



DURALIE COAL

DURALIE COAL MINE
ENVIRONMENTAL MANAGEMENT STRATEGY

DISTRIBUTION SUMMARY

Copy sent to:	Revision	Date	Purpose
Duralie Coal Pty Ltd	Version A	23/02/07	Review
Department of Planning	Version A	26/02/07	Review and Approval
Duralie Coal Pty Ltd	Version B	28/03/07	Review
Department of Planning	Version B	28/03/07	Review and Approval
Leighton Mining	Version C	12/4/07	Implementation
Duralie Coal Pty Ltd	Version C	12/4/07	Implementation

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1 INTRODUCTION

The Duralie Coal Mine (the Project) is operated by Duralie Coal Pty Ltd (DCPL), a wholly owned subsidiary of Gloucester Coal Limited. The Project is situated adjacent to the Mammy Johnsons River within the Karuah River catchment, between the townships of Wards River and Stroud Road in New South Wales (NSW) (Figure 1).

Schedule 5 (Environmental Management, Monitoring, Auditing and Reporting) Condition 1 of the Modified Development Consent issued on 30 July 2006, requires the preparation of an Environmental Management Strategy (EMS) which provides a strategic context for environmental management plans (EMPs) and programs prepared for the Project. These EMPs required are:

- Environmental Management Strategy
- Environmental Monitoring Program
- Air Quality Monitoring Program
- Site Water Management Plan (incorporating a Site Water Balance, Erosion and Sediment Control Plan, Surface Water Management and Monitoring Plan, Ground Water Monitoring Program and Surface and Ground Water Response Plan)
- Blast Monitoring Plan
- Irrigation Management Plan
- Noise Monitoring Plan
- Rehabilitation and Landscape Management Plan (incorporating a Rehabilitation Management Plan, Final Void Management Plan and Mine Closure Plan)
- Aboriginal Cultural Heritage Management Plan

Plans required under the 2006 Modification of the Development Consent are augmented by plans previously produced to satisfy the Development Consent (1999) or a DCPL identified need. These include Lighting Management, Coal Transportation Management, Vegetation Clearance Protocol, Potentially Acid Forming Material Management, Topsoil Stripping and Mine Water Dam Management plans.

2 COMPLIANCE WITH DEVELOPMENT CONSENT

This EMS is intended to satisfy the Duralie Coal Mine Modified Development Consent Condition 1 of Schedule 5.

The table below provides a cross reference for Condition 1 requirements and EMS content.

Development Consent Condition	Requirement	Section of EMS
1(a)	Provide the strategic context for environmental management of the development.	Full document
1(b)	Identify the statutory requirements that apply to the development.	3
1©	Describe in general how the environmental performance of the development would be monitored and managed during the development.	5, 6
1(d)	Describe the procedures that would be implemented to: <ul style="list-style-type: none"> • Keep the local community & 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. 	7 9 9 6 6 6
1(e)	Describe the role, responsibility, authority and accountability of all key personnel involved in environmental management of the development.	4

This environmental management strategy has been prepared to assist those undertaking the works on site to apply appropriate environmental management measures. Where there is any conflict between the provisions of this environmental management strategy and the contractual obligations of any mining contractor the statutory requirements are to take precedence. In the case of any real or perceived ambiguity between elements of this environmental management strategy and statutory requirements, a contractor shall first request clarification from Duralie Coal prior to implementing that element of the environmental management strategy over which the ambiguity is identified.

3 RELEVANT STATUTORY OBLIGATIONS

The key statutory elements detailing DCPL's obligations are contained in:

- (i) The conditions of development consent (attached as Appendix 1); and
- (ii) all relevant licences and approvals including conditions attached to the mining lease.

The Modified Development Consent requires DCPL to produce numerous environmental management plans and programs (Section 1).

The following further approvals are either required or potentially required for the Duralie Coal Mine:

National Parks and Wildlife Act, 1974

DCPL would obtain appropriate approvals pursuant to Part 6 of this Act if any Aboriginal objects are to be affected as a result of the Project. Application for any such approvals would be undertaken in consultation with the Karuah Aboriginal Land Council.

Protection of the Environment Operations Act, 1997

DCPL holds an Environmental Protection Licence (EPL) from the NSW EPA pursuant to this Act.

Rivers and Foreshores Improvement Act, 1948

DCPL during construction obtained permits under Section 22C of the Act to excavate or remove material from "protected land" or to do anything that obstructs or detrimentally affects the flow of "protected waters".

Water Act, 1912

DCPL holds a licence required under Section 116 of this Act to sink a bore and to take or use water obtained from any such bore (*viz.* Project Open Cut). DCPL also obtained a licence under Section 10 of this Act to divert any stream of water, whether permanent or intermittent, which flows in a natural or artificial channel, for diversion of Coal Shaft Creek.

4 SITE ENVIRONMENTAL MANAGEMENT STRUCTURE

Table 1 presents the roles and responsibilities of members of the site environmental management team. A combination of DCPL and Leighton Mining (LM) (mining contractor) staff are responsible for environmental management for the Duralie project. Section 6 of this EMS describes the members of the site environmental management team responsible for the management and implementation of the EMPs.

Table 1
Site Environmental Management – Roles and Responsibilities

Environmental Management Team Member (s)	Name and Company	Role and Responsibility
Environmental Manager	John Trotter (DCPL)	<ul style="list-style-type: none"> Responsible for site environmental monitoring Management of the implementation and compliance with EMPs, development consents, licensing and permits. Annual internal auditing and reporting (Annual Environmental Management Report). Progressive rehabilitation planning, development and reporting. Staff environmental inductions and training (in conjunction with LM staff). Receives, records and responds to complaints. External government and community consultation. Ongoing environmentally related approvals and planning. Secretary of the Community Consultative Committee.
Mine Manager	Mark Sheldon (LM)	<ul style="list-style-type: none"> Overall site management responsibility. Overall responsibility for the environmental performance of the site.
Manager Mining	Todd Hutchings (DCPL)	<ul style="list-style-type: none"> Member of the Community Consultative Committee.
Gloucester Coal – Chief Operating Officer	Graham Colliss (DCPL)	<ul style="list-style-type: none"> Ongoing environmentally related approvals and planning.
Environmental Manager - Stratford	Tony Dwyer (SCPL)	<ul style="list-style-type: none"> Vacation relief for Duralie Environmental Manager.
General Staff & Contractors	DCPL, LM, Others	<ul style="list-style-type: none"> All general staff members trained in environmental protocols as part of the induction process and regular site meetings. All general staff members responsible for immediately reporting environmental incidents. All general staff members responsible for undertaking works in an environmentally sound manner and in accordance with site commitments.

5 ENVIRONMENTAL OBJECTIVES

DCPL would honour its environmental responsibilities through good engineering practice, fulfillment of statutory responsibilities, regular community consultation and consideration of those impacted by operations.

DCPL's Environmental Policy states that:

"Duralie Coal Pty Ltd aims to maximise the recovery of economic coal reserves to supply domestic and export markets with coking and energy coals while protecting the environment for future generations.

We will maintain high standards of environmental management throughout our mining and processing operations in order to meet statutory obligations and community expectations.

Our guiding principles are:

- *Environmental management is the responsibility of everyone on site.*
- *We encourage open communications.*
- *We will actively minimise disturbance and impact on the surrounding environment caused by our operations.*
- *We will meet current and anticipated environmental standards by utilising the best practical technologies for water quality protection and waste management.*
- *We will implement appropriate standards of rehabilitation to ensure minimal visual impact and the achievement of a stable final landform, along with the preservation of fauna, flora and downstream water quality.*
- *We will monitor and regularly assess our environmental performance and keep the local community informed through a consultative committee".*

Duralie Coal's environmental policy principles are:

- Environmental management is the responsibility of management and all employees. For this reason, commitment to the environmental management program by all personnel is a high priority;
- Environmental performance will be assessed regularly and relevant information will be distributed to the local community through the Community Consultative Committee (CCC). Open communications will be encouraged;
- Areas disturbed by operations and the impact on the surrounding environment are to be minimised at all times;
- The best practical technologies for rehabilitation, water quality protection and coal handling are to be utilised to meet current and anticipated environmental standards; and
- Appropriate standards of rehabilitation will be implemented to ensure minimal visual impact and achievement of stable landform, along with the preservation of fauna and flora and downstream water quality.

Overall Environmental Objectives

DCPL's environmental management program has the following objectives:

- To ensure compliance with statutory requirements and with reasonable community expectations;
- To develop and maintain the most cost effective environmental management for the Duralie Mine;
- To provide all employees with the knowledge, skills and equipment necessary to meet their environmental obligations;
- To promote an awareness and concern for good environmental management amongst all employees; and
- To provide a "feed-back loop" so that the results of environmental monitoring are used to assess, and where necessary improve, environmental performance.

Ecological Objectives

The overall ecological objectives of the Duralie Project are to implement management strategies to minimise the potential impact of the development on flora and fauna, rehabilitate areas of disturbance and reduce the potential impacts of weeds and pests. The Rehabilitation and Landscape Management Plan would directly contribute to attaining these objectives (Section 6).

Rehabilitation Objectives and Principles

Rehabilitation objectives would include:

- development of final landforms that are stable and consistent with the local surrounding landscape;
- provision of landforms suitable for final landuses of grazing and woodland/wet area habitats;
- management of mining and overburden handling operations to minimise reshaping, recontouring double handling and acid formation;
- prevention of detrimental effects on the water quality of downstream watercourses into the long term;
- progressive rehabilitation to reduce visual impacts;
- retaining areas of existing vegetation and landforms wherever possible;
- where appropriate, the use of authorised hybrid cover crops to provide initial erosion protection;
- tree planted areas that are contiguous with existing woodland areas where practical;
- fencing to selectively exclude livestock from rehabilitation areas; and
- rehabilitation concepts which are flexible and allow for adjustments, based on trials, to improve the program.

6 ENVIRONMENTAL IMPACTS AND MITIGATION STRATEGIES

A summary of potential impacts and mitigation measures is presented in Table 2.

Table 2
Summary of Potential Impacts and Mitigation Measures

Potential Impact	Summary of Mitigation Strategy	Relevant Environmental Management Plan
Visual	<ul style="list-style-type: none"> Retention of a stand of trees between the North Railway Line and the mining operations. Progressive revegetation of the waste emplacement area. Planting of on and off-site screening vegetation to reduce views from local residences and public roads. Profiling of the waste emplacements to be consistent with the local landforms. Rehabilitation program to include the use of endemic species. Community consultation and rapid response where necessary. 	RLMP, LIMP, TSMP, AEMR
Noise and Blasting	<ul style="list-style-type: none"> Restriction of blasting hours. Blast overpressure and ground vibration measurement. Monitored results fed back into blast design. Use of low noise equipment. Noise monitoring within the community and prompt response where necessary. Restricting higher noise emitting equipment to less exposed locations particularly at night (where practical). Routine ongoing noise monitoring of key items of equipment. Consultation with communities and local landholders. 	NMP, BMP, AEMR
Water	<ul style="list-style-type: none"> Minimising disturbance areas Water containment and recycling Progressive stabilisation and revegetation of disturbed areas Provision of erosion and sediment control structures Maintaining adequate water storage capacity Minimising acid production Water Monitoring and prompt responses where necessary 	SWMP, ESCP, SSMP, RLMP, IMP, PMP, CTMP, DMP, AEMR
Air Quality	<ul style="list-style-type: none"> Watering of operational and road surfaces Minimising disturbance areas Provision of sprinklers on coal stockpiles Prevention of truck overloading Progressive revegetation of disturbed areas Monitoring and rapid response where necessary 	AQMP, SSMP, RLMP, AEMR
Flora	<ul style="list-style-type: none"> Delineation of remnant vegetation to avoid disturbance Clearance of native vegetation to be avoided where possible Progressive rehabilitation programme using suitable endemic species Creation of links between remnant vegetation Implementation of weed control strategies Monitoring and maintenance of rehabilitation and screening vegetation 	VCP, RLMP, AEMR
Fauna	<ul style="list-style-type: none"> Pre-clearance surveys to identify bat roosts and relocation of roosts 	VCP, RLMP, AEMR

	<ul style="list-style-type: none"> • Replacement of artificial roosts at strategic locations • Clearance of vegetation during late summer or early autumn where possible • Retention of mature hollow bearing trees where practical • Rehabilitation to include the use of endemic tree and shrub species • Implementation of pest animal control measures 	
Aboriginal Heritage	<ul style="list-style-type: none"> • Topsoil monitoring • Protection of "Honey Tree" 	AHMP
Traffic	<ul style="list-style-type: none"> • Design plans to be approved by the Gloucester Shire Council 	AEMR

RLMP Rehabilitation and Landscape Management Plan

SWMP Site Water Management Plan

AQMP Air Quality Management Plan

BMP Blasting/Vibration Management Plan

NMP Noise Management Plan

LIMP Lighting Management Plan

IMP Irrigation Management Plan

CTMP Coal Transportation Management Plan

VCP Vegetation Clearance Protocol

AHMP Aboriginal Heritage Management Protocol

PMP Potentially Acid Forming Material Management Plan

TSMP Topsoil Stripping Management Plan

DMP Mine Water Dam Management Plan

AEMR Annual Environmental Management Report

Cumulative impacts are generally considered to have the potential to arise from the interaction of mine operations with agricultural, rail and road activities.

On the basis that the nearest mine to the Duralie Mine is approximately twenty (20) kilometres away and there are no nearby industrial land users, both other mines and industrial land users do not provide the likelihood for cumulative environmental impacts.

With regard to agricultural activities, agricultural land use in the vicinity of the Duralie Coal Mine is largely limited to grazing activities. Hence there is typically only limited soil disturbance if compared to what would be the case were there to be more active cropping occurring.

The cumulative effect of road activities near the Duralie Mine (in terms of noise, emissions etc) are not considered to be substantial given the separation of public roads from the mine and the infrequent road use.

Cumulative rail impacts would involve the interaction of run of mine (ROM) coal train movements (between Duralie and Stratford Mines), product coal train movements (typically between Stratford Mine and the Port of Newcastle) and non-mine related train movements (passenger and general freight). Given that there is only a single rail line between Stratford and Duralie Mines, there is very limited capacity for cumulative rail impacts.

In the instance where there was to be an obvious cumulative environmental impact, for example between mining and agricultural activities (either obvious to mine management and/or if drawn to the mine's attention via the complaints management system), appropriate action to address the situation would be undertaken.

6.1 ENVIRONMENTAL EMERGENCIES

An environmental emergency would be addressed through the implementation of the Leighton Mining's Emergency Response Plan (ERP). The ERP is routinely revised to ensure its accuracy.

The purpose of the Duralie ERP is "to detail organisational responsibilities, actions, reporting requirements and resources available to ensure effective and timely management of emergencies on, or affecting, the Duralie Coal Mine".

Designated environmental emergencies such as flooding, chemical spills or releases and vehicle accidents have activity checklists within the ERP.

In addition to the ERP, the Duralie Dam Management Plan addresses specific events which are considered to present a threat to dam integrity such as nearby overburden blasting or a significant rain or seismic event.

Environmental incidents – defined as an occurrence which is causing, or has the potential to cause, damage to the environment – are subject to a DCPL "Environmental Incident Management Strategy". This Strategy covers responsibility, significance ranking, reporting and notification for the incident.

7 ENVIRONMENTAL MANAGEMENT AND/OR MONITORING PLANS - REVIEW AND FRAMEWORK

A listing of Environmental Management Plans used at the Duralie Coal Mine is provided in Section 1.

These plans will be reviewed on an annual basis to identify the need for any amendments and/or as specified in the development consent.

Finalisation of individual plans is subject to preparation by DCPL, consultation with stakeholder authorities and approval by the Department of Planning (DoP).

The Annual Environmental Management Report (AEMR) and the Mining Operations Plan (MOP) support these plans. In addition, an independent environmental audit would be conducted every three years and internal reviews annually. EMP's required under the 2006 Development Consent Modification, for which the site Environmental Officer is responsible for implementation, are summarised in Table 3 and their requirements are detailed in Appendix 1.

**Table 3
Summary of Environmental Management, Strategies and/or Monitoring Plans Required under 2006 Development Consent**

<i>Plans</i>	<i>EMP Framework and Objectives</i>
Environmental Management Strategy	<ul style="list-style-type: none"> The objective of this document is to outline the framework for environmental management at the Duralie Coal Mine.
Environmental Monitoring Program	<ul style="list-style-type: none"> Environmental monitoring in terms of air quality, water, blasting, irrigation, noise, cultural heritage and rehabilitation. Reporting and stakeholder consultation. The objective of the program is to obtain ongoing data on environmental parameters which have the potential to be affected by the operation of the Duralie Coal Mine and allow comparison with relevant criteria and standards.
Air Quality Monitoring Program	<ul style="list-style-type: none"> Identification of relevant criteria, dust management and control, dust monitoring, stakeholder consultation and reporting. The objective of the program is to determine air quality relative to stated criteria.
Site Water Management Plan	<ul style="list-style-type: none"> Site water balance, erosion and sediment control, surface water monitoring, ground water monitoring, surface and ground water response, stakeholder consultation and reporting. The objective of this plan is to manage the quantity and quality of surface water and ground water potentially affected by the Project.
Blast Monitoring Program	<ul style="list-style-type: none"> Identification of relevant criteria, monitoring methods and program, protection of infrastructure, property inspections, stakeholder consultation, reporting. The objective of this plan is to ensure safety of the public during blasting, prevent damage to private or public property and to minimise any nuisance to the public as a consequence of blasting.
Irrigation Management Plan	<ul style="list-style-type: none"> Water management system, irrigation system, monitoring, mitigation strategies, stakeholder consultation and reporting. The objective of this plan is to provide an operational framework in order to irrigate mine water in a sustainable manner.
Noise Monitoring Program	<ul style="list-style-type: none"> Identification of relevant criteria, methodology, monitoring locations, stakeholder consultation and reporting. The objective of this plan is to evaluate the extent of mine contributed noise at designated locations and assess operational noise from mining plant.
Rehabilitation and Landscape Management Plan	<ul style="list-style-type: none"> Landform design, visual impacts, drainage design, plant species selection and reporting. The objective of this plan is to establish a low maintenance, sustainable landform with an appropriate mix of introduced and endemic plant species which offer appropriate habitat characteristics and is compatible with likely post-mining land uses.
Aboriginal Cultural Heritage Management Plan	<ul style="list-style-type: none"> Stakeholder consultation, protection of known heritage sites, actions undertaken should previously unidentified relics be discovered and site monitoring. The objective of this plan is to manage sites of Aboriginal heritage in a culturally appropriate manner.

8 COMMUNITY OBJECTIVES

A key focus of the community based objectives is the retention of economic productivity in the area (on both DCPL's land and neighbouring farms) and recognition of the associated potential cumulative effect of DCPL's operations on surrounding agricultural production. It is DCPL's objective to operate its entire primary producing landholdings as economically viable and sustainable enterprises. In summary, the community objectives are to:

- ensure employees and contractors are informed about DCPL's policies and are made aware of their environmental and community responsibilities in relation to DCPL's activities;
- inform the community of the DCPL's activities and consult with the community in an open and honest fashion in relation to the DCPL's projects;
- address complaints/conflicts and consult to achieve mutually acceptable outcomes; and
- provide opportunities to share in the benefits which flow from DCPL activities.

DCPL prior to, and post, the commencement of the Duralie Coal Mine in 2002, has selectively grazed portions of land on and off the mining lease utilising agisted cattle. This has provided some grazing opportunities for cattle such that previously available grazing opportunities were not fully denied.

In addition, in 2006 undertook a cropping trial involving the planting of forage sorghum within the northern part of the mining lease. This was successful and the sorghum was bailed as silage and supplied to local drought stricken graziers. During 2007, additional areas were planted with forage sorghum. Such cropping has provided synergies with saline water irrigation – such irrigation occurring under the site's Irrigation Management Plan (IMP).

In accordance with DCPL's Rehabilitation and Landscape Management Plan (RLMP), it is proposed that extensive endemic tree plantings occur across rehabilitated land. The establishment of substantial treed areas should benefit biodiversity objectives.

9 COMPLAINTS, CONSULTATION AND CONFLICT RESOLUTION

The Environmental Manager is responsible for establishing and maintaining a system for recording complaints. The process for the management of complaints is shown by Flow Diagram 1. The Environmental Manager, in consultation with DoP, CCC and the complainant, would manage this process.

Complaints would be registered and an initial response provided within 24 hours. Preliminary investigations would commence within 24 hours of the complaint receipt to determine likely causes of the complaint using all available information (i.e. climatic conditions, nature of mining activities, recent environmental monitoring results). This preliminary investigation would be used to develop specific mitigation measures which would be presented to the complainant for consideration (refer Flow Diagram 1). If the complainant was not satisfied with the proposed measures, the matter would be referred to DoP and CCC for consideration. If necessary an Independent Monitoring Process would be triggered (refer Flow Diagram 2). The Environmental Manager in consultation with DoP, CCC and the complainant would manage this process.

The results of the Independent Monitoring Process would be reported simultaneously to DoP and the Environmental Manager for review prior to finalisation. During this review, the technical validity of the assessment results and the feasibility/practicality of any proposed mitigation measures would be agreed upon. Any feedback to the independent monitoring expert would be made jointly by DoP and the Environmental Manager.

In the event of a complaint where the Independent Monitoring Process demonstrates that impacts from the Project are in accordance with development consent conditions (i.e. below relevant criteria), the resolution process will be one of informed discussion involving the complainant and the Environmental Manager. The complainant will be made fully aware of the monitoring and reporting procedures used for the Project.

Every effort will be made to ensure that concerns are addressed in a manner that results in a mutually acceptable outcome. If necessary, the Independent Dispute Resolution Process (refer Flow Diagram 3) would be entered into. DoP and CCC would manage this process in consultation with the Environmental Officer and the complainant.

A report of the complaints is provided to each CCC meeting and included in the AEMR.

Considerable effort has been, and will continue to be, expended by DCPL to integrate its operations with existing landusers and communities. Whenever possible, issues/conflicts relating to environmental management will be addressed by the CCC. The committee comprises representatives of DCPL, Great Lakes Council and representatives from local community groups. The CCC conducts meetings quarterly and provide a forum to keep the community informed of the mine's activities.

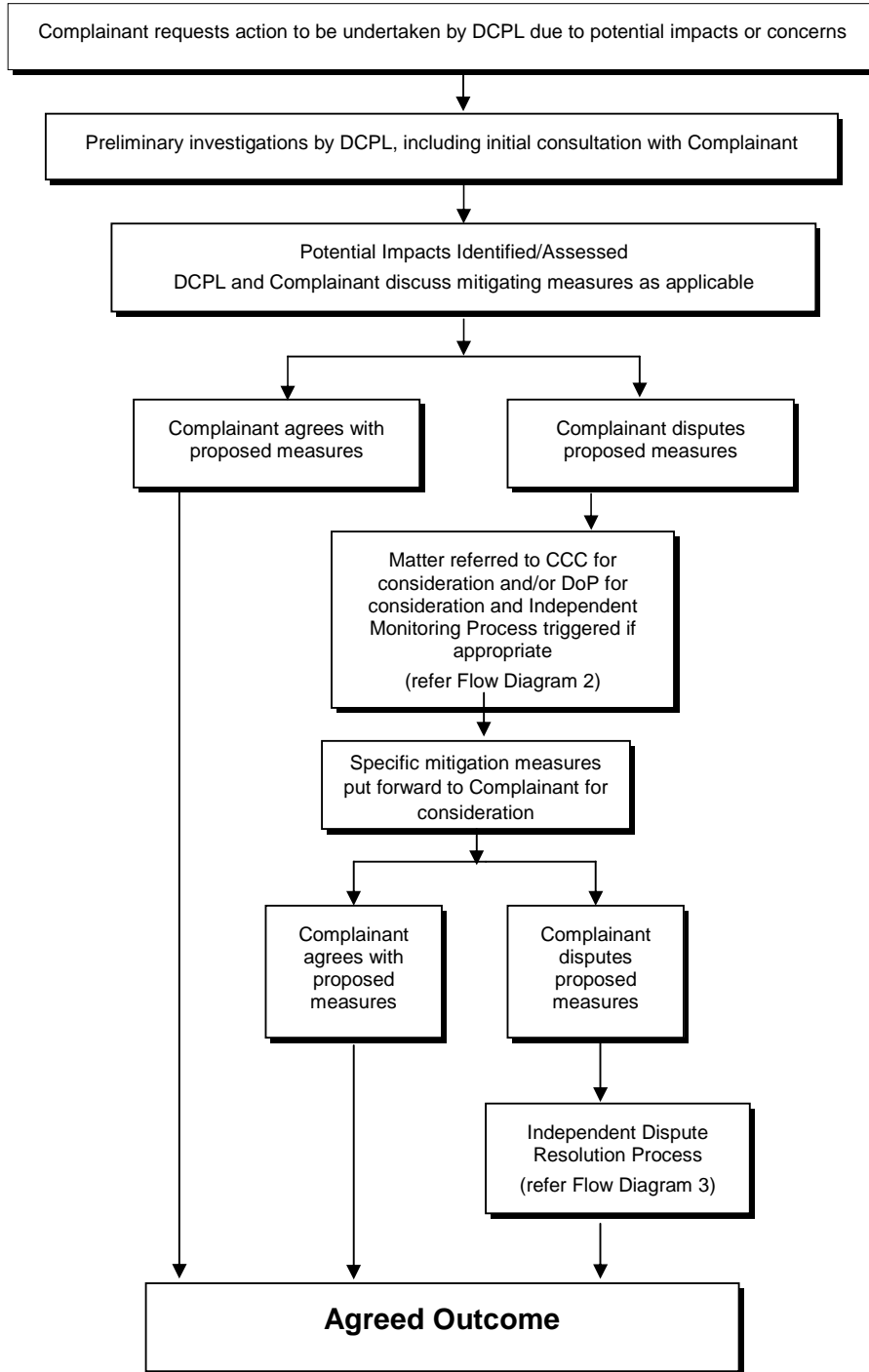
10 COMPLIANCE

Compliance with DCPL's conditions and undertakings is to be achieved via:

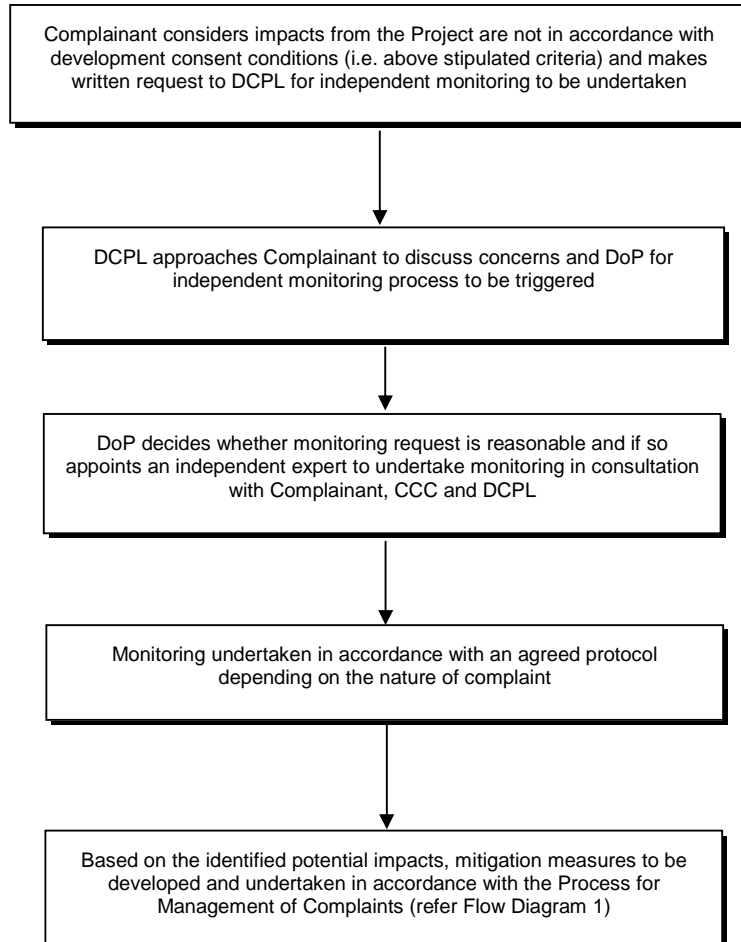
- adherence to consent conditions, licence and mining lease conditions, and corporate policies;
- annual compliance reporting in the AEMR;
- annual review of the EMPs or for significant and relevant operational modifications;
- compliance auditing (both internal and external);
- implementation of corrective procedures/strategies following complaint or monitoring inspection and identification and approval from necessary authorities and stakeholders; and
- active participation in the Community Consultative Committee.

FLOW DIAGRAMS

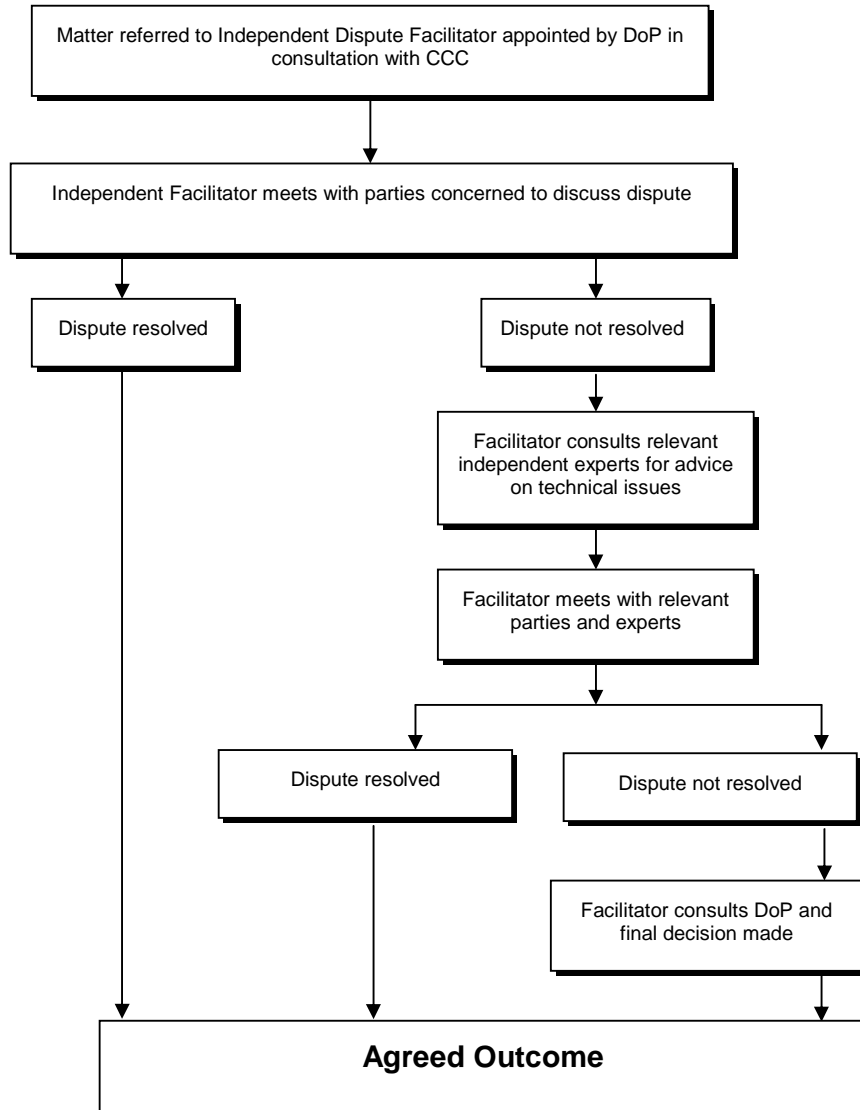
Flow Diagram 1 Process for the Management of Complaints



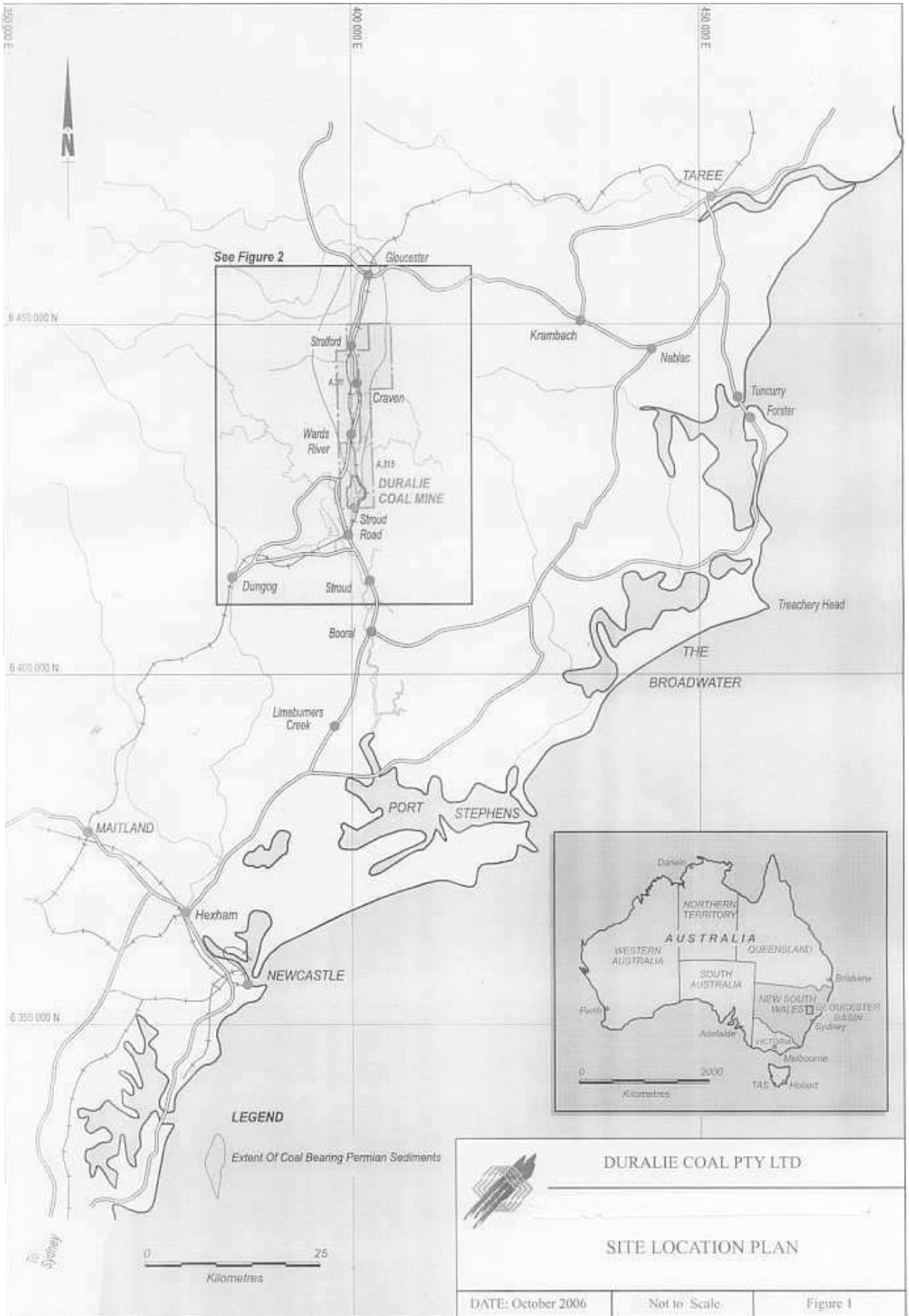
Flow Diagram 2 Independent Monitoring Process



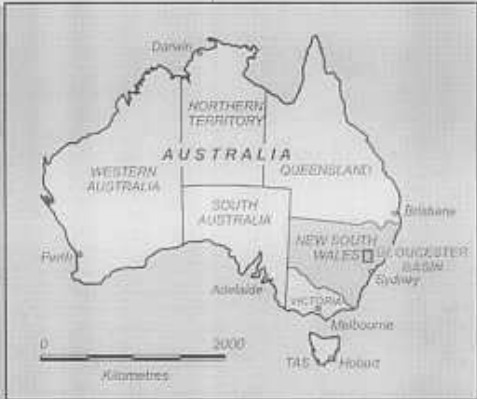
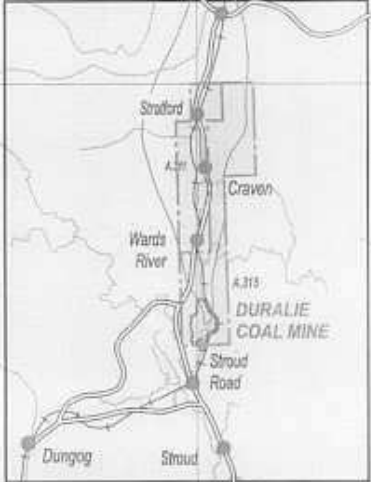
**Flow Diagram 3
Independent Dispute Resolution Process**



FIGURE



See Figure 2



LEGEND

Extent Of Coal Bearing Permian Sediments



DURALIE COAL PTY LTD

SITE LOCATION PLAN

DATE: October 2006	Not to Scale	Figure 1
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APPENDIX 1

DURALIE COAL MINE
2006 DEVELOPMENT CONSENT MODIFICATION CONDITIONS

Notice of Modification

Section 96(2) of the *Environmental Planning and Assessment Act 1979*

Under section 96(2) of the *Environmental Planning and Assessment Act 1979*, I, the Minister for Planning, modify the development consent referred to in Schedule 1, as set out in Schedule 2.

Frank Sartor
Minister for Planning

Sydney

2006

SCHEDULE 1

The development consent (DA No. 168/99) for the Duralie coal mine, which was granted by the Minister for Urban Affairs and Planning on 5 February 1999.

SCHEDULE 2

1. Delete the preamble on the first page of the development consent, and replace with:

I, the Minister for Urban Affairs and Planning, pursuant to Sections 76(A)9 & 80 of the *Environmental Planning and Assessment Act 1979* determine the development application referred to in schedule 1 by granting consent to the application subject to the conditions set out 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 development.

2. Delete Schedule 1 and Schedule 2, and replace with:

SCHEDULE 1

Development Application:	DA 168/99.
Applicant:	Duralie Coal Pty Ltd.
Consent Authority:	Minister for Urban Affairs and Planning
Land:	See Appendix 1.
Development:	Construction and operation of an open cut coal mine, rail siding, loading facilities and associated facilities (known as the "Duralie Coal Mine").

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DEFINITIONS

AEMR	Annual Environmental Management Report
Applicant	Duralie Coal Pty Limited, or its successors in title
ARTC	Australian Rail Track Corporation
BCA	Building Code of Australia
CCC	Community Consultative Committee
Council	Great Lakes Shire Council
Day	Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and public holidays
DEC	Department of Environment and Conservation
DNR	Department of Natural Resources
Department	Department of Planning
Director-General	Director-General of Department of Planning, or delegate
DPI	Department of Primary Industries
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environmental Protection Licence
Evening	Evening is defined as the period from 6pm to 10pm
Land	Land means 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
Mine Water	Water that accumulates within active mining areas and mine infrastructure areas, but excluding rainfall runoff from irrigation areas
Minister	Minister for Planning, or delegate
Night	Night is defined as the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and public holidays
Privately owned land	Land that is not owned by a public agency, or a mining company or its subsidiary; and where relevant, land that is not covered by a private agreement between the Applicant and the land owner that specifically allows of variances to criteria for environmental performance in this consent
ROM	Run of Mine
RTA	Roads and Traffic Authority
SEE	Statement of Environmental Effects
Site	Land to which the DA applies

**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:
 - (a) DA 168/99;
 - (b) SEE titled *Proposed Alterations to Duralie Coal Development*, dated October 1998, and prepared by Resource Strategies and where relevant the EIS titled *Duralie Coal Development*, dated September 1996 and prepared by AGC Woodward-Clyde Pty Ltd;
 - (c) all other relevant documentation, including the Applicant's primary submission, supplementary submission, and submission in reply to the Commission of Inquiry, and advice brought forward which clarifies the proposal including the amendment to the development application notified in the letter from Blake Dawson Waldron to the Great Lakes Shire Council dated 12 June 1997;
 - (d) modification application MOD-13-3-2003-i and accompanying documentation dated 29 November 2002 as prepared by Duralie Coal Pty Limited;
 - (e) modification application MOD-92-9-2003-i and accompanying documentation dated 21 August 2003 and Figures 1 to 6 as provided on 3rd September 2003 by Duralie Coal Pty Limited;
 - (f) SEE titled *Duralie Extended Modification*, dated March 2006, and prepared by Resource Strategies; and
 - (g) conditions of this consent.
3. If there is any inconsistency between the above documents, the latter document shall prevail over the former to the extent of the inconsistency. However, the conditions of this consent shall prevail over all other documents to the extent of any inconsistency.
4. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
 - (a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this consent; and
 - (b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.

Limits on Approval

5. Apart from the conditions relating to the Rehabilitation and Landscape Management Plan, this consent expires 21 years after the grant of a mining lease for the mine.

Note: Under this consent, the Applicant is required to implement the Rehabilitation and Landscape Management Plan for the life of the impact (as determined by the Director-General in consultation with the DPI). This consent will continue to operate during this period.
6. The Applicant shall not transport more than 1.8 million tonnes of ROM coal a year from the site.
7. Approval in respect of coal extraction (mine operations) is limited to a period of 9 years from the date of commencement of coal extraction.
8. The Applicant shall only transport coal from the site by rail.
9. Rail transportation of ROM coal to the Stratford coal mine shall be confined to the hours between 7.00am and 10.00pm.

Management Plans/Monitoring Programs

10. With the approval of the Director-General, the Applicant may prepare and submit any management plan or monitoring program required by this consent on a progressive basis.

Structural Adequacy

11. 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 the development.*

Demolition

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

Operation of Plant and Equipment

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

Contributions to Council

14. The Applicant shall pay Council a community infrastructure contribution of \$78,290.26 each year commencing on 30 April 2007 until the cessation of coal mining on the site. The contribution is to be indexed according to the CPI at the time of each payment.
 15. The Applicant shall pay Council a contribution of \$32,620.94 each year for the maintenance of the Bucketts Way commencing on 30 April 2007 until the cessation of coal mining on the site. The contribution is to be indexed according to the CPI at the time of each payment.
 16. The Applicant shall pay Council a contribution of \$10,000 each year towards a structural inspection of road bridges located along the Bucketts Way (between its intersection with Clarence Town Road and the mine access road) commencing on 30 April 2007 until the cessation of coal mining on the site. The contribution is to be indexed according to the CPI at the time of each payment.
-

**SCHEDULE 3
SPECIFIC ENVIRONMENTAL CONDITIONS**

ACQUISITION UPON REQUEST

1. Upon receiving a written request for acquisition from the landowner of the land listed in Table 1, the Applicant shall acquire the land in accordance with the procedures in conditions 8-10 of schedule 4.

Table 1: Land subject to acquisition upon request

22 - Holmes	59 - Hattam
36 - Doherty	60 – Gibson
53 - Lyall	106 – Mudford

Note: For more information on the numbering and identification of properties used in this consent, see Appendix 2.

NOISE

Noise Impact Assessment Criteria

2. The Applicant shall ensure that the noise generated by the development does not exceed the noise impact assessment criteria in Table 2.

Table 2: Noise impact assessment criteria dB(A)

Day	Evening	Night	Land Number
<i>L_{Aeq(15 minute)}</i>	<i>L_{Aeq(15 minute)}</i>	<i>L_{Aeq(15 minute)}</i>	
35	37	37	51- Woodley
35	39	39	52 – Trigg
35	35	36	129N - Relton (old)
35	35	38	129S – Relton (new)
35	35	40	133 – Guidice
			134 – Zulomovski
			135 – Hare-Scott
35	35	35	All other privately owned land excluding the land listed in Table 1

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

Notes:

a) 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 Department and the DEC 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.

b) Noise from the development is to be measured at 1 metre from the dwelling façade to determine compliance with the *L_{A1(1 minute)}* noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the DEC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).

c) The noise emission limits identified in the above table apply under meteorological conditions of:

- wind speeds of up to 3 m/s at 10 metres above ground level; or
- temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level.

Land Acquisition Criteria

3. If the noise generated by the development exceeds the criteria in Table 3, the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 8-10 of schedule 4.

Table 3: Land acquisition criteria dB(A)

Day/Evening/Night <i>L_{Aeq(15 minute)}</i>	Land
40	All privately owned land, excluding the land listed in Table 1

Note: Noise generated by the development is to be measured in accordance with the notes presented above Table 2.

Additional Noise Mitigation Measures

4. Upon receiving a written request from:
- a landowner of the land listed in Table 1 (unless the landowner has requested acquisition); or
 - the owner of any residence where subsequent noise monitoring shows the noise generated by the development is greater than, or equal to, $L_{Aeq(15\text{ minute})}$ 38 dB(A) (except where a negotiated noise agreement is in place),
- the Applicant shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner. These additional mitigation measures must be reasonable and feasible. If within 3 months of receiving this request from the landowner, the Applicant 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.

Continuous Improvement

5. The Applicant shall:
- (a) implement all reasonable and feasible noise mitigation measures;
 - (b) investigate ways to reduce the noise generated by the development, including off-site rail noise and maximum noise levels which may result in sleep disturbance; and
 - (c) report on these investigations and the implementation and effectiveness of these measures in the AEMR,
- to the satisfaction of the Director-General.

Monitoring

6. Prior to the end of December 2006, the Applicant shall prepare (and subsequently implement) a Noise Monitoring Program for the development, to the satisfaction of the Director-General. The Noise Monitoring Program must include quarterly attended noise monitoring, and a noise monitoring protocol for evaluating compliance with the noise impact assessment and land acquisition criteria in this consent.

BLASTING AND VIBRATION

Airblast Overpressure Criteria

7. The Applicant shall ensure that the airblast overpressure level from blasting at the site does not exceed the criteria in Table 4 at any residence on privately owned land.

Table 4: Airblast overpressure impact assessment criteria

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

Ground Vibration Impact Assessment Criteria

8. The Applicant shall ensure that the ground vibration level from blasting at the site does not exceed the criteria in Table 5 at any residence on privately owned land.

Table 5: Ground vibration impact assessment criteria

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

Blasting Hours

9. The Applicant shall only carry out blasting at the site between 9am and 5pm Monday to Saturday inclusive. No blasting is allowed on Sundays, public holidays, or at any other time without the written approval of the DEC.

Blasting Frequency

10. The Applicant shall not carry out blasting associated with open cut mining more than 2 blasts per week on average over any 12 month period at the site without the written approval of the Director-General.

Operating Conditions

11. During the life of the development, the Applicant 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 at the development, particularly during adverse meteorological conditions, to the satisfaction of the Director-General.
12. Prior to carrying out any blasting within 500 metres of a public road or railway, the Applicant must obtain approval from Council (in respect of public roads) and ARTC (in respect of the North Coast railway).

Public Notice

13. During the life of the development, the Applicant shall:
- (a) notify the landowner/occupier of any residence within 2 km of any active, or planned, mining areas 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 development; and
 - (c) advertise the blasting hotline number in a local newspaper at least 2 times each year, to the satisfaction of the Director-General.

Property Inspections

14. Prior to the end of December 2006, the Applicant shall advise all landowners within 2 km of any planned active mining areas that they are entitled to a structural property inspection (unless such an inspection has already been undertaken).
15. If the Applicant receives a written request for a structural property inspection from any landowner within 2 km of any active, or planned, mining areas, the Applicant shall within 3 months of receiving this request:
- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to inspect 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 the property inspection report.

Property Investigations

16. If any landowner within 2 km of any active, or planned, mining areas claims that buildings and/or structures on his/her land have been damaged as a result of blasting at the development, the Applicant shall within 3 months of receiving this request:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to investigate the claim; and
- (b) give the landowner a copy of the property investigation report.

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

If the Applicant or landowner disagrees with the findings of the independent property investigation, then either party may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process (see Appendix 3).

Blast Monitoring Program

- 17. Prior to the end of December 2006, the Applicant shall prepare (and following approval implement) a detailed Blast Monitoring Program, to the satisfaction of the Director-General. The Blast Monitoring Program must include a protocol for evaluating blasting impacts on privately owned residences and public infrastructure (including the North Coast railway), and demonstrating compliance with the blasting criteria in this consent.

AIR QUALITY

Impact Assessment Criteria

- 18. The Applicant shall ensure that the dust emissions generated by the development do not cause additional exceedances of the air quality impact assessment criteria listed in Tables 6, 7, and 8 at any residence on, or on more than 25 percent of, any privately owned land.

Table 6: 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 7: 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 8: 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, 2003, AS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Land Acquisition Criteria

- 19. If the dust emissions generated by the development exceed the criteria in Tables 9, 10, and 11 at any residence on, or on more than 25 percent of, any privately owned land, the Applicant shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 8-10 of schedule 4.

Table 9: 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 10: Short term land acquisition criteria for particulate matter

Pollutant	Averaging period	Criterion	Percentile ¹	Basis
Particulate matter < 10 µm (PM ₁₀)	24 hour	150 µg/m ³	99 ²	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 the DEC.

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 11: 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, 2003, AS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

Operating Conditions

20. The Applicant shall:
- ensure any visible air pollution generated by the development is assessed regularly, and that mining operations are relocated, modified, and/or stopped as required to minimise air quality impacts on privately owned land; and
 - implement all practicable measures to minimise the off-site odour and fume emissions generated by any spontaneous combustion at the development, to the satisfaction of the Director-General.

Monitoring

21. Prior to the end of December 2006, the Applicant shall prepare (and following approval implement) a detailed Air Quality Monitoring Program to the satisfaction of the Director-General. The Air Quality Monitoring Program shall include a combination of high volume samplers and dust deposition gauges to monitor the dust emissions of the development; and an air quality monitoring protocol for evaluating compliance with the air quality impact assessment and land acquisition criteria in this consent.

METEOROLOGICAL MONITORING

22. The Applicant shall ensure that there is a suitable meteorological station operating in the vicinity of the development in accordance with the requirements in *Approved Methods for Sampling of Air Pollutants in New South Wales*, and to the satisfaction of the DEC and the Director-General.

SURFACE AND GROUND WATER

Discharge Limits

23. Except as may be expressly provided by a DEC EPL, or in accordance with section 120 of the *Protection of the Environment Operations Act 1997*, the Applicant shall not discharge any Mine Water from the site.

Coal Shaft Creek Relocation

24. The Applicant shall design, construct, maintain, and rehabilitate the relocation of Coal Shaft Creek to the satisfaction of the DNR.

Mammy Johnsons River

25. The Applicant shall ensure that all development is located at least 40 metres from the banks of Mammy Johnsons River.

Site Water Management Plan

26. Prior to the end of December 2006, the Applicant shall prepare (and following approval implement) a Site Water Management Plan for the mine, in consultation with the DNR and the DEC, and to the satisfaction of the Director-General. This plan must include:
- (a) a Site Water Balance;
 - (b) an Erosion and Sediment Control Plan;
 - (c) a Surface Water Management and Monitoring Plan;
 - (d) a Ground Water Monitoring Program; and
 - (e) a Surface and Ground Water Response Plan.

Site Water Balance

27. The Site Water Balance must:
- (a) include details of:
 - sources of water;
 - reliability of water supply;
 - water use on site;
 - water management on site;
 - off-site water transfers;
 - reporting procedures; and
 - (b) describe measures to minimise water use by the development.

Erosion and Sediment Control

28. The Erosion and Sediment Control Plan must:
- (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.

Surface Water Management and Monitoring

29. The Surface Water Management and Monitoring Plan must include:
- (a) surface water assessment criteria;
 - (b) a program to monitor surface water flows and quality (particularly in Mammy Johnsons River);
 - (c) a program to assess chemical and biological conditions in streams, including sediment core monitoring in Mammy Johnsons River;
 - (d) reporting procedures; and
 - (e) a protocol for the investigation, notification, and mitigation of identified exceedances of the surface water criteria that are related to the development.

Groundwater Monitoring

30. The Groundwater Monitoring Program must include:
- (a) a program to monitor:
 - impacts on the groundwater supply of potentially affected landowners;
 - impacts on groundwater aquifers; and
 - the volume of groundwater seeping into the open cut mine workings; and
 - (b) reporting procedures for the results of the monitoring program.

Surface and Ground Water Response Plan

31. The Surface and Ground Water Response Plan must include:
- (a) a protocol for the investigation, notification and mitigation of any exceedances of the surface water and groundwater impact assessment criteria that result from the development; and
 - (b) the procedures that would be followed if any unforeseen impacts are detected during the development.

Irrigation Management Plan

32. The Applicant shall not undertake any off-site irrigation.
33. For the life of the development, the Applicant shall implement an Irrigation Management Plan to the satisfaction of the Director-General. This plan must include:
- (a) a detailed description of the irrigation management system;
 - (b) objectives for the operation of the irrigation management system;
 - (c) a program for monitoring the following parameters in the irrigation management area:
 - water quality (including runoff);
 - seepage;
 - soils;
 - crop factors; and
 - meteorological conditions; and
 - (d) a program for reporting the effectiveness of the irrigation management system and performance against objectives contained in this plan and the documents listed in condition 2 of schedule 2.

REHABILITATION AND LANDSCAPE MANAGEMENT

Rehabilitation and Landscape Management Plan

34. By end of May 2007, the Proponent must prepare (and following approval implement) a detailed Rehabilitation and Landscape Management Plan for the development, in consultation with affected agencies, and to the satisfaction of the DPI and the Director-General. This plan must be prepared by suitably qualified expert/s whose appointment/s have been approved by the Director-General, and must include a:
- (a) Rehabilitation Management Plan;
 - (b) Final Void Management Plan; and
 - (c) Mine Closure Plan.

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

Rehabilitation Management Plan

35. The Rehabilitation Management Plan must include:
- (a) the rehabilitation objectives for the site;
 - (b) a description of the short, medium, and long term measures that would be implemented to:
 - rehabilitate the site; and
 - manage the remnant vegetation and habitat on the site;
 - (c) detailed assessment and completion criteria for the rehabilitation of the site;
 - (d) a detailed description of how the performance of the rehabilitation of the mine would be monitored over time to achieve the stated objectives;
 - (e) a detailed description of what measures would be implemented over the next 3 years to rehabilitate and manage the landscape of the site including the procedures to be implemented for:
 - progressively rehabilitating areas disturbed by mining;
 - implementing revegetation and regeneration;

- protecting areas outside the disturbance areas;
 - managing and treating Potentially Acid Forming (PAF) waste;
 - undertaking pre-clearance surveys;
 - managing impacts on fauna;
 - landscaping the site to minimise visual impacts;
 - conserving and reusing topsoil;
 - collecting and propagating seed for rehabilitation works;
 - salvaging and reusing material from the site for habitat enhancement;
 - controlling weeds and feral pests;
 - controlling access;
 - bushfire management;
 - managing any identified conflicts between the rehabilitation of the mine and Aboriginal cultural heritage; and
- (f) details of who is responsible for monitoring, reviewing, and implementing the plan.

Final Void Management

36. The Final Void Management Plan must:
- (a) justify the planned final location and future use of the final void/s;
 - (b) incorporate design criteria and specifications for the final void/s based on verified groundwater modelling predictions and a re-assessment of post-mining groundwater equilibration;
 - (c) assess the potential interactions between creeks on the site (particularly Coal Shaft Creek) and the final void/s; and
 - (d) describe what actions and measures would be implemented to:
 - minimise any potential adverse impacts associated with the final void; and
 - manage and monitor the potential impacts of the final void until the Mining Lease for the development is relinquished,
 to the satisfaction of the Director-General.

Mine Closure Plan

37. The Mine Closure Plan must:
- (a) define the objectives and criteria for mine closure;
 - (b) investigate options for the future use of the site, including any final void/s;
 - (c) describe the measures that would be implemented to minimise or manage the ongoing environmental effects of the development; and
 - (d) describe how the performance of these measures would be monitored over time.

ABORIGINAL CULTURAL HERITAGE

Aboriginal Cultural Heritage Management Plan

38. For the life of the development, the Applicant shall implement an Aboriginal Cultural Heritage Management Plan, in consultation with DEC and the Karuah Local Aboriginal Land Council, and to the satisfaction of the Director-General. The plan must include:
- (a) a detailed description of the measures that would be implemented to protect Aboriginal sites outside the proposed disturbance area, particularly the Honey Scarred Tree;
 - (b) a description of the measures that would be implemented if any new Aboriginal objects are discovered during the development; and
 - (c) a protocol for the ongoing consultation and involvement of the Aboriginal communities in the conservation and management of Aboriginal cultural heritage on the site.

TRAFFIC AND TRANSPORT

Monitoring of Coal Transport

39. The Applicant shall:
- (a) keep records of the:
 - amount of coal transported from the site each year; and
 - number of coal haulage train movements generated by the development (including maximum number of daily movements); and
 - (b) include these records in the AEMR.

Traffic Management

40. The Applicant is not permitted to use Duralie Road for any traffic associated with mining activities.

VISUAL IMPACT

Visual Amenity

41. The Applicant shall minimise the visual impacts of the development to the satisfaction of the Director-General.
42. The Applicant shall implement the landscape and revegetation plan approved by the Council for the development.

Lighting Emissions

43. The Applicant shall:
 - (a) take all practicable measures to mitigate off-site lighting impacts from the development; and
 - (b) ensure that all external lighting associated with the development complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the Director-General.

BUSHFIRE MANAGEMENT

:

44. The Applicant shall:
 - provide adequate fire protection works on site, including one fully equipped fire fighting unit on stand-by (or alternative facilities specified by the Council);
 - undertake annual hazard reduction works (at a time determined by the Council); and
 - submit an annual report on fire management activities to the Great Lakes Bush Fire Management Committee, (or as required by this Committee), to the satisfaction of the Council.

GREENHOUSE GAS

45. The Applicant shall:
 - (a) estimate the greenhouse gas emissions generated by the development;
 - (b) investigate ways to reduce greenhouse gas emissions generated by the development; and
 - (c) report on greenhouse gas emissions and abatement measures in the AEMR, to the satisfaction of the Director-General.

WASTE MINIMISATION

46. The Applicant shall:
 - (a) monitor the amount of waste generated by the development;
 - (b) investigate ways to minimise waste generated by the development;
 - (c) implement reasonable and feasible measures to minimise waste generated by the development;
 - (d) ensure irrigation of treated wastewater is undertaken in accordance with DEC's *Environmental Guideline for the Utilisation of Treated Effluent*; and
 - (e) report on waste management and minimisation in the AEMR, to the satisfaction of the Director-General.
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SCHEDULE 4
ADDITIONAL PROCEDURES FOR AIR QUALITY AND NOISE MANAGEMENT

Notification of Landowners

1. By end of September 2006, the Applicant shall notify the landowners of the land listed in Table 1 in writing that they have the right to require the Applicant to acquire their land at any stage during the development.
2. If the results of the air quality and/or noise monitoring required in schedule 3 identify that the air pollution and/or noise generated by the development is greater than any of the air quality and/or noise criteria in schedule 3, except where this is predicted in the documents listed in condition 2 of schedule 2 and except where a negotiated air quality or noise agreement has been entered into, then the Applicant 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 development is complying with the air quality and/or noise criteria in schedule 3.
3. Prior to the end December 2006, the Applicant shall provide a brochure, endorsed by NSW Health, to advise landowners and/or existing or future tenants (including tenants of mine owned properties) of the possible health and amenity impacts associated with exposure to particulate matter.

The Applicant shall provide this brochure to all landowners and/or existing or future tenants (including tenants of mine owned properties) of properties where the monitoring results identify that the mine is exceeding the air quality impact assessment criteria in schedule 3.

Independent Review

4. If a landowner considers the development to be exceeding the air quality and/or noise criteria in schedule 3, except where this is predicted in the documents listed in condition 2 of schedule 2, he/she may ask the Director-General in writing for an independent review of the air pollution and/or noise impacts of the development on his/her land.

If the Director-General is satisfied that an independent review is warranted, the Applicant shall within 3 months of the Director-General 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 Director-General, to conduct air quality and/or noise monitoring on the land, to determine whether the development is complying with the relevant air quality and/or noise criteria in schedule 3, and identify the source(s) and scale of any air quality and/or noise impact on the land, and the development's contribution to this impact;
 - (c) give the Director-General and landowner a copy of the independent review.
5. If the independent review determines that the development is complying with the relevant air quality and/or noise criteria in schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.
 6. If the independent review determines that the development is not complying with the relevant air quality and/or noise criteria in schedule 3, and that the development is primarily responsible for this non-compliance, then the Applicant shall:
 - (a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant air quality and/or noise criteria; and
 - (b) conduct further air quality and/or noise monitoring to determine whether these measures ensure compliance; or
 - (c) secure a written agreement with the landowner to allow exceedances of the air quality and/or noise criteria in schedule 3,to the satisfaction of the Director-General.

If the additional monitoring referred to above subsequently determines that the development is complying with the relevant air quality and/or noise criteria in schedule 3, then the Applicant may discontinue the independent review with the approval of the Director-General.

If the measures referred to in (a) do not achieve compliance with the air quality and/or noise land acquisition criteria in schedule 3, and the Applicant cannot secure a written agreement with the landowner to allow these exceedances within 3 months, then the Applicant shall, upon receiving a written request from the landowner, acquire the landowner's land in accordance with the procedures in conditions 8-10 below.

7. If the landowner disputes the results of the independent review, either the Applicant or the landowner may refer the matter to the Director-General for resolution.

If the matter cannot be resolved within 21 days, the Director-General shall refer the matter to an Independent Dispute Resolution Process.

Land Acquisition

8. Within 3 months of receiving a written request from a landowner with acquisition rights, the Applicant 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 condition 4 of schedule 3;
 - (b) the reasonable costs associated with:
 - relocating within the Great Lakes, Gloucester and Dungog local government areas, 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.

However, if at the end of this period, the Applicant 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 request, the Director-General shall request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer or Fellow of the Institute, to consider submissions from both parties, and determine a fair and reasonable acquisition price for the land, and/or terms upon which the land is to be acquired.

Within 14 days of receiving the independent valuer's determination, the Applicant shall make a written offer to purchase the land at a price not less than the independent valuer's determination.

If the landowner refuses to accept this offer within 6 months of the date of the Applicant's offer, the Applicant's obligations to acquire the land shall cease, unless otherwise agreed by the Director-General.

9. The Applicant shall bear the costs of any valuation or survey assessment requested by the independent valuer, or the Director-General and the costs of determination referred above.
10. If the Applicant and landowner agree that only part of the land shall be acquired, then the Applicant shall pay all reasonable costs associated with obtaining Council approval for any plan of subdivision, and registration of the plan at the Office of the Registrar-General.
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**SCHEDULE 5
ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING**

ENVIRONMENTAL MANAGEMENT STRATEGY

1. Prior to the end of December 2006, the Applicant shall prepare and implement an Environmental Management Strategy for the development to the satisfaction of the Director-General. 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.

ENVIRONMENTAL MONITORING PROGRAM

2. Prior to the end of December 2006, the Applicant shall prepare an Environmental Monitoring Program for the development, to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in schedule 3 of this consent into a single document.

INCIDENT REPORTING

3. Within 7 days of detecting an exceedance of the limits/performance criteria in this consent, the Applicant shall report the exceedance/incident to the Department (and any relevant agency). The report must:
 - (a) describe the date, time, and nature of the exceedance/incident;
 - (b) identify the cause (or likely cause) of the exceedance/incident;
 - (c) describe what action has been taken to date; and
 - (d) describe the proposed measures to address the exceedance/incident.

ANNUAL REPORTING

4. Each year, the Applicant shall submit an Annual Environmental Management Report (AEMR) to the Director-General 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/limits;
 - 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.

INDEPENDENT ENVIRONMENTAL AUDIT

5. Prior to the end of April 2009, and every 3 years thereafter, unless the Director-General directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:
 - (a) be conducted by suitably qualified, experienced, and independent expert/s whose appointment has been endorsed by the Director-General;
 - (b) assess the various aspects of the environmental performance of the development, and its effects on the surrounding environment;
 - (c) assess whether the development is complying with the relevant standards, performance measures, and statutory requirements;

- (d) review the adequacy of any strategy/plan/program required under this consent; and, if necessary,
 - (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy/plan/program required under this consent.
6. Within 3 months of commissioning this audit, or as otherwise agreed by the Director-General, the Applicant shall submit a copy of the audit report to the Director-General, with a response to any recommendations contained in the audit report.

UPDATING ENVIRONMENTAL MANAGEMENT REQUIREMENTS

7. Within 6 months of the completion of the Independent Environmental Audit (see condition 6), the Applicant shall review, and if necessary revise, the Environmental Management Strategy, the Environmental Monitoring Program and all other environmental management plans and monitoring programs required under this consent are reviewed, and if necessary updated, to the satisfaction of the Director-General.

ENVIRONMENTAL MANAGER

8. The Applicant shall employ a suitably qualified and experienced Environmental Manager, whose appointment has been endorsed by the Director-General, for the duration of the development to oversee the environmental performance of the development and compliance with the conditions of this consent.

COMMUNITY CONSULTATIVE COMMITTEE

9. Within 3 months of this consent, the Applicant shall establish a Community Consultative Committee (CCC) to oversee the environmental performance of the development. The CCC shall:
- (a) be comprised of:
 - 2 representatives from the Applicant, including the person responsible for environmental management at the mine;
 - at least 1 representative from Council; and
 - at least 4 representatives from the local community, whose appointment has been approved by the Director-General in consultation with the Council. The local community representative positions will be re-appointed every two years unless otherwise agreed by the Director-General;
 - (b) be chaired by an independent chairperson, or council representative, whose appointment has been approved by the Director-General;
 - (c) meet at least 4 times a year, or as otherwise approved by the Director-General;
 - (d) review the Applicant's performance with respect to environmental management and community relations;
 - (e) undertake regular inspections of the mine operations;
 - (f) review community concerns or complaints about the mine operations, and the Applicant's complaints handling procedures; and
 - (g) provide advice to:
 - the Applicant on improved environmental management and community relations, including the provision of information to the community and the identification of community initiatives to which the Applicant could contribute;
 - the Department regarding the conditions of this consent; and
 - the general community on the performance of the mine with respect to environmental management and community relations; and
 - (h) be operated generally in accordance with any guidelines the Department may publish in regard to the operation of Community Consultative Committees for mining developments.

Note: The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Applicant complies with this consent.

10. The Applicant shall, at its own expense:
- (a) ensure that 2 of its representatives attend CCC meetings;
 - (b) provide the CCC with regular information on the environmental performance and management of the development;
 - (c) provide meeting facilities for the CCC;
 - (d) arrange site inspections for the CCC, if necessary;
 - (e) take minutes of the CCC meetings;
 - (f) make these minutes available to the public;
 - (g) respond to any advice or recommendations the CCC may have in relation to the environmental management or community relations; and

- (h) forward a copy of the minutes of each CCC meeting, including a response to any recommendations from the CCC, to the Director-General within a month of the CCC meeting.
11. The Applicant shall establish a trust fund to be managed by the chairperson of the CCC to facilitate the functioning of the CCC, and pay \$2,000 each year to the fund until the cessation of coal mining on the site. The contribution is to be indexed according to the CPI at the time of each payment. The first payment shall be made by the date of the first CCC meeting.

ACCESS TO INFORMATION

12. From end of December 2006, and during the life of the development thereafter, the Applicant shall place a copy of the following documents and information (and any subsequent revisions) required under this consent on its website:
- (a) all current environmental management plans, strategies and programs;
 - (b) the current Independent Environmental Audit;
 - (c) the current AEMR; and
 - (d) a summary of all environmental monitoring results (to be updated at least every 6 months), to the satisfaction of the Director-General.
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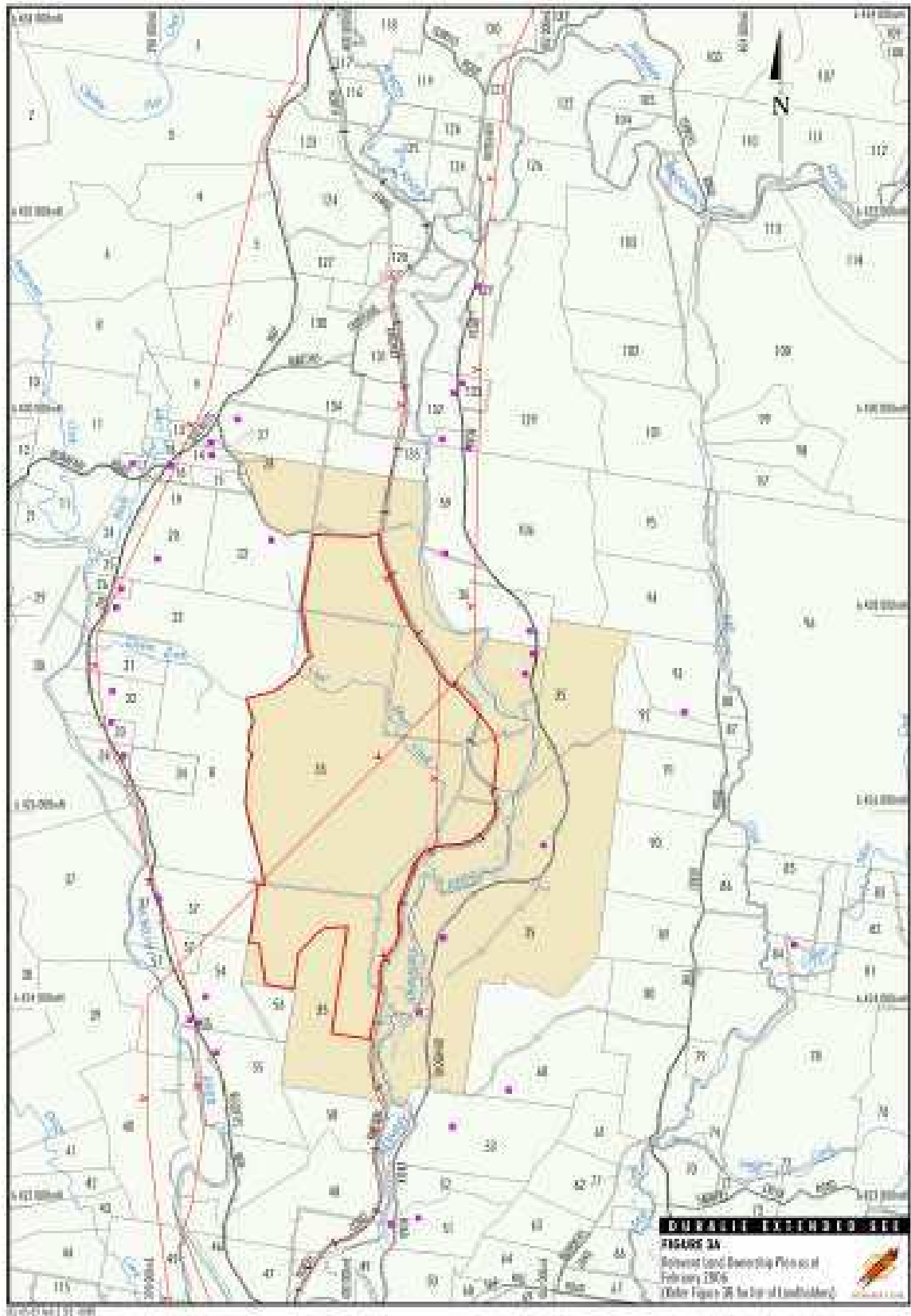
**APPENDIX 1
SCHEDULE OF LAND**

Lot No.	DP No.
30	95765
636	95742
4	595876
705	95759
12	95773
125	95694
126	95695
131	95773
6	876013
C	160430
130	95768
40	753187
662	753187
19	753187
136	753187

All formed and unformed Crown roads and any unformed public roads located within and adjacent to the above properties.

That part of Dungog to Gloucester railway (also known as the North Coast Railway) located within and adjacent to the above properties.

APPENDIX 2
PROPERTY LOCATIONS



1. SEIGNIO 4 PTY LTD
2. F & F FREEMAN
3. W & P HENNING
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* Including, but not limited to, the following:

Source: World Bank, 2009
RURAL EXTENSION LIST
FIGURE 38
 Relevant Land Ownership List
 (as of February 2014)



APPENDIX 3
INDEPENDENT DISPUTE RESOLUTION PROCESS

