# **Project Approval**

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

As delegate for the Minister for Planning and Infrastructure, the Planning Assessment Commission approves the project application referred to in schedule 1, subject to the conditions in schedules 2 to 5.

These conditions are required to:

Member of the Commission

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

Sydney	2011
	SCHEDULE 1
Application No:	10_0046
Proponent:	Gujarat NRE Coking Coal Ltd
Approval Authority:	Minister for Planning and Infrastructure
Land:	See Appendix 1
Project:	NRE No. 1 Colliery Preliminary Works Project

Red type represents the December 2012 modification (MOD 1) Green type represents the October 2014 modification (MOD 3)

# Member of the Commission

# TABLE OF CONTENTS

DEFINITIONS		3
ADMINISTRATIVE C	ONDITIONS	5
OBLIGATION -	TO MINIMISE HARM TO THE ENVIRONMENT	5
TERMS OF AP	PROVAL	5
LIMITS ON AP	PROVAL	5
STRUCTURAL	ADEQUACY	5
DEMOLITION		5
OPERATION C	OF PLANT AND EQUIPMENT	5
STAGED SUB	MISSION OF STRATEGIES, PLANS OR PROGRAMS	6
SPECIFIC ENVIRON	MENTAL CONDITIONS	7
SUBSIDENCE		7
NOISE		9
AIR QUALITY	& GREENHOUSE GASES	12
TRANSPORT		14
BIODIVERSITY	Υ	14
WATER MANA	AGEMENT	15
HERITAGE		16
VISUAL		16
WASTE		16
<b>BUSHFIRE MA</b>	ANAGEMENT	17
REHABILITAT	ION	17
ADDITIONAL PROCI	EDURES	19
NOTIFICATION	N OF LANDOWNERS	19
INDEPENDEN	T REVIEW	19
ENVIRONMENTAL M	IANAGEMENT, REPORTING AND AUDITING	20
ENVIRONMEN	ITAL MANAGEMENT	20
REPORTING		21
INDEPENDEN <sup>®</sup>	T ENVIRONMENTAL AUDIT	21
ACCESS TO IN	NFORMATION	22
APPENDIX 1: SCHE	DULE OF LAND	23
APPENDIX 2: PROJ	ECT LAYOUT PLAN	24
APPENDIX 3: STAT	EMENT OF COMMITMENTS	25
APPENDIX 4: RECE	IVER LOCATION PLAN	33

# DEFINITIONS

Adaptive management	Adaptive management includes monitoring subsidence effects and impacts
Adaptive management	and, based on the results, modifying the mine plan as mining proceeds to
	ensure that the effects, impacts and/or associated environmental
	consequences remain within the predicted and/or designated ranges and in compliance with the conditions of this approval
Annual Review	The review required by Condition 3 of Schedule 5
Approval	This Project Approval
Approved Mine Plan	The mine plan depicted in the figure in Appendix 2
BCA Built features	Building Code of Australia Includes any building or work erected or constructed on land, and includes
	dwellings and infrastructure such as any formed road, street, path, walk, or
	driveway; and any pipeline, water, sewer, telephone, gas or other service main
CCC	Community Consultative Committee
Conditions of this approval	Conditions contained in Schedules 2 to 5 inclusive
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on
-	Sundays and Public Holidays
Department Director-General	Department of Planning and Infrastructure Director-General of Department of Planning and Infrastructure, or delegate
DRE	Division of Resources and Energy within DTIRIS
DSC	Dams Safety Committee
DTIRIS EA	Department of Trade and Investment, Regional Infrastructure and Services Environmental Assessment prepared for NRE No. 1 Colliery Preliminary
EA	Works Project entitled NRE No. 1 Colliery Preliminary Works Project
	Environmental Assessment (dated October 2010) including the Response to
EA – Mod 1	Submissions (dated 21 February 2011)
EA - Mod T	Environmental Assessment titled Longwalls 4 and 5; Maingates 6, 7 and 8: Application for s75W Modification 1 to MP 10_0046 – Preliminary Works
	Project, dated August 2012, the associated Response to Submissions, dated
	8 October 2012, and the Addendum to the Response to Submissions, dated 18 November 2012
Environmental consequences	The environmental consequences of subsidence impacts, including: damage
	to built features; loss of surface water flows to the subsurface; loss of standing
	pools; adverse water quality impacts; cliff falls; rock falls; damage to Aboriginal heritage sites; impacts on aquatic ecology; and ponding.
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPL	Environment Protection Licence issued under the <i>Protection of the</i> Environment Operations Act 1997
Executive Director Mineral	Executive Director Mineral Resources (or equivalent position) within DRE
Resources	
Evening Feasible	The period from 6pm to 10pm Feasible relates to engineering considerations and what is practical to build or
	to implement
First workings	Extraction of coal by bord and pillar workings and the like
Gujarat Incident	Gujarat NRE Coking Coal Ltd A set of circumstances that causes or threatens to cause material harm to the
medent	environment, and/or breaches or exceeds the limits or performance
	measures/criteria in this approval
INP Land	NSW Industrial Noise Policy (NSW EPA, 2000) In general, the definition of land is consistent with the definition in the EP&A
Land	Act. However, in relation to the noise and air quality conditions in schedule 4 it
	means the whole of a lot, or contiguous lots owned by the same landowner, in
Material harm to the environment	a current plan registered at the Land Titles Office at the date of this approval Harm to the environment is material if it involves actual or potential harm to
	the health or safety of human beings or to ecosystems that is not trivial
Mining operations	Extraction, processing, handling and storage of coal on the site
Minister Minor	Minister for Planning and Infrastructure, or delegate Small in quantity, size and degree given the relative context
Mitigation	Activities associated with reducing the impacts of the project prior to or during
-	those impacts occurring
Negligible Night	Small and unimportant, such as to be not worth considering The period from 10pm to 7am, Monday to Saturday, 10pm to 8am on Sundays
	and Public Holidays
NOW	New South Wales Office of Water
OEH	Office of Environment and Heritage

РКСТ	Port Kembla Coal Terminal
POEO Act	Protection of the Environment Operations Act 1997
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Project	NRE No. 1 Colliery Preliminary Works Project as described in the EA
Proponent	Gujarat or any other person or persons who rely on this approval to carry out the development that is subject to this approval
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
Reasonable costs	The costs agreed between the Department and the Proponent for obtaining independent experts to review the adequacy of any aspects of the extraction plan, or where such costs cannot be agreed, the costs determined by a dispute resolution process
ROM coal	Run-of-mine coal
RTA	Roads and Traffic Authority
Safe, serviceable & repairable	Safe means no danger to users who are present, serviceable means available for its intended use, and repairable means damaged components can be repaired economically
Second workings	Extraction of coal by pillar extraction methods
Site	Land to which the project approval applies (see Appendix 1)
SCA	Sydney Catchment Authority
SMP	Subsidence Management Plan
Statement of Commitments	The commitments by Gujarat set out in Appendix 3
Subsidence	The totality of subsidence effects and impacts and their associated environmental consequences
Subsidence effects	Deformation of the ground mass due to mining, including all mining-induced ground movements, including both vertical and horizontal displacement, tilt, strain and curvature
Subsidence impacts	Physical changes to the ground and its surface caused by subsidence effects, including tensile and shear cracking of the rock mass, localised buckling of strata caused by valley closure and upsidence and surface depressions or troughs
Surface facilities sites	The Russell Vale site; all ventilation shaft sites; sites used for gas drainage or for other mining purposes infrastructure; and any other site subject to existing or proposed surface disturbance associated with the project
WCC	Wollongong City Council
WSC	Wollondilly Shire Council

# **SCHEDULE 2**

# ADMINISTRATIVE CONDITIONS

## **OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT**

1. The Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the project.

# TERMS OF APPROVAL

- 2. The Proponent shall carry out the project generally in accordance with the:
  - (a) EA;
  - (a1) EA Mod 1 with the exception that approval is not given for development of Maingates 7 and 8;
  - (b) Statement of Commitments (see Appendix 3); and
  - (c) conditions of this approval.

Note: The general layout of the project is shown in Figure 1 of Appendix 2.

- 3. If there is any inconsistency between the above documents, the more recent document shall prevail to the extent of the inconsistency. However, the conditions of this approval shall prevail to the extent of any inconsistency.
- 4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - (a) any strategies, plans, programs, reviews, audits, reports or correspondence that are submitted in accordance with the conditions of this approval; and
  - (b) the implementation of any actions or measures contained in these documents.

# LIMITS ON APPROVAL

#### **Mining Operations**

- (a) mining operations may take place until 31 December 2014; and
- (b) nothing in this approval authorises development of Maingates 7 and 8.
- Note: Under this Approval, the Proponent is required to rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. Consequently this approval will continue to apply in all other respects other than the right to conduct mining operations until the site has been rehabilitated to a satisfactory standard.

# **Coal Production**

5. The Proponent shall not extract more than 1 million tonnes of ROM coal from the site per calendar year.

#### Hours of Operation

6. The Proponent may undertake mining operations 24 hours a day, 7 days a week.

#### STRUCTURAL ADEQUACY

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

Notes:

- Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works; and
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.

# DEMOLITION

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

# **OPERATION OF PLANT AND EQUIPMENT**

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

(b) operated in a proper and efficient manner.

# STAGED SUBMISSION OF STRATEGIES, PLANS OR PROGRAMS

10. With the approval of the Director-General, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis.

Note: The conditions of this approval require certain strategies, plans, and programs to be prepared for the project. They also require these documents to be reviewed and audited on a regular basis to ensure they remain effective. However, in some instances, it will not be necessary or practicable to prepare these documents for the whole project at any one time; particularly as these documents are intended to be dynamic and improved over time. Consequently, the documents may be prepared and implemented on a progressive basis. In doing this however, the Proponent will need to demonstrate that it has suitable documents in place to manage the existing operations of the project.

# SCHEDULE 3

# SPECIFIC ENVIRONMENTAL CONDITIONS

# SUBSIDENCE

#### Performance Measures

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

Table 1: Subsidence Impact Performance Measures

Water resources	
Wallandoola Creek Cataract Creek	<ul> <li>Negligible environmental consequences including:</li> <li>negligible diversion of flows or changes in the natural drainage behaviour of pools;</li> <li>negligible gas releases and iron staining;</li> <li>negligible increase in water cloudiness;</li> <li>negligible increase in bank erosion;</li> <li>negligible increase in sediment load; and</li> <li>negligible reduction in the volume of water reporting to the reservoir.</li> </ul>
Lizard Creek and other watercourses	No greater subsidence impact or environmental consequences than predicted in the EA.
Cataract Reservoir	Negligible leakage from the reservoir and negligible reduction in the water quality of the reservoir.
Swamps	
Upland swamps adjacent to Wallandoola and Lizard Creeks (including valley fill swamp WCvfs1) Cataract Creek Upland Swamp 4 (CCUS4) Cataract Reservoir Upland Swamp 1 (CRUS1)	<ul> <li>Negligible environmental consequences including:</li> <li>negligible change in the size of swamps;</li> <li>negligible change in the functioning of swamps;</li> <li>negligible change to the composition or distribution of species within swamps; and</li> <li>negligible drainage of water from swamps, or redistribution of water within swamps.</li> </ul>
Cataract Creek Upland Swamp 3 (CCUS3)	No greater subsidence impact or environmental consequences than predicted in EA – Mod 1
Biodiversity	
Threatened species, populations or their habitats and endangered ecological communities with the exception of Cataract Creek Upland Swamp 3	Negligible environmental consequences.
Heritage Features	
Aboriginal heritage site 52-2-1223 and 52-2-0320	Negligible impact or environmental consequences.

- Notes: 1) The Proponent will be required to define more detailed performance indicators (including impact assessment criteria) for each of these performance measures in the various management plans that are required under this approval (see conditions 29 and 35-38 below).
  - 2) Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Director-General will be the final arbiter.
  - 3) The requirements of this condition only apply to the impacts and consequences of mining operations, construction or demolition undertaken following the date of this approval.
- 2. The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the performance measures in Table 1. Any exceedance of these performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation, notwithstanding actions taken pursuant to paragraphs (a)-(c) or condition 3 below. Where any exceedance of these performance measures has occurred, the Proponent must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
  - (b) consider all reasonable and feasible options for remediation and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and
  - (c) implement remediation measures as directed by the Director-General,
  - to the satisfaction of the Director-General.

#### Offsets

- 3. If the Proponent exceeds the performance measures in Table 1 and the Director-General determines that:
  - (a) it is not reasonable or feasible to remediate the impact or environmental consequence; or
  - (b) remediation measures implemented by the Proponent have failed to satisfactorily remediate the impact or environmental consequence;

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

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

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

Table 2: Subsidence Impact Performance Measures

Built Features	
Key public infrastructure: Mount Ousley Road, Telstra fibre optic cable F HOME 2005 48 and 330 and 132 kV power transmission lines	Always safe and serviceable. Damage that does not affect safety or serviceability must be fully repairable, and must be
Access road to Vent Shaft No. 4, fire trails, other public infrastructure, other built features	fully repaired. Always safe. Serviceability should be maintained wherever practicable. Loss of serviceability must be fully compensated. Damage must be fully repairable, and must be fully repaired or else replaced or fully compensated.
Public safety	
Public Safety	No additional risk

Notes: 1) The Proponent will be required to define more detailed performance indicators (including impact assessment criteria) for each of these performance measures in Built Features Management Plans or Public Safety Management Plan (see condition 7 below).

- 2) Measurement and/or monitoring of compliance with performance measures and performance indicators is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans. In the event of a dispute over the appropriateness of proposed methods, the Director-General will be the final arbiter.
- 3) The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of this approval.
- 4) Any breach of this condition is taken to be a breach of this approval, and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation.
- 5) Requirements regarding safety or serviceability do not prevent preventative or mitigatory actions being taken prior to or during mining in order to achieve or maintain these outcomes.
- 5. Any dispute between the Proponent and the owner of any built feature over the interpretation, application or implementation of the performance measures in Table 2 is to be settled by the Director-General, following consultation with the MSB and the Executive Director Mineral Resources. Any decision by the Director-General shall be final and not subject to further dispute resolution under this approval.

#### **First Workings**

- 6. The Proponent may carry out first workings within the underground mining area, other than in accordance with an approved Extraction Plan, provided that DRE is satisfied that the first workings are designed to remain stable and non-subsiding in the long-term, except insofar as they may be impacted by approved second workings.
  - Note: The intent of this condition is not to require an additional approval for first workings, but to ensure that first workings are built to geotechnical and engineering standards sufficient to ensure long term stability, with negligible resulting direct subsidence impacts.

# **Extraction Plan**

- 7. The Proponent shall prepare and implement an Extraction Plan for all second workings on site to the satisfaction of the Director-General. This plan must:
  - (a) be prepared by suitably qualified and experienced persons whose appointment has been endorsed by the Director-General;
  - (b) be approved by the Director-General before the Proponent carries out any of the second workings covered by the plan;
  - (c) include detailed plans of existing and proposed first and second workings and any associated surface development;

- (d) include detailed performance indicators for each of the performance measures in Tables 1 and 2;
- (e) provide revised predictions of the potential subsidence effects, subsidence impacts and environmental consequences of the proposed second workings, incorporating any relevant information obtained since this approval;
- (f) describe the measures that would be implemented to:
  - ensure compliance with the performance measures in Tables 1 and 2; and
  - manage or remediate subsidence impacts and/or environmental consequences;
- (g) include a contingency plan that expressly provides for adaptive management where monitoring indicates that there has been an exceedance of any performance measure in Tables 1 and 2, or where any such exceedance appears likely;
- (h) include the following to the satisfaction of DRE:
  - a Coal Resource Recovery Plan that demonstrates effective recovery of the available resource;
  - a Subsidence Monitoring Program to:
    - provide data to assist with the management of the risks associated with subsidence;
    - validate the subsidence predictions; and
    - analyse, in consultation with OEH, the relationships between predicted and resulting subsidence effects and predicted and resulting subsidence impacts and environmental consequences; and
    - inform the contingency plan and adaptive management process;
  - a Built Features Management Plan to manage the potential subsidence impacts and/or environmental consequences of the proposed second workings, and which:
    - addresses in appropriate detail all items of public infrastructure and all classes of other built features; and
    - has been prepared following appropriate consultation with the owner/s of potentially affected feature/s;
  - a Public Safety Management Plan to ensure public safety in the mining area;
  - a Spontaneous Combustion Management Plan; and
  - appropriate revisions to the Rehabilitation Management Plan required under condition 44; and
- (h1) include appropriate references to:
  - water resources, biodiversity values and heritage values managed under the Water Management, Biodiversity and Heritage Management Plans required under conditions 29, 35 and 38 of Schedule 3 and;
  - programs, procedures, management measures and the like required under those plans;
- (i) include a program to collect sufficient baseline data for any future Extraction Plans.
- Note: An SMP that is substantially consistent with this condition and which is approved by DRE prior to 31 December 2011 is taken to satisfy the requirements of this condition.
- 8. The Proponent shall ensure that the management plans required under conditions 29 and 35-38:
  - (a) include an assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this approval; and
  - (b) include a Trigger Action Response Plan, or equivalent, to address potential subsidence impacts and environment consequences that may result from mining subsidence; and
  - (c) are approved by the Director-General before the Proponent carries out any of the second workings covered by the Extraction Plan.

#### Payment of Reasonable Costs

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

# NOISE

#### Noise Criteria

10. Until 31 December 2013, the Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 3 and Table 4 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Location		Day	Evening	Nigl	ht
Area	Receiver Number	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)	LA1 (1 min)
Lyndon Street, Corrimal	C1, C2	39	38	38	47

Table 3: Noise Criteria dB(A) - Interim Intrusive Noise Limits

Location		Day	Evening	Night	
Area	Receiver Number	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)	LA1 (1 min)
Midgely Street, Corrimal	C3	38	37	36	47
Bloomfield Avenue, Corrimal	C4	37	37	36	47
Taylor Place, Corrimal	C5	40	40	40	50
Robson Street, Corrimal	C6	37	36	36	50
Broker Street, Russell Vale	R1, R3	45	43	41	47
West Street, Russell Vale	R2	46	43	42	47
Moreton Street, Russell Vale	R4	44	40	38	47
All other privat	ely-owned land	35	35	35	45

Table 4: Noise Criteria dB(A) – Amenity Noise Limits – All residences

Receiver Area	Day	Evening	Night	
Receiver Area	LAeq (11 hour)	LAeq (4 hour)	LAeq (9 hour)	
All privately-owned land	60	50	45	
Notos to Tables 2 and 1:				

Notes to Tables 3 and 4:

• To interpret the locations referred to Tables 3 and 4, see Appendix 4.

• Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

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

11. From 1 January 2014, the Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 5 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Location		Day	Evening	Night	
Area	Receiver Number	LAeq (15 min)	L <sub>Aeq</sub> (15 min)	L <sub>Aeq (15</sub> min)	LA1 (1 min)
Lyndon Street, Corrimal	C1, C2	39	38	38	47
Midgely Street, Corrimal	C3	38	37	36	47
Bloomfield Avenue, Corrimal	C4	37	37	36	47
Taylor Place, Corrimal	C5	40	40	40	50
Robson Street, Corrimal	C6	37	36	36	50
Broker Street,	R1, R3	43	40	40	47

Table 5: Noise Criteria dB(A) - Medium Term Intrusive Noise Limits

Location		Day	Evening	Night	
Area	Receiver Number	LAeq (15 min)	LAeq (15 min)	LAeq (15 min)	LA1 (1 min)
Russell Vale					
West Street, Russell Vale	R2	44	40	39	47
Moreton Street, Russell Vale	R4	43	39	38	47
All other privately-owned land		35	35	35	45

Notes to Table 5:

12.

• To identify the locations referred to in Table 5, refer to Appendix 4; and

Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

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

The Proponent shall make continual endeavours to reduce noise, with the objective that the noise generated by the project will comply with criteria in Table 6 at any existing residence on privately-owned land or on more than 25 percent of any privately-owned land, to the satisfaction of the Director-General.

Location		Day	Evening	Night	
Area	Receiver Number	LAeq (15 min)	LAeq (15 min)	L <sub>Aeq (15 min)</sub>	LA1 (1 min)
Lyndon Street, Corrimal	C1, C2	39	38	38	47
Midgely Street, Corrimal	C3	38	37	36	47
Bloomfield Avenue, Corrimal	C4	37	37	36	47
Taylor Place, Corrimal	C5	40	40	40	50
Robson Street, Corrimal	C6	37	36	36	50
Broker Street, Russell Vale	R1, R3	43	39	37	47
West Street, Russell Vale	R2	43	39	37	47
Moreton Street, Russell Vale	R4	43	39	37	47
All other private	ely-owned land	35	35	35	45

Table 6: Long Term Intrusive Noise Goals

Notes to Table 6:

• To identify the locations referred to in Table 6, refer to Appendix 4; and

• Noise generated by the project is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

#### **Noise Audit**

- 13. The Proponent shall prepare and implement a Noise Audit for the project to the satisfaction of the Director-General. The audit must:
  - (a) be prepared by a suitably qualified acoustic consultant, whose appointment has been approved by the Director-General;
  - (b) be prepared in consultation with OEH, and be submitted to the Director-General for approval by the end of December 2012;
  - (c) investigate and evaluate all reasonable and feasible measures to mitigate operational noise levels to comply with the long term noise goals in Table 5; and

(d) include an action plan to implement the audit recommendations and a protocol for monitoring the effectiveness of these measures.

## **Noise Mitigation Measures**

- 14. The Proponent shall ensure that the following noise mitigation measures are undertaken, in consultation with OEH, and to the satisfaction of the Director-General:
  - (a) the existing Bulli Conveyor is operated during daylight hours only (ie 7:00 am to 6:00 pm) and is decommissioned after completion of the driveage of the Wonga Mains; and
  - (b) the Wongawilli Conveyor utilises noise minimisation measures conforming to Best Available Technology Economically Achievable (BATEA) standards, with construction completed by the end of December 2012.
- 14A. The Proponent shall:
  - (a) in consultation with the CCC assess options for improved noise mitigation measures as an alternative to construction of the two acoustic screens identified in the 2010 Statement of Commitments and submit by 30 June 2013 appropriate options for consideration by the Director-General;
  - (b) implement the approved option within 6 months of the Director-General's approval.

#### **Operating Conditions**

- 15. The Proponent shall:
  - (a) implement best practice noise management, including all reasonable and feasible noise mitigation measures to minimise the construction, operational and road traffic noise generated by the project; and
  - (b) regularly assess the real-time noise monitoring to ensure compliance with the relevant conditions of this approval,
  - to the satisfaction of the Director-General.

#### Noise Management Plan

- 16. The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with OEH, and submitted for approval to the Director-General within 6 months of this approval;
  - (b) include provisions to ensure that the road haulage fleet attains and maintains best practices in both equipment and operations;
  - (d) describe the noise mitigation measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time noise management system;
  - (d) outline procedures to manage responses to any complaints or issues raised by the owners of affected residences; and
  - (e) include a noise monitoring program that:
    - uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project; and
    - includes a protocol for determining exceedances of the relevant conditions of this approval.

# AIR QUALITY & GREENHOUSE GASES

#### Odour

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

#### **Greenhouse Gas Emissions**

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

#### Air Quality Assessment Criteria

19. The Proponent shall ensure that all reasonable and feasible avoidance and mitigation measures are employed so that particulate matter emissions generated by the project do not exceed the criteria listed in Tables 7, 8 or 9 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 7: Long-term criteria for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
-----------	------------------	------------------------

Total suspended particulate (TSP) matter	Annual	<sup>a</sup> 90 µg/m³
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	<sup>a</sup> 30 μg/m³

Table 8: Short-term criterion for particulate matter

Pollutant	Averaging Period	<sup>d</sup> Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	<sup>a</sup> 50 μg/m³

#### Table 9: Long-term criteria for deposited dust

Pollutant	Averaging Period	Maximum increase in deposited dust level	Maximum total deposited dust level
<sup>C</sup> Deposited dust	Annual	<sup>b</sup> 2 g/m <sup>2</sup> /month	<sup>a</sup> 4 g/m <sup>2</sup> /month

Notes to Tables 7-9:

- <sup>a</sup> Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to all other sources);
- <sup>b</sup> Incremental impact (i.e. incremental increase in concentrations due to the project on its own);
- <sup>c</sup> Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air Determination of Particulate Matter Deposited Matter Gravimetric Method.
- <sup>d</sup> Excludes 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 OEH.

#### **Operating Conditions**

- 20. The Proponent shall:
  - (a) implement best practice air quality management on site, including all reasonable and feasible measures to minimise the off-site odour, and dust emissions generated by the project including those generated by any spontaneous combustion on site;
  - (b) minimise any visible air pollution generated by the project;
  - (c) regularly assess the real time air quality monitoring and meteorological forecasting data, and modify and/or suspend operations on site to ensure compliance with the relevant conditions of this approval,
  - to the satisfaction of the Director-General.

## Air Quality & Greenhouse Gas Management Plan

- 21. The Proponent shall prepare and implement an Air Quality & Greenhouse Gas Management Plan for the project to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with OEH, and submitted for approval to the Director-General within 6 months of this approval;
  - (b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this approval, including a real-time air quality management system that employs both reactive and proactive mitigation measures;
  - (c) describe the measures that would be implemented to minimise the release of greenhouse gas emissions from the site; and
  - (d) include an air quality monitoring program, that:
    - uses a combination of real-time monitors and supplementary monitors to evaluate the performance of the project; and
    - includes a protocol for determining exceedances with the relevant conditions of this approval.

#### **Meteorological Monitoring**

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

# **Truck Washing**

23. The Proponent shall prepare a report to the Department about the various truck washing arrangements that have been trialled at the surface facilities site. This report must:

- (a) be submitted for approval to the Director-General within 6 months of this approval; and
- (b) consider the following truck washing arrangements:
  - washing trucks before they depart the surface facilities site;
  - washing trucks when they arrive at the surface facilities site; and
  - not washing trucks at all.
- (c) include consideration of the effectiveness of the various arrangements in terms of:
  - preventing fugitive materials from being carried from the surface facilities site and deposited on public roads; and
  - minimising the impacts of polluted water from truck wash areas on surface water and groundwater.

## TRANSPORT

#### Monitoring of Coal Transport

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

#### **Road Transport Restrictions**

- 25. The Proponent shall only load coal or coal reject onto trucks, or transport it off site by road between 7am to 10pm, Monday to Friday and between and 8 am to 6 pm on Saturdays, Sundays and public holidays.
- 26. During emergencies, the Proponent may exceed the restrictions in condition 25 above with the written approval of the Director-General.
  - Note: The kind of circumstances which may constitute an emergency include major traffic disruptions on the transport route and major loading equipment failure or other critical port need at PKCT.
- 27. The Proponent shall ensure that any truck leaving the site:
  - (a) does not carry dirt or mud onto public roads; and
    - (b) is free of material that may fall on the road and create a road safety hazard or public nuisance, to the satisfaction of the Director-General.

#### Traffic Management Plan

- 28. The Proponent shall prepare and implement a Traffic Management Plan for the project to the satisfaction of the Director-General. This Plan must:
  - (a) be prepared in consultation with RTA, OEH, WCC and PKCT;
  - (b) be submitted for approval to the Director-General within 6 months of this approval;
  - (c) aim to minimise the traffic impacts of the project on the residential areas surrounding the surface facilities site, and in particular the residences located along Bellambi Lane;
  - (d) include a traffic management protocol, which must consider:
    - appropriate speed limits;
    - truck separation distances;
    - minimisation of compression braking and other noisy practices, especially on the approach to
    - Port Kembla Road/Springhill Road traffic lights when entering or exiting PKCT;
    - reporting of vehicle faults; and
    - reporting of all traffic incidents; and
  - (e) include a Traffic Noise Management Strategy, which must consider, but is not limited to: - the selection and maintenance of vehicle fleets:
    - movement scheduling to reduce noise impacts during sensitive times of the day; and
    - procedures to minimise impacts at identified sensitive areas along the haulage routes.
- 28A. The Proponent shall consult with Wollongong City Council with a view to having a 50kph speed limit imposed on Bellambi Lane.

# BIODIVERSITY

#### Biodiversity Management Plan

- 29. The Proponent shall prepare and implement a Biodiversity Management Plan for the project to the satisfaction of the Director-General. This Plan must:
  - (a) be prepared by a suitably qualified expert in consultation with OEH;
  - (b) be submitted for approval to the Director-General within 6 months of this approval;
  - (c) include:
    - management measures;
      - monitoring procedures;

- performance indicators; and
  - reporting frameworks,
- with particular reference to the Green and Golden Bell Frog, the Red-crowned Toadlet, Giant Burrowing Frog, Littlejohn's Tree Frog and Giant Dragonfly; and
- (d) demonstrate achievement of the relevant performance measures in Table 1.

# WATER MANAGEMENT

# Water Licences

30. The Proponent shall obtain all necessary water licences for the project under the *Water Act 1912* or the *Water Management Act 2000.* 

## Surface Water Discharges

31. The Proponent shall ensure that all surface water discharges from the site comply with the discharge limits (both volume and quality) set for the project in any EPL.

#### Surface Facilities Water Management Plan

- 32. The Proponent shall prepare and implement a Surface Facilities Water Management Plan for the surface facilities areas, to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with OEH, NOW, DRE and WCC by suitably qualified and experienced persons whose appointment has been approved by the Director-General;
  - (b) be submitted for approval to the Director-General within 6 months of this approval; and
  - (c) include:
    - a Site Water Balance; and
      - an Erosion and Sediment Control Plan.

#### 33. The Site Water Balance must:

- (a) include details of:
  - sources and security of water supply;
  - water use on site;
  - water management on site;
  - any off-site water transfers; and
  - (b) investigate and implement all reasonable and feasible measures to minimise potable water use from Wollongong's reticulated water supply and to reuse and recycle water.
- 34. The Erosion and Sediment Control Plan must:
  - (a) be consistent with the requirements of the *Managing Urban Stormwater Soils and Construction, Volume 2E: Mines and Quarries* (DECC 2008), or its latest version);
  - (b) identify activities that may cause soil erosion and generate sediment, particularly in relation to Bellambi Gully Creek;
  - (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;
  - (e) describe what measures would be implemented to maintain the structures over time.

# Water Management Plan

- 35. The Proponent shall prepare and implement a Water Management Plan, to the satisfaction of the Director-General. This plan must:
  - (a) be prepared in consultation with OEH, NOW, SCA, DRE and WCC by suitably qualified and experienced persons whose appointment has been approved by the Director-General;
  - (b) be submitted for approval to the Director-General within 6 months of this approval; and
  - (c) include:
    - a Groundwater Monitoring Program; and
    - a Surface and Ground Water Response Plan; and
  - (d) include detailed baseline data on surface water flows and quality of Cataract, Wallandoola and Lizard Creeks and associated tributaries;
  - (e) provide a geomorphic description of watercourses within and downstream of the project area;
  - (f) detail surface water quality and stream health impact assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts; and
  - (g) provide a program to monitor:
    - surface water discharges;
    - surface water flows and quality;
    - stream health; and
    - channel stability,
    - in natural watercourses on site.

- 36. The Groundwater Monitoring Program must include:
  - (a) detailed baseline data of all groundwater levels (including swamp, alluvial and weathered rock aquifers), yield and quality in the region, and any privately owned groundwater bores that may be affected by mining operations;
  - (b) groundwater impact assessment criteria based upon analysis of baseline data for swamps, groundwater, surface water and ecology, including trigger levels for investigating any potentially adverse groundwater impacts;
  - (c) a detailed program to monitor and/or validate the impacts of the project on swamps and other groundwater dependent ecosystems, with reference to relevant performance indicators and groundwater impact assessment criteria and a particular focus on all swamps listed in Table 1: and
  - (d) a program to monitor and/or validate the impacts of the project on alluvial and coal seam aquifers and any affected groundwater bores.
- 37. The Surface and Ground Water Response Plan must describe what measures and/or procedures would be implemented to:
  - (a) respond to any exceedances of the surface water, stream health, and groundwater impact assessment criteria;
  - (b) mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation located within and adjacent to the site; and
  - (c) ensure that ongoing impacts reduce to levels below the impact assessment criteria as quickly as possible.

# HERITAGE

#### Heritage Management Plan

- 38. The Proponent shall prepare and implement a Heritage Management Plan for the project to the satisfaction of the Director-General. This Plan must:
  - (a) be prepared in consultation with OEH, WCC, any relevant local historical organisations and any relevant Aboriginal stakeholders;
  - (b) be submitted for approval to the Director-General within 6 months of this approval;
  - (c) include consideration of the Aboriginal and non-Aboriginal cultural context and significance of the site;
  - (d) detail the responsibilities of all stakeholders; and
  - (e) include programs/procedures and management measures for:
    - dealing with previously unidentified Aboriginal objects (excluding human remains), including any need to halt works in the vicinity, assessment of significance, determination of appropriate mitigation measures (by a qualified archaeologist in consultation with Aboriginal stakeholders), re-commencement of works, notifying OEH, and registering the new site(s) in the OEH AHIMS register;
    - dealing with any human remains which may be discovered, including halting of works in the vicinity; notifying NSW Police, OEH, the Department and Aboriginal stakeholders; and not recommencing any works in the vicinity unless authorised;
    - heritage induction for construction personnel (including procedures for keeping records of inductions);
    - ongoing Aboriginal consultation and involvement (including procedures for keeping records of this);
    - the monitoring of site 52-2-0320 and 52-2-1223 by a qualified archaeologist and the Aboriginal community;
    - appropriate identification, management, conservation and protection of non-Aboriginal heritage items identified on the site, particularly within the NRE No. 1 Colliery surface facilities site; and
    - dealing with previously unidentified non-Aboriginal heritage items which may be discovered during the project.

# VISUAL

#### Visual Amenity and Lighting

- 39. The Proponent shall:
  - (a) minimise visual impacts, and particularly the off-site lighting impacts, of the project; and
  - (b) ensure that all external lighting associated on site complies with Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting,
  - to the satisfaction of the Director-General.

# WASTE

- 40. The Proponent shall:
  - (a) minimise the waste generated by the project; and

- (b) ensure that the waste generated by the project is appropriately stored, handled and disposed of,
- to the satisfaction of the Director-General.

# **BUSHFIRE MANAGEMENT**

- 41. The Proponent shall:
  - (a) ensure that the project 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 in the surrounding area.

## REHABILITATION

#### **Rehabilitation Objectives**

42. The Proponent shall rehabilitate the site to the satisfaction of the Executive Director Mineral Resources. This rehabilitation must be generally consistent with the proposed rehabilitation strategy described in the EA, and comply with the objectives in Table 10.

Feature	Objective		
Mine site (as a whole)	Safe, stable & non-polluting.		
	Final land use compatible with surrounding land uses.		
Project surface infrastructure	To be decommissioned, and subject to the Heritage		
	Management Plan, removed (unless the Executive Director		
	Mineral Resources agrees otherwise).		
Portals and vent shafts	To be decommissioned and made safe and stable.		
	Retain habitat for threatened species (eg bats), where		
	practicable		
Watercourses of 2 <sup>nd</sup> order or higher	Hydraulically and geomorphologically stable.		
subject to subsidence impacts			
Cliffs	No additional risk to public safety compared to prior to mining		
Other land affected by the project	Restore ecosystem function, including maintaining or		
	establishing self-sustaining ecosystems comprised of:		
	local native plant species (unless the Executive Director		
	Mineral Resources agrees otherwise); and		
	<ul> <li>a landform consistent with the surrounding environment</li> </ul>		
Built features damaged by mining	Repair to pre-mining condition or equivalent unless:		
operations	<ul> <li>the owner agrees otherwise; or</li> </ul>		
	• the damage is fully restored, repaired or compensated for		
	under the Mine Subsidence Compensation Act 1961.		
Community	Ensure public safety.		
	Minimise the adverse socio-economic effects associated with		
	mine closure.		

Table 10: Rehabilitation Objectives

Notes: 1) These rehabilitation objectives apply to all subsidence impacts and environmental consequences caused by mining taking place after the date of this approval; and to all project surface infrastructure part of the project, whether constructed prior to or following the date of this approval.

2) Rehabilitation of subsidence impacts and environmental consequences caused by mining which took place prior to the date of this approval may be subject to the requirements of other approvals (eg under a mining lease or an Subsidence Management Plan approval) or the Proponent's commitments.

# **Progressive Rehabilitation**

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

#### **Rehabilitation Management Plan**

- 44. The Proponent shall prepare and implement a Rehabilitation Management Plan for the project to the satisfaction of the Executive Director Mineral Resources. This plan must:
  - (a) be prepared in consultation with the Department, OEH, NOW, SCA, Council and the CCC;
  - (b) be prepared in accordance with any relevant DRE guideline, and be consistent with the rehabilitation objectives in the EA and in Table 10;
  - (c) provide for detailed mine closure planning, including measures to minimise socio-economic effects due to mine closure, to be conducted prior to the site being placed on care and maintenance;
  - (d) build, to the maximum extent practicable, on the other management plans required under this approval; and
  - (e) be submitted to the Department and the Executive Director Mineral Resources within 12 months of this approval.

Note: The Rehabilitation Management Plan should address all land impacted by the project, whether prior to or following the date of this approval.

# **SCHEDULE 4**

# ADDITIONAL PROCEDURES

## NOTIFICATION OF LANDOWNERS

1. Within 2 weeks of obtaining monitoring results showing an exceedance of the relevant criteria in Schedule 3, the Proponent shall notify the affected landowner and tenants in writing of the exceedance, and provide monitoring results to each of these parties until the project is complying with the relevant criteria again.

## INDEPENDENT REVIEW

 If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 3, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.

If the Director-General is satisfied that an independent review is warranted, then within 2 months of the Director-General's decision the Proponent shall:

- (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to:
  - consult with the landowner to determine his/her concerns;
  - conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 3; and
  - if the project is not complying with these criteria, then identify the measures that could be implemented to ensure compliance with the relevant criteria; and
- (b) give the Director-General and landowner a copy of the independent review.
- 3. If the independent review determines that the project is complying with the relevant criteria in Schedule 3, then the Proponent may discontinue the independent review with the approval of the Director-General.

If the independent review determines that the project is not complying with the relevant criteria in Schedule 3, then the Proponent shall implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the project complies with the relevant criteria to the satisfaction of the Director-General.

# SCHEDULE 5

# ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

# ENVIRONMENTAL MANAGEMENT

#### Environmental Management Strategy

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

#### Management Plan Requirements

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

#### **Annual Review**

- 3. By the end of August 2012, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Director-General. This review must:
  - (a) describe the development (including any rehabilitation) that was carried out in the past calendar year, and the development that is proposed to be carried out over the next year;

- (b) include a comprehensive review of the monitoring results and complaints records of the project over the past calendar year, which includes a comparison of these results against the
  - the relevant statutory requirements, limits or performance measures/criteria;
  - the monitoring results of previous years; and
  - the relevant predictions in the EA;
- (c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;
- (d) identify any trends in the monitoring data over the life of the project;
- (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and
- (f) describe what measures will be implemented over the next year to improve the environmental performance of the project.

#### **Revision of Strategies, Plans and Programs**

- 4. Within 3 months of:
  - (a) the submission of an annual review under Condition 3 above;
  - (b) the submission of an incident report under Condition 6 below;
  - (c) the submission of an audit under Condition 8 below; and
  - (d) any modification to the conditions of this approval (unless the conditions require otherwise),

the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Director-General.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

#### **Community Consultative Committee**

5. The Proponent shall establish and operate a Community Consultative Committee (CCC) for the project in general accordance with the *Guidelines for Establishing and Operating Community Consultative Committees for Mining Projects* (Department of Planning, 2007, or its latest version), or alternative consultative framework as may be agreed by the Director-General, to the satisfaction of the Director-General. This CCC or alternative framework must be operating within 6 months of this approval.

Notes:

- The CCC is an advisory committee. The Department and other relevant agencies are responsible for ensuring that the Proponent complies with this approval;
- In accordance with the guideline, the Committee should be comprised of an independent chair and appropriate representation from the Proponent, Council, recognised environmental groups and the local community; and

# REPORTING

#### **Incident Reporting**

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

# **Regular Reporting**

7. The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval, and to the satisfaction of the Director-General.

# INDEPENDENT ENVIRONMENTAL AUDIT

- 8. Within 12 months of this approval, and every 3 years thereafter, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must:
  - (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Director-General;

- (b) include consultation with the relevant agencies;
- (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals);
- (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and
- (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals.
- Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Director-General.
- 9. Within 6 weeks of the completion of this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, together with its response to any recommendations contained in the audit report.

# ACCESS TO INFORMATION

- 10. From the end of December 2011, the Proponent shall:
  - (a) make copies of the following publicly available on its website:
    - the documents referred to in Condition 2 of Schedule 2;
    - all relevant statutory approvals for the project;
    - all approved strategies, plans and programs required under the conditions of this approval;
    - a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any approved plans or programs required under the conditions of this or any other approval;
    - a complaints register, which is to be updated on a monthly basis;
    - minutes of CCC meetings;
    - the annual reviews required under this approval;
    - any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit;
    - any other matter required by the Director-General; and
  - (b) keep this information up-to-date,
  - to the satisfaction of the Director-General.

# APPENDIX 1: SCHEDULE OF LAND

# **Real Property Description**

Property ID / Lot Number	DP Plan Number	Comments
Auto Consol 1833- 110		Surface lease area
Auto Consol 1644-66		Surface lease area
Auto consol 5333- 243 includes:		Surface lease area
Lot 3	DP 60975	Surface lease area
Lot 30 to 32	DP 751301	Surface lease area
Lot 63&68 -71	DP751301	Surface lease area
Lot 1-2	DP 1046069	Surface lease area
Lot 1	DP 1046070	Surface lease area
Lot 130	DP 751301	Surface lease area
Lot 31	DP 1006012	Surface lease area
Lot 1	DP 630761	Surface lease area
Lot 1	DP 986675	Surface lease area
Lot 1	DP 986676	Surface lease area
Lot 1	DP 534522	Surfaçe lease area
Lot 95 to 97	DP 4414	Surface lease area
Lots 1 to 4	DP 225021	Surface lease area
Lot 34	DP 751301	Surface lease area
Lot 6	DP 793358	Surface lease area
Lot 66	DP 751301	Surface lease area
Lot 67	DP 751301	Surface lease area
Lot 1	DP 652833	Surface lease area
Lot 6001	DP 1077301	Surface lease area
Part Lot 6000	DP 1077301	Surface lease area
Lot 1	DP 77407	Surface lease area
Lot 6500	DP 1083715	Underground lease area
Lot 6502	DP 1083715	Underground lease area
Part Lot 6501	DP1083715	Underground lease area
Lot 12	DP736121	Underground lease area
Part Lot 14	DP 1092321	SCA Land. Majority of area is underground lease, with some surface least areas
Part Lot 7001	DP 93027	SCA Land. Majority of area is underground lease, with some surface least areas

APPENDIX 2: PROJECT LAYOUT PLAN



<b>APPENDIX 3:</b>	STATEMENT OF	COMMITMENTS
--------------------	--------------	-------------

Outcome	Commitment	Timing
Statutory Requirements		
Compliance with all conditional requirements in all approvals, licences and leases.	<ul> <li>The development will be carried out as outlined in:</li> <li>this Environmental Assessment Report (EA);</li> <li>Project Approval;</li> <li>Environment Protection Licence;</li> <li>Subsidence Management Plans (SMPs);</li> <li>Mining Lease(s) conditions;</li> <li>Controlled Activity Approval; and</li> <li>any other approvals, licences or leases.</li> </ul>	Continuous and as required
All operations conducted in accordance with all relevant documentation.	<ul> <li>Undertake all activities in accordance with the accepted Mining Operations Plan; environmental procedures; safety management plan and/or site-specific documentation in force at that time.</li> </ul>	Continuous and as required
Stakeholder Consultation		
Effective communication/ consultation is undertaken throughout construction and operation of the project.	<ul> <li>NRE will conduct regular community liaison meetings and provide regular updates to the community both during construction and operation of the project.</li> </ul>	Prior to construction and at regular intervals of not less than 2 times a year
Subsidence		
Potential adverse impacts from subsidence are managed, monitored and remediated where necessary.	<ul> <li>Implement V Mains SMP as amended by approval conditions.</li> <li>Continue implementing conditions of T and W Mains as relevant to 309 Panel.</li> <li>Implement a subsidence monitoring program that will include: <ul> <li>monitoring before, during and after mining;</li> <li>a set of pre-determined triggers; and</li> <li>responses and actions that flow from the identification of each trigger.</li> </ul> </li> </ul>	Prior to mining and on going Prior to mining and on going Prior to mining and on going
	<ul> <li>Implement mitigation measures for No.8 Fire Trail as detailed in the V Mains SMP:</li> <li>signs erected to warn motorists of potential subsidence impacts, including a recommended speed limit;</li> <li>daily inspections (Monday to Friday) during mining under the fire trail;</li> <li>a pre-approved treatment strategy; and</li> <li>road rehabilitation if required, including regular regrading of the affected sections of the access road.</li> <li>A management plan has been developed for the in consultation with Telstra for management of the optical fibre cable during mining of the T and W Mains. NRE will consult with Telstra to have this plan extended to</li> </ul>	Prior to mining and on going Prior to mining and on going

Outcome	Commitment	Timing
	cover the V Mains.	
Soil and Water		1
Construction and operations are managed such that	<ul> <li>Dirty stormwater and mine water will be treated on site prior to discharge.</li> </ul>	Continuous and as required
adverse impacts to water quality and flows Bellambi	<ul> <li>Dirty stormwater from hard surfaces will be diverted into the SWCD. Water will be held in the SWCD to reduce solids prior to treatment and then discharging via LDP2.</li> </ul>	Continuous and as required
Gully Creek and surrounding residents are	<ul> <li>The stormwater control dam (SWCD) will be kept at a level that allows 30ML of stormwater to be captured on site, reducing the flow and flood potential downstream.</li> </ul>	Continuous and as required
prevented or minimised.	<ul> <li>Chemicals will be properly stored and bunded. Dosing of flocculent will be metered and monitored on site.</li> </ul>	Continuous and as required
	<ul> <li>The underground pipe section of Bellambi Gully Creek will be replaced with a suitably designed and engineered open bypass channel constructed on the southern side of the coal stockpile area. This will include:</li> <li>a dissipation pond will be constructed at the end of the bypass channel to reduce the energy of flows back into Bellambi Gully Creek;</li> <li>upgrades to the existing channel including Reno mattresses and Gabion drop structures to reduce the velocity of water flowing down the gully; and</li> <li>regular maintenance to minimise scouring during major flow events.</li> </ul>	By 31 December 2013
	<ul> <li>Preparation of a Construction Management Plan that includes the following: <ul> <li>a dry and wet basin arrangement to minimise sediment transportation to the stormwater dam;</li> <li>works will not take place during heavy rainfall that is likely to contribute to erosion;</li> <li>undertake stripping of topsoil, if required, immediately before starting bulk earthworks to be use for rehabilitation or revegetation works on site;</li> <li>suitable areas for any temporary stockpiling of excavated soil (on flat ground) will be clearly identified and delineated before the commencement of works;</li> <li>ensure stockpiles are:</li> <li>constructed on the contour at least 2 (preferably 5) metres from hazard areas, particularly likely areas of concentrated water flows or slopes steeper than 10 percent;</li> <li>stabilised if they are to be in place for more than 10 days. The stockpile of VENM excavated from the construction of the bypass channel will be grassed;</li> <li>protected from run-on water by installing water diversions upslope; and</li> <li>installed with sediment filters immediately downslope to protect other lands and waterways from pollution.</li> </ul> </li> </ul>	Prior to construction
	<ul> <li>Construction of Bellambi Gully Creek will be undertaken in accordance with engineering plans prepared in general to meet the design parameters outlined in Coffey (2010).</li> </ul>	Prior to construction
	<ul> <li>All erosion, sediment control and runoff diversion measures will be established before any excavation begins. These will be left in place throughout works execution and beyond works completion until all surfaces have</li> </ul>	During construction

Outcome	Commitment	Timing
	been fully restored and stabilised.	
Surface Water		-
Operations are managed	<ul> <li>Implement a monitoring program including:</li> </ul>	On going during mining
such that adverse impacts to	<ul> <li>daily automated monitoring of selected pool water depths upstream, within and downstream of the V</li> </ul>	
catchment surface water are	Mains area;	
prevented or minimised.	<ul> <li>Water quality monitoring in Wallandoola and Lizard Creeks;</li> </ul>	
	<ul> <li>every 2 months prior to mining;</li> </ul>	
	<ul> <li>fortnightly during mining; and</li> </ul>	
	<ul> <li>monthly post mining</li> </ul>	
	<ul> <li>stream water level, or spot flow monitoring and sampling conducted at all locations on the same day;</li> </ul>	
	water depths in the stream monitoring sites should where practical be automatically monitored and	
	photographed during site visits;	
	<ul> <li>potential bedload movement in and downstream of the subsidence area visually monitored during and</li> </ul>	
	after significant flow events;	
	<ul> <li>Stream bed/bank stability and vegetation will be visually monitored and photographically recorded</li> </ul>	
	prior to, during and post mining	
	<ul> <li>rainfall monitored daily at the mine's weather station for the duration of mining.</li> </ul>	
	· An end of panel extraction report will be prepared, which summarises all monitoring over the period. The	Post mining
	report will outline any changes in the surface water in the V Mains area.	
	· Results of the monitoring programmes will be reviewed one year after pillar extraction has been completed	One year after extraction of each
	and an updated ongoing monitoring and remediation program will be developed in association with IIN,	pillar
	DWE and the SCA.	
Groundwater		
Operations are managed	<ul> <li>Groundwater quality monitoring will be undertaken at P6:</li> </ul>	On going during mining
such that adverse impacts to	<ul> <li>bimonthly prior to mining;</li> </ul>	
local and regional	<ul> <li>monthly during mining; and</li> </ul>	
groundwater resources are	<ul> <li>quarterly post mining.</li> </ul>	
prevented or minimised.	<ul> <li>Standing water levels will be monitored:</li> </ul>	
	<ul> <li>daily prior to mining;</li> </ul>	
	<ul> <li>twice daily (automatic) and monthly (manual) during mining; and</li> </ul>	
	<ul> <li>quarterly post mining.</li> </ul>	
	<ul> <li>Mine inflows will be monitored monthly during and post mining.</li> </ul>	
	<ul> <li>An end of extraction report will be prepared, which summarises all monitoring over the period. The report</li> </ul>	Post mining
	will outline any changes in the groundwater.	
	<ul> <li>Results of the monitoring programs will be reviewed one year after pillar extraction has been completed and</li> </ul>	One year after extraction
	an updated ongoing monitoring and remediation program will be developed in association with the IIN,	

Outcome	Commitment	Timing
	NOW and the SCA.	
Air Quality		
Operations are managed to	<ul> <li>All conveyors will be covered where practical.</li> </ul>	Continuous and as required
minimise potential adverse	<ul> <li>Water sprays will continue to be used to minimise air bome dust on an as needs basis.</li> </ul>	Continuous and as required
impacts to the environment,	<ul> <li>Tracks will be covered before leaving the site.</li> </ul>	Continuous and as required
residences and the	<ul> <li>Tracks will be clean prior to leaving the site:</li> </ul>	Continuous and as required
community.	<ul> <li>NRE will continue to enforce the Driver's Code of Conduct, through continuing driver education (tool box talks) and regular audits;</li> </ul>	Continuous and as required
Greenhouse Gasses		
Manage operations such that greenhouse gas emissions on	<ul> <li>Energy audits will be held when practicable to ensure that the mine is using current practice techniques to minimise energy use and is operating at optimum energy levels.</li> </ul>	Continuous
the environment are	<ul> <li>She management will ensure that equipment is maintained to retain energy efficiency.</li> </ul>	Continuous
minimised.	<ul> <li>The inventory of emissions developed for this assessment will be maintained.</li> </ul>	Continuous and as required
	<ul> <li>Emissions and abatement strategies will be reported annually as part of internal environmental reporting and National Gesenhouse and Energy Reporting System obligations.</li> </ul>	Annually
	<ul> <li>NRE will investigate opportunities to capture and/or re-use ventilation gases.</li> </ul>	2015 onwards
Acoustics		
Operations are managed to minimise potential adverse	<ul> <li>A 3 m high barrier will be constructed to the south of Broker Street across the intersection with West Street (subject to site constraints).</li> </ul>	Within 12 months of approval
impacts on the environment, residences and the	<ul> <li>A 3.6 m high barrier will be constructed to north of the internal access road from the weighbridge to the Princes Hwy (subject to site constraints).</li> </ul>	Within 12 months of approval
community.	<ul> <li>The existing Bulli decline conveyor will to be decommissioned and demolished on completion of the new driveage which is likely to start in mid to late 2012.</li> </ul>	On competition of the new driveage
	<ul> <li>Attended noise monitoring will be undertaken upon the commencement of operations to confirm predicted minor exceedances which may occur at some receivers.</li> </ul>	Following completion of construction works and upon the commencement of operation of new infrastructure.
	<ul> <li>An operational Noise Management Plan (NMP) will be developed to specifically address potential noise impacts associated with the proposed operations at the nearest receivers. The NMP will cutline methods and procedures to manage the following: <ul> <li>results of the regular noise monitoring program on-site and within the surrounding area;</li> <li>response to any complaints or issues raised by the owner of the affected residence;</li> <li>noise mitigation measures and operating procedures to ensure compliance with noise goals; and</li> <li>noise monitoring data from the early stages of Project operations will be utilised to calibrate an operational specific noise model, to refine the potential predicted noise impacts during the worst case</li> </ul> </li> </ul>	Within 18 months of approval

Outcome	Commitment	Timing
	scenario.	
	· An operational noise monitoring program will be developed to monitor noise emissions from the proposed	Within 18 months of approval
	operations to determine ongoing compliance with PSNLs and to identify any further feasible noise mitigation	
	measures that can be implemented.	
	<ul> <li>The results of the noise monitoring program will be reviewed by the operations manager to assess compliance</li> </ul>	Ongoing
	with the PSNLs and reported in accordance with any requirements of the development approval or EPL.	
	<ul> <li>Site equipment to be selected to meet appropriate INP noise goals in accordance with the acoustic design</li> </ul>	Prior to operation
	parameters for acoustically significant plant and equipment presented in NRE No.1 Colliery Preliminary	
	Work Acoustic Assessment.	
Construction activities are	<ul> <li>Construction will be limited to Monday to Friday 7am to 6pm and 8am to 1pm Saturday.</li> </ul>	During construction
managed to minimise	<ul> <li>All residents adjacent to the site will be notified of the start of works.</li> </ul>	Prior to construction
potential adverse impacts on	<ul> <li>Where feasible, silenced site equipment will be used to minimise environmental noise emissions.</li> </ul>	During construction
the environment, residences	· Any complaints regarding environmental noise emissions will be investigated and responded to in an	During construction
and the community.	appropriate manner.	
	· All works will be undertaken in accordance with the DECCW's Interim Construction Noise Guideline (2009).	During construction
Aquatic Ecology		
Operations are managed	· Observations of aquatic habitats and surveys of aquatic macroinvertebrates will be undertaken at impact and	During and after mining
such that adverse impacts to	control locations in the headwater swamp regions during and after mining.	
native aquatic habitats are	· A survey of aquatic macroinvertebrates (at impact and control locations) will be undertaken if the regular	As required
prevented or minimised.	water quality monitoring program detects changes in the depth and quality of the water within Wallandoola	
	Creek and Lizard Creek that are greater than anticipated on the basis of the subsidence predictions.	
	<ul> <li>Baseline monitoring will continue.</li> </ul>	Continuous
Terrestrial Ecology		
Mining operations are	· Monitoring habitat areas including the upland swamps, creeks and rocky habitats of the V Mains will occur	Prior to and post mining
managed such that adverse	pre and post mining.	
impacts to native flora and		
fauna are prevented or	<ul> <li>Additional fauna surveys in suitable seasons will be undertaken to detect the threatened species in the 309</li> </ul>	During suitable seasons
minimised.	Panel:	
	<ul> <li>Red-crowned Toadlet; and</li> </ul>	
	Giant Burrowing Frog.	
	<ul> <li>Fauna surveys will be undertaken to determine if the following species are presenting the V Mains and 309</li> </ul>	During suitable seasons and prior to
	Panel:	mining
	<ul> <li>Red-crowned Toadlet;</li> </ul>	
	Giant Burrowing Frog;	
	<ul> <li>Littlejohn's Tree Frog; and</li> </ul>	
	Giant Dragonfly	

Outcome	Commitment	Timing
	· If these species are detected, an Environmental Management Plan (EMP) will be developed in consultation	
	with relevant agencies including DECCW and SCA to document contingency plans to mitigate unforseen	
	impacts from mine related subsidence.	
Construction activities at	<ul> <li>Targeted surveys for the Green and Golden Bell Frog, to be conducted in late 2101 and in early 2011 at all</li> </ul>	Before commencement of any work
Russell Vale are managed	potential habitat locations at the Russell Vale site to determine the presence of the species and the extent of	that may potentially affect habitat.
such that adverse impacts to	their utilisation (e.g. breeding, foraging, over-winter sites) of the site; and	
native flora and fauna are	Should Dam 6 be verified as actual habitat for GGBF, then enhancement of Dam 5 will be undertaken in	
prevented or minimised.	consultation with DECCW and WCC, to provide suitable breeding, sheltering and foraging habitat;	
	<ul> <li>Preparation of a translocation plan, with the intent of moving individuals (if identified) from Dam 6 to</li> </ul>	
	Dam 5.	
	<ul> <li>Measures that will be implemented to assist in the management of impacts to the riparian areas of Bellambi</li> </ul>	Prior to and during construction
	Gully Creek including the following will be included in an CMP:	
	<ul> <li>demarcation of works area prior to works beginning to avoid impacts to vegetation outside of the works</li> </ul>	
	areas;	
	<ul> <li>appropriate sedimentation controls to be implemented prior to works beginning; and</li> </ul>	
	<ul> <li>weed removal and ongoing management of the area for weed control.</li> </ul>	
Aboriginal Heritage		Dia di stato
Surface works at the Russell	<ul> <li>A Protocol for the discovery of suspected Aboriginal objects (chance finds) will be included in a CMP. The</li> </ul>	Prior to construction
Vale site are managed such	protocol will include:.	
that adverse impacts to	<ul> <li>contact the registered stakeholder groups who participated in fieldwork, Illawarra Local Aboriginal</li> </ul>	
archaeology are minimised	Land Council and the D'harawal Knowledge Holders and have a representative identify if the suspected	
	item is in fact an Aboriginal site or object;	
	<ul> <li>if the identification is positive, contact a qualified archaeologist to determine record the site or object. The archaeologist is an arbitrary with the maintenant at helphalder means about a maintenant and</li> </ul>	
	archaeologist in consultation with the registered stakeholder groups should provide management and	
	mitigation measures as necessary, and provide a short report of the investigation to NRE and a copy to DECCW;	
	<ul> <li>if human skeletal remains are found the following actions should be immediately undertaken;</li> </ul>	
	<ul> <li>stop works in the immediate area of the remains;</li> </ul>	
	<ul> <li>stop works in the initiativate area of the remains;</li> <li>the local police contacted, a physical anthropologist or archaeologist contacted;</li> </ul>	
	<ul> <li>interocal police contacted, a physical antiropologist or archaeologist contacted,</li> <li>if the remains are determined to be of antiquity and of Indigenous origin contacted the registered</li> </ul>	
	<ul> <li>If the remains are determined to be of antiquity and of malgenous origin contacted the registered stakeholder groups; and</li> </ul>	
	<ul> <li>management and mitigation measures to be drawn up in consultation with the registered</li> </ul>	
	<ul> <li>management and mitigation measures to be drawn up in consultation with the registered stakeholder groups and the archaeologist.</li> </ul>	
Mining operations are	<ul> <li>Site 52-2-1223 will be monitored by a qualified archaeologist and Aboriginal community.</li> </ul>	Pre and post mining
managed such that adverse	<ul> <li>Site 52-2-1225 will be monitored by a quantied archaeologist and Aboriginal contributility.</li> </ul>	r te una post hunnig
impacts to Aboriginal		
impacto to reoligitat		

Outcome	Commitment	Timing
heritage items are avoided or		
minimised.		
Non-Aboriginal Heritage		
Operations are managed such that adverse impacts to significant heritage items are avoided or minimised.	<ul> <li>A Conservation Management Plan (CMP) will be prepared for the Project. The CMP will reflect the future need of the site as a continuing mine. The CMP will include:</li> <li>no items identified as having heritage value or contributing to the heritage value of the site, will be demolished as part of this Project;</li> <li>a photographic recording of the 1887 portal and the site will be undertaken to Heritage Archival</li> </ul>	Within 3 months of project approval During construction Within 3 months of project approval
	<ul> <li>a photographic recording of the room portal and the site will be indertaken to mentage Archival Recording standards. Copies of the recording will be lodged with the appropriate Local and State repositories;</li> <li>procedures to follow for any unanticipated impacts to heritage structures and for the discovery of</li> </ul>	Within 3 months of project approval
	unanticipated 'Relics'; and	rituito inolicio di projectuppiotal
	<ul> <li>items of moveable heritage, including historical photos, plans, maps, records and the like will be documented, collated and catalogued records to Heritage Archival Recording standards. A conservator will provide advice regarding the long term storage of the items and an appropriate repository will be identified prior to Project works commencing.</li> </ul>	Within 3 months of project approval
Traffic and Transport		
Operations are managed to	<ul> <li>NRE will implement a traffic/driver management protocol which includes:</li> </ul>	Continuous
ensure minimal impacts on	<ul> <li>trucking during PCKT approved hours</li> </ul>	
the local road network.	all coal transport trucks obeying legal speed limits including a self-imposed 50km/hr speed limit along Bellambi Lane	
	<ul> <li>ensuring drivers are vigilant regarding separation distances;</li> </ul>	
	<ul> <li>avoiding compression braking. Compression brakes must not be used on the approach to Port Kembla Rd/Springhill Rd lights when entering or exiting PKCT;</li> </ul>	
	covering all loads;	
	<ul> <li>washing all trucks prior to leaving the site;</li> </ul>	
	<ul> <li>reporting all vehicle faults to the owner; and</li> </ul>	
	<ul> <li>reporting all traffic incidents.</li> </ul>	
Visual Amenity		
Construction and design is	<ul> <li>Colour treatments for surface facility components will be selected to match the surrounding environment.</li> </ul>	During design and construction
managed to ensure minimal	<ul> <li>The area of disturbance will be restricted to the minimum practicable.</li> </ul>	During design and construction
visual impacts on local residents.	<ul> <li>Facilities will be placed to minimise disturbance of vegetation.</li> </ul>	During design and construction
Operations are managed to	<ul> <li>Progressive rehabilitation will be undertaken as required.</li> </ul>	Continuous and as required
ensure minimal visual impacts on local residents.	<ul> <li>Routine use of low beam on vehicle headlights by all construction and maintenance personnel.</li> </ul>	Continuous
	<ul> <li>Appropriate use of lighting equipment to limit impacts on sensitive locations. This will be managed through inductions of all construction and operations employees.</li> </ul>	Continuous

Outcome	Commitment	Timing
	· Ensuring lighting is directed away from residences through the use of directional lighting and shielding in	Continuous
	accordance with safety regulations, and which complies with Australian Standard AS4282 (INT) 1995 -	
	Control of Obtrusive Effects of Outdoor Lighting.	
Waste		
Avoidance of unnecessary	<ul> <li>All construction materials will be purchased with the aim of reducing waste products.</li> </ul>	Prior to construction
resource consumption; reuse,	<ul> <li>The stockpile of clean excavated material will be seeded with grass to stabilise until it can be reused.</li> </ul>	During construction
reprocessing, recycling and	· All waste material will be disposed of in accordance with the provisions of the Protection of the Environment	Continuous
energy recovery wherever	Operations Act 1997 and the Waste Classification Guidelines (DECC, 2008).	
possible and, where this is	<ul> <li>Waste will be recycled where possible or disposed of at an appropriately licensed waste disposal facility.</li> </ul>	Continuous
not possible, disposal of	· Onsite storage and disposal of different categories of waste will be defined prior to construction. A sufficient	Prior to construction and ongoing
wastes in an	number of covered storage bins will be provided for waste disposal on site, with separate bins for recyclable	
environmentally responsible	and non-recyclable waste.	
manner.	<ul> <li>All records will be retained as proof of correct disposal for environmental audit purposes.</li> </ul>	Continuous
	· At No 4 Shaft, NRE will implement a manual monitoring assessment including visual observation for the	Continuous
	presence of ponding of water on the surface of the irrigation area.	
	· A tertiary treatment system will be installed at No 4 Shaft to reduce pathogens resulting in a 1mg\L chlorine	End of first quarter 2011
	residual after 30 minutes as required under the DEC reuse guidelines.	
Rehabilitation		
Progressive rehabilitation of	· Rehabilitation at the Russell Vale site and within the catchment area to be undertaken in accordance with the	Continuous
areas of the Colliery that are	Schedules set out in Tables 23.1 and 23.2	
no longer in use and where		
safe operational conditions		
permit.		

egend Project Application Area 0 Receiver Location Representative Receiver Location Source: Image © 2009 Google TM/Digital Globe ROKER ST Figure 14.1 LAMBI RD Sensitive Receivers Gujarat NRE Coking Coal Limited lient: NRE No.1 Colliery Preliminary Works Environmental Assessment roiect: Drawing No: 0079383h\_EA\_PW\_004\_R1.cdr 09/09/2010 Drawing size: A4 Date: Reviewed by: MK rawn by: JD Refer to Scale Bar cale 200n Waps and figures contained within this document may be based on third arrly data, may not be to scale and is intended for use as a guide only. ERM does not warrant the accuracy of any such maps or figures. Environmental Resources Management Australia Pty Ltd Building C, 33 Saunders St, Pyrmont, NSW 2009 Telephone +61 2 8584 8888 **ERM** 

# APPENDIX 4: RECEIVER LOCATION PLAN