

**DETERMINATION OF A DEVELOPMENT APPLICATION FOR STATE SIGNIFICANT
AND INTEGRATED DEVELOPMENT UNDER SECTION 80 OF
THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979**

I, the Minister for Infrastructure and Planning, under Section 80 of the *Environmental Planning and Assessment Act 1979* ("the Act"), determine the development application ("the Application") referred to in Schedule 1 by granting consent subject to the conditions set out in Schedule 2.

The reason for the imposition of conditions is to:

- (i) Prevent, minimise, and/or offset adverse environmental impacts;
- (ii) Set standards and performance measures for acceptable environmental performance;
- (iii) Require regular monitoring and reporting; and
- (iv) Provide for the on-going environmental management of the development.

Craig Knowles MP
Minister for Infrastructure and Planning
Minister for Natural Resources

Sydney,

11 December 2003

File No. S03/00187

SCHEDULE 1

Development Application:	DA-317-7-2003-i.
Applicant:	Barnu Pty Ltd.
Consent Authority:	Minister for Infrastructure and Planning.
Land:	Lot 3 DP 747544, predominantly within Mining Lease 1496, and portion 139 Parish of Bobbara in the County of Harden
Proposed Development:	The construction and operation of a lime kiln, to produce up to 150,000 tonnes per annum of quicklime, from limestone sourced from the adjacent Galong Limestone Mine; and the conversion of an existing grinding mill to a coal mill to feed the new kiln.

BCA Classification: Class 8: Lime Kiln and associated structure
Class 8: Lime Silo

State Significant Development: The proposal is classified as State significant development under the provisions of Schedule 1 of *State Environmental Planning Policy No. 34 – Major Employment Generating Industrial Development* and Section 76(A)7 of the *Environmental Planning and Assessment Act 1979*.

Designated Development: The proposal is classified as designated development, under Section 77A of the *Environmental Planning & Assessment Act 1979*, because it is for a limestone works kiln which could burn more than 30,000 tonnes per annum of limestone; and consequently meets the criteria for designated development in Schedule 3 of the *Environmental Planning & Assessment Regulation 2000*.

Integrated Development: The proposal is classified as integrated development, under Section 91 of the *Environmental Planning and Assessment Act 1979*, because it requires additional approvals from the:

- Environment Protection Authority under the *Protection of the Environment Operations Act 1997*;
- Department of Infrastructure, Planning and Natural Resources (formerly the Department of Land and Water Conservation) under the *Rivers and Foreshores Improvements Act 1948*;

Note:

- 1) *The General Terms of Approval relating to the Part 3A Permit under the Rivers and Foreshores Improvements Act 1948 have been incorporated into this consent. Attachment 1 provides information relating to general administration and formal application procedures.*

Note:

- 1) *To find out when this consent becomes effective, see Section 83 of the Act;*
 - 2) *To find out when this consent is liable to lapse, see Section 95 of the Act; and*
 - 3) *To find out about appeal rights, see Section 97 of the Act.*
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SCHEDULE 2

In this consent, except in so far as the context or subject-matter otherwise indicates or requires, the following terms have the meanings indicated:

Act	<i>Environmental Planning and Assessment Act, 1979</i>
AEMR	Annual Environmental Management Report
Applicant	Barnu Pty Ltd
BCA	Building Code of Australia
commissioning	the period between when construction has finished and prior to the commencement of operations
construction	any activity requiring a Construction Certificate, the laying of a slab or significant excavation work
Council	Harden Shire Council
dB(A)	decibel (A-weighted scale)
DEC	NSW Department of Environment and Conservation
Department	NSW Department of Infrastructure, Planning and Natural Resource
Director-General	Director-General of the NSW Department of Infrastructure, Planning and Natural Resources
dust	any solid material that may become suspended in air or deposited
EIS	The Environmental Impact Statement entitled <i>Environmental Impact Statement Galong Lime Kiln Project</i> , volumes 1-3, dated June 2002, and prepared by Olsen Environmental Consulting
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act, 1997</i>
L _{Aeq} (15 minute)	equivalent average sound pressure level that is measured over a 15 minute period
Minister operation	NSW Minister for Infrastructure and Planning, or delegate any activity that results in the production, or intended production of electricity to be supplied to the grid, after commissioning of the development has finished
Principal Certifying Authority	the Minister or an accredited certifier, appointed under section 109E of the Act, to issue a Part 4A Certificate as provided under section 109C of the Act
Regulation site	<i>Environmental Planning and Assessment Regulation, 2000</i> the land to which this consent applies

1. GENERAL

Obligation to Minimise Harm to the Environment

- 1.1 ¹ The Applicant shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or decommissioning of the development.

Terms of Approval

- 1.2 ² The Applicant shall carry out the development generally in accordance with the:
- (a) DA 317-7-2003-i;
 - (b) The Environmental Impact Statement entitled *Environmental Impact Statement Galong Lime Kiln Project*, volumes 1-3, dated June 2003, and prepared by Olsen Environmental Consulting;
 - (c) All additional information submitted to the Department during the assessment period, being from 10 August 2003 to 21 November 2003;
 - (d) Conditions of this consent.

If there is any inconsistency between the above, either the conditions of this consent or the most recent document shall prevail to the extent of the inconsistency.

- 1.3 The Applicant shall ensure that the Lime Kiln generates generally no more than 150,000 tonnes per annum of quicklime.

Note: For the purposes of this development "generally no more than 150,000 tonnes per annum" means that the Applicant may generate up to 10% above the stated 150,000 tonnes per annum, during temporary peak production periods.

- 1.4 The Applicant shall ensure that the Lime Kiln utilises only limestone sourced from the adjacent Galong Limestone Mine.

- 1.5 ³ The Applicant shall only utilise either coal and/or natural gas as fuel for the Lime Kiln.

Note: Condition 1.5 of this consent does not permit the transportation, storage, management or use of natural gas at the development without the prior relevant approvals being sought and received from the relevant regulatory authorities.

- 1.6 The Applicant shall operate the development such that it is consistent with any current and operating consent applicable to the adjacent Limestone Mine.

Note: Nothing in this consent permits the Applicant to not comply with conditions of any consent, licence or permit currently operating on the adjacent Limestone Mine.

Provision of Information

- 1.7 Where practicable, the Applicant shall provide all documents and reports required to be submitted to the Director-General under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall aim to minimise resource consumption.

¹ Incorporates an EPA general term of approval (1.2)

² Incorporates an EPA general term of approval (1.1)

³ Incorporates an EPA general term of approval (4.1.2)

Note: At the date of this consent, an appropriate electronic format for submission to the Director-General is the “portable document format” (pdf) or another format that may be readily converted to pdf.

Statutory Requirements

- 1.8 The Applicant shall ensure that all necessary licences, permits and approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.

Compliance

- 1.9 The Applicant shall ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent. The Applicant shall be responsible for the environmental impacts resulting from the actions of all persons on the site, including any visitors.
- 1.10 Prior to the commencement of each of the events listed from a) to b) below, or within such period as otherwise agreed by the Director-General, the Applicant shall certify in writing, to the satisfaction of the Director-General, that it has complied with all conditions of this consent applicable prior to the commencement of that event.

Where an event is to be undertaken in stages, the Applicant may, subject to the agreement of the Director-General, stage the submission of compliance certification consistent with the staging of activities relating to that event. The events referred to in this condition are as follows:

- a) construction of the development; and
 - b) operation of the development.
- 1.11 Notwithstanding condition 1.10 of this consent, the Director-General may require an update on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the reasonable requirements of the Director-General and be submitted within such period as the Director-General may agree.
- 1.12 The Applicant shall comply with any reasonable requirement/s of the Director-General, within such time as the Director-General may agree, arising from the Department’s assessment of:
- (a) Any reports, plans or correspondence that are submitted in accordance with this consent; and
 - (b) The implementation of any actions or measures contained in these reports, plans or correspondence.

Protection of Public Infrastructure

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

Operation of Plant and Equipment

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

Section 94 Contribution

1.15 The Applicant shall pay Council the relevant quantum of contributions in accordance with the formula and Schedule described within Council's Section 94 Contribution Plan: *Road Works as a result of Unpredictable Development Which Generates Additional Heavy Vehicle Traffic Movements* for the trucks associated with the proposed development, in particular the coal haulage vehicles. Should the limestone and quicklime trucks be subject to Section 94 contributions under any existing and operating consent for the Galong Limestone Mine, then such trucks would not be considered for contributions for this development.

2. CONSTRUCTION AND OCCUPATION CERTIFICATION

2.1 In relation to the construction and occupation of the development, the Applicant shall provide to the Director-General and Council the following:

- a) written notification of the appointment of a Principal Certifying Authority;
- b) copies of all Construction Certificates issued for the development;
- c) written notification of the intention to commence construction work, to be received at least two working days prior to the commencement of construction. In the event that more than one Construction Certificate is issued, notification shall be provided prior to the commencement of construction the subject of each Certificate;
- d) copies of all Occupation Certificates issued for the development; and
- e) written notification of the intention to occupy all relevant components of the development for which an Occupation Certificate has issued, to be received at least two working days prior to occupation. In the event that more than one Occupation Certificate is issued, notification shall be provided prior to the occupation the subject of each Certificate.

Note: Part 4A of the Environmental Planning and Assessment Act 1979 provides specific details of the Applicant's obligations in relation to certification and provides the overarching requirements in this regard. These requirements have been summarised and reproduced under condition 2.1 of this consent to highlight the need for this certification.

2.2 Prior to the commencement of any construction work associated with the development, the Applicant shall erect at least one sign at the site and in a prominent position at the site boundary where the sign can be viewed from the nearest public place. The sign shall indicate:

- a) the name, address and telephone number of the Principal Certifying Authority;
- b) the name of the person in charge of the construction site and telephone number at which that person may be contacted outside working hours; and
- c) a statement that unauthorised entry to the construction site is prohibited.

The sign(s) shall be maintained for the duration of construction works.

3. ENVIRONMENTAL PERFORMANCE

Air Quality Impacts

Dust Emissions

3.1 ⁴ The Applicant shall design, construct, operate and maintain the development in a manner that minimises dust (including limestone dust) emissions from the site.

⁴ Incorporates an EPA general term of approval (4.2.1)

- 3.2 The Applicant shall design, construct, operate and maintain the development in a manner that minimises the amount of dust (including limestone and quicklime dust) allowed to settle on the ground outside of the bunded areas.
- 3.3 The Applicant shall take all practicable measures to ensure that all vehicles entering or leaving the site and carrying a load that may generate dust are covered at all times, except during loading and unloading, in a manner that will prevent emissions of dust from the vehicle.
- 3.4 All trafficable areas and vehicle manoeuvring areas on the site shall be maintained in a condition that will minimise the generation or emission of wind blown or traffic generated dust from the site at all times.

Load Limits

- 3.5 ⁵ The Applicant shall ensure that the actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutants, coarse particulates, fine particulates, nitrogen oxides and sulfur oxides within the EPA's Environment Protection Licence. The actual load of an assessable pollutant must be calculated in accordance with the relevant load calculation protocol.

Note: The Load Limits will be negotiated with the licensee following the submission of the post commissioning air monitoring report required under condition 4.3.

Concentration Limits

- 3.6 ⁶ The Applicant shall ensure that the concentration of pollutants discharged from the Lime Kiln stack do not exceed the 100 percentile concentration limits specified for that pollutant in Table 1, sampled in accordance with the prescribed reference conditions and averaging period and described in the prescribed units of measure.

Table 1: Concentration Limits from the Lime Kiln Stack

Pollutant	Units of measure	100 percentile limit	Reference Conditions	Averaging Period
Solid Particles	mg/m ³	50	Dry, 273K, 101.3kPa, 7% O ₂	As per test method
Hazardous Substances	mg/m ³	1	Dry, 273K, 101.3 kPa	As per test method
Cadmium	mg/m ³	0.01	Dry, 273K, 101.3 kPa	As per test method
Mercury	mg/m ³	0.01	Dry, 273K, 101.3 kPa	As per test method
Carbon Monoxide	mg/m ³	125	Dry, 273K, 101.3 kPa, 7% O ₂	Rolling 1-hour average
Volatile Organic Compounds ¹	mg/m ³	77	Dry, 273K, 101.3 kPa, 7% O ₂	Rolling 1-hour average

Note: 1) as n-hexane

- 3.7 ⁷ The Applicant shall ensure that the concentration of pollutants discharged from the Coal Mill exhaust do not exceed the 100 percentile concentration limits specified for that pollutant in Table 2, and to be determined by the Environment Protection Authority after the relevant pollution studies have been completed and reviewed (as described within conditions 3.8 and 4.3).

⁵ Incorporates an EPA general terms of approval (3.1.2 and 3.1.3)

⁶ Incorporates part of an EPA general term of approval (3.2.1)

⁷ Incorporates part of an EPA general term of approval (3.2.1)

Table 2: Concentration Limits from the Coal Mill Exhaust

Pollutant	Units of measure	100 percentile limit	Reference Conditions	Averaging Period
Solid Particles	mg/m ³	TBD ¹	Dry, 273K, 101.3kPa	As per test method

Note: 1) To be determined from outcome of Pollution Studies described within conditions 3.8 and 4.3.

Design Specifications

3.8 ⁸ Prior to construction, the Applicant must submit Manufacturers Design Specifications for discharge points described as the Lime kiln stack and the Coal Mill exhaust, demonstrating to the satisfaction of the EPA, and forward a written approval from the EPA to the Director-General to that effect, that these sources of air pollutants will comply with the:

- a) The emission concentration limits specified in condition 3.6 and 3.7; and
- b) The emission concentration limits specified in the Clean Air (Plant and Equipment) Regulation 1997.

Greenhouse Gas Emissions

3.9 The Applicant shall ensure that the development is operated in such a manner as to minimise the emissions of greenhouse gases. In particular the Applicant shall investigate mechanisms by which the emissions of greenhouse gases can be reduced on site, or can be off-set in accordance with the Environment Enhancement Strategy described in condition 6.6. In particular the Applicant must investigate the feasibility of utilising natural gas at the development. All activities and/or investigations to mitigate greenhouse gas emissions must be described within the annual Environment Enhancement Strategy.

Noise Impacts

Construction

3.10 ⁹ Subject to compliance with the requirements of this consent, the construction of the development may occur 6 am to 6 pm Monday to Saturday. Construction works may only occur on Sundays or public holidays with the prior approval of the Director-General and the EPA.

3.11 ¹⁰ The Applicant shall ensure that the noise generated by the development during construction does not exceed the sound pressure level (noise) limits presented in Table 3.

Table 3: Construction Noise Limits

Location	Time	Project specific LA10 construction noise level goal
All residential locations	6:00 am to 7:00 am Monday to Friday 1:00 pm to 6:00 pm Saturday	35 dB(A)
All residential locations	7:00 am to 6:00 pm Monday to Friday 7:00 am to 1:00 pm Saturday	40 dB(A)

Operation

3.12 Subject to compliance with the requirements of this consent, the development may be operated 24 hours per day, 7 days per week.

3.13 ¹¹ The Applicant shall ensure that the noise from the premises must not exceed the sound pressure level (noise) limits presented in Table 4, during operation of the development.

⁸ Incorporates EPA general terms of approval (6.2.1 and 6.2.2)

⁹ Incorporates an EPA general term of approval (3.3.1)

¹⁰ Incorporates an EPA general term of approval (3.4.1)

Table 4: Operation Noise Limits

Day		Evening		Night		
L _{Aeq} (15 minute)	L _{Aeq} (day)	L _{Aeq} (15 minute)	L _{Aeq} (evening)	L _{Aeq} (15 minute)	L _{Aeq} (night)	L _{A1} (1 minute)
35 dB(A)	N/A	35 dB(A)	N/A	35 dB(A)	N/A	45 dB(A)

Notes:

- 1) *These limits represent the sound pressure level (noise) contribution, at the most affected noise sensitive location, as a result of activities carried out at the premises.*
- 2) *Noise from the premises is to be measured at the most affected point on or within the residential boundary. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance in accordance with Chapter 11 of the NSW Industrial Noise Policy.*
- 3) *The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable. Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,*
- 4) *Evening is defined as the period from 6pm to 10pm*
- 5) *Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays*
- 6) *These limits apply under meteorological conditions of:*
 - a. *Wind speed up to 3 metres per second at 10 metres above ground level.*
 - b. *Temperature inversion conditions of up to 3°C/100metres and wind speeds up to 2 metres per second at 10 metres above ground level.*

Water Quality Impacts

Construction

- 3.14 ¹² The Applicant shall ensure that sediment or turbid runoff is prevented from being washed into Limestone Creek, during construction of the development.
- 3.15 ¹³ The Applicant shall ensure that all temporary sediment and erosion control measures are inspected at appropriately scheduled regular intervals and following extreme climatic events.
- 3.16 ¹⁴ The Applicant shall ensure that any temporary sediment and erosion control works shall be properly installed and maintained for the duration of the road construction activity and until such time as permanent soil and water management works and rehabilitation works have stabilised the site
- 3.17 ¹⁵ The Applicant shall ensure that soil and water management measures are appropriately designed to convey sediment and runoff to the designated disposal and treatment areas without causing erosion.
- 3.18 ¹⁶ Any soil removed from the area of road construction shall be utilised for rehabilitation at an appropriate location where the soil cannot be swept back into the waterway during a flood. Other excavated material shall be disposed of in accordance with the applicable legislation.

Operations

- 3.19 ¹⁷ The Applicant shall ensure that all surface water run-off collected from the kiln development site is:
 - a) collected and stored for on-site reuse; or
 - b) collected, stored, analysed and treated as necessary prior to discharge to Limestone Creek.

¹¹ Incorporates EPA general terms of approval (3.5.1, 3.5.2, 3.5.3 and 3.5.4)

¹² Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.1)

¹³ Incorporates an EPA General Term of Approval (M3.2)

¹⁴ Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.2)

¹⁵ Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.3)

¹⁶ Incorporates general terms of approval under the Rivers and Foreshores Improvement Act 1948 (2.8, 2.9)

¹⁷ Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.11)

- 3.20 The Applicant shall ensure that surface water run-off which collects from the kiln development site is not mixed with groundwater out-pumped from the Galong Limestone Mine prior to any use on-site or discharge to Limestone Creek.
- 3.21 ¹⁸ The Applicant shall ensure that the development is operated so as not cause damage or increase the erosion on adjacent banks.

Groundwater Impacts

- 3.22 The Applicant shall construct a new surface water detention/storage basin to collect surface water run-off generated from the development site. The Applicant shall ensure that all surface water detention and/or storage basins, including walls and floors of such basins, have an impermeability of 1×10^{-9} m/s.
- 3.23 The Applicant shall carry out the development in accordance with Licence 40BL189001 issued under Part V of the *Water Act 1912* on 11 March 2003, until such time as that Licence ceases to operate, in so far as it relates to the Lime Kiln development.

Traffic and Transport Impacts

- 3.24 The Applicant shall dispatch quicklime produced at the Lime Kiln within the heavy vehicle traffic constraints and parameters of any operating consent applicable to the adjacent Galong Limestone Mine.

Note: This consent permits the Applicant to dispatch quicklime only in heavy vehicles that could otherwise have been carrying limestone from Galong Limestone Mine. In this manner this consent does not permit an increase in the quantity of heavy vehicles which are permitted to transport lime product from the Mine in its totality, over and above that approved by any operating consent applicable to the Galong Limestone Mine.

- 3.25 The Applicant is permitted a maximum of 6 heavy vehicle movements (3 in / 3 out) per day for the purposes of hauling coal to the site. Any coal haulage above this limit requires the prior approval of the Director-General.
- 3.26 The Applicant shall ensure that drivers of heavy vehicles, whether associated with kiln construction works or hauling coal to the site during operations of the development, are subject to the same protocols as determined for the heavy vehicle drivers associated with any operating consent applicable to the adjacent Galong Limestone Mine.

Alternative Transport

- 3.27 The Applicant shall investigate the feasibility of utilising alternative transport routes and alternative modes of transport (in particular rail) for transporting goods associated with the kiln, especially coal and quicklime products. All activities and/or investigations must be described within the annual Environment Enhancement Strategy.

Flora and Fauna Impacts

Construction

- 3.28 The Applicant shall ensure that there is no clearing of native vegetation outside of the exclusions (Mining Act 1992) and exemptions in the Native Conservation Act 1997 without receiving the required consent(s).

¹⁸ Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.7)

- 3.29 The Applicant shall take all practical measures to minimise vegetation clearing and to maintain and conserve all mature trees inside the development's footprint.
- 3.30 ¹⁹ No vegetation shall be removed within 20 meters of Limestone Creek.
- 3.31 ²⁰ The Applicant shall ensure that after the completion of works, disturbed areas are revegetated in accordance with the Vegetation Management Plan described in condition 6.4c) of this consent.

Operation

- 3.32 The Applicant shall ensure that the riparian vegetation adjacent to Limestone Creek is not impacted by the development.

Visual Amenity Impacts

- 3.33 The Applicant shall carry out the development in a way that minimises the visual impacts of the development, to the satisfaction of the Director-General.

Lighting

- 3.34 The Applicant shall take all practicable measures to prevent any off-site lighting impacts from the development, to the satisfaction of the Director-General. In particular the Applicant shall ensure that no lights are directed towards residences, roads or Villages. All external lighting associated with the development shall comply with *Australian Standard AS4282(INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*.

Hazards and Risk

- 3.35 The Applicant shall ensure that any storage, handling, and transport of liquid fuels and lubricants is in accordance with the relevant *Australian Standards* and the *Dangerous Goods Code*, in particular *AS1940*.
- 3.36 The Applicant shall take the necessary measures to prevent spontaneous combustion of coal dust at the development.

Waste Management

- 3.37 The Applicant shall minimise the amount of waste generated at the development requiring disposal in accordance with the waste hierarchy to, reduce, reuse and recycle waste prior to disposal.

Bushfire Impacts

- 3.38 The Applicant shall:
- (a) Take all practicable measures to prevent bush fires originating on the site, particularly during bush fire season;
 - (b) Ensure that the development is suitably equipped to respond to any fires on-site;
 - (c) Assist the Rural Fire Service and emergency services as much as possible if there is a fire on-site during the development.

Heritage Impacts

- 3.39 If, during the course of the development the Applicant becomes aware of any heritage or archaeological objects or sites, all work likely to affect the material shall cease immediately and the relevant authorities consulted about an appropriate course of action prior to recommencement of work. The relevant authorities include

¹⁹ Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.12)

²⁰ Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.5)

NPWS, the Heritage Office, the Local Aboriginal Land Councils, and the holder of any Native Title (in accordance with the Native Title Act (Commonwealth)) over the site (in a. Any necessary permits or consents shall be obtained and complied with prior to recommencement of work.

Housing Impacts

3.40 Where practicable, the Applicant shall implement the following measures to minimise the impact on the local accommodation supply:

- (a) construction work between the months of December and February should be minimised;
- (b) the workforce should be housed and located between at least two or more towns; and
- (c) the Applicant should give preference to local contractors.

4. ENVIRONMENTAL MONITORING AND AUDITING

General

4.1 The results of any monitoring required to be conducted by this consent must be recorded and retained to the satisfaction of the EPA.

Air Quality Monitoring

4.2 ²¹ For each monitoring/discharge point or utilisation area specified in Column 1 to Table 5 the Applicant must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 2. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

Table 5: Air Quality Monitoring Requirements

Location	Pollutant	Units of measure	Frequency	Sampling Method
Lime Kiln Stack	Solid Particles	mg/m ³	Post Commissioning, Annually	TM-15
	Hazardous substances	mg/m ³	Post Commissioning, Annually	TM-12, TM-13 and TM-14
	Mercury	mg/m ³	Post Commissioning, Annually	TM-12, TM-13 and TM-14
	Cadmium	mg/m ³	Post Commissioning, Annually	TM-12, TM-13 and TM-14
	Nitrogen Oxides	mg/m ³	Post Commissioning, Annually	TM 11
	Sulfur Oxides	mg/m ³	Post Commissioning, Annually	TM 4
	Carbon Monoxide or Volatile Organic Compounds	mg/m ³	Post Commissioning, Annually	OM-1 ² or OM-2 ³
	Velocity	m/s	Post commissioning, annually	TM-2
	Volumetric flow rate	m ³ /s	Post commissioning, annually	TM-2
	Temperature	°C	Post commissioning, annually	TM-2
	Moisture	%	Post commissioning, annually	TM-22
	Dry gas density	Kg/m ³	Post commissioning, annually	TM-23
	Molecular weight of stack gases	g/g.mol	Post commissioning, annually	TM-23
	Oxygen	%	Post commissioning, annually	TM-25

²¹ Incorporates EPA general terms of approval (5.1.1 and 5.2.1)

Location	Pollutant	Units of measure	Frequency	Sampling Method
	Carbon dioxide	%	<i>Post commissioning, annually</i>	TM-24
	Carbon Monoxide or Volatile Organic Compounds	mg/m ³	Continuous	CEM-4 ² or CEM-8 ³
	Temperature	°C	Continuous	TM-2
	Moisture	%	Continuous	TM-22
	Volumetric flow rate	m ³ /s	Continuous	CEM-6
	Oxygen	%	Continuous	CEM-3
	Selection of sampling positions	-	-	TM-1
Coal Mill Exhaust	Solid Particles	mg/m ³	Post Commissioning, Annually	TM-15
	Velocity	m/s	Post commissioning, annually	TM-2
	Volumetric flow rate	m ³ /s	Post commissioning, annually	TM-2
	Temperature	°C	Post commissioning, annually	TM-2
	Moisture	%	Post commissioning, annually	TM-22
	Dry gas density	kg/m ³	<i>Post commissioning, annually</i>	TM-23
	Molecular weight of stack gases	g/g mol	<i>Post commissioning, annually</i>	TM-23
	Carbon dioxide	%	<i>Post commissioning, annually</i>	TM-24
	Selection of sampling positions	-	-	TM-1
Dust Gauges as described by the EPA Licence	Particulates – Deposited Matter	g/m2/month	Monthly	Clean air (Plant and Equipment) Regulation 1997 Method Number AM-19

Notes:

- 1) *Continuous emissions monitoring for either carbon monoxide (CO) or volatile organic compounds (VOC) must be undertaken. If continuous emissions monitoring for carbon monoxide (CO) is chosen, then periodic monitoring for volatile organic compounds (VOC) must be undertaken. Similarly, if continuous emissions monitoring for volatile organic compounds (VOC) is chosen, then periodic monitoring for carbon monoxide (CO) must be undertaken*
- 2) *Method for carbon monoxide*
- 3) *Method for volatile organic compounds*
- 4) *Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:*
 - a. *any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or*
 - b. *if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or*
 - c. *if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.*
- 5) *The Clean Air (Plant & Equipment) Regulation 1997 requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".*

Monitoring Report

- 4.3 ²² Within 3 months of the commissioning of the kiln the Applicant must submit a written report to the EPA detailing the results of post commissioning source emissions sampling and analysis undertaken in accordance with the requirements specified in condition 4.2 of this consent. The report must assess compliance with the limit conditions specified in condition 3.6 and 3.7 of this consent.

Water Quality Monitoring

- 4.4 The Applicant shall undertake water quality monitoring as detailed in the Soil and Water Monitoring and Management Plan described in condition 6.4 of this consent, to the satisfaction of the Director-General.

²² Incorporates EPA general terms of approval (6.3.1)

Noise Compliance Auditing

- 4.5 At the request of the Director-General, the Applicant shall commission, and pay the full cost of, an independent noise expert, approved by the Director-General, to conduct a Noise Compliance Audit of the development in accordance with the EPA's *Industrial Noise Policy*.
- 4.6 Within 3 months of the commencement of operations at the development, and thereafter as required by the Director-General, the Applicant shall commission, and pay the full cost of, an independent noise expert, approved by the Director-General, to conduct a Traffic Noise Compliance Audit of the development. Specifically the Traffic Noise Compliance Audit must undertake traffic noise monitoring and measurements at the most effected parts of Galong Road in accordance with the methods described within the EPA's *Environmental Criteria for Road Traffic Noise*. The Applicant must provide a copy of this Audit to the Department.

Auditing

- 4.7 Within two years of the commencement of commissioning of the development, and thereafter as directed by the Director-General, the Applicant shall commission, and pay the full cost of, an independent person or team to undertake an Independent Environmental Audit of the development. The independent person or team shall be approved by the Director-General, in consultation with the EPA, prior to the commencement of the Audit. An **Environmental Audit Report** shall be submitted for comment to the Director-General, the EPA and Council, within one month of the completion of the Audit. The Audit shall:
- a) be carried out in accordance with *ISO 14010 - Guidelines and General Principles for Environmental Auditing* and *ISO 14011 - Procedures for Environmental Auditing*;
 - b) assess compliance with the requirements of this consent, and other licences and approvals that apply to the development;
 - c) assess the development against the predictions made and conclusions drawn in the EIS and additional information documents supplied during the development application and assessment process, as described in condition 1.2; and
 - d) review the effectiveness of the environmental management of the development, including any environmental impact mitigation works.

The Director-General may, having considered any submission made by the EPA and/or Council in response to the Environmental Audit Report, require the Applicant to undertake works to address the findings or recommendations presented in the Report. Any such works shall be completed within such time as the Director-General may agree.

5. COMMUNITY CONSULTATION AND INVOLVEMENT

- 5.1 Subject to confidentiality, the Applicant shall make all documents required under this consent available for public inspection upon request. This shall include provision of all documents at the site for inspection by visitors, and in an appropriate electronic format on the Applicant's internet site, should one exist.

Complaints Procedure

- 5.2 Prior to the commencement of construction for the development, the Applicant shall ensure that the following are available for community complaints for the life of the development (including construction and operation):
- a) a telephone number on which complaints about operations on the site may be registered;

- b) a postal address to which written complaints may be sent; and
- c) an email address to which electronic complaints may be transmitted, should the Applicant have email capabilities.

The Applicant shall ensure that the required details are publicly available including, but not limited to, displaying the information on a sign near the entrance to the site, in a position that is clearly visible to the public. These details shall also be provided on the Applicant's internet site, should one exist.

- 5.3 The Applicant shall record details of all complaints received through the means listed under condition 5.2 of this consent in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to:
- a) the date and time, where relevant, of the complaint;
 - b) the means by which the complaint was made (telephone, mail or email);
 - c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
 - d) the nature of the complaint;
 - e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and
 - f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register shall be made available for inspection by the EPA or the Director-General upon request.

Community Consultation

- 5.4 The Applicant shall ensure that there is a Community Liaison Group to oversee the environmental performance of the development. This committee shall be established prior to the submission of the Construction Environmental Management Plan as described in section 6.2:
- (a) Be comprised of the following, whose appointment has been approved by the Director-General in consultation with the Council:
 - 1 or 2 representatives from the Applicant, including the person responsible for environmental management at the Lime Kiln;
 - 1 representative from Council;
 - 3 representatives from the local community (Galong), and
 - 1 representative from the Binalong community.
 - (b) Be chaired by a representative approved by the Director-General;
 - (c) Meet a minimum of once in every 6 month period; and
 - (d) Review and provide advice on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints.
- 5.5 The Applicant shall, at its own expense:
- (a) Ensure that 1 or 2 of its representatives attend the Committee's meetings;
 - (b) Provide the Committee with regular information on the environmental performance and management of the development;
 - (c) Provide meeting facilities for the Committee, where necessary;
 - (d) Arrange site inspections for the Committee, if requested;
 - (e) Take minutes of the Committee's meetings;
 - (f) Make these minutes available to the public for inspection within 14 days of the Committee meeting, or as agreed to by the Committee;
 - (g) Respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development;

- (h) Maintain a record and a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations, to be provided to the Director-General upon request.

Note: Nothing in condition 5.4 and 5.5 of this consent prevents the Applicant from combining the community consultation and meeting requirements under this consent with any other relevant community consultation requirements for the adjacent Galong Limestone Mine development.

6. ENVIRONMENTAL MANAGEMENT

Construction Environmental Management Plan (CEMP)

6.1 ²³The Applicant shall prepare and implement a **Construction Environmental Management Plan (CEMP)** to outline environmental management practices and procedures to be followed during the construction of the development. The Plan shall include, but not necessarily be limited to:

- a) a description of all activities to be undertaken on the site during construction, including an indication of stages of construction, where relevant;
- b) statutory and other obligations that the Applicant is required to fulfil during construction, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
- c) specific consideration of measures to address any requirements of the Department and the EPA during construction;
- d) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;
- e) a description of the roles and responsibilities for all relevant employees involved in construction;
- f) a description of community consultation undertaken during the preparation of the CEMP to ensure that the potentially affected community has been able to provide input into the CEMP, and how the Applicant has addressed those impacts; and
- g) the Management Plans listed under condition 6.2 of this consent.

The CEMP shall be submitted for the approval of the Director-General prior to the commencement of construction of the development. Notwithstanding, where construction work is to be undertaken in stages, the Applicant may, subject to the agreement of the Director-General, stage the submission of the CEMP consistent with the staging of activities relating to that work. Construction of each stage shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the CEMP to the EPA as soon as practicable.

6.2 As part of the CEMP for the development, required under condition 6.1 of this consent, the Applicant shall prepare and implement the following Management Plans:

- a) a **Fire Safety Study** for the development, covering all relevant aspects detailed in the Department's publication *Hazardous Industry Planning Advisory Paper No. 2 - Fire Safety Guidelines*. The Study shall be submitted for the approval of the Commissioner of the NSW Fire Brigades prior to inclusion in the CEMP. In particular, the Study shall identify hazards related to dust explosions and detail the risk reduction measures proposed. The dust

²³ Incorporates a general term of approval under the Rivers and Foreshores Improvement Act 1948 (2.10)

explosion related findings and actions arising from the Hazard and Operability Study shall also be addressed in the Fire Safety Study.

- b) a **Hazard and Operability Study** of the coal and coal dust operations at the development, chaired by an independent, qualified person or team approved by the Director-General. The Study shall be carried out in accordance with the Department's publication *Hazardous Industry Planning Advisory Paper No. 8 - HAZOP Guidelines*. The Study Report must be accompanied by a program for implementation of all recommendations made in the report. If the Applicant intends to defer the implementation of a recommendation, justification must be included.
- c) ²⁴ an **Erosion and Sedimentation Management Plan** to detail measures to minimise erosion during construction of the development. In addition to approval from the Director-General, the Plan shall be submitted to the EPA for approval. The Plan shall include, but not necessarily be limited to:
 - i) demonstration that it is consistent with the Department of Housing's *Managing Urban Stormwater: Soils and Construction* manual;
 - ii) identification the aspects of the development that could cause soil erosion or discharge sediment or water pollutants from the site;
 - iii) provide a description of the location and capacity of all erosion and sediment control structures, and nominate which, if any, of these structures would be used as water sources for the development;
 - iv) reference to the impacts related to the construction related to the access road to the development, and these impacts are to be managed;
 - v) details of what actions and measures would be implemented to minimise soil erosion and the discharge of sediments or water pollutants from the site; and
 - vi) a description of how the effectiveness of these actions and measures would be monitored during the development.

Operation Environmental Management Plan (OEMP)

6.3 The Applicant shall prepare and implement an **Operation Environmental Management Plan (OEMP)** to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The plan shall include, but not necessarily be limited to:

- a) identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations;
- b) a description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- c) overall environmental policies and principles to be applied to the operation of the development;
- d) standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved;
- e) management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent;
- f) the Management Plans listed under condition 6.4 of this consent; and
- g) the environmental monitoring requirements outlined under conditions 4.2 to 4.4 of this consent, inclusive.

The OEMP shall be submitted for the approval of the Director-General no later than one month prior to the commencement of commissioning of the development, or within such period otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General.

²⁴ Incorporates EPA general terms of approval (4.3.1 and 4.3.2)

Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the OEMP to the EPA and Council as soon as practicable.

Note: nothing in Condition 6.3 of this consent prevents the Applicant from combining the preparation of management plan's to satisfy the requirements of the DMR.

- 6.4 As part of the OEMP for the development, required under condition 6.3 of this consent, the Applicant shall prepare and implement the following Management Plans:
- a) a **Compliance Report** detailing compliance with conditions 6.2 a) and b), in relation to the Fire Safety Study and the Hazard and Operability Study. The Report shall include:
 - i) dates of submission of the relevant studies, dates of approval from the Department, dates relating to the commencement of construction and commissioning;
 - ii) actions taken or proposed to be taken, to implement the recommendations made in the relevant studies; and
 - iii) responses to any requirements made by the Director-General in response to the relevant studies
 - b) a **Vegetation Management Plan** with an aim to conserve, protect and restore any vegetation areas on the site, or impacted by the development. This plan shall include, but not necessarily be limited to:
 - i) identification of all noxious weeds on-site, and management measures to appropriately control such weeds;
 - ii) ensuring that the site is appropriately vegetated, to the satisfaction of the Director-General. The species used for any planting must be approved by the Director-General, in consultation NPWS.
 - c) a **Soil and Water Monitoring and Management Plan** with an aim to protect the integrity of Limestone Creek. This plan shall be prepared in consultation with the Department and the EPA, and shall include, but not necessarily be limited to:
 - i) identification of all the potential sources of water pollution and soil contamination arising from the development;
 - ii) a description of all measures taken to minimise potential for spillage of quicklime, and what procedures would be employed in the event of a spill;
 - iii) a description of all measures, including the location and capacity, which would be employed to ensure that contaminated storm water is appropriately treated prior to discharge into Limestone Creek;
 - iv) a description of all measures which would be employed to ensure that extracted mine water is not mixed with potentially contaminated storm water prior to discharging to the creek;
 - v) calculations to determine appropriate water quality discharge limits in accordance with the *Australian Water Quality Guidelines for Fresh and Marine Waters* (Australian and New Zealand Environment and Conservation Council (ANZECC), 2001). The Plan must include, but not be limited to, consideration of pH and suspended solids; and
 - vi) details of all monitoring to be carried out at the development to ensure compliance with the abovementioned water quality discharge limits, this consent and any other Licences or Permits; and the effectiveness of described actions and measures employed to manage potential pollutant discharge into Limestone Creek.
- 6.5 Within three years of the commencement of operation of the development, and at least every three years thereafter, the Applicant shall undertake a formal review of the Operation Environmental Management Plan (OEMP) required under condition

6.3 of this consent. The review shall ensure that the OEMP is up-to-date and all changes to procedures and practices since the previous review have been fully incorporated into the OEMP. The Applicant shall notify the Director-General, Council and the EPA of the completion of each review, and shall supply a copy of the updated OEMP to those parties on request. The Applicant shall also make any revised OEMP available for public inspection on request.

- 6.6 The Applicant shall prepare an annual **Environmental Enhancement Strategy** with an aim to off-set the impacts of the development. The Strategy shall be prepared in consultation with the community, including but not limited to the CLG, for the approval of the Director-General. The Strategy shall describe works including, but not limited to:
- a) identification of the potential off-site projects, based in the local area, which may be undertaken to enhance the local community, including tree planting and the guaranteed provision of agricultural lime to the local market (local meaning Galong and surrounds);
 - b) a description of which projects will be undertaken;
 - c) a justification for excluding any of the projects identified in part a).

7. ENVIRONMENTAL REPORTING

Incident Reporting

- 7.1 The Applicant shall notify the DMR, the EPA and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Applicant shall provide written details of the incident to the EPA and the Director-General within seven days of the date on which the incident occurred.
- 7.2 The Applicant shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with condition 7.1, within such period as the Director-General may agree.

Note: Condition 7.2 of this consent does not limit or preclude the DMR or the EPA from requiring any action to address the cause or impact of any incident, in the context of the DMR's or the EPA's statutory role in relation to the development.

Annual Performance Reporting

- 7.3 The Applicant shall, throughout the life of the development, prepare and submit for the approval of the Director-General an **Annual Environmental Management Report**. This report shall review the performance of the development against the conditions of this consent and other licences and approvals relating to the development and must:
- (a) Identify the standards and performance measures that apply to the development;
 - (b) Include a detailed summary of the complaints received during the past year, and compare this to the complaints received in the previous 5 years;
 - (c) Include a detailed summary of the monitoring results on the development during the past year,
 - (d) Include a detailed analysis of these monitoring results against the relevant:
 - Impact assessment criteria;
 - Monitoring results from previous years; and
 - Predictions in the EIS;
 - (e) Identify any trends in the monitoring over the life of the development;
 - (f) Identify any non-compliance during the previous year; and

- (g) Describe what actions were, or are being, taken to ensure compliance.
- 7.4 The Applicant shall submit a copy of the AEMR to the Director-General, the EPA, the DMR and Council every year, with
- a) the first AEMR to be submitted within twelve months of commencement of commissioning of the development; and
 - b) the second and subsequent AEMRs to be submitted concurrently with the EPA's Annual Return.
- 7.5 The Director-General may require the Applicant to address certain matters in relation to the environmental performance of the development, in response to review of the Annual Environmental Report and any comments received from the EPA and/or Council. Any action required to be undertaken shall be completed within such period as the Director-General may agree.

Note: The AEMR does not aim to satisfy any requirement of the EPA with regard to any Annual Return required under any licence issued for the development under the Protection of the Environment Operations Act 1997.

Attachment 1

General Administrative and Formal Application Issues PART 3A PERMIT

- 1) If in the opinion of a DIPNR officer any work is being carried out in such a manner as it may damage or detrimentally affect the watercourse, or damage or interfere in any way with any work, the operation on that section of the watercourse shall cease immediately upon oral or written direction of such officer.
- 2) The permit holder and the owner or occupier of the land are responsible for any excavation or soil removal undertaken by any other person or company at this site.
- 3) Any permit subsequently granted is not transferable to any other person or Company and does not allow operations at any other site.
- 4) Any permit subsequently granted does not give the holder the right to occupy any land without the owner's consent nor does it relieve the holder of any obligation which may exist to also obtain permission from Local Government and other Authorities who may have some form of control over the site of the works and / or the activities you propose to undertake.
- 5) No interference shall be made to the flow of water in the stream except the excavation of a pool for the purpose of obtaining water for the operation of a treatment plant or water supply pump for use during the duration of the works.
- 6) If the operation will involve the installation of any water extraction plants or construction of any dams, levees, diversion banks or the like, on Limestone Creek application must be made to DIPNR to have such works licensed under the provisions of Part II or Part VIII of the Water Act.
- 7) If the permit conditions have been breached the permit holder shall restore the site to the satisfaction of the DIPNR. If the necessary works are not completed then the permit holder shall pay a fee prescribed by the DIPNR for the initial breach inspection and all subsequent inspections.
- 8) A permit will be issued for the proposed works upon request.
- 9) A copy of these general terms of approval must be made available to DIPNR officers upon formal application.
- 10) Permits are generally granted for a period of 12 months from the date of formal approval and renewable on an annual basis. Any application for renewal shall be lodged three months prior to the expiry date.