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:
- 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.

Member of the Commission **Member of the Commission** **Member of the Commission**

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

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DEFINITIONS

Adaptive management	Adaptive management includes monitoring subsidence effects and impacts 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
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	Building Code of Australia
Built features	Includes any building or work erected or constructed on land, and includes dwellings and infrastructure such as any formed road, street, path, walk, or driveway; 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
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Infrastructure
Director-General	Director-General of Department of Planning and Infrastructure, or delegate
DRE	Division of Resources and Energy within DTIRIS
DTIRIS	Department of Trade and Investment, Regional Infrastructure and Services
EA	Environmental Assessment prepared for NRE No. 1 Colliery Preliminary Works Project entitled *NRE No. 1 Colliery Preliminary Works Project Environmental Assessment* (dated October 2010) including the Response to Submissions (dated 21 February 2011)
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 *Protection of the Environment Operations Act 1997*
Executive Director Mineral Resources	Executive Director Mineral Resources (or equivalent position) within DRE
Evening	The period from 6pm to 10pm
Gujarat	Gujarat NRE Coking Coal Ltd
INP	NSW Industrial Noise Policy (NSW EPA, 2000)
Mining operations	Extraction, processing, handling, storage and transportation of coal
Minister	Minister for Planning and Infrastructure, or delegate
Minor	Small in quantity, size and degree given the relative context
Negligible	Small and unimportant, such as to be not worth considering
Night	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
PKCT	Port Kembla Coal Terminal
Privately-owned land	Land that is not owned by a public agency, or a mining company (or its subsidiary)
Proponent	Gujarat or any other person or persons who rely on this approval to carry out the development that is subject to this approval
Project	NRE No. 1 Colliery Preliminary Works Project as described in the EA
RTA	Roads and Traffic Authority
ROM coal	Run-of-mine coal
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
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 practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation or rehabilitation of the project.

TERMS OF APPROVAL

2. The Proponent shall carry out the project generally in accordance with the:
   (a) EA;
   (b) Statement of Commitments (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 latter 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 reports, plans, programs or correspondence that are submitted in accordance with the conditions of this approval; and
   (b) the implementation of any actions or measures contained in these reports, plans, programs or correspondence.

LIMITS ON APPROVAL

Mining Operations

5. Mining operations may take place for 3 years from the commencement of this approval.

   Note: Under this Approval, the Proponent is required to rehabilitate the site to the satisfaction of the Director-General and DRE. 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

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

Hours of Operation

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

STRUCTURAL ADEQUACY

8. 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

9. 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

10. 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

11. 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.

Table 1: Subsidence Impact Performance Measures

Water resources	
Wallandoola Creek	Negligible environmental consequences including: • *negligible* diversion of flows or changes in the natural drainage behaviour of pools; • *negligible* gas releases and iron staining; and • *negligible* increase in water cloudiness.
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	Negligible environmental consequences.
Valley fill swamp 'Wcvfs1'	Negligible environmental consequences.
Biodiversity	
Threatened species, populations or their habitats and endangered ecological communities	Negligible environmental consequences.
Heritage Features	
Site 52-2-1223	Negligible impact or environmental consequences.

Notes: 1) The Proponent will be required to define more detailed performance indicators for each of these performance measures in the various management plans that are required under this approval (see condition 28-34 below).
2) 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.
3) Any breach of this condition is taken to be a breach of this approval, and may be subject to penalty or offence provisions, notwithstanding that offsets may be agreed or implemented under condition33 below.

2. The Proponent shall ensure that the project does not cause any exceedances of the performance measures in Table 2, to the satisfaction of the Executive Director Mineral Resources.

Table 2: Subsidence Impact Performance Measures

Built Features	
Mount Ousley Road, Telstra fibre optic cable (F HOME 2005 48)	Always safe and serviceable. Damage that does not affect safety or serviceability must be fully repairable, and must be fully repaired, unless the owner agrees otherwise in writing.
Access road to Vent Shaft No. 4, other built features, including other public infrastructure	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 for each of these performance measures in Built Features Management Plans or Public Safety Management Plan (see condition 5 below).
2) The requirements of this condition only apply to the impacts and consequences of mining operations undertaken following the date of this approval.
3) Any breach of this condition is taken to be a breach of this approval, and may be subject to penalty or offence provisions.
4) 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.

3. 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 Executive Director Mineral Resources. The Executive Director Mineral Resources may seek the advice of the MSB on the matter. Any decision by the Executive Director Mineral Resources shall be final and not subject to further dispute resolution under this approval.

First Workings

4. 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

5. 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 a team of 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 the proposed first and second workings and any associated surface development;
   (d) include detailed performance indicators for each of the performance measures in Table 1;
   (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 Table 1, and manage or remediate any impacts and/or environmental consequences;
   (g) 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 the relationship between the subsidence effects and impacts under the plan and any ensuing environmental consequences;
      - 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 40; and
   (a) include a program to collect sufficient baseline data for any future Extraction Plans.

Note: An SMP approved by DRE prior to 31 December 2011 is taken to satisfy the requirements of this condition.

6. The Proponent shall ensure that the management plans required under conditions 18-25 include:
   (a) an assessment of the potential environmental consequences of the Extraction Plan, incorporating any relevant information that has been obtained since this approval;
   (b) a detailed description of the measures that would be implemented to remediate predicted impacts; and
   (c) a contingency plan that expressly provides for adaptive management.

Payment of Reasonable Costs

7. 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 any Extraction Plan.

NOISE

Noise Criteria

8. The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 3 and Table 4 at any existing residence on privately-owned land or on more than 25 percent of any privately-owned land. In addition, the Proponent shall ensure that the criteria in Table 4 is not exceeded at any future residence

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

Location		Day	Evening	Night	
Area	**Receiver Number**	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{A1\ (1\ min)}$
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	45	43	41	47
West Street, Russell Vale	R2	46	43	42	47
Moreton Street, Russell Vale	R4	44	40	38	47
All other privately-owned land		35	35	35	45

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

Receiver Area	Day	Evening	Night
	$L_{Aeq\ (period)}$	$L_{Aeq\ (period)}$	$L_{Aeq\ (period)}$
All privately-owned land	60	50	45

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.

9. Unless otherwise agreed by the Director-General, 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 5 at any existing residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 5: Long Term Intrusive Noise Limits

Location		Day	Evening	Night	
Area	**Receiver Number**	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{A1\ (1\ min)}$
Lyndon Street, Corrimal	C1, C2	39	38	38	47
Midgely Street, Corrimal	C3	38	37	36	47

Location		Day	Evening	Night	
Area	**Receiver Number**	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{Aeq\ (15\ min)}$	$L_{A1\ (1\ min)}$
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 privately-owned land		35	35	35	45

Notes to Table 5:
- *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 criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.

Noise Audit

10. 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 limits 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

11. 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 decommissioned and demolished by the end of December 2012; and
    (b) the Wongawilli Conveyor arrangement is designed and installed with low noise technology by the end of December 2012.

Operating Conditions

12. 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

13. 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

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

Greenhouse Gas Emissions

15. 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

16. 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 2, 3 or 4 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.

Table 6: Long-term criteria for particulate matter

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

Table 7: Short-term criterion for particulate matter

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

Table 8: Long-term criteria for deposited dust

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

Notes to Tables 6-8:
- *[a] Total impact (i.e. incremental increase in concentrations due to the project plus background concentrations due to all other sources);*
- *[b] Incremental impact (i.e. incremental increase in concentrations due to the project on its own);*
- *[c] Deposited dust is to be assessed as insoluble solids as defined by Standards Australia, AS/NZS 3580.10.1:2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulate Matter - Deposited Matter - Gravimetric Method.*
- *[d] 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

17. 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 air quality monitoring and meteorological forecasting data, and modify 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

18. 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 the proposed air quality management system;
    (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 high volume samplers and dust deposition gauges to evaluate the performance of the project; and
        - includes a protocol for determining exceedances with the relevant conditions of this approval.

Meteorological Monitoring

19. 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 complies with the requirements in *Approved Methods for Sampling of Air Pollutants in New South Wales* guideline.

Truck Washing

20. 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

21. 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

22. 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 with a maximum proportion of 20% of total coal transported during the hours of 6 pm to 10 pm, Monday to Friday, and 8 am to 6 pm on Sundays and public holidays.

23. During emergencies, the Proponent may exceed the restrictions in condition 22 above with the written approval of the Director-General.

Traffic Management Plan

24. 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.

BIODIVERSITY

Biodiversity Management Plan

25. 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

26. 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

27. 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

28. 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;
- an Erosion and Sediment Control Plan;
- a surface Water Management Plan;
- a Groundwater Monitoring Program; and
- a Surface and Ground Water Response Plan.

29. 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.

30. 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

31. 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, 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 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 assessment criteria, including trigger levels for investigating any potentially adverse surface water impacts;
(g) provide a program to monitor:
- surface water discharges;
- surface water flows and quality;
- stream health; and
- channel stability,

in natural watercourses on site.

32. The Groundwater Monitoring Program must include:
(a) detailed baseline data of all groundwater levels (including alluvial and weathered rock aquifers), yield and quality in the region, and any privately owned groundwater bores that may be affected by mining operations on site;
(b) groundwater assessment criteria based upon analysis of baseline data for groundwater, surface water and ecology, including trigger levels for investigating any potentially adverse groundwater impacts; and
(c) a program to monitor and/or validate the impacts of the project of alluvial and coal seam aquifers, any groundwater bores and Groundwater Dependent Ecosystems.

33. 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 assessment criteria;
(b) mitigate and/or offset any adverse impacts on groundwater dependent ecosystems or riparian vegetation located within and adjacent to the site.

HERITAGE

Heritage Management Plan

34. 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 re-commencing 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 52-2-1223 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

35. 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

36. The Proponent shall:
    (b) minimise the waste generated by the project; and
    (c) ensure that the waste generated by the project is appropriately stored, handled and disposed of,
    to the satisfaction of the Director-General.

BUSHFIRE MANAGEMENT

37. 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

38. 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 9.

Table 9: Rehabilitation Objectives

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).
Watercourses of 2nd order or higher to be undermined	Hydraulically and geomorphologically stable.
Built Features damaged by mining operations	Repair to pre-mining condition or equivalent unless: • the owner agrees otherwise; or • the damage is fully restored, repaired or compensated for under the *Mine Subsidence Compensation Act 1961*.
Community	Ensure public safety. Minimise the adverse socio-economic effects associated with mine closure.

Progressive Rehabilitation

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

Rehabilitation Management Plan

40. 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, Council and the CCC;
    (b) be prepared in accordance with any relevant DRE guideline;

(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.

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

2. 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;
   (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), and to the satisfaction of the Director-General. This CCC 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 associated with the project 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.

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. Within 6 months of this approval, 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,

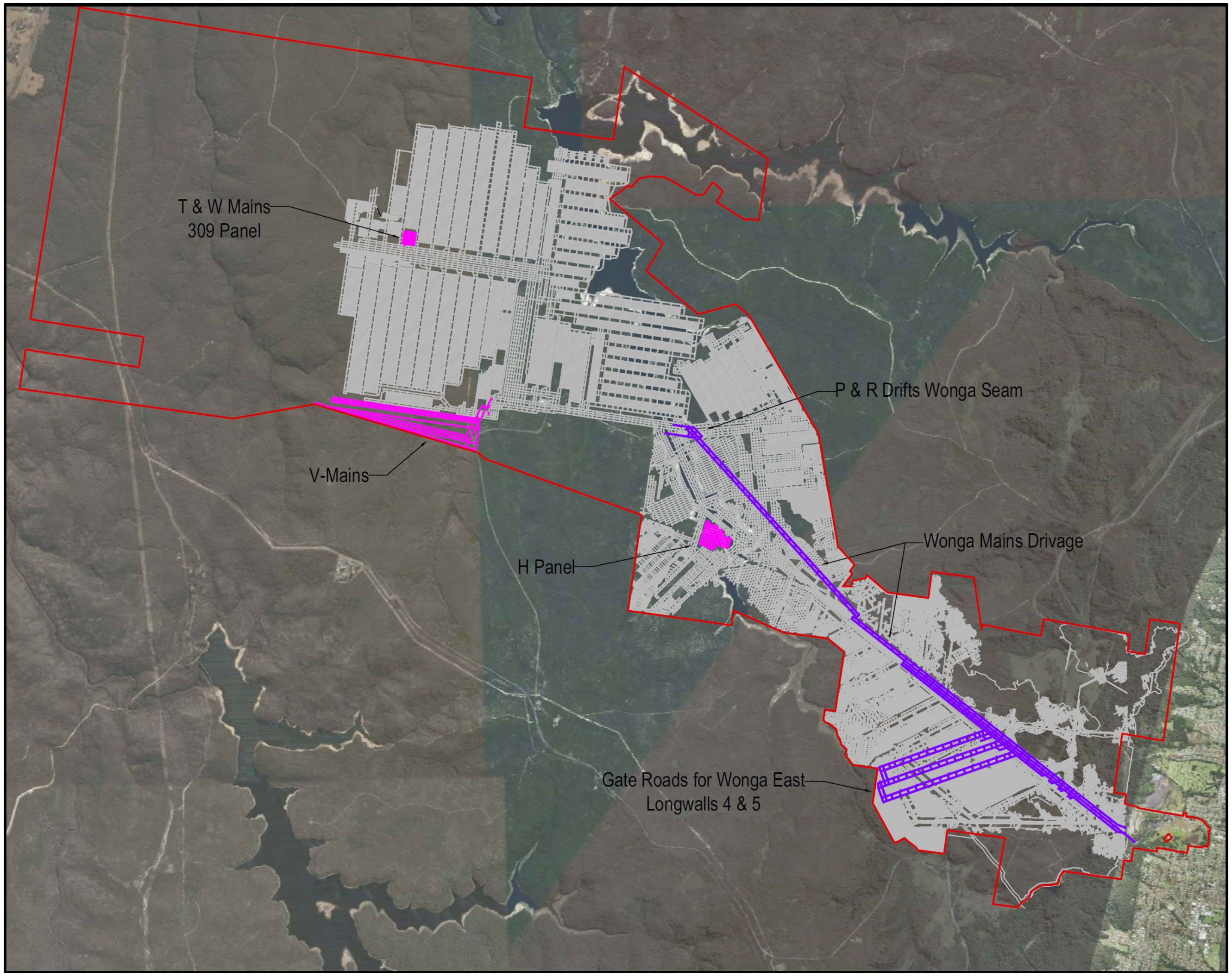
    to the satisfaction of the Director-General.

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	Surface 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



APPENDIX 3: STATEMENT OF COMMITMENTS

Outcome	Commitment	Timing
Statutory Requirements		
Compliance with all conditional requirements in all approvals, licences and leases.	• The development will be carried out as outlined in: • this Environmental Assessment Report (EA); • Project Approval; • Environment Protection Licence; • Subsidence Management Plans (SMPs); • Mining Lease(s) conditions; • Controlled Activity Approval; and • any other approvals, licences or leases.	Continuous and as required
All operations conducted in accordance with all relevant documentation.	• 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.	Continuous and as required
Stakeholder Consultation		
Effective communication/ consultation is undertaken throughout construction and operation of the project.	• NRE will conduct regular community liaison meetings and provide regular updates to the community both during construction and operation of the project.	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.	• Implement V Mains SMP as amended by approval conditions.	Prior to mining and on going
	• Continue implementing conditions of T and W Mains as relevant to 309 Panel.	Prior to mining and on going
	• Implement a subsidence monitoring program that will include: • monitoring before, during and after mining; • a set of pre-determined triggers; and • responses and actions that flow from the identification of each trigger.	Prior to mining and on going
	• Implement mitigation measures for No.8 Fire Trail as detailed in the V Mains SMP: • signs erected to warn motorists of potential subsidence impacts, including a recommended speed limit; • daily inspections (Monday to Friday) during mining under the fire trail; • a pre-approved treatment strategy; and • road rehabilitation if required, including regular regrading of the affected sections of the access road.	Prior to mining and on going
	• 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	Prior to mining and on going

Outcome	Commitment	Timing
	cover the V Mains.	
Soil and Water		
Construction and operations are managed such that adverse impacts to water quality and flows Bellambi Gully Creek and surrounding residents are prevented or minimised.	• Dirty stormwater and mine water will be treated on site prior to discharge.	Continuous and as required
	• 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.	Continuous and as required
	• 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.	Continuous and as required
	• Chemicals will be properly stored and bunded. Dosing of flocculent will be metered and monitored on site.	Continuous and as required
	• 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: • a dissipation pond will be constructed at the end of the bypass channel to reduce the energy of flows back into Bellambi Gully Creek; • upgrades to the existing channel including Reno mattresses and Gabion drop structures to reduce the velocity of water flowing down the gully; and • regular maintenance to minimise scouring during major flow events.	Within 12 months of approval
	• Preparation of a Construction Management Plan that includes the following: • a dry and wet basin arrangement to minimise sediment transportation to the stormwater dam; • works will not take place during heavy rainfall that is likely to contribute to erosion; • undertake stripping of topsoil, if required, immediately before starting bulk earthworks to be use for rehabilitation or revegetation works on site; • suitable areas for any temporary stockpiling of excavated soil (on flat ground) will be clearly identified and delineated before the commencement of works; • ensure stockpiles are: • 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; • 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; • protected from run-on water by installing water diversions upslope; and • installed with sediment filters immediately downslope to protect other lands and waterways from pollution.	Prior to construction
	• 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).	Prior to construction
	• 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	During construction

Outcome	Commitment	Timing
	been fully restored and stabilised.	
Surface Water		

Operations are managed such that adverse impacts to catchment surface water are prevented or minimised.	• Implement a monitoring program including:
	  • daily automated monitoring of selected pool water depths upstream, within and downstream of the V Mains area;
	  • Water quality monitoring in Wallandoola and Lizard Creeks;
	    ▪ every 2 months prior to mining;
	    ▪ fortnightly during mining; and
	    ▪ monthly post mining
	  • stream water level, or spot flow monitoring and sampling conducted at all locations on the same day; water depths in the stream monitoring sites should where practical be automatically monitored and photographed during site visits;
	  • potential bedload movement in and downstream of the subsidence area visually monitored during and after significant flow events;
	  • Stream bed/bank stability and vegetation will be visually monitored and photographically recorded prior to, during and post mining
	  • rainfall monitored daily at the mine's weather station for the duration of mining.
		On going during mining

	• An end of panel extraction report will be prepared, which summarises all monitoring over the period. The report will outline any changes in the surface water in the V Mains area.	Post mining
	• Results of the monitoring programmes will be reviewed one year after pillar extraction has been completed and an updated ongoing monitoring and remediation program will be developed in association with IIN, DWE and the SCA.	One year after extraction of each pillar
Groundwater		

Operations are managed such that adverse impacts to local and regional groundwater resources are prevented or minimised.	• Groundwater quality monitoring will be undertaken at P6:
	  • bimonthly prior to mining;
	  • monthly during mining; and
	  • quarterly post mining.
	• Standing water levels will be monitored:
	  • daily prior to mining;
	  • twice daily (automatic) and monthly (manual) during mining; and
	  • quarterly post mining.
	• Mine inflows will be monitored monthly during and post mining.
		On going during mining

	• An end of extraction report will be prepared, which summarises all monitoring over the period. The report will outline any changes in the groundwater.	Post mining
	• Results of the monitoring programs will be reviewed one year after pillar extraction has been completed and an updated ongoing monitoring and remediation program will be developed in association with the IIN,	One year after extraction

Outcome	Commitment	Timing
	NOW and the SCA.	
Air Quality		
Operations are managed to minimise potential adverse impacts to the environment, residences and the community.	• All conveyors will be covered where practical.	Continuous and as required
	• Water sprays will continue to be used to minimise air borne dust on an as needs basis.	Continuous and as required
	• Trucks will be covered before leaving the site.	Continuous and as required
	• Trucks will be clean prior to leaving the site.	Continuous and as required
	• NRE will continue to enforce the Driver's Code of Conduct, through continuing driver education (tool box talks) and regular audits.	Continuous and as required
Greenhouse Gasses		
Manage operations such that greenhouse gas emissions on the environment are minimised.	• 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.	Continuous
	• Site management will ensure that equipment is maintained to retain energy efficiency.	Continuous
	• The inventory of emissions developed for this assessment will be maintained.	Continuous and as required
	• Emissions and abatement strategies will be reported annually as part of internal environmental reporting and National Greenhouse and Energy Reporting System obligations.	Annually
	• NRE will investigate opportunities to capture and/or re-use ventilation gases.	2015 onwards
Acoustics		
Operations are managed to minimise potential adverse impacts on the environment, residences and the community.	• A 3 m high barrier will be constructed to the south of Broker Street across the intersection with West Street (subject to site constraints).	Within 12 months of approval
	• 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).	Within 12 months of approval
	• 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.	On competition of the new driveage
	• Attended noise monitoring will be undertaken upon the commencement of operations to confirm predicted minor exceedances which may occur at some receivers.	Following completion of construction works and upon the commencement of operation of new infrastructure.
	• 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 outline methods and procedures to manage the following: • results of the regular noise monitoring program on-site and within the surrounding area; • response to any complaints or issues raised by the owner of the affected residence; • noise mitigation measures and operating procedures to ensure compliance with noise goals; and • 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	Within 18 months of approval

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

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 Russell Vale are managed such that adverse impacts to native flora and fauna are prevented or minimised.	• Targeted surveys for the Green and Golden Bell Frog, to be conducted in late 2101 and in early 2011 at all potential habitat locations at the Russell Vale site to determine the presence of the species and the extent of their utilisation (e.g. breeding, foraging, over-winter sites) of the site; and • Should Dam 6 be verified as actual habitat for GGBF, then enhancement of Dam 5 will be undertaken in consultation with DECCW and WCC, to provide suitable breeding, sheltering and foraging habitat; • Preparation of a translocation plan, with the intent of moving individuals (if identified) from Dam 6 to Dam 5.	Before commencement of any work that may potentially affect habitat.
	• Measures that will be implemented to assist in the management of impacts to the riparian areas of Bellambi Gully Creek including the following will be included in an CMP: • demarcation of works area prior to works beginning to avoid impacts to vegetation outside of the works areas; • appropriate sedimentation controls to be implemented prior to works beginning; and • weed removal and ongoing management of the area for weed control.	Prior to and during construction
Aboriginal Heritage		
Surface works at the Russell Vale site are managed such that adverse impacts to archaeology are minimised	• A Protocol for the discovery of suspected Aboriginal objects (chance finds) will be included in a CMP. The protocol will include:. • contact the registered stakeholder groups who participated in fieldwork, Illawarra Local Aboriginal 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; • if the identification is positive, contact a qualified archaeologist to determine record the site or object. The 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; • if human skeletal remains are found the following actions should be immediately undertaken; • stop works in the immediate area of the remains; • the local police contacted, a physical anthropologist or archaeologist contacted; • if the remains are determined to be of antiquity and of Indigenous origin contacted the registered stakeholder groups; and • management and mitigation measures to be drawn up in consultation with the registered stakeholder groups and the archaeologist.	Prior to construction
Mining operations are managed such that adverse impacts to Aboriginal	• Site 52-2-1223 will be monitored by a qualified archaeologist and Aboriginal community.	Pre and post mining

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.	• 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:	Within 3 months of project approval
	• no items identified as having heritage value or contributing to the heritage value of the site, will be demolished as part of this Project;	During construction
	• a photographic recording of the 1887 portal and the site will be undertaken to Heritage Archival Recording standards. Copies of the recording will be lodged with the appropriate Local and State repositories;	Within 3 months of project approval
	• procedures to follow for any unanticipated impacts to heritage structures and for the discovery of unanticipated 'Relics'; and	Within 3 months of project approval
	• 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.	Within 3 months of project approval
Traffic and Transport		
Operations are managed to ensure minimal impacts on the local road network.	• NRE will implement a traffic/driver management protocol which includes: • trucking during PCKT approved hours • obeying legal speed limits including a self imposed 50km/hr speed limit along Bellambi Lane; • ensuring drivers are vigilant regarding separation distances; • avoiding compression braking. Compression brakes must not be used on the approach to Port Kembla Rd/Springhill Rd lights when entering or exiting PKCT; • covering all loads; • washing all trucks prior to leaving the site; • reporting all vehicle faults to the owner; and • reporting all traffic incidents.	Continuous
Visual Amenity		
Construction and design is managed to ensure minimal visual impacts on local residents.	• Colour treatments for surface facility components will be selected to match the surrounding environment.	During design and construction
	• The area of disturbance will be restricted to the minimum practicable.	During design and construction
	• Facilities will be placed to minimise disturbance of vegetation.	During design and construction
Operations are managed to ensure minimal visual impacts on local residents.	• Progressive rehabilitation will be undertaken as required.	Continuous and as required
	• Routine use of low beam on vehicle headlights by all construction and maintenance personnel.	Continuous
	• Appropriate use of lighting equipment to limit impacts on sensitive locations. This will be managed through inductions of all construction and operations employees.	Continuous

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

APPENDIX 4: RECEIVER LOCATION PLAN

Legend

Project Application Area

Receiver Location

Representative Receiver Location

Source:

Image © 2009 Google TM/Digital Globe

Figure 14.1

Sensitive Receivers

Client:	Gujarat NRE Coking Coal Limited
Project:	NRE No.1 Colliery Preliminary Works Environmental Assessment
Drawing No:	0079383h_EA_PW_004_R1.cdr
Date:	09/09/2010 Drawing size: A4
Drawn by:	JD Reviewed by: MK
Scale:	Refer to Scale Bar

N 0 100 200m

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