

Project Approval

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

I approve the project application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

- prevent, minimise and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.



The Hon Kristina Keneally MP
Minister for Planning

Sydney

24 December

2008

SCHEDULE 1

Project Application:	07_0127
Proponent:	Coalpac Pty Limited
Approval Authority:	Minister for Planning
Land:	Part Ben Bullen State Forest, Lot 1/DP 180294, Lot 113/DP 877190, Lot 112/DP 677190
Project:	Invincible Coal Project

TABLE OF CONTENTS

DEFINITIONS	3
ADMINISTRATIVE CONDITIONS	4
Obligation to Minimise Harm to the Environment	4
Terms of Approval	4
Surrender of Project Approval 05_0065	4
Limits on Approval	4
Hours of Operation	4
Prohibition on evening operations in the West, Central, and Southern Pits	4
Management Plans / Monitoring Programs	5
Structural Adequacy	5
Demolition	5
Operation of Plant and Equipment	5
Community Enhancement Contribution	5
SPECIFIC ENVIRONMENTAL CONDITIONS	6
Noise	6
Air Quality	7
Meteorological Monitoring	9
Soil and Water	9
Transport	10
Blasting and Vibration	10
Landscape	12
Subsidence	14
Heritage	14
Visual	15
Greenhouse and Energy Efficiency	15
Waste	15
ADDITIONAL PROCEDURES	16
Notification of Landowners	16
Independent Review	16
Land Acquisition	17
ENVIRONMENTAL MANAGEMENT, MONITORING, REPORTING & AUDITING	18
Environmental Management Strategy	18
Reporting	18
Independent Environmental Audit	19
Community Consultative Committee	19
Access to Information	19
APPENDIX 1: PROJECT MAPS	20
APPENDIX 2: STATEMENT OF COMMITMENTS	25
APPENDIX 3: INDEPENDENT DISPUTE RESOLUTION	37

DEFINITIONS

AEMR	Annual Environmental Management Report
Auger mining	Mining operations conducted with the use of in-seam auger mining equipment from either an access bench or open cut highwall
Biodiversity Offset Strategy	The conservation and enhancement program described in this approval
BCA	Building Code of Australia
CCC	Community Consultative Committee
Coal Processing	Crushing, screening and processing of coal
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and public holidays
DECC	Department of Environment and Climate Change
Department	Department of Planning
Director-General	Director-General of Department of Planning, or delegate
DPI	Department of Primary Industries
DWE	Department of Water and Energy
EA	Environmental Assessment titled <i>Environmental Assessment of the Proposed Extension to the Invincible Colliery Open Cut Mine and Production Increase and Specialist Consultant Studies Compendium</i> , dated April 2008, including the <i>Response to Public and Government Agency Submissions</i> dated 27 June 2008
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act 1997</i>
Evening	The period from 6pm to 10pm
Land	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	Material harm to the environment as defined in <i>Protection of the Environment Operations Act 1997</i>
Mine water	Water that accumulates within active or disused mining areas, coal reject emplacement areas, tailings dams and infrastructure areas (excluding sedimentation dams)
Mining operations	Vegetation clearing, soil stripping, drilling, overburden/interburden removal and placement, coal mining (including auger mining) and transport of coal to stockpiles
Minister	Minister for Planning, or delegate
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Proponent	Coalpac Pty Limited, or its successors in title
Project	The Invincible Coal Mine Extension project described in the EA
Reasonable and Feasible	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. Feasible relates to engineering considerations and what is practical to build
ROM	Run-of-mine
RTA	Roads and Traffic Authority
Site	All land to which the project approval applies (see schedule 1)
Statement of Commitments	The Proponent's commitments in Appendix 2
Transport	The movement of coal and overburden material on and off the site

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all practicable 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) statement of commitments; and
 - (c) conditions of this approval.

Note: The statement of commitments is reproduced in Appendix 2.

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 and feasible requirements of the Director-General arising from the Department's assessment of:
 - (a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with the conditions of this approval; and
 - (b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence.

Surrender of Project Approval 05_0065

5. By the end of November 2009, the Proponent shall surrender project approval 05_0065 to the satisfaction of the Director-General.

Limits on Approval

6. Mining operations may take place on the site for 8 years from the date of this approval.

Note: Under this approval, the Proponent is required to rehabilitate the site to the satisfaction of the Director-General and DPI. Consequently this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been rehabilitated to a satisfactory standard.

7. The Proponent shall not extract more than 1.2 million tonnes of ROM coal a year from the site.
8. The Proponent shall not transport more than 900,000 tonnes of product coal a year from the site.

Note: Prior to the surrender of project approval 05_0065 under condition 5, the quantities in conditions 7 and 8 include any quantities permitted under that approval.

Hours of Operation

9. The Proponent is permitted to:
 - (a) undertake mining operations and coal processing between the period of 7 am and 10 pm, Monday to Saturday, with the exception of public holidays, subject to the provisions of condition 10; and
 - (b) undertake maintenance activities, and safety procedures as agreed with the DPI, at any time.

Prohibition on Evening Operations in the West, Central and Southern Pits

10. For the open cut pits depicted in Figure 3 of Appendix 1 as the West, Renown (Central), and South pits, the Proponent is not permitted to undertake mining operations between the hours of 6 pm and 10 pm.

Note: This condition does not apply if the Proponent can provide written noise agreements in accordance with condition 2 of Schedule 3, for all 15 residences predicted in the EA to receive noise levels in excess of 40dB(A) during evening operations.

Management Plans / Monitoring Programs

11. The Proponent may:
- (a) with the approval of the Director-General, submit any management plan or monitoring program required by this approval on a progressive basis; and
 - (b) continue to implement management plans and monitoring programs produced in compliance with project approval 05_0065 (to the satisfaction of the Director-General) until replaced by management plans and monitoring programs approved in accordance with the conditions of this approval.

Structural Adequacy

12. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

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.

Demolition

13. 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

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

Community Enhancement Contribution

15. Prior to 30 May 2009, the Proponent shall contribute \$80,000 to Lithgow City Council for the provision of community facilities in the Cullen Bullen area. Any monies not expended within 2 years of their receipt by Council, may be reclaimed by the Proponent.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

NOISE

Note: These conditions should be read in conjunction with sections 5 and 12 of the Statement of Commitments.

Acquisition Upon Request

1. Upon receiving a written request for acquisition from the owner of any land listed in Table 1, the Proponent shall acquire the land in accordance with the procedures in conditions 6-8 of schedule 4.

Table 1: Land subject to acquisition upon request

Residence / Location
<i>Billabong</i>
<i>Hillview</i>

Impact Assessment Criteria

2. The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria set out in Table 2 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 2: Impact assessment criteria dB(A)

Residence / Location	Day <i>L_{Aeq}(15 minute)</i>	Evening <i>L_{Aeq}(15 minute)</i>	Night <i>L_{Aeq}(15 minute)</i>
<i>All privately-owned land</i>	40	35	35

However, if the Proponent has a written negotiated noise agreement with any landowner and a copy of this agreement has been forwarded to the Department and DECC, then the Proponent may exceed the noise limits in Table 2 on that land in accordance with the negotiated noise agreement.

Notes:

- To determine compliance with the *L_{Aeq}(15 minute)* noise limits, noise from the project is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the Department and DECC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- These limits apply under meteorological conditions of:
 - wind speeds of 3 m/s at 10 metres above ground level; or
 - up to 3°C/100 m temperature inversion strength for all receivers, plus a 2 m/s source-to-receiver component drainage flow wind at 10 metres above ground level for those receivers where applicable.

Land Acquisition Criteria

3. If the noise generated by the project exceeds the criteria in Table 3 at any residence on privately-owned land, or on more than 25% of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 6-8 of schedule 4.

Table 3: Acquisition criteria dB(A)

Residence / Location	Day <i>L_{Aeq}(15 minute)</i>	Evening <i>L_{Aeq}(15 minute)</i>
<i>All privately-owned land</i>	45	40

Additional Noise Mitigation Measures

4. Upon receiving a written request after 30 May 2009 from a landowner of any residence on privately-owned land where subsequent noise monitoring shows the noise generated by the project is equal to, or greater than 3 dB(A) L_{Aeq} (15 min) above the noise impact assessment criteria in Table 2 (unless a negotiated noise agreement is in place), the Proponent shall implement additional reasonable and feasible noise mitigation measures (such as double glazing, insulation and/or air conditioning) at the residence in consultation with the landowner.

If within 3 months of receiving this request from the landowner, 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.

5. The Proponent shall develop and implement a Pollution Reduction Program (PRP) to the satisfaction of the DECC. The Proponent shall include measures in the PRP to attenuate noise emissions from:
 - (a) the rotary breaker at the Invincible coal preparation plant;
 - (b) the jig washer at the Invincible coal preparation plant;
 - (c) reversing alarms on all mobile plant; and
 - (d) the operation of the jig washer and/or front end loader at the Invincible coal preparation plant during evening hours.

Monitoring

6. The Proponent shall prepare and implement a Noise Monitoring Program for the project to the satisfaction of the Director-General. This program must:
 - (a) be prepared in consultation with the DECC;
 - (b) be submitted to the Director-General for approval prior to 30 May 2009;
 - (c) include attended noise monitoring measures; and
 - (d) set out and explain how the Proponent would respond to any exceedance of the noise impact assessment criteria in Tables 2 and 3.

Continuous Improvement

7. The Proponent shall:
 - (a) implement all reasonable and feasible best practice noise mitigation measures;
 - (b) continue to investigate ways to reduce the noise generated by the project; and
 - (c) report on these investigations and the implementation and effectiveness of these measures in the AEMR,
 to the satisfaction of the Director-General.

AIR QUALITY

Note: These conditions should be read in conjunction with sections 11 and 12 of the Statement of Commitments.

Impact Assessment Criteria

8. The Proponent shall ensure that dust and particulate emissions generated by the project do not cause additional exceedances of the criteria listed in Tables 4 to 6 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Table 4: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³

Table 5: Short term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³

Table 6: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 1991, AS/NZS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Land Acquisition Criteria

- If the dust and particulate emissions generated by the project exceed the criteria in Tables 7 to 9 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 6-8 of schedule 4.

Table 7: Long term land acquisition criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m ³
Particulate matter < 10 µm (PM ₁₀)	Annual	30 µg/m ³

Table 8: Short term land acquisition criteria for particulate matter

Pollutant	Averaging period	Criterion	Percentile ^{1,2}	Basis
Particulate matter < 10 µm (PM ₁₀)	24 hour	150 µg/m ³	99	Total ³
Particulate matter < 10 µm (PM ₁₀)	24 hour	50 µg/m ³	98.6	Increment ⁴

¹Based on the number of block 24 hour averages in an annual period.

²Excludes extraordinary events such as bushfires, prescribed burning, dust storms, sea fog, fire incidents, illegal activities or any other activity agreed by the Director-General in consultation with DECC.

³Background PM₁₀ concentrations due to all other sources plus the incremental increase in PM₁₀ concentrations due to the mine alone.

⁴Incremental increase in PM₁₀ concentrations due to the mine alone.

Table 9: Long term land acquisition criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m ² /month	4 g/m ² /month

Note: Deposited dust is 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.

Monitoring

10. The Proponent shall prepare and implement an Air Quality Monitoring Program for the project to the satisfaction of the Director-General. This program must:
 - (a) be submitted to the Director-General prior to 30 May 2009;
 - (b) be prepared in consultation with the DECC; and
 - (c) use a combination of high volume samplers and dust deposition gauges to monitor the performance of the project.

METEOROLOGICAL MONITORING

11. During the life of the project, the Proponent shall ensure that there is a suitable meteorological station in the vicinity of the site that complies with the requirements in the *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

SOIL AND WATER

Note: These conditions should be read in conjunction with sections 7, 9 and 12 of the Statement of Commitments.

Discharge

12. Except as may be expressly provided for by an EPL, or in accordance with section 120 of the *Protection of the Environment Operations Act 1997*, the Proponent shall not discharge any mine water from the site.

Water Management Plan

13. The Proponent shall prepare and implement a Water Management Plan to the satisfaction of the Director-General. This Plan must:
 - (a) be prepared in consultation with DWE;
 - (b) be submitted to the Director-General for approval prior to 30 May 2009; and
 - (c) include:
 - a site water balance with:
 - details of sources and security of water supply;
 - details of water use and management on site, as well as any off site water transfers; and
 - measures to minimise water use by the project;
 - an erosion and sediment control plan for all surface works in the mining area that is consistent with the requirements of *Managing Urban Stormwater: Soils and Construction Manual* (Landcom 2004, or its latest version);
 - a surface water monitoring program with:
 - detailed baseline data on surface water flows and quality in the watercourses that could be affected by the development;
 - surface water impact assessment criteria, including trigger levels for investigating potentially adverse surface water impacts of the development; and
 - a program to monitor surface water flows and quality in the watercourses that could be affected by the development;
 - a groundwater monitoring program with:

- baseline data of groundwater levels and quality in the region, including details of any privately-owned groundwater bores which could be affected by the development;
- groundwater impact assessment criteria, including trigger levels for investigating any potentially adverse groundwater impacts of the development; and
- a program to monitor:
 - groundwater inflows to the open cut mining operations; and
 - impacts of the development on the region's aquifers, groundwater bores and surrounding watercourses; and
- a surface and groundwater response plan which describes the measures and/or procedures that would be implemented to:
 - respond to any exceedances of the surface water and groundwater assessment criteria; and
 - compensate landowners of privately-owned land whose water supply is adversely affected by the development.

TRANSPORT

Note: These conditions should be read in conjunction with sections 2 and 10 of the Statement of Commitments.

Monitoring of Coal Transport

14. The Proponent shall keep records of the amount of coal transported from the mine site and number of coal truck movements each year and include these records in the AEMR.

Coal Transportation Hours

15. The Proponent shall only transport coal from the site by road between the hours of 7 am and 9.30 pm Monday to Saturday, and at no time on Sundays or public holidays.

Coal Haulage Limits

16. The Proponent shall ensure that coal haulage from the project within the Lithgow local government area is conveyed only on the Castlereagh Highway, the Great Western Highway and Boulder Road, except with the approval of the Director-General.
17. The Proponent shall ensure the Castlereagh Highway between its junction with Boulder Road and the Wallerawang Power Station is not used to transport coal to the Wallerawang Power Station for more than two weeks in any three month period, and only after prior notification has been given by the Proponent to all landowners of residences within 200 metres of this route, unless otherwise approved by the Director-General.
18. Subject to conditions 7 and 8 of schedule 2, the Proponent is permitted to transport up to 200,000 tonnes of coal a year by road to domestic destinations other than the Mount Piper or Wallerawang power stations.

Note: Prior to the surrender of project approval 05_0065 under condition 5 of schedule 2, conditions 16 and 17 include any entitlements under that approval.

BLASTING AND VIBRATION

Note: These conditions should be read in conjunction with sections 6 and 12 of the Statement of Commitments.

Airblast Overpressure Impact Assessment Criteria

19. The Proponent shall ensure that the airblast overpressure level from blasting at the project does not exceed the criteria in Table 10 at any residence on privately-owned land.

Table 10: Airblast overpressure impact assessment criteria

Airblast overpressure level (dB(Lin Peak))	Allowable exceedance
115	5% of the total number of blasts in a 12 month period
120	0%

Note: The overpressure values in Table 10 apply when the measurements are performed with equipment having a lower cut-off frequency of 2 Hz or less. If the instrumentation has a higher cut-off frequency a correction of 5 dB should be added to the measured value. Equipment with a lower cut-off frequency exceeding 10 Hz should not be used.

Ground Vibration Impact Assessment Criteria

20. The Proponent shall ensure that the ground vibration level from blasting, or any other activity at the project does not exceed the criteria in Table 11 at any residence on privately-owned land.

Table 11: Ground vibration impact assessment criteria

Peak particle velocity (mm/s)	Allowable exceedance
5	5% of the total number of blasts in a 12 month period
10	0%

Blasting Hours

21. The Proponent shall only carry out blasting on the site between 9 am and 5 pm Monday to Saturday, and at no time on public holidays.

Blasting Frequency

22. The Proponent shall not carry out more than:
- (a) 2 blasts a day; or
 - (b) 5 blasts a week, averaged over any 12 month period;
- without the approval of the Director-General.

Operating Conditions

23. During mining operations on site, the Proponent shall implement best blasting practice to:
- (a) protect the safety of people, property, public infrastructure and livestock; and
 - (b) minimise the dust and fume emissions from blasting.
24. The Proponent shall not undertake blasting within 500 metres of any privately-owned land, unless suitable arrangements have been made with the landowner and any tenants to minimise the risk of flyrock-related impact to the property to the satisfaction of the Director-General.

Road Closure

25. Prior to blasting within 500 metres of any public road, the Proponent shall prepare and implement a Road Closure Management Plan to the satisfaction of RTA and DPI.

Public Notice

26. During mining operations on site, the Proponent shall:

- (a) notify any person who registers an interest in being notified about the blasting schedule at the mine;
- (b) operate a Blasting Hotline, or alternate system agreed to by the Director-General, to enable the public to get up-to-date information on the blasting schedule at the project;
- (c) advertise the blasting hotline number in a local newspaper each year; and
- (d) provide signage, with updated details of proposed blasting times, immediately to the north and south of the mine site on the Castlereagh Highway.

Property Inspections

- 27. Before carrying out blasting within 2 km of any privately-owned land, the Proponent shall advise such landowners, and any other landowner nominated by the Director-General, that they are entitled to a property inspection to establish the baseline condition of any residence or other significant structure.
- 28. If the Proponent receives a request for a property inspection from such a landowner, the Proponent shall:
 - (a) commission a suitably qualified person, whose appointment has been approved by the Director-General, to inspect and report on the condition of any building or structure on the land, and recommend measures to mitigate any potential blasting impacts; and
 - (b) give the landowner a copy of this property inspection report.

Note: It is preferable for the property inspection to be carried out prior to the commencement of blasting activities on the site, and the Proponent should facilitate this occurring wherever possible.

Property Investigations

- 29. If any owner of privately-owned land within 2 km of proposed blasting activities, or any other landowner nominated by the Director-General, claims that any building or structure on his/her property, including vibration-sensitive infrastructure such as water supply or underground irrigation mains, has been damaged as a result of blasting at the project, the Proponent shall within 3 months of receiving this request:
 - (a) commission a suitably qualified person whose appointment has been approved by the Director-General to investigate the claim; and
 - (b) give the landowner a copy of the finalised property investigation report.

If this independent investigation confirms the landowner's claim, and both parties accept these findings, then the Proponent shall repair the damages to the satisfaction of the Director-General.

If the Proponent or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution. The Proponent shall repair the damages to the satisfaction of the Director-General.

Monitoring

- 30. The Proponent shall prepare and implement a Blast Monitoring Program for the project to the satisfaction of the Director-General. This program must:
 - (a) be prepared in consultation with the DECC;
 - (b) be submitted to the Director General for approval by 30 May 2009; and
 - (c) include a protocol for evaluating blasting impacts on, and demonstrating compliance with the blasting criteria in this approval for all privately-owned residences and structures.

LANDSCAPE

Note: These conditions should be read in conjunction with sections 4, 6, 7, and 12 of the Statement of Commitments.

Biodiversity Offsets

- 31. The Proponent shall implement the Biodiversity Offset Strategy summarised in Table 12 and described in:
 - (a) the document titled *Augmented Biodiversity Offset Strategy for the Invincible Colliery Open Cut Mine Extension*, prepared by RW Corkery & Co Pty Ltd and dated May 2008;
 - (b) the document titled *Lot 112, DP 877190 Biodiversity Offset Area, Prepared as Supplementary Information to the Augmented Biodiversity Offset Strategy for the Invincible Colliery Open Cut Mine Extension*, prepared by RW Corkery & Co Pty Ltd and dated July 2008; and

- (c) section 5.7.2 of the EA titled *Proposed Extension of Invincible Open Cut Mine and Rehabilitation Activities*, prepared by Craven, Elliston & Hayes (Lithgow) Pty Ltd and dated March 2006. to the satisfaction of the Director-General.

Note: Where there is any inconsistency between the above documents, the more recent document shall prevail to the extent of the inconsistency.

Table 12: Biodiversity Offsets

	Offset Area	Minimum Size
1	Lot 112, DP 877190	82 ha
2	"Renown Farm" (Lot 1, DP 180294)	18 ha
3	Lot 113, DP 877190	14.5 ha
4	Rehabilitation of 'derelict' Cullen Main East mine	6 ha

Note: The Offset Areas are shown conceptually in Figure 4 of Appendix 1.

32. Within 2 years of the date of this approval, the Proponent shall provide appropriate long term security for the biodiversity offset strategy, to the satisfaction of the Director-General.

Note: The long-term security of the offset can be achieved through one, or a combination, of the following: Deed of Agreement with the Minister, rezoning the land under the Lithgow Local Environment Plan, caveats on the title under the Conveyancing Act 1919, etc.

Rehabilitation

33. The Proponent shall progressively rehabilitate the site in a manner that is generally consistent with the final landform set out in the EA (shown conceptually in Figure 5 of Appendix 1) to the satisfaction of the Director-General and DPI.

Landscape Management Plan

34. The Proponent shall prepare and implement a detailed Landscape Management Plan for the site to the satisfaction of the Director-General and DPI. This plan must:
- be prepared in consultation with Lithgow City Council and DWE by suitably qualified expert/s whose appointment/s have been approved by the Director-General;
 - be submitted to the Director-General for approval by 30 May 2009;
 - include a:
 - Rehabilitation and Offset Management Plan; and
 - Mine Closure Plan.

Note: The Department accepts that the initial Landscape Management Plan may not include the detailed Mine Closure Plan. However, if this occurs, the Proponent will be required to seek approval from the Director-General for an alternative timetable for the completion and approval of the Mine Closure Plan.

Rehabilitation and Offset Management Plan

35. The Rehabilitation and Offset Management Plan must include:
- the objectives for rehabilitation of the site and biodiversity offset areas;
 - a strategic description of how the rehabilitation of the site and biodiversity offset areas would be integrated with surrounding land use;
 - details of the vegetation species and communities to be established in the biodiversity offset areas;
 - detailed performance and completion criteria for the rehabilitation of the site and the implementation of the biodiversity offsets;
 - a detailed description of how the performance of the rehabilitation works and the biodiversity offset areas would be monitored over time to achieve the stated objectives;
 - a detailed description of the short, medium and long-term measures that would be implemented to:
 - rehabilitate the site;
 - implement the biodiversity offsets;
 - manage the remnant vegetation and habitat on the site and in the biodiversity offset areas;

- maximise effective vegetative linkages for the biodiversity offset areas to the Ben Bullen State Forest;
 - minimise impacts on fauna;
 - minimise visual impacts;
 - conserve and reuse topsoil;
 - control weeds, feral pests and access;
 - manage bushfires; and
 - manage any potential conflicts between the rehabilitation works and/or biodiversity offsets and Aboriginal cultural heritage;
- (g) a description of the potential risks to successful rehabilitation and/or revegetation and a description of the contingency measures that would be implemented to mitigate these risks; and
- (h) details of who is responsible for monitoring, reviewing and implementing the plan.

Mine Closure Plan

36. The Mine Closure Plan must:
- (a) define the objectives for the site following the cessation of mining operations under this approval;
 - (b) investigate options for the future use of the site;
 - (c) investigate ways to minimise the adverse socio-economic effects associated with the conclusion of the project, including reduction in local and regional employment levels;
 - (d) describe the measures that would be implemented to minimise or manage the on-going environmental effects of the project; and
 - (e) describe how the performance of these measures would be monitored over time.

Biodiversity Offset Strategy Implementation Bond

37. Within 3 months of the approval of the Landscape Management Plan, the Proponent shall lodge a Biodiversity Offset Strategy implementation bond with either the DPI or the Department to ensure that the Biodiversity Offset Strategy is implemented in accordance with the performance and completion criteria of the Landscape Management Plan. The sum of the bond shall reflect the full cost of implementing the Biodiversity Offset Strategy and be determined by employing a suitably qualified rehabilitation expert or quantity surveyor.

Notes:

- If the Biodiversity Offset Strategy is implemented to the satisfaction of the Director-General and DPI, then the bond holder will release the implementation bond.
- If the Biodiversity Offset Strategy is not implemented to the satisfaction of the Director-General and DPI, then all or part of the bond may be used to ensure the satisfactory completion of the relevant works.
- The bond may be incorporated into rehabilitation bonding arrangements under the Mining Act 1992.

SUBSIDENCE

38. Prior to undertaking auger mining in any seam, the Proponent must undertake an assessment of potential subsidence impacts in accordance with the requirements of *NSW DPI Technical Reference for a Notification of Highwall Mining and Auger Mining* (DPI, August 2008, or its latest version), to the satisfaction of DPI.

HERITAGE

Note: These conditions should be read in conjunction with section 8 of the Statement of Commitments.

Management of Aboriginal Heritage Site Invincible OS1

39. The Proponent must prevent any further disturbance to the Aboriginal heritage site Invincible OS1, unless:
- (a) detailed justification for the disturbance is provided to the Director-General; and
 - (b) the disturbance is undertaken in accordance with the procedures recommended by the Bathurst Local Aboriginal Land Council in its letter dated 17 June 2007 and reproduced in the EA.

Aboriginal Heritage Management Plan

40. The Proponent shall prepare and implement an Aboriginal Heritage Management Plan for the project to the satisfaction of the Director-General. The Plan must:
- (a) be prepared in consultation with DECC and the Aboriginal community;
 - (b) be submitted to the Director-General for approval prior to carrying out any open cut mining operations under this approval; and
 - (c) include a:
 - program for the recording, salvage and surface collection of any Aboriginal objects/sites that may be encountered within the project area;
 - description of the measures that would be implemented if any Aboriginal skeletal remains are discovered during the project; and
 - protocol for the ongoing consultation and involvement of the Aboriginal community in the conservation and management of the Aboriginal heritage of the objects/sites.

VISUAL

41. The Proponent shall:
- (a) ensure no outdoor lights shine above the horizontal;
 - (b) ensure that all external lighting associated with the project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*;
 - (c) take all practicable measures to mitigate off-site lighting impacts from the project; and
 - (d) minimise the visual impacts of the project to the satisfaction of the Director-General.

GREENHOUSE & ENERGY EFFICIENCY

Note: These conditions should be read in conjunction with section 11 of the Statement of Commitments.

42. The Proponent shall prepare and implement an Energy Savings Action Plan for the project to the satisfaction of the Director-General. This plan must:
- (a) be generally in accordance with the *Guidelines for Energy Savings Action Plans* (DEUS 2005, or its latest version);
 - (b) be submitted to the Director-General for approval by 30 May 2009;
 - (c) include a program to monitor greenhouse gas emissions and energy use generated by the project;
 - (d) include a framework for investigating and implementing measures to reduce greenhouse gas emissions and energy use at the site; and
 - (e) describe how the performance of these measures would be monitored over time.

WASTE

Note: These conditions should be read in conjunction with section 3 of the Statement of Commitments.

Waste Minimisation

43. The Proponent shall:
- (a) monitor the amount of waste generated by the project;
 - (b) investigate ways to reuse, recycle, or minimise the waste generated by the project;
 - (c) implement reasonable and feasible measures to minimise waste generated by the project;
 - (d) ensure irrigation of treated wastewater is undertaken in accordance with *Environmental Guidelines: Use of Effluent by Irrigation* (DEC, 2004), or its latest version; and
 - (e) report on waste management and minimisation in the AEMR to the satisfaction of the Director-General.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. If the results of monitoring required in schedule 3 identify that impacts generated by the project are greater than the relevant impact assessment criteria in schedule 3, then the Proponent shall notify the Director-General and the affected landowners and/or existing or future tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the criteria in schedule 3. However, no notification is required if the impact is predicted in the EA or where an agreement has been negotiated with a landowner that excludes the requirement for ongoing notification of such impacts.

INDEPENDENT REVIEW

2. If a landowner considers the project to be exceeding the impact assessment criteria in schedule 3, except where this is predicted in the EA, 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, the Proponent shall within 2 months of the Director-General's decision:

- (a) consult with the landowner to determine his/her concerns;
- (b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to:
 - determine whether the project is complying with the relevant impact assessment criteria in schedule 3; and
 - identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and
- (c) give the Director-General and landowner a copy of the independent review.

3. If the independent review determines that the project is complying with the relevant impact assessment criteria in schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General. If the landowner disputes the results of the independent review then either the Proponent or the landowner may refer the matter to the Director-General for resolution.

Where matters referred to the Director-General under this condition cannot be resolved by the Director-General within 28 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process.

4. If the independent review determines that the project is not complying with the relevant impact assessment criteria in schedule 3, and that the project is primarily responsible for this non-compliance, then the Proponent shall:
 - (a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria and conduct further monitoring to determine whether these measures ensure compliance; or
 - (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria; or
 - (c) offer to acquire all or part of the landowner's land in accordance with the procedures in conditions 6-8 belowto the satisfaction of the Director-General.

5. If further monitoring under condition 4(a) determines that the project is complying with the relevant impact assessment criteria, then the Proponent may discontinue the independent review with the approval of the Director-General.

If further monitoring under condition 4(a) determines that measures implemented under that condition have not achieved compliance with the land acquisition criteria in schedule 3, and the Proponent cannot secure a written agreement with the landowner under condition 4(b) to allow these exceedances, then the Proponent shall, upon receiving a written request from the landowner, acquire all or part of the landowner's land in accordance with the procedures in conditions 6-8 below.

LAND ACQUISITION

6. Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on:
- (a) the current market value of the landowner's interest in the property at the date of this written request, as if the property was unaffected by the development the subject of the development application, having regard to the:
 - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - presence of improvements on the property and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the 'additional noise mitigation measures' in condition 4 of schedule 3;
 - (b) the reasonable costs associated with:
 - relocating within the local government areas of the affected Councils, or to any other local government area determined by the Director-General;
 - obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is required; and
 - (c) reasonable compensation for any disturbance caused by the land acquisition process.

If, within 28 days of the Proponent making this offer, the Proponent and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Director-General for resolution.

Upon receiving such a referral, the Director-General shall request the President of the NSW Division of the Australian Property Institute (the API) to appoint a qualified independent valuer to:

- consider submissions from both parties;
- establish a fair market valuation for the land and determine reasonable costs and compensation for the acquisition, in accordance with paragraphs (a)-(c) above and any guidance or guidelines that the Director-General may prepare relating to this condition; and
- propose any appropriate fair and reasonable terms of acquisition.

The appointed valuer is to provide a full report and explanation of their valuation, determinations and proposed terms of acquisition to the Director-General, the Proponent and the landowner. The Director-General shall consider the report and decide whether the valuation, determinations and any proposed terms of acquisition are fair and reasonable and advise the parties accordingly.

Within 14 days of receiving the Director-General's decision that the independent valuer's report is fair and reasonable, the Proponent shall make a written offer to purchase the land at a price and according to terms not less than set out in the independent valuer's report.

If the Director-General is of the opinion that the valuation and/or determination is not fair and/or reasonable, they shall give notice to the parties that a further independent valuation and determination will be undertaken in accordance with this condition and duly request a further appointment by the API.

If the landowner refuses to accept within 6 months a written offer duly made by the Proponent under this condition, then the Proponent's obligations to acquire the land shall cease, unless otherwise agreed by the Director-General.

7. The Proponent shall bear the full costs of any independent valuer's valuation, determination and report.
8. If the Proponent and landowner agree that only part of the land shall be acquired, then the Proponent shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of the plan at the Office of the Registrar-General.

SCHEDULE 5

ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING

Note: This schedule should be read in conjunction with sections 17 and 18 of the Statement of Commitments.

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 by 30 November 2009;
 - (b) provide for the strategic context for the environmental management of the project;
 - (c) identify the statutory requirements that apply to the project;
 - (d) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the project;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the project;
 - respond to any non-compliance;
 - manage cumulative impacts; and
 - respond to emergencies;
 - (e) include an environmental monitoring program for the project that includes all the monitoring requirements of this approval;
 - (f) describe how the various incident and approval reporting requirements of the project would be integrated into a single reporting system; and
 - (g) describe the role, responsibility, authority and accountability of all the key personnel involved in the environmental management of the project.

REPORTING

Incident Reporting

2. Within 24 hours of detecting the occurrence of an incident that causes (or may cause) material harm to the environment, the Proponent shall notify the Department and other relevant agencies of the incident.
3. Within 6 days of notifying the Department and other relevant agencies of an incident, the Proponent shall provide the Department and these agencies with a written report that:
 - (a) describes the date, time, and nature of the incident;
 - (b) identifies the cause (or likely cause) of the incident;
 - (c) describes what action has been taken to date; and
 - (d) describes the proposed measures to address the incident.

Annual Reporting

4. By the end of November 2009, and annually thereafter, the Proponent shall submit an AEMR to the Director-General and to all relevant agencies. This report must:
 - (a) identify the standards and performance measures that apply to the project;
 - (b) describe the works carried out in the last 12 months;
 - (c) describe the works that would be carried out in the next 12 months;
 - (d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
 - (e) include a summary of the monitoring results for the project during the past year;
 - (f) include an analysis of these monitoring results against the relevant:
 - impact assessment criteria/limits;
 - monitoring results from previous years; and
 - predictions in the EA;
 - (g) identify any trends in the monitoring results over the life of the project;
 - (h) identify any non-compliance during the previous year; and
 - (i) describe what actions were, or are being, taken to ensure compliance.

INDEPENDENT ENVIRONMENTAL AUDIT

5. By the end of November 2010, 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 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 relevant requirements in this approval and any associated EPL or Mining Lease (including any strategy, plan or program required under these approvals);
 - (d) review the adequacy of strategies, plans or programs required under these approvals; and, if appropriate,
 - (e) recommend measures or actions to improve the environmental performance of the project, and/or any strategy, plan or program required under these approvals.

Note: This audit team must be led by a suitably qualified auditor and include experts in the fields of ecology and mine site rehabilitation.

6. Within 6 weeks of the completing 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.
7. Within 3 months of submitting the audit report to the Director-General, the Proponent shall review, and if necessary revise the strategies/plans/programs required under this approval to the satisfaction of the Director-General.

COMMUNITY CONSULTATIVE COMMITTEE

8. The Proponent shall maintain 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)*, to the satisfaction of the Director-General.

Notes:

- *The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the proponent complies with this approval.*
- *With the approval of the Director-General, this CCC may be combined with the CCC for Cullen Valley mine.*

ACCESS TO INFORMATION

9. Within 3 months of the approval of any strategy/plan/ program required under this approval (or any subsequent revision of these strategies/plans/ programs), or the completion of the audits or AEMRs required under this approval, the Proponent shall:
- (a) provide a copy of the relevant document/s to the relevant agencies and CCC; and
 - (b) put a copy of the relevant document/s on its website.
10. From the end of November 2009, and thereafter during the project, the Proponent shall:
- (a) provide a copy of this approval as may be modified from time to time on its website;
 - (b) provide a comprehensive, running summary of monitoring results required under this approval on its website; and
 - (c) update these results on a regular basis (at least every three months).

APPENDIX 1 PROJECT MAPS

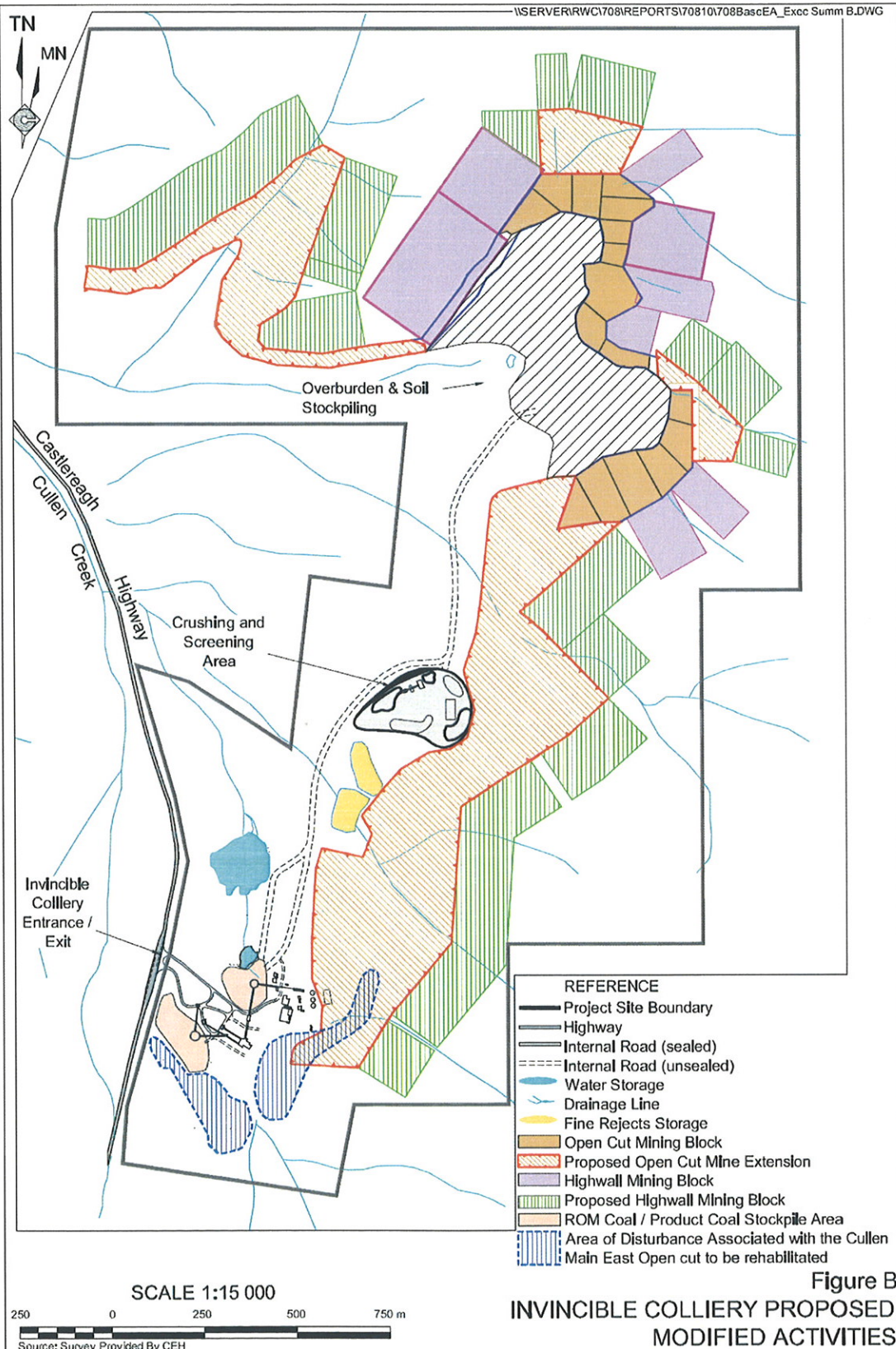


Figure 1: Project Site and Mine Layout

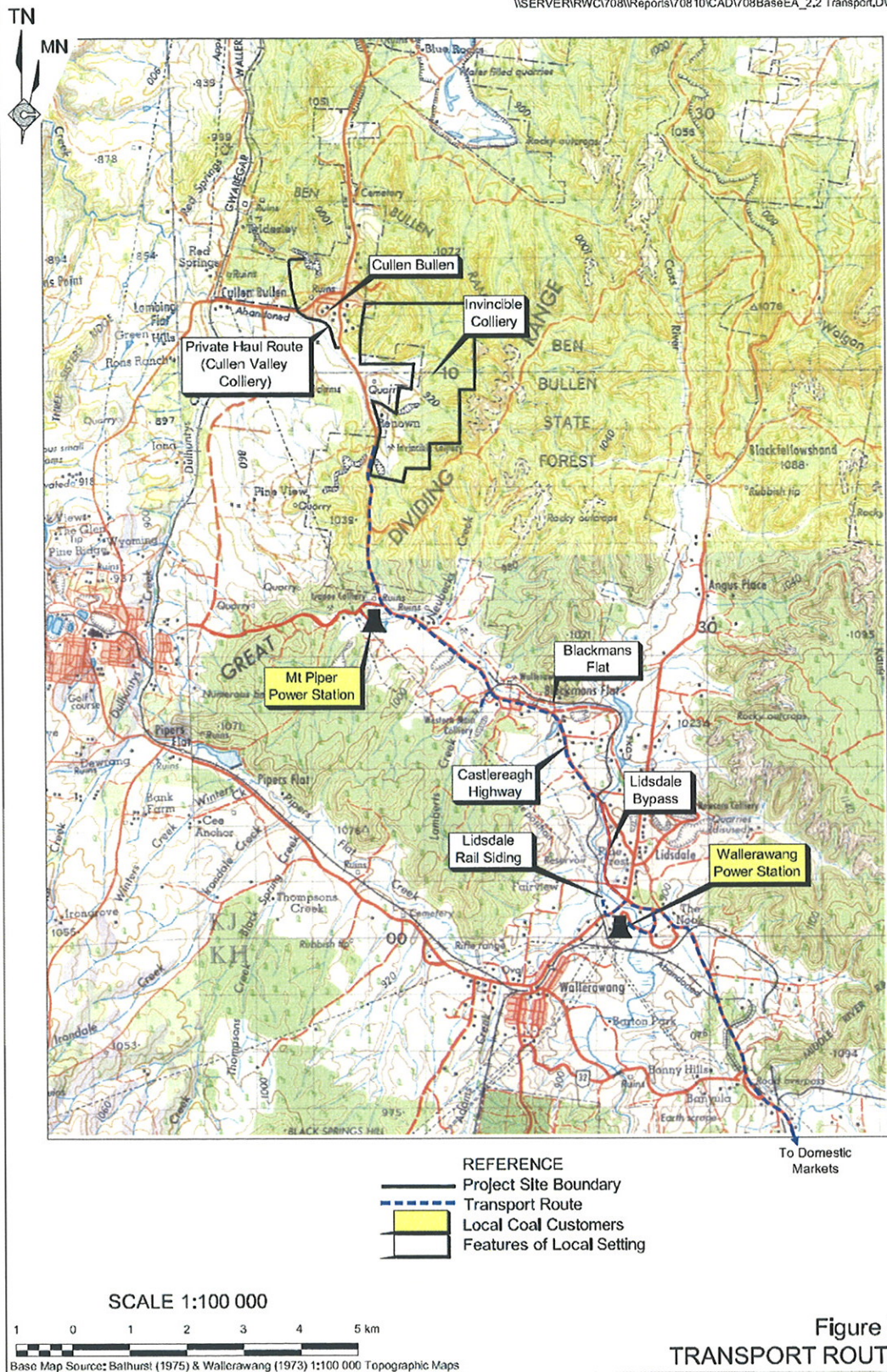


Figure 2: Coal Transport Routes

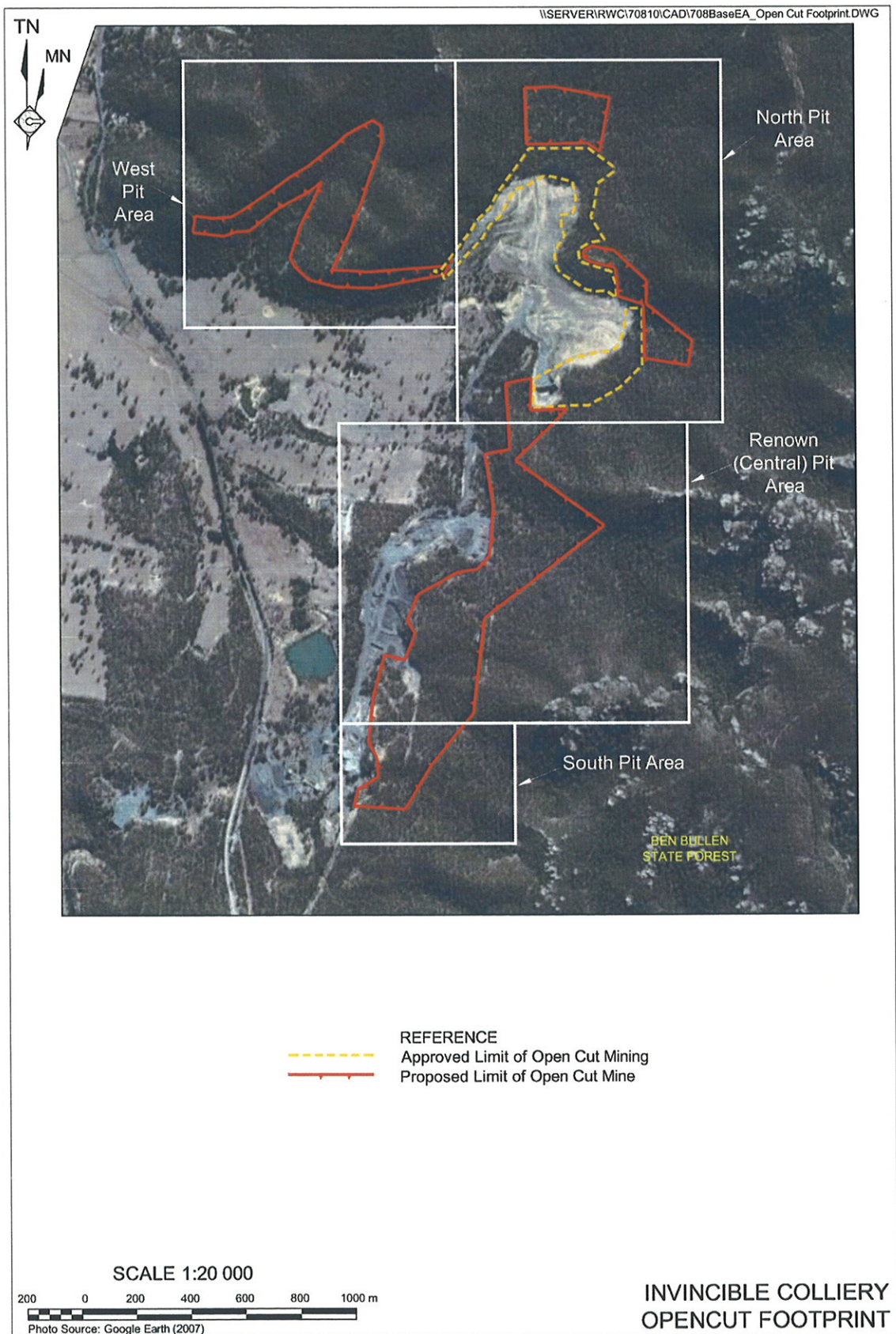


Figure 3: Classification of Open Cut Pits

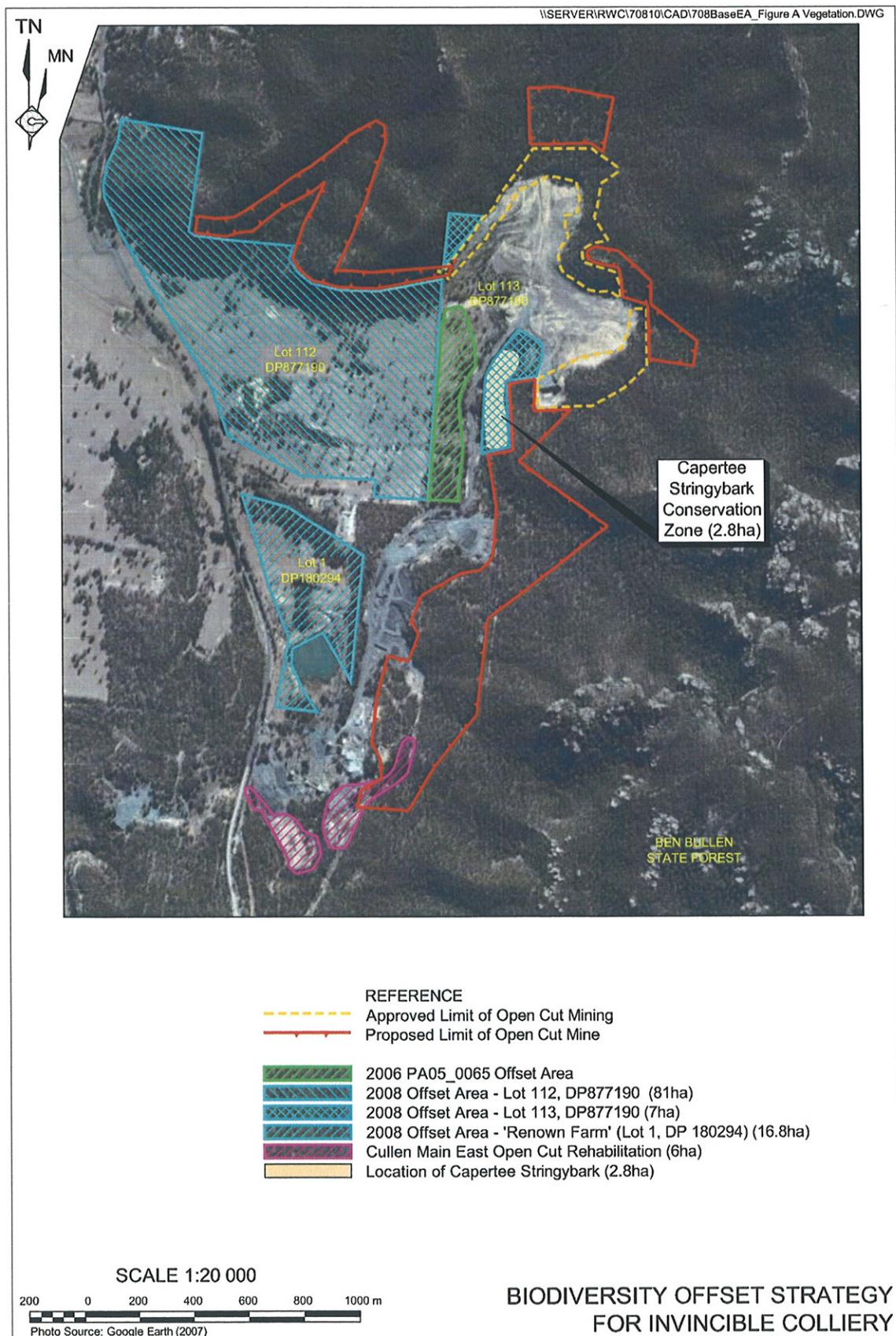


Figure 4: Biodiversity Offset Areas

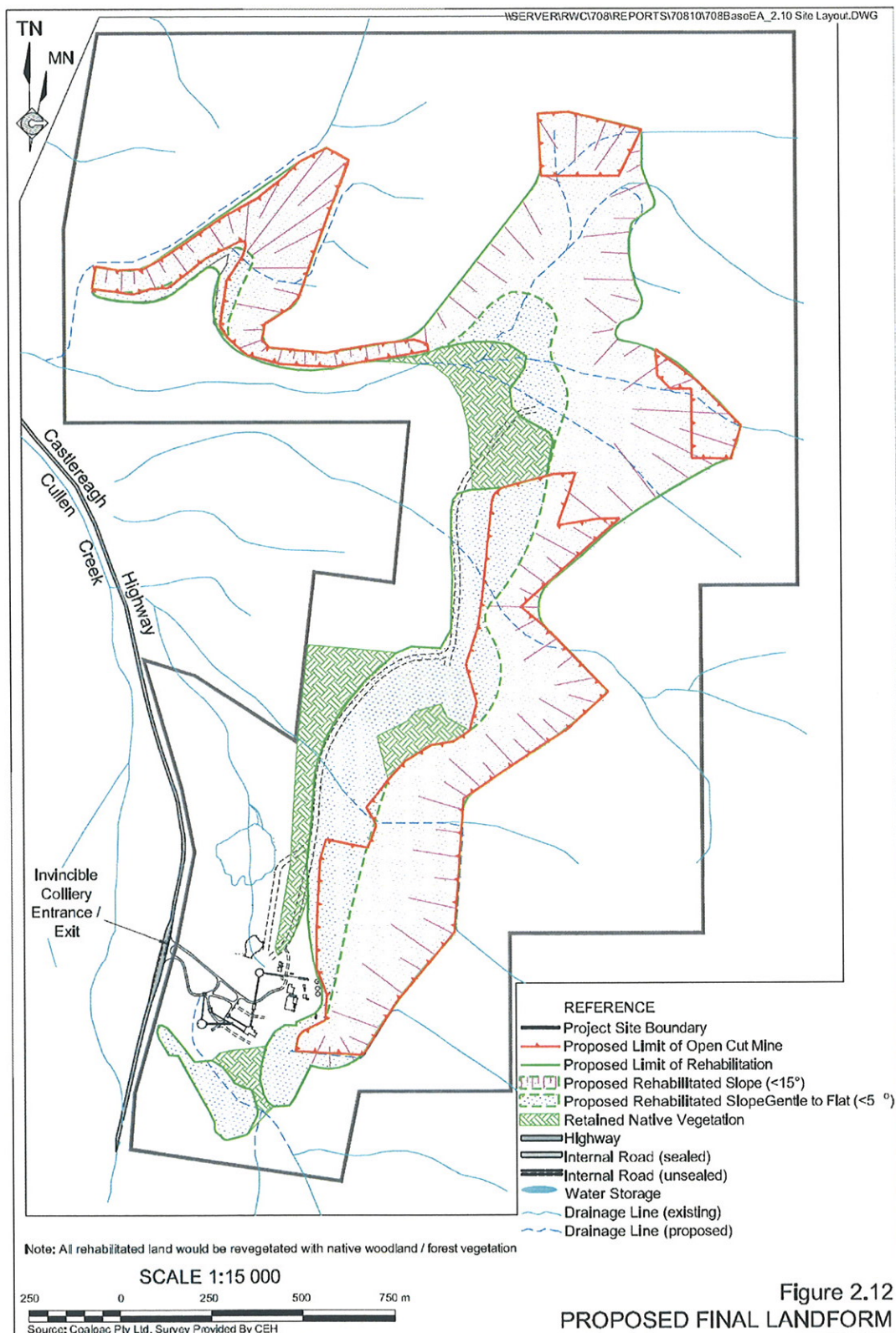


Figure 5: Proposed Final Landform and Mine Rehabilitation Plans

**APPENDIX 2
STATEMENT OF COMMITMENTS**

Desired Outcome	Commitment	Timing
1. Area of Activities		
All approved activities are undertaken in the area(s) nominated on the approved plans and figures (unless moved slightly to avoid individual trees).	1.1 Survey and mark the boundaries of the areas of disturbance on the ground.	Prior to any vegetation clearing
2. Operating Hours		
Management of operations in accordance with the approved operating hours.	Undertake open cut mining, coal processing and rehabilitation activities between the hours of 7:00am and 10:00pm Monday to Saturday. Undertake coal transportation: - between 7:00am and 9:30pm Monday to Saturday, and at no time on Sundays or public holidays for coal hauled to the Mount Piper Power Station; and - between 7:00am and 6:00pm Monday to Saturday, and at no time on Sundays or public holidays for coal hauled to other destinations. Undertake blasting between 9:00am and 5:00pm Monday to Friday.	During operations During operations During operations
3. Waste Management		
Minimisation of general waste creation and maximisation of recycling, wherever possible.	3.1 Place all paper and general wastes originating from the Site Facilities Area, together with routine maintenance consumables from the daily servicing of equipment in garbage bins located adjacent to the various buildings.	Ongoing
Minimisation of the potential risk of environmental impact due to waste creation, storage and/or disposal.	3.2 Collect general waste bins daily and place contents in large waste skip bins positioned adjacent to the heavy vehicle maintenance building to await removal by licensed contractor. 3.3 Organise the regular collection of industrial wastes. 3.4 Store waste oils and grease at the maintenance workshop for collection by a licensed waste recycling contractor. 3.5 Collect all parts and packaging and transfer to the maintenance workshop for disposal or recycling. 3.6 Store potentially hydrocarbon contaminated water in the oil/water separator for regular	Daily Fortnightly Bi-monthly As required As required

	removal from site by a licensed contractor.	
	3.7 Install adequate toilet and ablution facilities within the mine facilities area for the site workforce and visitors.	During site establishment
	3.8 Direct sewage to a septic system which would be pumped out by a licensed waste collection & disposal contractor.	As required
Manage coarse and fine rejects material generated by the Invincible Colliery Processing Plant in a manner to minimise potential for impact on the local environment.	3.9 Collect and transfer all coarse rejects to completed sections of the open cut and incorporate into backfill operations.	Ongoing
	3.10 Pump fine rejects to Fines Rejects Ponds	Ongoing
4. Rehabilitation		
The creation of a stable final landform, available for the proposed future use(s) of agriculture and/or nature conservation.	4.1 Adopt a progressive approach to rehabilitation to ensure that completed areas are quickly shaped and vegetated to provide a stable landform.	Ongoing
	4.2 Stabilise earthworks, drainage lines and disturbed areas no longer required for mine-related activities.	As areas become available
	4.3 Blend the created landforms with the surrounding land fabric.	Ongoing during rehabilitation activities
	4.4 Utilise native tree, shrub and grass species and / or pasture species comparable with either the existing vegetation communities or those which occurred in the area prior to mining and agriculture-related disturbance.	Ongoing during rehabilitation activities
	4.5 Collect, sow and replant tube stock of <i>Eucalyptus cannonii</i> and <i>E. viminalis</i> over the final landform.	Ongoing during rehabilitation activities
	4.6 Remove tree hollows and relocate these to areas within the biodiversity offset areas which will not be disturbed by the project.	Prior to disturbance
	4.7 Retain cleared trees and branches for use in stabilising slopes identified for rehabilitation with native woodland communities.	Ongoing during rehabilitation activities
	4.8 Include the rehabilitation of disturbance associated with the abandoned Cullen Main East open cut to the south of the proposed open cut extension and in the final landform.	Ongoing during rehabilitation activities
Incorporate rehabilitation activities associated with the	4.9 Update the approved Rehabilitation Management Plan to include the open cut mine extension area.	Prior to disturbance of the previously rehabilitated area

proposed modification with existing rehabilitation and landscape management of the site.	4.10 Commission an annual inspection of rehabilitation success against objectives such as ground cover, biodiversity, weed invasion, erosion and sedimentation, and general condition.	Annual
5. Noise		
All open cut mining and coal crushing / screening activities are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	5.1 Restrict surface clearing activities to only one of the more noisy activities at a time eg. tree felling or topsoil stripping. If unavoidable, these noisier activities would only occur simultaneously after 9:00am when the affects of local temperature inversions are likely to be minimal.	During clearing and soil stripping activities
	5.2 Construct a 15m high earth bund adjacent to northwest (Year 1 and 2) open cut operations for all scenarios where activity occurs within this region.	As part of initial soil and overburden stripping activities
	5.3 Regularly service all equipment used on site to ensure the sound power levels remain at or below the levels used in the modelling to assess generated noise levels and compliance with the criteria.	Ongoing
	5.4 Fit mobile mining equipment with mid-high frequency broadband reverse beepers, decreasing sound power levels by 2dB(A) to 3dB(A).	Ongoing
	5.5 Use equipment with lower sound power levels in preference to more noisy equipment.	Ongoing
	5.6 Minimise surface open cut mining activities (within 10m of surface) between 6:00pm and 10:00pm.	Ongoing
	5.7 Cease surface open cut mining activities (within 10m of surface) between 6:00pm and 10:00pm should noise enhancing winds (from the east) prevail at speeds between 0.5m/s and 3.0m/s.	Ongoing
	5.8 Ensure the on-site road network is well maintained to limit body noise from empty trucks travelling on internal roads.	Ongoing Ongoing
	5.9 Operate the coal crushing and screening equipment immediately behind coal stockpiles of, on average, 6m in height.	
All highwall mining operations are undertaken in such a manner as to reduce the noise	5.10 Position the highwall mining equipment at least 15m below surface level or behind appropriate bunding.	During highwall mining operations
	5.11 Create a low wall bund of at least 5m in	Prior to commencement

level generated and minimise impacts on surrounding landholders and/or residents.	height between the highwall mining equipment and receivers.	of highwall mining
All Invincible Colliery Processing Plant operations are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	5.12 Enclose or otherwise attenuate noise of the Bradford Breaker, to reduce the sound power level (SPL) by at least 10dB(A).	Within 6 months of project approval
	5.13 Implement measures to reduce noise emissions from the jig washer	By 2 March 2009
	5.14 Implement measures to restrict the operation of the jig washer and/or front end loader during evening hours in noise enhancing weather conditions	By 2 March 2009
All transport operations are undertaken in such a manner as to reduce the noise level generated and minimise impacts on surrounding landholders and/or residents.	5.15 Adhere to the approved hours of coal transportation.	Ongoing
	5.16 Instruct all truck drivers to avoid the use of engine brakes when approaching the Project Site entrance on the Castlereagh Highway and to be mindful of local residences when accelerating the truck uphill.	Ongoing
No activities with the potential to generate sleep disturbing noise are to be undertaken.	5.17 Instruct the mining contractor to restrict on site activities between the hours of 10:00pm and 7:00am to low noise maintenance activities such as oil changes.	Ongoing
Provide for the reduction of noise levels generated by the Invincible Colliery over the life of the project.	5.18 Prepare to the satisfaction of the DECC and DoP, a Pollution Reduction Programme which incorporates the commitments made.	Prior to commencement of any project related activity
6. Blasting		
All blasting is designed and carried out to industry standards, to meet nominated airblast and ground vibration criteria and to minimise impacts on surrounding land owners of the Project Site.	6.1 Blast design and implementation would be undertaken by a suitably qualified blasting engineer and/or experienced and appropriately certified shot-firer.	Ongoing
	6.2 Orientate the blast face, where practical, away from or at an oblique angle to nearby residences.	Ongoing
	6.3 Implement blast hole spacing in accordance with blast design.	Ongoing
7. Flora and Fauna		
Minimisation of long term impact on flora and fauna on and around the Project Site.	7.1. Manage all overburden storage within the completed sections of the open cut and areas previously disturbed by mining activities.	Ongoing
	7.2. Minimise clearing to be consistent with	During clearing

	operational requirements. 7.3. Clearly define all areas to be cleared and conduct all soil stripping in campaigns on an as-needs basis. 7.4. Construct any additional internal roads required on the cleared lands well away from stands of native vegetation. 7.5. Manage noxious weeds on the Invincible Colliery Site. 7.6. Identify, remove and relocate tree hollows within the footprint of the proposed open cut mine extension. 7.7. Carry out, where possible, tree removal, especially the mature trees in late spring and early autumn to avoid spring nesting birds and over-wintering bats. 7.8. Undertake inspections of mature trees for nesting birds and roosting bats prior to each clearing campaign. 7.9. Relocate any nesting and roosting hollows, as well as nests, used by listed threatened species to appropriate locations nearby. 7.10. Place all branches and tree trunks <300mm in diameter or containing hollows over the areas of the final landform designated for the reestablishment of native vegetation. 7.11. Rehabilitate the final landform using tube stock of the species <i>Eucalyptus cannonii</i> and <i>E. viminalis</i>. 7.12. Include a vertebrate pest control program as part of the mining operation. 7.13. Design drainage line crossings to ensure that natural creek flows are not interfered with.	Prior to clearing Ongoing Ongoing Prior to clearing Ongoing Prior to clearing Ongoing Ongoing Ongoing Within 12 months of commencement of mining. Prior to commencement of the Project.
8. Cultural Heritage		
Provide appropriate protection to identified Aboriginal artefacts.	8.1. Construct a fence around the site "Invincible OS1" and identify this as a culturally sensitive area at the site and on all mine plans. 8.2. Manage drainage in the vicinity of the site such that it would not be subject of flooding. 8.3. Inform all site personnel to the presence of the site and their obligations under the National Parks and Wildlife Act 1974 (NPW Act, 1974) in relation to site protection.	Prior to commencement of the Project Ongoing Prior to commencement of construction

Minimise potential to impact upon unidentified Aboriginal artefacts.	8.4. Cease work at any area if further Aboriginal objects are uncovered during the course of the Project, and contact the DECC (NPWS) for advice.	Ongoing
Employees who are sensitive and respectful of possible identified Aboriginal sites and artefacts.	8.5. Conduct a Cultural Heritage Awareness Induction Course for staff, contractors and any heritage monitors working on the Project Site.	Ongoing
9. Water Resources		
Provide for a constant source of water for operational and environmental purposes.	9.1. Obtain appropriate water licences for the extraction of groundwater from the Invincible Colliery underground workings.	Prior to extraction of water from existing and proposed groundwater bores
Manage groundwater at surface to prevent contamination.	9.2. Cease pumping and discharge of groundwater to the Cox's River (under EPL 1095) in the event of observed ferrous iron oxidation, i.e. iron staining. 9.3. Locate the groundwater discharge point to the Main Colliery Dam on a float towards the middle of the dam. 9.4. Undertake quarterly sampling and general observation of water within the main Colliery Dam and analyse / inspect for signs of ferrous iron oxidation or other contamination. 9.5. Cease pumping and discharge of groundwater to the Main Colliery Dam in the event of observed ferrous iron oxidation or signs of other contamination.	Ongoing Prior to extraction of water from existing and proposed groundwater bores. Quarterly Ongoing
Diversion of clean water flows away from areas of project related disturbance.	9.6. Operate the existing clean water diversion structures in accordance with the Invincible Colliery Soil and Water Management Plan 9.7. Construct a diversion banks upstream of the proposed extension areas of the open cut, diverting water to an adjacent natural drainage features. 9.8. Inspect the diversion banks and other clean water management structures on a regular basis, or following rainfall of >25mm/24 hours, and undertake maintenance work as necessary.	Ongoing Prior to disturbance of previously rehabilitated area Quarterly or following rainfall of >25mm/24hours
Capture of dirty water flows from areas of project related disturbance.	9.9. Construct low flow contour bank(s) discharging to a sediment basin(s) downstream of the proposed open cut mine extension. 9.10. Construct road-side sediment basins to capture run-off from the internal haul road.	Prior to commencement of open cut mining Complete

	9.11. Inspect the settlement ponds and sediment basins on a regular basis, or following rainfall of >25mm/24 hours, and clean out the sediment basins of consolidated sediment once capacity reduced by 20%. 9.12. Excavate temporary sumps within the open cut area to capture rainfall and runoff within the open cut.	Quarterly or following rainfall of >25mm/24 hours As part of open cut mining activities
Discharged water quality to meet nominated criteria.	9.13. Undertake monitoring of any discharged water from the Project Site within 24 hours of discharge event. 9.14. Ensure any water discharged from nominated discharge point (No. 2) meets the criteria of EPL 1095, as follows. TSS <50mg/L. pH: 5.5 to 8.5. Oil & grease <10mg/L.	Within 24 hours of discharge event As above
Prevention of hydrocarbon contamination of water on the Project Site.	9.15. Securely store all hydrocarbon products. 9.16. Refuel all but the less mobile mining equipment which would be refuelled within the open cut area, within designated areas. 9.17. Direct all water from wash-down areas and workshops to oil/water separators and containment systems. 9.18. Ensure all storage tanks are either selfbunded tanks or bunded with an impermeable surface and have a capacity to contain a minimum 110% of the largest storage tank capacity. 9.19. Implement a 3-phase remedial action plan in the event of a major hydrocarbon spill as follows. – Phase 1 – Initial Recovery: Recover as much as possible at the source by pumping free hydrocarbon from the surface and excavating hydrocarbon-contaminated materials. – Phase 2 – Source Control: Begin hydraulic control of the source to prevent spreading of contamination. – Phase 3 – Recovery: If necessary, install boreholes to remove and treat contaminated groundwater.	Ongoing Ongoing Ongoing Ongoing In the event of hydrocarbon spill
Manage all ongoing water issues.	9.20. Update the Invincible Colliery Site Water Management Plan (SWMP) to include modifications resultant from proposed extension to the open cut mine and increased production.	Within 3 months of project approval
10. Traffic and Transport		

All motorists travel safely to and from the Project Site with minimal disruption to traffic on the Castlereagh Highway.	10.1. Undertake all transport activities strictly in accordance with the project approval and environment protection licence.	Ongoing
	10.2. Restrict maximum hourly truck movements to and from the Project Site to 12.	Ongoing
	10.3. Maintain a 5-minute gap, as far as practicable, between the despatch of coal carrying trucks from the Invincible Colliery.	Ongoing
	10.4. Encourage communication between drivers exiting the Invincible Colliery and Ivanhoe North Rehabilitation Project such that movements to and from these operations are staggered.	Ongoing
	10.5. Minimise truck movements during periods when buses carrying school children are travelling on the section of road between the Invincible Colliery and Mt Piper or Wallerawang Power Stations.	Ongoing
	10.6. Undertake all deliveries of "oversize" loads in accordance with RTA and Council restrictions on transport hours and safety / warning requirements.	Ongoing
	10.7. Ensure all trucks transporting coal are well maintained and that driver's act in a courteous manner at all times.	Ongoing
	10.8. Ensure all trucks transporting coal are well maintained and that driver's act in a courteous manner at all times.	Ongoing
	10.9. Ensure all truck drivers operate in accordance with a Transport Policy and Code of Conduct.	Ongoing
	10.10. Obtain an Occupational Health and Safety Management Plan and a "Code of Conduct" for all drivers from each transport contractor.	On grant of contract
	10.11. Enforce a covered load policy to all trucks transporting coal from the Invincible Colliery.	Ongoing
	10.12. Load each truck to avoid spillage and distribute the load safely within the Road and Traffic Authority's legal maximum weights.	Ongoing
	10.13. Only transport coal to the Wallerawang Power Station to provide emergency supply. The campaigns of traffic between Invincible Colliery and Wallerawang Power Station are not to exceed 2 weeks every 3 months.	Ongoing
11. Air Quality		
Site activities are	11.1. Minimise clearing ahead of construction and	Ongoing

undertaken without exceeding DECC air quality criteria or goals.	operational activities.	
	11.2. Undertake soil stripping at a time when there is sufficient soil moisture to prevent significant lift-off of dust.	Ongoing
	11.3. Avoid stripping soil in periods of high wind.	Ongoing
	11.4 Sow a sterile cover crop over soil stockpiles that are to be retained for more than three months.	Ongoing
	11.5. Use water application to increase soil moisture should stripping occur during periods of high wind or low soil moisture.	Ongoing
	11.6. Fit drill rigs with dust collectors or alternatively use water injection.	Ongoing
	11.7. Undertake surface dampening activities prior to blasting to minimise dust lift-off.	Ongoing
	11.8. Use coarse aggregates for blast hole stemming to prevent venting of explosion gases.	Ongoing
	11.9. Dampen stockpiles of ROM coal prior to processing through the crushing and screening plant and product coal if significant dust lift-off is observed.	Ongoing
	11.10. Temporarily cease operation in the event of protracted dry periods, high winds and significant dust generation and dispersal towards the surrounding residences.	Ongoing
	11.11. Cover all trucks carrying product coal from the mine with approved covers and securely fix the tailgates to prevent windblown dust emission or spillages.	Ongoing
Minimise the generation of greenhouse gases as a consequence of the project.	11.12. Apply water to internal haul roads at a rate of approximately 2L/m ² per application.	Ongoing
	11.13. Minimise the drop heights between front-end loader buckets and trucks carrying coal or overburden.	Ongoing
	11.14. Cease any dust-generating activity(ies) in the event of strong winds blowing dust towards residences.	Ongoing
	11.15. Fit all earthmoving equipment on-site with exhaust controls which satisfy NSW DECC emission requirements.	Ongoing
	11.16. Ensure that all equipment is properly maintained to ensure no unacceptable exhaust emissions occur.	Ongoing

Monitor the impacts on local air quality to ensure the nominated DECC criteria are adhered to.	11.17. Undertake an air quality monitoring program to demonstrate compliance with the nominated goals.	Various
	11.18. Monitor deposited dust at selected residences and strategic locations surrounding the Project Site.	Monthly
	11.19. Monitor meteorological conditions as they relate to the dispersion of air contaminants.	Continuous
12. Environmental Monitoring		
Monitor and record environmental impacts on the local environment	Surface Water	
	12.1. Monitor water quality from licensed discharge point (No. 2) within 24 hours of commencement of discharge.	As required
	12.2. Monitor water quality within the Main Colliery Dam.	Quarterly
	Noise	
	12.3. Undertake quarterly attended and unattended monitoring at the "Hillview", "Billabong", Cullen Bullen south and Cullen Bullen west residences for the life of the Invincible Colliery.	Quarterly
	12.4. Update the Invincible Colliery Noise Monitoring Program to account for the proposed implementation of highwall mining and production increase.	Within 3 months of Approval
	12.5. Prepare a Noise Management Protocol as described by Commitment 5.18	Within 6 months of receiving project approval
	Blasting	
	12.6. Monitor all blasts for air overpressure and ground vibration at the "Billabong" residence and the closest residence in Cullen Bullen.	Every blast
	12.7. Update the Invincible Colliery Blasting Management Plan to account for the proposed implementation of highwall mining and production increase.	Within 3 months of approval
	Air Quality	
	12.8. Monitor wind speed and direction at the Invincible Colliery weather station.	Continuous
	12.9. Monitor deposited dust deposition at locations IDD-1 to IDD-6 surrounding the Invincible Colliery.	Monthly
	12.10. Monitor PM10 at location HVAS-1 in accordance with DECC guidelines.	Ongoing (1 day in 6)
	12.11. Update the Invincible Colliery Air Quality Monitoring Program to account for the proposed implementation of highwall mining and production increase.	Within 3 months of project approval

	Rehabilitation and Compensatory Conservation Areas	
	12.12. Undertake annual monitoring of rehabilitation success.	Annual
	12.13. Undertake annual inspection of compensatory conservation areas and report on recommended improvements.	Annual

**APPENDIX 3
INDEPENDENT DISPUTE RESOLUTION**

**Independent Dispute Resolution Process
(Indicative only)**

