look at Table 4 and see the outlined of the Preventative Mitigation Measures provided by Table 3.

Table 1 – Determine Strain Damage Category

Damage Category	Description of typical damage to walls and required repair	Approximate crack width limit
0 (negligible)	Hairline cracks.	<0.1 mm
1 (very slight)	Fine cracks that do not need repair.	0.1 mm to 1.0 mm
2 (slight)	Cracks noticeable but easily filled. Doors and windows stick slightly.	1.0 mm to 5.0 mm
3 (moderate)	Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weather- tightness often impaired.	5.00 mm to 15.0 mm (or a number of cracks 3mm to 5mm in one group)
4 (severe)	Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window or doorframes distort. Walls lean or bulge noticeably. Some loss of bearing in beams. Service pipes disrupted.	15 mm to 25 mm but also depends on number of cracks
5 (very severe)	As above but worse, and requiring partial or complete rebuilding. Roof and floor beams lose bearing and need shoring up. Windows have been broken with distortion. If compressive damage, severe buckling and bulging of the roof and walls.	>25 mm

Table 2 - Tilt Damage Category

Damage Category	Tilt	Description of typical damage to walls and required repair
A (negligible)	<5	Unlikely that remedial work will be required.
B (tolerable)	5 to 7	Adjustment to roof drainage and wet area floors might be required.
C (questionable)	7 to 10	Minor structural work might be required to rectify tilt. Adjustments to roof drainage and wet area floors will probably be required and remedial work to surface water drainage and sewerage systems might be necessary.
D (intolerable)	>10	Considerable structural work might be required to rectify tilt. Jacking to level or rebuilding could be necessary in the worst cases. Remedial work to surface water drainage and sewerage systems might be necessary.

For some structures, the levels of damage shown in Tables 1 and 2 can be significantly reduced by various simple, preventative measures. The general types of management measures, and the residence types and categories of structural damage to which they apply, are provided in Table 4. The specific management measures for individual residences will be developed in consultation with the improvement owner and the Mine Subsidence Board, prior to mining.

Table 3 – Determine Preventative Mitigation Measures

Type of Construction		Strain Damage Category					Tilt Damage Category				
		0	1	2	3	4	5	A	B	C	D
1	Flat slab or waffle slab on ground	None	14	14 & 15	1, 15, 17, 18 & 1	1, 15, 17, 18, 20 & 25	1, 15, 17, 18, 20 & 25 or 21 & 26	None	16	11	11 & 25 or 21 & 26
2	Strip footing	None	14	14 & 15	1, 2, 15, 17, 18 &19	1, 2, 15,17, 18, 2 & 25	1, 2, 15, 17, 18, 20 & 25 or 21 & 26	None	16	12	13 & 25 or 21 & 26
3	In-ground concrete or steel piers	None	14	14 & 15	1, 2, 15, 17, 18 &19	1, 2, 15,17, 18, 2 & 25	1, 2, 15, 17, 18, 20 & 25 or 21 & 26	None	16	13	13 & 25 or 21 & 26
4	Below-ground construction with retaining walls or basement walls	None	14	14 & 15	1, 2, 15, 17, 18 &19	1, 2, 15,17, 18, 2 & 25	1, 2, 15, 17, 18, 20 & 25 or 21 & 26	None	16	13	13 & 25 or 21 & 26
5	Stiffened waffle slab on secondary foundations	None	14	14 & 15	1, 5, 14 & 18	1, 5, 14, 18, 19 & 25	1, 5, 14, 18, 20 & 25	None	5 & 18	5 & 18	5, 18 & 25
6	Suspended floor with ground clearance less than 600 mm	None	14	14 & 15	1, 3, 6 & 14	1, 3, 6, 14, 19 & 25	1, 3, 6, 14, 20 & 25	None	6 & 16	3 & 6	3, 6 & 25
7	Above-ground stilts or poles	None	14	14 & 15	1, 4, 6 & 14	1, 4, 6, 14, 19 & 25	1, 4, 6, 14, 20 & 25	None	4 & 6	4 & 6	4, 6 & 25
8	Above-ground brick piers	None	14	14 & 15	1, 3, 6 & 15	1, 3, 6, 14, 19 & 25	1, 3, 6, 14, 20 & 25	None	3 & 6	3 & 6	3, 6 & 25
9	Demountable building	None	14	5, 6 & 14	5, 6 & 14	5, 6 & 14	5, 6 & 14	None	5 & 6	5 & 6	5, 6 & 25
10	Paved areas, paths and driveways	None	None	None	7 or 8	7 or 8 & 24	7 or 8 & 24	None	None	None	11 or 24
11	Steel sheds & outbuildings	None	None	None	1 & 14	1, 9 & 17	9, 22 & 11 or 23	None	None	None	22 & 11 or 23
12	Fences & handrails	None	None	None	10	10	10	None	None	None	None

Strategies that can be used to ameliorate damage to building structures as mine subsidence occurs or to remedy the damage on completion of subsidence are listed below.

Table 4 - Preventative Mitigation Measures

1. Increase the capacity of structures to articulate by cutting vertical slots in the walls or slabs.
2. Excavate trenches or slots alongside the building to isolate the structure from ground strains.
3. Install jacks and relevel the structure as subsidence occurs. Rebuild piers on completion.
4. Install steel beams and jacks and relevel the structure as subsidence occurs.
5. Install jacks to relevel the building and provide packs and shims beneath bearers.
6. Provide flexible couplings to service pipes.
7. Remove pavers or paving slabs and replace after mining.
8. Cut slots in paths and drives and repair on completion of mining.
9. Provide temporary supports, bracings and ties if required to ensure the safety of the structure during mining.
10. Provide expansion or contraction joints in fences and handrails or temporarily remove a section.

Remedial Rehabilitation Measures

11. Raise slabs up to 300 mm using grout injection.
12. Raise walls using grout injection.
13. Underpin and jack walls to level.
14. Cosmetic repair and repainting.
15. Rehang sticking doors and adjust windows.
16. Relevelling of wet area floors and roof gutters.
17. Major repairs and painting.
18. Repairs to service pipes.
19. Demolish small area of brickwork and repair.
20. Demolish brick walls and rebuild.
21. Completely demolish building and rebuild.
22. Provide jacks and relevel steel structure.
23. Break out and replace concrete floor slab to required levels.
24. Possibly remove paving or slabs, relevel subgrade and replace on completion of mining.
25. Possible repairs to drainage and sewerage pipes or septic tanks.
26. Provide temporary replacement structure.