

Development Consent

Section 80 of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the Development 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 on-going environmental management of the development.

Frank Sartor, MP
Minister for Planning

Sydney,

2005

MODs 2 & 3 (27 May 2014) – red
Mod 4 (August 2019) – Blue
MOD 5 (October 2019) – Green

SCHEDULE 1

Development Application:	DA 504-00.
Applicant:	Centennial Coal Company Limited.
Consent Authority:	Minister for Planning.
Land:	See Appendix 1.
Proposed Development:	Extension of the Clarence Underground Coal Mine.
State Significant Development:	The proposal is classified as State significant development, under section 76A(7) of the <i>Environmental Planning and Assessment Act 1979</i> , because it involves coal-mining related development that requires a new mining lease under section 63 of the <i>Mining Act 1992</i> .
Integrated Development:	The proposal is classified as integrated development, under section 91 of the <i>Environmental Planning and Assessment Act 1979</i> , because it requires additional approvals under the: <ul style="list-style-type: none">• <i>Protection of the Environment Operations Act 1997</i>; and• <i>Water Act 1912</i>.
Designated Development:	The proposal is classified as designated development, under section 77A of the <i>Environmental Planning and Assessment Act 1979</i> , because it is for an underground coal mine, and consequently meets the criteria for designated development in schedule 3 of the <i>Environmental Planning and Assessment Regulation 2000</i> .

Notes:

- To find out when this consent becomes effective, see section 83 of the *Environmental Planning and Assessment Act 1979* (EP&A Act);
- To find out when this consent is liable to lapse, see section 95 of the EP&A Act; and
- To find out about appeal rights, see section 97 of the EP&A Act.

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DEFINITIONS

Annual Review	The review of operations required under condition 5 of Schedule 5
Applicant	Centennial Coal Company Limited
BCA	Building Code of Australia
BCD	Biodiversity Conservation Division within the Department
Bore	Any bore or well or excavation or other work connected or proposed to be connected with sources of sub-surface water, and used or proposed to be used or capable of being used to obtain supplies of such water whether the water flows naturally at all times or has to be raised whether wholly or at times by pumping or other artificial means
CCC	Community Consultative Committee
Council	Lithgow City Council
DA	Development Application
Day	Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning, Industry & Environment
Development	The development described in the EIS
DRG	Division of Resources and Geoscience within the Department
EIS	Environmental Impact Statement titled <i>Clarence Colliery – Lease Extension Environmental Impact Statement</i> , dated October 2000, as modified by: <ul style="list-style-type: none"> • Supplementary Report titled <i>Variation to Development Application No.504-00 and Supplementary Information</i>, dated May 2005; • Environmental Assessment – Reject Emplacement Area (REA) VI, November 2013, as modified by the Response to Submissions, dated 27 March 2014; • Environmental Assessment – <i>Road Haulage Modification</i>, November 2013, as modified by the Response to Submissions, dated 18 February 2014; • Environmental Assessment – <i>Clarence Colliery Modification to DA 504-00 Statement of Environmental Effects</i>, April 2019, as modified by the Response to Submissions, dated 27 June 2019 and Response to Request for Information dated 31 July 2019; and • <i>Modification Clarence Colliery – Modification to DA 504_00 – Employee Increase</i>, June 2019 as modified by the Response to Submissions dated 28 August 2019 and Response to Request for Information dated 06 September 2019.
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Evening	Evening is defined as the period from 6pm to 10pm
GTA	General Term of Approval
Incident	A set of circumstances that: <ul style="list-style-type: none"> • causes or threatens to cause material harm to the environment; and/or • breaches or exceeds the limits or performance measures/criteria in this consent
Land	As defined in the EP&A Act, except for where the term

Material harm to the environment

Minister

Night

Privately-owned land

ROM Coal

RMS

Planning Secretary

Water Division

Site

Statement of Commitments

is used in the noise and air quality conditions in Schedules 3 and 4 of this consent 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 consent

Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial

Minister for Planning and Public spaces, or delegate

Night is defined as the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays

Land that is not owned by a public agency or a mining or power generation company (or its subsidiary)

Run-of-mine coal

Transport - Roads and Maritime Services

Secretary of the Department, or nominee

Water Division within the Department

Land to which the DA applies

The Applicant's commitments in Appendix 4

SCHEDULE 2 ADMINISTRATIVE CONDITIONS

Obligation to Minimise Harm to the Environment

1. The Applicant 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 development.

Terms of Approval

2. The Applicant shall carry out the development:
 - generally in accordance with the EIS and Statement of Commitments; and
 - in accordance with the conditions of this consent.
3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency
4. The Applicant shall comply with any reasonable requirement/s of the Planning Secretary arising from the Department's assessment of:
 - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with this consent; and
 - (b) the implementation of any actions or measures contained in these documents.

Limits on Approval

5. This consent shall lapse on 31 December 2026.

Note: Conditions of this consent may require activities to be carried out by the Applicant beyond the period of approval.

6. The Applicant shall not extract more than 3 million tonnes of ROM coal per year from the mine.
 7. Except for the period referred to in condition 7AA, the Applicant may transport up to 200,000 tonnes of coal by road per calendar year in total, with a maximum of 100,000 tonnes per calendar year transported to the west, via the Darling Causeway and Great Western Highway haulage route shown in Appendix 5.
- 7AA. Until 31st December 2020, the Applicant may transport up to 300,000 tonnes of coal by road per calendar year in total, including 200,000 tonnes of coal by road per calendar year to the Mount Piper Power Station or to locations north of Sydney or Eastern NSW using the haulage routes shown in Figure 1 of Appendix 5.
- 7A. Other than via the haulage route shown in Appendix 5, the Applicant shall not cause any coal truck movements through the City of Lithgow without the prior approval of the Council.
 - 7B. Haulage of coal to the west shall only take place between the hours of 7 am to 10 pm Monday to Saturday and between 8 am to 10 pm on Sunday and public holidays.

Structural Adequacy

8. The Applicant 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 Applicant is required to obtain construction and occupation certificates for any building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of development.

Demolition

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

Protection of Public Infrastructure

10. The Applicant shall:
 - (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
 - (b) relocate, or pay the full costs associated with relocating any public infrastructure that needs to be relocated as a result of the development.

Operation of Plant and Equipment

11. The Applicant shall ensure that all plant and equipment used at the site, or used in connection with the development, are:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

SUBSIDENCE

Note: The development will generally be regulated under the approval process for managing the impacts of coal mining subsidence under the Mining Act 1992.

Subsidence Impact Assessment Criteria

1. The Applicant shall ensure that surface subsidence generated by the development does not exceed the criteria listed in Table 1.

Table 1: Subsidence Impact Assessment Criteria

Level of Extraction	Subsidence	Tilt	Horizontal Strain (compressive and tensile)
First Workings	20 mm	1.0 mm/m	1.0 mm/m
Partial Extraction	100 mm	3.0 mm/m	2.0 mm/m

Note: The first workings and partial extraction areas refer to those areas shown conceptually on Figure 5.6 (revised) of the Supplementary Report, as reproduced in Appendix 2.

Subsidence Management Plan

2. Before carrying out any underground mining operations that will potentially lead to subsidence of the land surface, the Applicant shall prepare a Subsidence Management Plan for those operations in accordance with the following [DRG](#) documents (or the most current and updated versions of these documents):
 - (a) *New Approval Process for Management of Coal Mining Subsidence - Policy*; and
 - (b) *Guideline for Applications for Subsidence Management Approvals*, to the satisfaction of the [Planning Secretary](#).

In addition to the above each Subsidence Management Plan shall:

- (a) describe how the subsidence impact assessment criteria will be monitored over time;
- (b) provide for the notification of relevant authorities, including [DRG](#), [Water Division](#) and the [Planning Secretary](#) in the event of any exceedance of the impact assessment criteria; and
- (c) detail measures to reduce, mitigate and remediate any impacts.

During the preparation of each Subsidence Management Plan the Applicant shall consult with the Department, Council, [EPA](#), [WaterNSW](#) and the CCC, and have regard for any comments provided by these agencies/committees.

SURFACE & GROUND WATER

Note: The Applicant is required to obtain licences for the development under the Water Act 1912 and the Protection of the Environment Operations Act 1997.

Pollution of Waters

3. Except as may be expressly provided by an Environment Protection Licence, the Applicant shall comply with section 120 of the *Protection of the Environment Operations Act 1997* during the carrying out of the development.

Water Discharge Pollution Limits

4. Except as may be expressly provided by an Environment Protection Licence, the Applicant shall ensure that the discharges from any licensed discharge points comply with the limits in Table 2:

Table 2: Water Discharge Pollution Limits

Pollutant	Units of Measure	100 percentile concentration limit
pH	pH	6.5 ≤ pH ≤ 9.0
Non-filterable residue	mg/litre	NFR ≤ 120

Note: This condition does not authorise the pollution of waters by any other pollutants.

Water Resources Impact Assessment Criteria

5. The Applicant shall ensure that the development does not result in any:
 - (a) significant inflows to mine workings;
 - (b) reduction in pumping yield in privately-owned groundwater bores;
 - (c) reduction in surface flows and groundwater baseflow to upland swamps (Newnes Plateau Shrub Swamps) and wetlands; and
 - (d) reduction in surface flows and groundwater baseflow to waterbodies including Marrangaroo Creek, Farmers Creek, Dargans Creek, Wolgan River, Dumbano Creek, Bungleboori Creek, and Wollangambe River (excluding reduction in flows associated with the proposed water transfer scheme),
 to the satisfaction of the [Planning Secretary](#).

Note: Each of these impact assessment criteria must be quantified in the respective sub-plans of the Water Management Plan (see condition 6 below), to the satisfaction of the [Planning Secretary](#).

Water Management Plan

6. Within 12 months of the date of this consent, the Applicant shall prepare and subsequently implement a revised Water Management Plan for the mine in consultation with Council, SCA, [EPA](#), [Water Division](#) and to the satisfaction of the [Planning Secretary](#). This plan must be prepared by a qualified hydrogeologist/hydrologist and include:
 - (a) a Water Balance;
 - (b) an Erosion and Sediment Control Plan;
 - (c) a Surface Water Monitoring Program;
 - (d) a Ground Water Monitoring Program; and
 - (e) a Surface and Ground Water Response Plan, to address any potential adverse impacts associated with the development.

Note: The Water Management Plan may be prepared in a staged manner in accordance with the staging of the development.
- 6A. The Applicant shall prepare and implement a revised Water Management Plan for the development, taking into account the construction of Reject Emplacement Area VI and protection of the adjacent Newnes Plateau Hanging Swamp (see [Appendix 4](#)), and the relocation of the effluent irrigation area, to the satisfaction of the [Planning Secretary](#). This plan must be prepared in consultation with Council, EPA and [WaterNSW](#), and be submitted to the [Planning Secretary](#) for approval by 31 October 2014.
- 6B. The Applicant shall design, construct and operate Reject Emplacement Areas V and VI to ensure that:
 - (a) its commitments in [Appendix 3](#) are implemented;
 - (b) the base of the emplacement is suitably lined to comply with a permeability standard of less than 1x10⁻⁹ metres per second over a minimum thickness of 0.5 metres, or equivalent performance; and
 - (c) there are no discharges from the emplacement to surface waters.
7. The Water Balance shall:
 - (a) include details of all water extracted, dewatered, transferred, used and/or discharged by the mine; and
 - (b) provide for the annual re-calculation of the water balance and reporting of the review in the [Annual Review](#).
8. The Erosion and Sediment Control Plan shall:
 - (a) be consistent with the requirements of the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual;
 - (b) identify activities that could cause soil erosion and generate sediment;
 - (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
 - (d) describe the location, function, and capacity of erosion and sediment control structures; and
 - (e) describe what measures would be implemented to maintain the structures over time.

9. The Surface Water Monitoring Program shall include:
 - (a) detailed baseline data on surface water flows (including ground water baseflows) and quality in waterbodies and wetlands above the mine;
 - (b) surface water impact assessment criteria;
 - (c) a program to monitor surface water flows (including ground water baseflows) and quality; and
 - (d) a protocol for the investigation, notification and mitigation of identified exceedances of the surface water impact assessment criteria; and
 - (e) a program to monitor the effectiveness of the Erosion and Sediment Control Plan.
10. The Ground Water Monitoring Program shall include:
 - (a) detailed baseline data on ground water levels and quality, based on statistical analysis, to benchmark the pre-mining natural variation in ground water levels and quality;
 - (b) ground water impact assessment criteria;
 - (c) a program to monitor the volume and quality of ground water seeping into the underground mine workings; and
 - (d) a program to monitor regional ground water levels and quality in the following geologic formations:
 - (i) Banks Wall Sandstone;
 - (ii) Burra-Moko Head Sandstone;
 - (iii) Caley Formation; and
 - (iv) Katoomba Coal Seam.
 - (e) a protocol for the investigation, notification and mitigation of identified exceedances of the ground water impact assessment criteria.
11. The Surface and Ground Water Response Plan shall include:
 - (a) the procedures that would be followed in the event of any exceedance of the surface or ground water impact assessment criteria, or other identified impact on surface or ground water; and
 - (b) measures to mitigate, remediate and/or compensate any identified impacts.

Reporting

12. Each year, the Applicant shall:
 - (a) review the Water Management Plan;
 - (b) update each sub-plan; and
 - (c) report the results of this review in the [Annual Review](#), including;
 - (d) the results of monitoring;
 - (e) details of the review for each sub-plan;
 - (f) amendments to the sub-plans; and
 - (g) details of the measures undertaken/proposed to address any identified issues.

BIODIVERSITY

Biodiversity Offset Strategy

- 12A. By the end of December 2016, the Applicant shall, in consultation with [BCD](#), and to the satisfaction of the [Planning Secretary](#):
 - (a) provide a suitable offset to satisfactorily offset clearing 4.1 hectares of *Newnes Plateau Narrow-leaved Peppermint – Silver-top Ash Layered Open Forest* and the loss of related biodiversity values, including for threatened species; and
 - (b) make suitable arrangements to manage, protect and provide long-term security in perpetuity for this area, consistent with the relevant NSW Offsets policy.

AIR QUALITY

Impact Assessment Criteria

13. The Applicant shall ensure that the air pollution generated by the development does not exceed the criteria listed in Tables 3, 4, and 5 at any privately-owned land.

Table 3: 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	25 µg/m ³

Table 4: Short term impact assessment criterion for particulate matter

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

Table 5: 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 3580.10.1-1991: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Air Quality Monitoring Program

14. Within 6 months of the date of this consent, the Applicant shall prepare and subsequently implement an Air Quality Monitoring Program for the development, in consultation with EPA, and to the satisfaction of the Planning Secretary. This program must include an air monitoring protocol for evaluating compliance with the air quality criteria in this consent.

NOISE

Noise Impact Assessment Criteria

15. The Applicant shall ensure that the noise generated by the development, excluding train-loading and rail operations, does not exceed the noise impact assessment criteria presented in Table 6 at any residence on privately owned land.

Table 6: Noise impact assessment criteria dB(A) L_{Aeq} (15 min)

Location	Day	Evening	Night
Residences on privately owned land	38	36	35

Notes:

- (a) For the purpose of these noise criteria, 5dB(A) must be added to the measured level if the noise is substantially tonal or impulsive in character.
- (b) The noise criteria do not apply where the Applicant and the affected landowner have reached a negotiated agreement in regard to noise, and a copy of the agreement has been forwarded to the Planning Secretary and EPA.
- (c) Noise from the development is to be measured at the most affected point or 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, to determine compliance with the L_{Aeq}(15 minute) noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Noise Policy for Industry). The modification factors in Section 4 of the NSW Noise Policy for Industry shall also be applied to the measured noise levels where applicable.
- (d) The noise criteria apply under prevailing meteorological conditions (winds up to 3m/s), except under conditions of temperature inversions. Noise impacts that may be enhanced by temperature inversions must be addressed by:
 - documenting noise complaints received to identify any higher level of impacts or patterns of temperature inversions; and
 - where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts under temperature inversion conditions shall be developed and implemented.

Noise Management Plan

16. Within 6 months of the date of this consent, the Applicant shall prepare and subsequently implement a Noise Management Plan for the development, in consultation with EPA, and to the satisfaction of the Planning Secretary. The plan shall include:
 - (a) a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria;

- (b) a plan for the management and minimisation of noise emissions associated with train-loading and rail operations, including consideration of all feasible and reasonable noise mitigation measures; and
- (c) a protocol for the investigation, notification, and mitigation of identified exceedances of the noise impact assessment criteria.

16A. The Applicant shall prepare and implement a revised Noise Management Plan for the development, with a particular focus on reducing rail noise, to the satisfaction of the [Planning Secretary](#). This plan must be prepared in consultation with EPA, provide for the implementation of the Applicant's commitments in Appendix 4, and be submitted to the [Planning Secretary](#) for approval by 31 October 2014.

METEOROLOGICAL MONITORING

- 17. Within 6 months of the date of this consent, the Applicant shall establish and subsequently maintain 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*, and to the satisfaction of the [EPA](#) and the [Planning Secretary](#).

TRAFFIC & TRANSPORT

Road Haulage

- 18. The Applicant shall ensure that all vehicles loaded with coal leaving the site are covered and remain covered throughout the duration of their journey.
- 19. The Applicant shall ensure all loaded vehicles leaving the site are cleaned of materials that may fall on the road before they are allowed to leave the site.

Use of Wallerawang Power Station Intersection

- 19A. The Applicant shall not utilise the intersection of the Castlereagh Highway and Wallerawang Power Station Haul Road for haulage of coal until the intersection has been upgraded in accordance with Austroads standards, to the satisfaction of RMS.

VISUAL IMPACT

- 20. The Applicant shall minimise the visual impacts of the development to the satisfaction of the [Planning Secretary](#).

Lighting Emissions

- 21. The Applicant shall take all practicable measures to mitigate off-site lighting impacts from the development to the satisfaction of the [Planning Secretary](#).
- 22. All external lighting associated with the development shall comply with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

GREENHOUSE GAS

- 23. The Applicant shall:
 - (a) monitor the greenhouse gas emissions generated by the development;
 - (b) investigate ways to reduce greenhouse gas emissions on site; and
 - (c) report on these investigations in the [Annual Review](#), to the satisfaction of the [Planning Secretary](#).

WASTE MINIMISATION

- 24. The Applicant shall minimise the amount of waste generated by the development to the satisfaction of the [Planning Secretary](#).

REJECT EMPLACEMENT

- 24A. The Applicant shall prepare and implement a long term Reject Management Strategy for the project to the satisfaction of the [Planning Secretary](#). This plan must be:
- (a) prepared in consultation with [Water Division](#), EPA and [BCD](#);
 - (b) consider alternatives to reject emplacement, including beneficial re-use and underground disposal; and
 - (c) be submitted to the [Planning Secretary](#) for approval by the end of November 2014.

HAZARDS MANAGEMENT

Spontaneous Combustion

25. The Applicant shall take the necessary measures to prevent, as far as is practical, spontaneous combustion on the site.

Dangerous Goods

26. The Applicant shall ensure that the storage, handling, and transport of dangerous goods is done in accordance with the relevant *Australian Standards*, particularly *AS1940* and *AS1596*, and the *Dangerous Goods Code*.

BUSHFIRE MANAGEMENT

27. The Applicant shall:
- (a) ensure that the development is suitably equipped to respond to any fires on-site; and
 - (b) assist the Rural Fire Service and emergency services as much as possible if there is a fire on-site during the development.

MINE CLOSURE STRATEGY

28. At least 3 years prior to the cessation of mining, the Applicant shall prepare a Mine Closure Strategy for the development, in consultation with Council, [DRG](#), [Water Division](#) and [EPA](#), and to the satisfaction of the [Planning Secretary](#). The plan must:
- (a) define the objectives and criteria for mine closure;
 - (b) investigate options for the future use of the site, including the pit top and surface facilities area;
 - (c) investigate ways to minimise the adverse socio-economic effects associated with mine closure, including reduction in local employment levels;
 - (d) define a strategy for the ongoing management of water inflow to the mine;
 - (e) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and
 - (f) describe how the performance of these measures would be monitored over time.

REHABILITATION

29. Prior to the commencement of construction of Reject Emplacement Areas V or VI, the Applicant shall revise the Mining Operations Plan for the development to include detailed rehabilitation objectives and completion criteria for Reject Emplacement Areas V and VI, to the satisfaction of the Executive Director, Mineral Resources.

HERITAGE

Heritage Management Plan

30. The Applicant shall prepare and implement a Heritage Management Plan for the development to the satisfaction of the [Planning Secretary](#). This Plan must:
- (d) be prepared in consultation with relevant Aboriginal stakeholders;
 - (e) be submitted to the [Planning Secretary](#) for approval prior to 31 October 2014;
 - (f) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;
 - (g) detail the responsibilities of all stakeholders; and
 - (h) include programs/procedures and management measures for appropriate identification, management, conservation and protection of both Aboriginal and non-Aboriginal heritage items identified on the site.

SCHEDULE 4 ADDITIONAL PROCEDURES

NOTIFICATION OF LANDOWNERS

1. If the results of monitoring required in schedule 3 identify that impacts generated by the development are greater than the relevant impact assessment criteria in schedule 3, then the Applicant shall notify the [Planning Secretary](#) 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 development is complying with the criteria in schedule 3.

INDEPENDENT REVIEW

2. If a landowner (excluding mine owned properties) considers that the development is exceeding the impact assessment criteria in schedule 3, then he/she may ask the Applicant in writing for an independent review of the impacts of the development on his/her land.

If the [Planning Secretary](#) is satisfied that an independent review is warranted, the Applicant shall within 3 months of the [Planning Secretary](#) advising that an independent review is warranted:

- (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 [Planning Secretary](#), to conduct monitoring on the land, to determine whether the development is complying with the relevant criteria in schedule 3, and identify the source(s) and scale of any impact on the land, and the development's contribution to this impact; and
- (c) give the [Planning Secretary](#) and landowner a copy of the independent review.

SCHEDULE 5

ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING & REPORTING

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Within 12 months of the date of this consent, the Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the [Planning Secretary](#). This strategy must:
 - (a) provide the strategic context for environmental management of the development;
 - (b) identify the statutory requirements that apply to the development;
 - (c) describe in general how the environmental performance of the development would be monitored and managed during the development;
 - (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 development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliance;
 - manage cumulative impacts; and
 - respond to emergencies; and
 - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development; and
 - (f) be updated within 3 months of the completion of each Independent Environmental Audit.
2. Within 14 days of the [Planning Secretary's](#) approval for the strategy, the Applicant shall:
 - (a) send copies of the approved strategy to the relevant agencies, Council, and the CCC; and
 - (b) ensure the approved strategy is publicly available during the development.

ENVIRONMENTAL MONITORING PROGRAM

3. Within 12 months of the date of this consent, the Applicant shall prepare an Environmental Monitoring Program for the development in consultation with the relevant agencies, and to the satisfaction of the [Planning Secretary](#). This program must consolidate the various monitoring requirements in schedule 3 of this consent into a single document.
4. Within 3 months of the completion of each Independent Environmental Audit, the Applicant shall review, and if necessary update, the Environmental Monitoring Program to the satisfaction of the [Planning Secretary](#).

REPORTING

Annual Reporting

5. The Applicant shall prepare and submit an [Annual Review](#) to the [Planning Secretary](#) and the relevant agencies. This report must:
 - (a) identify the standards and performance measures that apply to the development;
 - (b) describe the works carried out in the last 12 months;
 - (c) describe the works that will 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 development during the past year,
 - (f) include an analysis of these monitoring results against the relevant:
 - impact assessment criteria;
 - monitoring results from previous years; and
 - predictions in the EIS;
 - (g) identify any trends in the monitoring results over the life of the development;
 - (h) identify any non-compliance during the previous year; and
 - (i) describe what actions were, or are being taken to ensure compliance.

Incident Reporting

- 5A. The Applicant shall immediately notify the [Planning Secretary](#) and any other relevant agencies of any incident. Within 7 days of the date of the incident, the Applicant shall provide the [Planning Secretary](#) and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular Reporting

- 5B. The Applicant shall provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent, and to the satisfaction of the [Planning Secretary](#).

INDEPENDENT ENVIRONMENTAL AUDIT

6. Within 5 years of the date of this consent, and every 5 years thereafter, unless the [Planning Secretary](#) directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
- be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the [Planning Secretary](#);
 - be consistent with *ISO 19011:2002 – Guidelines for Quality and/or Environmental Systems Auditing*, or updated versions of this guideline;
 - assess the environmental performance of the development, and its effects on the surrounding environment;
 - assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;
 - review the adequacy of the Applicant's Environmental Management Strategy and Environmental Monitoring Program; and, if necessary,
 - recommend measures or actions to improve the environmental performance of the development, and/or the environmental management and monitoring systems.
7. The Independent Environmental Audit shall include a detailed audit of the subsidence, surface water, and ground water impacts of the development. The audit shall:
- review the monitoring data for the development;
 - identify any trends in the monitoring data;
 - examine the subsidence, surface water, and ground water impacts of the development;
 - compare these impacts against the relevant impact assessment criteria; and, if necessary,
 - recommend measures to reduce, mitigate, or remediate these impacts

If the independent audit determines that the subsidence, surface water, and/or ground water impacts resulting from the underground mining operations are greater than those predicted in the EIS/Supplementary Report or the relevant impact assessment criteria, the Applicant shall:

- assess the significance of these impacts;
- investigate measures to minimise these impacts, including modifying subsequent mine plans; and
- describe what measures would be implemented to reduce, minimise, mitigate or remediate these impacts in the future;

to the satisfaction of the [Planning Secretary](#).

8. Within 3 months of commissioning the Independent Environmental Audit, the Applicant shall submit a copy of the audit report to the [Planning Secretary](#), with a response to the recommendations contained in the audit report.

COMMUNITY CONSULTATIVE COMMITTEE

9. Within 3 months of the date of this consent, the Applicant shall establish a Community Consultative Committee to oversee the environmental performance of the mine. The CCC shall:
- be comprised of:
 - 2 representatives from the Applicant, including the person responsible for environmental management at the mine;
 - at least 1 representative from Council (if available); and
 - at least 3 representatives from the local community, whose appointment has been approved by the [Planning Secretary](#) in consultation with the Council;
 - be chaired by an independent chairperson, whose appointment has been approved by the [Planning Secretary](#);
 - meet at least twice a year; and
 - review and provide comment on the environmental performance of the development, including any environmental management plans, monitoring results, audit reports, or complaints.
10. The Applicant shall, at its own expense:
- ensure that 2 of its representatives attend the Committee's meetings;
 - provide the Committee with regular information on the environmental performance and management of the development;
 - provide meeting facilities for the Committee;
 - arrange site inspections for the Committee, if necessary;
 - take minutes of the Committee's meetings;

- (f) make these minutes available to the public;
- (g) respond to any comments or recommendations the Committee may have in relation to the environmental management or performance of the development;
- (h) forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the [Planning Secretary](#) within a month of acceptance of the minutes by the Committee.

ACCESS TO INFORMATION

11. Within 1 month of the approval of any management plan/strategy required under this consent (or any subsequent revision of these management plans/strategies), the completion of the independent audits required under this consent, or the completion of the [Annual Review](#), the Applicant shall:
 - (a) provide a copy of the relevant document/s to the Council, relevant agencies and the CCC;
 - (b) ensure that a copy of the relevant documents is made publicly available at the mine; and
 - (c) put a copy of the relevant document/s on the Applicant's website, to the satisfaction of the [Planning Secretary](#).
12. During the life of the development, the Applicant shall:
 - (a) make a summary of the results of all monitoring required under this consent publicly available both at the mine and on the Applicant's website; and
 - (b) update these results on a regular basis (at least every 3 months), to the satisfaction of the [Planning Secretary](#).

Note: The Applicant's environmental management plans/protocols should specify the reporting provisions for each environmental aspect.

REVISION OF STRATEGIES, PLANS OR PROGRAMS

13. Within 3 months of:
 - (a) the submission of an incident report under condition 5A, Schedule 5;
 - (b) the submission of an annual review under condition 5 of Schedule 5;
 - (c) the submission of an audit report under condition 6 of Schedule 5; or
 - (d) any modification to the conditions of this consent, (unless the conditions require otherwise),
 the Applicant must review the strategies, plans, and programs required under this consent, to the satisfaction of the Secretary. 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 Secretary.

Note: This is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve the environmental performance of the development.

APPENDIX 1 SCHEDULE OF LAND

This Appendix to be completed by an officer of the local office of the Department of Land and Water Conservation, a Registered Surveyor, Survey Drafting Officer or Property Officer.

ITEM	PARTICULARS REPORTED
Nature of the land (i.e, Freehold, occupied or vacant Crown land).	<p>Freehold : Parish: Marrangaroo : County: Cook Lots Pt 20, 47, 50 139, Pt 94, Pt 19, 200 & 17 DP 751655 Lot 1 DP 576152 Lot 1 DP 113040 Lot 1 DP 574704 Lot 2 DP 787403 Lot 1 DP 911661 Lot Pt 1 DP 4330 Lot 19 DP 661122 Lots A & B DP 377435 Lots Pt A & Pt B DP 400049 Lots A & B DP 410209 Lots Pt 2, Pt 3, Pt 4, Pt 5 & Pt 6 DP 834082 Lots Pt 1 & Pt 2 DP 514250 Lots 1-14, 17 & 18 DP 7199 Shown by Orange Edge</p> <p>Freehold : Parish: Lett : County: Cook Lots Pt81, Pt 274, Pt 275, 16, 218, 4 & 134 DP 751650 Lots 1-35, 37-95, 97 & 98 DP 237413 Lots 14, 15, 16 & 17 Section 4 DP 2018 Lots 3, 4, 5, 7, 8, 9 & 10 Section 2 DP 2018 Lots 2-6 & 11 Section 1 DP 2018 Lots A & B DP 350637 Lots A & B 440786 Lot 369 DP 726995 Pt 1 & Pt 20 DP 5083 Lots 8,9 & 9A DP 981609 Lots 10-13 DP 852373 Lots A & B DP 440786 Lots 1 & 2 DP 575422 Lot 1 DP 871022 Lots 8 & 5 DP 788554 Lot 1 DP 105037 Lot 1 DP 982496 Lots 191 & 192 DP 875912 Lot 4 DP 251935 Lots 1 & 2 DP 719201 Lots 1 & 2 DP 823423 Lots 1 & 2 DP 823390 Lot 1 DP 47648 Lot 3 DP 601456 Lot 3 DP 778317 Lots A & B 345465 Shown by Orange Edge</p> <p>Freehold : Parish: Clywdd : County: Cook Lots 45, Pt23, 37, 38, 39, 40, 54 & 59 DP 751631 Lot 167 DP 821851 Lot Pt 165 DP 751631 Lots 1 & 2 DP 606571 Lot 1002 DP 843871 Lots 361 & 363 DP 209982 Lot 1 DP 579474 Lot Pt 1 DP 741138 Shown by Orange Edge</p> <p>Leasehold Land : Parish: Lett : County: Cook Lot 339 DP 720625 Special Lease 1963/32 Lithgow (73420) Shown by Brown</p>

The map displays the Clarence Colliery lease extension area, bounded by a blue dashed line. Key features include:

- Mining Tenements:** ALA5, ALA8, A307, ML1354, ML1353, CCL705, and EL5072.
- Faults:** Several faults are indicated by pink dashed lines, including Fault 1, Fault 2, Fault 3, Fault 4, Fault 5, Fault 6, Fault 7, Fault 8, Fault 9, Fault 10, Fault 11, Fault 12, Fault 13, Fault 14, Fault 15, Fault 16, Fault 17, Fault 18, Fault 19, Fault 20, Fault 21, Fault 22, Fault 23, Fault 24, Fault 25, Fault 26, Fault 27, Fault 28, Fault 29, Fault 30, Fault 31, Fault 32, Fault 33, Fault 34, Fault 35, Fault 36, Fault 37, Fault 38, Fault 39, Fault 40, Fault 41, Fault 42, Fault 43, Fault 44, Fault 45, Fault 46, Fault 47, Fault 48, Fault 49, Fault 50, Fault 51, Fault 52, Fault 53, Fault 54, Fault 55, Fault 56, Fault 57, Fault 58, Fault 59, Fault 60, Fault 61, Fault 62, Fault 63, Fault 64, Fault 65, Fault 66, Fault 67, Fault 68, Fault 69, Fault 70, Fault 71, Fault 72, Fault 73, Fault 74, Fault 75, Fault 76, Fault 77, Fault 78, Fault 79, Fault 80, Fault 81, Fault 82, Fault 83, Fault 84, Fault 85, Fault 86, Fault 87, Fault 88, Fault 89, Fault 90, Fault 91, Fault 92, Fault 93, Fault 94, Fault 95, Fault 96, Fault 97, Fault 98, Fault 99, Fault 100.
- Infrastructure:** Clarence Colliery Pit Top, Newnes Junction Station, Zig Zag Railway, Main Western Railway, and a 4m deep road.
- Protection Zones:** First workings subsidence protection zone (red hatched), Partial extraction workings subsidence protection zone (green hatched), and Proposed Katoomba Seam workings over existing Lithgow Seam workings (blue hatched).

KEY

- Existing Clarence Colliery mine workings
- Existing adjacent mine workings
- Adjacent mining tenement boundary
- Extent of proposed mining area
- First workings subsidence protection zone
- Partial extraction workings subsidence protection zone
- Proposed Katoomba Seam workings over existing Lithgow Seam workings

Datum : MGA Zone 56

Scale: 0 1000 2000 3000 metres

Figure 5.6 (revised) Clarence Colliery - Lease Extension Area

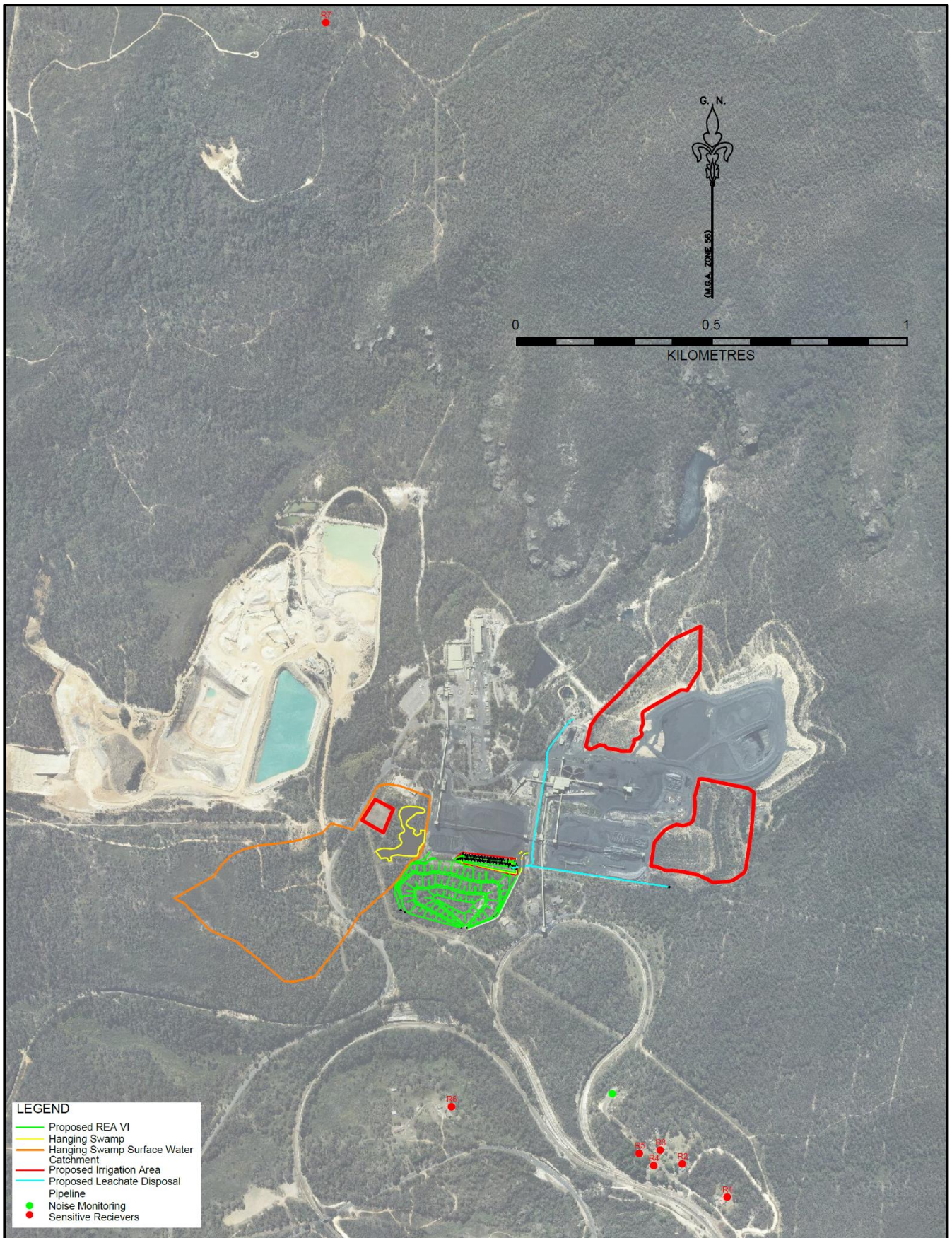
FIGURE 5.6 (revised)
**Clarence Colliery - Lease Extension Area
and Subsidence Protection Zones**

APPENDIX 3
STATEMENT OF COMMITMENTS

Issue	Commitment
<i>Construction Phase</i>	
General REA VI Construction Management	<p>Prior to construction, develop a Construction Environmental Management Plan incorporating:</p> <ul style="list-style-type: none"> • Construction of REA VI generally in accordance with the design plans contained within Attachment 2 of the Response to Submissions. • Capacity of the REA VI will not exceed 390,000m³. • Construction of water management infrastructure as described in Section 7. • REA VI will remain outside of the modelled surface water catchment associated with the Hanging Swamp (as per Figure 1 within this Response to Submissions). • A Construction Groundwater Monitoring Program including the installation of an additional monitoring well used to determine the existing groundwater level. • Excavation for the preparation of the proposed REA VI will not occur within 2 metres of the perched water table. • Clay lining and compacting the base of REA VI to prevent migration of any leachate seepage into groundwater aquifers. • A Construction Noise Management Plan.
<i>Operational Phase</i>	
Soil and water management	Manage and treat all leachate from REA VI in accordance with the existing Water Management Plan and additional water management infrastructure included as part of the proposal.
Effluent Irrigation	Undertake irrigation in accordance with the Effluent Irrigation Operational Environmental Management Plan.
Water Monitoring	<p>Update the Water Management Plan to include monitoring of the additional monitoring well.</p> <p>Undertake surface water and groundwater monitoring in accordance with the updated Water Management Plan.</p>
TPHSS Monitoring	Annually undertake, in summer months, a rapid assessment on established cross-sections within the TPHSS community to monitor the integrity of the swamp.
Heritage	Development of a Cultural Heritage Management Plan for Clarence Colliery.

Issue	Commitment
Traffic and transport	Undertake line marking to delineate the required parking spaces.
Rail noise and vibration	<p data-bbox="528 412 1390 524">Development of a Noise Management Plan (within 6 months of approval) which will include the following with regard to train loading operations:</p> <ul data-bbox="528 546 1390 1133" style="list-style-type: none"> <li data-bbox="528 546 1390 792">• Within 3 months of approval, and in consultation with Pacific National and Sydney Trains, review operational and rail loading practices to reduce noise, including review of the location of relief points and signals on the departure side of the rail loop to minimise idling noise near residential receivers to the satisfaction of the Director General. <li data-bbox="528 815 1390 927">• Implementation of acoustical mitigation at receivers as agreed to with relevant property owner for residential receivers labelled R1 to R6. <li data-bbox="528 949 1390 1133">• Where acoustical mitigation at receivers is insufficient to meet compliance with relevant noise criteria, negotiated agreements will be pursued with residential receivers labelled R1 to R6 following the process outlined Section 7 and Section 8 of the Industrial Noise Policy.
Visual amenity	Undertake rehabilitation of REA VI in accordance with the Conceptual Rehabilitation and Closure Plan (2012).
Socio-economic	Undertake community consultation in accordance with Section 16.4 .

APPENDIX 4
LOCATION OF REJECT EMPLACEMENT AREA VI,
NEWNES PLATEAU HANGING SWAMP AND
EFFLUENT IRRIGATION AREA



APPENDIX 5: COAL TRANSPORT ROUTES

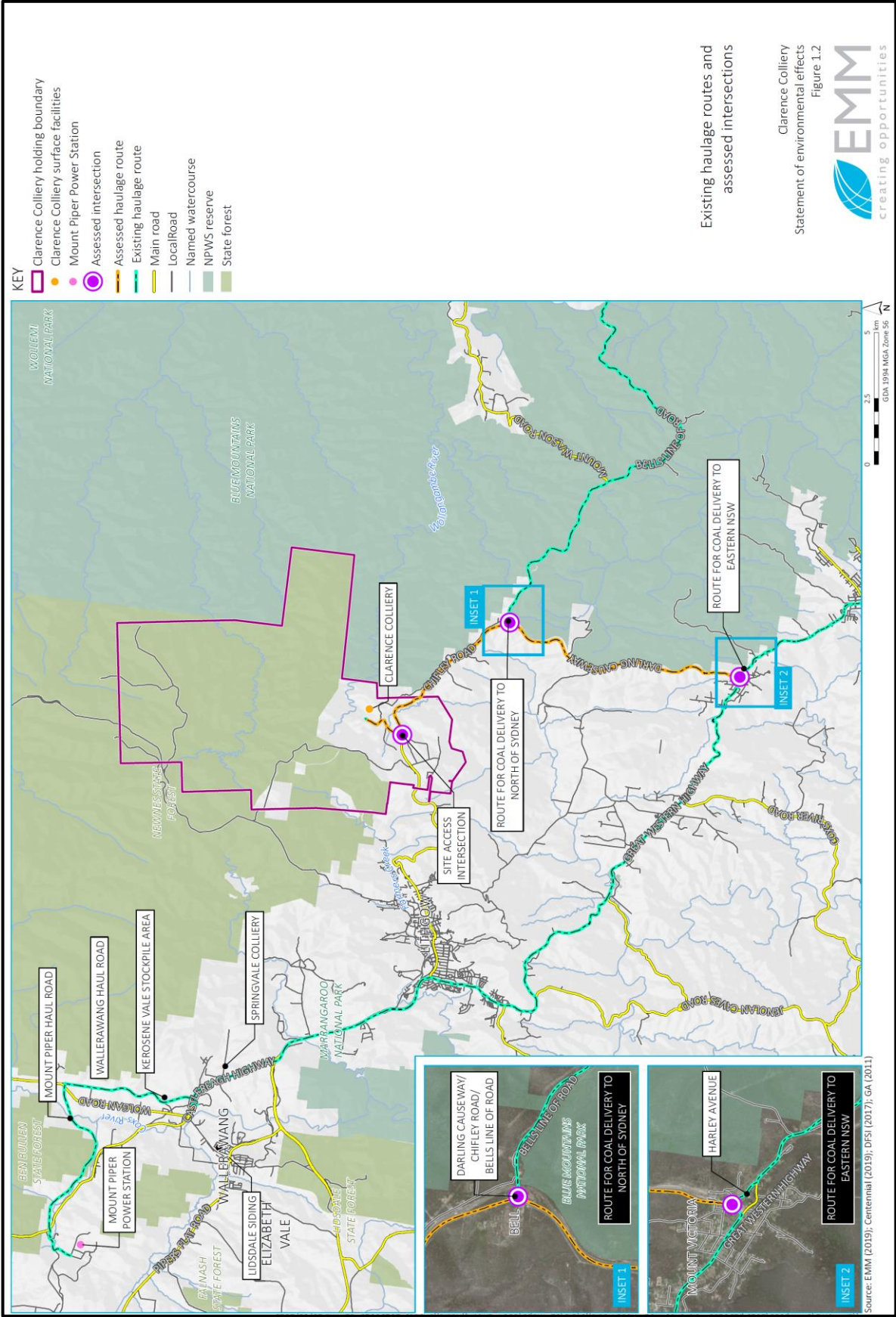


Figure 1: Coal Transport Routes