

Environment Protection Licence

Licence - 12290

**Licence Details**

Number:	12290
Anniversary Date:	01-April
Review Due Date:	14-Apr-2013

Licensee

WERRIS CREEK COAL PTY LIMITED
 PO BOX 2440
 FORTITUDE VALLEY BC QLD 4006

Licence Type

Premises

Premises

Werris Creek Coal Mine
 Werris Creek Quirindi Road
 WERRIS CREEK NSW 2341

Scheduled Activity

Coal Mines
 Coal Works

Fee Based Activity

Coal Mining (26)

Scale

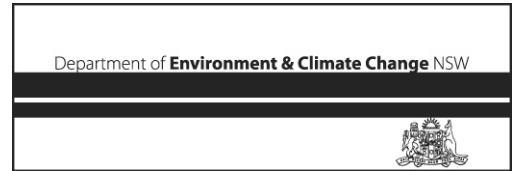
> 500000 - 2000000 T produced

Region

North West - Armidale
 Level 1, NSW Govt Offices, 85 Faulkner Street
 ARMIDALE NSW 2350
 Phone: 02 6773 7000
 Fax: 02 6772 2336
 PO Box 494 ARMIDALE
 NSW 2350

Environment Protection Licence

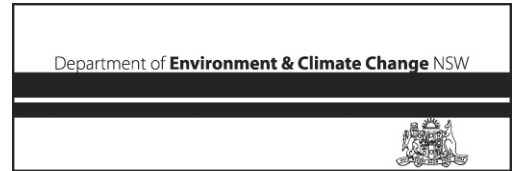
Licence - 12290



INFORMATION ABOUT THIS LICENCE	4
Dictionary	4
Responsibilities of licensee.....	4
Variation of licence conditions	4
Duration of licence.....	4
Licence review.....	4
Fees and annual return to be sent to the EPA	4
Transfer of licence	5
Public register and access to monitoring data.....	5
1 ADMINISTRATIVE CONDITIONS	5
A1 What the licence authorises and regulates	5
A2 Premises to which this licence applies	6
A3 Other activities	7
A4 Information supplied to the EPA	7
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	8
P1 Location of monitoring/discharge points and areas.....	8
3 LIMIT CONDITIONS	10
L1 Pollution of waters	10
L2 Load limits.....	10
L3 Concentration limits.....	10
L4 Volume and mass limits	11
L5 Waste.....	11
L6 Noise Limits	11
L7 Hours of Operation.....	13
L8 Blasting	14
L9 Potentially offensive odour	15
4 OPERATING CONDITIONS	15
O1 Activities must be carried out in a competent manner.....	15
O2 Maintenance of plant and equipment.....	15
O3 Dust.....	16
O4 Stormwater/ Sediment Control- Construction Phase.....	16
O5 Stormwater/ Sediment Control- Operation Phase.....	16
O6 Waste Water Utilisation Areas	16
O7 Maintaining Waste Water Utilisation Areas	16
O8 Noise.....	16
5 MONITORING AND RECORDING CONDITIONS	17
M1 Monitoring records.....	17
M2 Requirement to monitor concentration of pollutants discharged.....	17
M3 Testing methods - concentration limits	20

Environment Protection Licence

Licence - 12290



M4	Recording of pollution complaints	21
M5	Telephone complaints line	21
M6	Requirement to monitor volume or mass	21
6	REPORTING CONDITIONS	22
R1	Annual return documents	22
R2	Notification of environmental harm	23
R3	Written report	23
	GENERAL CONDITIONS	24
G1	Copy of licence kept at the premises	24
	POLLUTION STUDIES AND REDUCTION PROGRAMS	24
U1	Noise Monitoring and Assessment Program	24
	SPECIAL CONDITIONS	25
	DICTIONARY	25
	General Dictionary	25



Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act); and
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

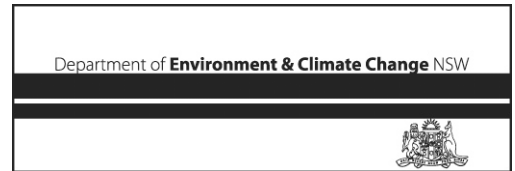
For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees.

Environment Protection Licence

Licence - 12290



The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

WERRIS CREEK COAL PTY LIMITED
PO BOX 2440
FORTITUDE VALLEY BC QLD 4006

subject to the conditions which follow.

1 Administrative conditions

A1 What the licence authorises and regulates

- A1.1 This licence authorises the carrying out of the scheduled development work listed below at the premises listed in A2.
Construct mine entrance/access/rail load-out roads; site preparation (clearing/soil removal) including initial mining activities; earthworks for processing plant, coal loading & office facility installation; install initial water management controls.

Environment Protection Licence



Licence - 12290

- A1.2 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity
Coal Mines
Coal Works

Fee Based Activity	Scale
Coal Mining (26)	> 500000 - 2000000 T produced

- A1.3 The licensee must not carry on any scheduled activities until the scheduled development works are completed, except as elsewhere provided in this licence.

A2 Premises to which this licence applies

- A2.1 The licence applies to the following premises:

Premises Details
Werris Creek Coal Mine
Werris Creek Quirindi Road
WERRIS CREEK
NSW
2341
SEE FULL DESCRIPTION IN CONDITION A2.2 OF THIS LICENCE
GRENFELL PARISH, BUCKLAND COUNTY, LIVERPOOL PLAINS SHIRE

Environment Protection Licence



Licence - 12290

A2.2 For the purposes of this licence, the premise comprises the following land.

Freehold Land

Lot 1 DP 186633.

Lots 19, 20, 73, 74, 75, 109, 110, 112, 120, 121, 123, 126, 127, 128, 129, 130, 133 & 135 DP 751017;

Part lots 83, 131, 132, 217 & 225 DP 751017.

Part lot 271 DP 257307 (under conversion to freehold).

Lots 1, 2, 3 & 4 DP 1022826.

Part lots 3 & 4 DP1037145.

Crown Land Descriptions

Council Roads

Council public roads east of lots 130, 133, 135, part lot 83, part lot 217 and part lot 225 in DP 751017.

Council public roads north of lots 129 and 130 in DP 751017.

Council public road through part lot 271 DP 257307.

Crown Roads

Crown public roads east of lots 126, 127, 128, part lot 132 DP 751017.

Crown public roads south of part lot 132, part lot 83, part lot 225 and lot 109 DP 751017.

Railway Land

Lot 2 DP 431951.

A3 Other activities

A3.1 This licence applies to all other activities carried on at the premises, including:

Crushing, Grinding or Separating Works

A4 Information supplied to the EPA

A4.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- (a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- (b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.



2 Discharges to air and water and applications to land

P1 Location of monitoring/discharge points and areas

P1.1 The following points referred to in the table below are identified in this licence for the purposes of monitoring and/or the setting of limits for the emission of pollutants to the air from the point.

Air

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Description of Location
1	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the residence on the Patterson's property.
2	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the residence on the "Eurunderee" property.
3	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the residence on the "Old Colliery" property.
4	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the residence on the "Railway View" property.
5	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the residence on the "Hillview" property.
6	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the residence on the "Escott" property.
7	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the residence on the "Cintra" property.
8	Ambient Air Monitoring / Air Discharge Quality	Ambient Air Monitoring / Air Discharge Quality	Within 100 metres of the southern boundary of the premises.
9	Ambient Weather Monitoring.		Weather station located in the north east corner of the premises.

P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

P1.3 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

*Water and land*

EPA identification no.	Type of monitoring point	Type of discharge point	Description of location
10	Wet Weather Discharge / Discharge Water Quality Monitoring.	Wet Weather Discharge / Discharge Water Quality Monitoring.	Point SD7 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
11	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point SD8 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
12	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point SD9 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
13	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point SD10 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
14	Wet Weather Discharge / Discharge Water Quality Monitoring	Wet Weather Discharge / Discharge Water Quality Monitoring	Point SD12 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
15		Wet Weather Discharge	Waste Water Utilisation Area marked on Figure 1 in the Site Water Management Plan for Werris Creek Coal Mine.
16	Water Quality Monitoring		Point MV1 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
17	Water Quality Monitoring		Point MW-1 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
18	Water Quality Monitoring		Point MW-2 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
19	Water Quality Monitoring		Point MW-3 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
20	Water Quality Monitoring		Point MW-4 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.



EPA identification no.	Type of monitoring point	Type of discharge point	Description of location
21	Water Quality Monitoring		Point MW-5 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
22	Water Quality Monitoring		Point MW-6 marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
23	Water Quality Monitoring		Point WC-U on Werris Creek marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
24	Water Quality Monitoring		Point WC-D on Werris Creek marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
25	Water Quality Monitoring		Point QC-U on Quipolly Creek marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.
26	Water Quality Monitoring		Point QC-D on Quipolly Creek marked on Figure 3 in the Site Water Management Plan for Werris Creek Coal Mine.

3 Limit conditions

L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Load limits

L2.1 Not applicable.

L2.2 Not applicable.

L3 Concentration limits

Environment Protection Licence



Licence - 12290

- L3.1 For each monitoring/discharge point or utilisation area specified in the table below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L3.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L3.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.

Water and Land

POINTS 10,11,12,13,14

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile Concentration Limit
Oil and Grease	milligrams per litre	-	-	-	10
pH	pH	-	-	-	6.5- 8.5
Total suspended solids	milligrams per litre	20	35	-	50

L4 Volume and mass limits

- L4.1 Not applicable.

L5 Waste

- L5.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.
- L5.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if those activities require an environment protection licence.

L6 Noise Limits

- L6.1 Noise from the premises must not exceed:
- an $L_{Aeq(15\text{ minute})}$ noise emission criterion of 40 dB(A) (7am to 6pm Monday to Friday during the initial construction period of the mines operation; and
 - an $L_{A1(1\text{ minute})}$ noise emission criterion of 45 dB(A) at night; and
 - at all other times (including at night), an $L_{Aeq(15\text{ minute})}$ noise emission criterion of 35 dB(A), except as expressly provided by this licence.

Environment Protection Licence

Licence - 12290



L6.2 Noise from the premises is to be measured at a point within 30 metres of any residence not on the premises to determine compliance with this condition.

L6.3 Definitions

L_{Aeq} (15 minute) is the equivalent continuous noise level- the level of noise equivalent to the energy-average of noise levels occurring over a measures period (i.e. 15 minutes).

L_{Amax} is the maximum noise level.

Night is the period between midnight to 7am and 10pm to midnight Monday to Saturday and midnight to 8am and 10pm to midnight Sundays and Public Holidays.

Construction period is defined in the EIS for the mine and is limited in any case to a maximum of the initial 6 months of activities on the premises.

L6.4 Note: Noise Management

For the purpose of noise measures required for this condition, the L_{Aeq} noise level must be measured or computed at any point within 30 metres of any residence not on the premises over a period of 15 minutes using "FAST" response on the sound level meter.

For the purpose of the noise criteria for this condition, 5dBA must be added to the measurement level if the noise is substantially tonal or impulsive in character.

L6.5 The noise emission limits identified in this licence apply under all meteorological conditions except:
(a) during rain and wind speeds (at 10m height) greater than 3m/s; and
(b) under "non-significant weather conditions".

Note: Field meteorological indicators for non-significant weather conditions are described in the NSW Industrial Noise Policy, Chapter 5 and Appendix E in relation to wind and temperature inversions.

L6.6 Noise impacts where wind speed exceeds 3 metres per second at 10 metres above the ground must be addressed by:

- a) documenting noise complaints received to identify any higher level of impacts or wind patterns;
- b) where levels of noise complaints indicate a higher level of impact then actions to quantify and ameliorate any enhanced impacts where wind speed exceeds 3 metres per second at 10 metres above the ground should be developed and implemented.

L6.7 The noise limits set by condition L6.1 of the licence do not apply where a current legally binding agreement exists between the proponent and the occupant of a residential property that:

- a) agrees to an alternative noise limit for that property; or
- b) provides an alternative means of compensation to address noise impacts from the premises.

A copy of any agreement must be provided to the EPA before the proponent can take advantage of the agreement.

Environment Protection Licence

Licence - 12290



L7 Hours of Operation

- L7.1 All construction activities at the premises must only be conducted between 7am to 10pm Mondays to Fridays, 8am to 6pm on Saturdays and at no time on Sundays and Public Holidays.
- L7.2 Activities at the premises, other than construction work, may only be carried out at the time specified in the table below, except as permitted by condition L7.3 of the licence.

Stage 1 - Permitted Operating Hours		
Activity	Monday to Friday	Saturday
Vegetation clearing / soil removal	7 am to 6 pm *	
Drilling	7 am to 6 pm *	
Blasting	10 am to 4 pm	
Overburden removal & emplacement	7 am to 6 pm *#	8 am to 2 pm ##
Internal transport of coal products to ROM stockpiles	7 am to 6 pm *#	8 am to 2 pm ##
On-site processing	7 am to 6 pm *#	
Coal transport to rail load-out facility	7 am to 6 pm *#	8 am to 2 pm ##
Maintenance	24 hours	24 hours
Coal loading to trains	7 am to 10 pm **	8 am to 10 pm **##
Coal loading to trucks for domestic market	7 am to 6 pm *	8 am to 2 pm ##
Rehabilitation	7 am to 6 pm *	
* Note 1: Activities restricted to 8 am to 6 pm during temperature inversion conditions, SE winds exceeding 3 m/s and/or NW winds exceeding 3 m/s.		
# Note 2: Activities permitted between 7 am to 10 pm (subject to Note 1) where 15 metres high acoustic bund is complete.		
** Note 3: 24 hour train loading permitted where agreement referred to in condition L6.7 is in place.		
## Note 4: Activities permitted to commence at 7 am where all acoustic bunds identified in the EIS are in place.		

- L7.3 Activities at the premises, other than construction work, may only be carried out at the times specified in the table below after:
- the proponent has completed the pollution reduction study specified in condition U1.1 of this licence; and
 - the results of the pollution reduction study specified in condition U1.1 of this licence demonstrate full compliance with the noise limits set by the EPA's Environmental Guideline – Industrial Noise Policy (INP); and
 - the proponent has obtained written approval from the EPA for the project to progress to Stage 2 Permitted Operating Hours.

Stage 2 - Permitted Operating Hours		
Activity	Monday to Friday	Saturday
Vegetation clearing / soil removal	7 am to 8 pm	

Environment Protection Licence



Licence - 12290

Drilling	7 am to 8 pm	7 am to 2 pm
Blasting	9 am to 5 pm	
Overburden removal & emplacement	24 hours	24 hours
Internal transport of coal products to ROM stockpiles	Midnight to 4 am; and 7 am to midnight	Midnight to 4 am; and 7 am to 2 pm
On-site processing	7 am to 10 pm	7 am to 10 pm
Coal transport to rail load-out facility	7 am to 10 pm	7 am to 2 pm
Maintenance	24 hours	24 hours *
Coal loading to trains	24 hours	24 hours *
Coal loading to trucks for domestic market	7 am to 6 pm	7 am to 2 pm
Rehabilitation	7 am to 10 pm	7 am to 2 pm
* Note: and Sundays, if required		

L7.4 This condition does not apply to the delivery of material outside the hours of operation permitted by condition L7.1, L7.2 or L7.3, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered. In such circumstances, prior notification is provided to the EPA and affected residents as soon as possible, or within a reasonable period in the case of emergency.

L7.5 The hours of operation specified in conditions L7.1, L7.2 or L7.3 may be varied with written consent if the EPA is satisfied that the amenity of the residents in the locality will not be adversely affected.

L8 Blasting

L8.1 The airblast overpressure level from blasting operations in or on the premises must not exceed:

- (a) 115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period; and
- (b) 120 dB (Lin Peak) at any time,

when measured at any point within 3.5 metres of any non- project related residential building or other noise sensitive location such as a school or hospital .

Note: The airblast overpressure values stated above apply when the measurements are performed with equipment having a lower cut- off frequency of 2Hz or less. If the instrumentation has a higher cut- off frequency then a correction of 5 dB should be added to the measured value. Equipment with a lower cut- off frequency exceeding 10Hz should not be used for the purpose of measuring airblast overpressure.

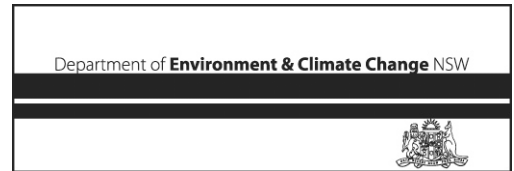
L8.2 Ground vibration peak particle velocity from the blasting operations at the premises must not:

- (a) Exceed 5mm/s for more than 5% of the total number of blasts over a period of 12 months; and
- (b) Exceed 10mm/s at any time,

when measured at any point within 3.5 metre of any non- project related residential building or

Environment Protection Licence

Licence - 12290



other noise sensitive location such as a school or hospital.

- L8.3 Blasting operations on the premises must only be carried out between 9am hours and 5pm, Monday to Friday, except as further restricted by condition L7.2 of this licence.
- L8.4 The hours of operation for blasting operations specified in condition L7.3 may be varied by the EPA, having regard to the effect that the proposed variation would have on the amenity of the residents in the locality, gives written consent to the variation.
- L8.5 Blasting at the premises is limited to 1 blast on each day on which blasting is permitted.

Note: Additional blasts are permitted where it is demonstrated to be necessary for safety reasons and the EPA and neighbours have been notified of the intended blast prior to the additional blast being fired.

L9 Potentially offensive odour

- L9.1 No condition in this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the Protection of the Environment Operations Act 1997 provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

4 Operating conditions

O1 Activities must be carried out in a competent manner

- O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
 - (a) must be maintained in a proper and efficient condition; and
 - (b) must be operated in a proper and efficient manner.



O3 Dust

- O3.1 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.
- O3.2 Trucks transporting coal from the premises must be covered immediately after loading to prevent wind blown emissions and spillage. The covering must be maintained until immediately before unloading the trucks.

O4 Stormwater/ Sediment Control- Construction Phase

- O4.1 An Erosion and Sediment Control Plan (ESCP) must be prepared and implemented. The plan must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The ESCP should be prepared in accordance with the requirements for such plans outlined in *Managing Urban Stormwater: Soils and Construction* (available from the Department of housing).

O5 Stormwater/ Sediment Control- Operation Phase

- O5.1 A Stormwater Management Scheme must be prepared for the development and must be implemented. Implementation of the Scheme must mitigate the impacts of stormwater run-off from and within the premises following the completion of construction activities. The Scheme should be consistent with the Stormwater management Plan for the catchment(s). Where a Stormwater Management Plan has not yet been prepared the Scheme should be consistent with the guidance contained in *Managing Urban Stormwater: Council Handbook* (available from the EPA).

O6 Waste Water Utilisation Areas

- O6.1 Waste water must only be applied to the following areas: Point 15 defined in condition P1.3 of this licence.
- O6.2 Spray from waste water application must not drift beyond the boundary of the waste water utilisation area to which it is applied.

O7 Maintaining Waste Water Utilisation Areas

- O7.1 Waste water utilisation areas must effectively utilise the waste water applied to those areas. This includes the use for pasture or crop production, as well as ensuring the soil is able to absorb the nutrients, salts, hydraulic load and organic materials in the solids or liquids. Monitoring of land and receiving waters to determine the impact of waste water application may be required by the EPA.

O8 Noise

- O8.1 All reversing beepers fitted to vehicles on the premises must be a mid- high frequency broadband type as described in the EIS.



5 Monitoring and recording conditions

M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
- in a legible form, or in a form that can readily be reduced to a legible form;
 - kept for at least 4 years after the monitoring or event to which they relate took place; and
 - produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- the date(s) on which the sample was taken;
 - the time(s) at which the sample was collected;
 - the point at which the sample was taken; and
 - the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Every 6 days	AM-18
Solid Particles	grams per square metre per month	Continuous	AM-19

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Every 6 days	AM-18

POINT 3

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Every 6 days	AM-18
Solid Particles	grams per square metre per month	Continuous	AM-19

Environment Protection Licence

Licence - 12290



POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
PM10	micrograms per cubic metre	Every 6 days	AM-18
Solid Particles	grams per square metre per month	Continuous	AM-19

POINTS 5,6,7,8

Pollutant	Units of measure	Frequency	Sampling Method
Solid Particles	grams per square metre per month	Continuous	AM-19

POINTS 10,11,12,13,14

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Special Frequency 1	Grab sample
Nitrate	milligrams per litre	Special Frequency 1	Grab sample
Nitrogen (total)	milligrams per litre	Special Frequency 1	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
Phosphorus (total)	milligrams per litre	Special Frequency 1	Grab sample
Reactive Phosphorus	milligrams per litre	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	Grab sample

POINT 16

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Every 3 months	Grab sample
Nitrate	milligrams per litre	Every 3 months	Grab sample
Nitrogen (total)	milligrams per litre	Every 3 months	Grab sample
Oil and Grease	milligrams per litre	Every 3 months	Grab sample
Phosphorus (total)	milligrams per litre	Every 3 months	Grab sample
Reactive Phosphorus	milligrams per litre	Every 3 months	Grab sample
Total suspended solids	milligrams per litre	Every 3 months	Grab sample
pH	pH	Every 3 months	Grab sample

POINTS 17,18,19,20,21,22

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Special Frequency 3	Representative sample
Nitrate	milligrams per litre	Special Frequency 3	Representative sample
Nitrogen (total)	milligrams per litre	Special Frequency 3	Representative sample
Phosphorus (total)	milligrams per litre	Special Frequency 3	Representative sample
Reactive Phosphorus	milligrams per litre	Special Frequency 3	Representative sample
Standing Water Level	metres	Special Frequency 3	In situ
pH	pH	Special Frequency 3	In situ

POINTS 23,24,25,26

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Special Frequency 2	Grab sample
Nitrate	milligrams per litre	Special Frequency 2	Grab sample
Nitrogen (total)	milligrams per litre	Special Frequency 2	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 2	Grab sample
Phosphorus (total)	milligrams per litre	Special Frequency 2	Grab sample
Reactive Phosphorus	milligrams per litre	Special Frequency 2	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 2	Grab sample
pH	pH	Special Frequency 2	Grab sample

Environment Protection Licence

Licence - 12290



For the purposes of this condition, **Special Frequency 1** means as soon as practicable after overflow commences and in any case not more than 12 hours after any overflow commencing.

For the purposes of this condition, **Special Frequency 2** means within 12 hours after any overflow from a storage dam(s) on the premises occurring.

For the purposes of this condition, **Special Frequency 3** means initially to establish background levels and then every 6 months.

Note: The frequency of monitoring and the pollutant/s to be monitored may be varied by the EPA once the variability of the water quality and ground water quality is established.

POINT 9

Parameter	Units of measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm/h	continuous	1 hour	AM-4
Wind speed @ 10 metres	m/sec	continuous	15 minute	AM-2 & AM-4
Wind direction @ 10 metres	⁰	continuous	15 minute	AM-2 & AM-4
Temperature @ 2 metres	⁰ C	continuous	15 minute	AM-4
Temperature @ 10 metres	⁰ C	continuous	15 minute	AM-4
Sigma theta @ 10 metres	⁰	continuous	15 minute	AM-2 & AM-4
Solar radiation	W/m ²	continuous	15 minute	AM-4
Additional requirements -Siting				AM-1 & AM-4 & Special method 2
- Measurement				AM-2 & AM-4 & Special method 2

For the purposes of this condition, **Special method 2** means that the applicant must install a permanent meteorological monitoring station and logger. The location of the site chosen for the station and details of equipment, measurement and maintenance/service procedures and schedules to be installed and maintained must be submitted in writing to the EPA and approved in writing by the EPA before any sampling or analysis is carried out. The meteorological monitoring station must be calibrated at least once every 12 months. The EPA is to be provided with the data on request in a Microsoft ® Office software compatible format.

POINTS: Within 30 metres of the residence on the properties “Cintra”, “Old Colliery”, “Railway View”, “Hillview”, “Hazeldene” and “Escott”.

Environment Protection Licence

Licence - 12290



Parameter	Units of measure	Frequency	Sampling Method
Ambient Noise	L _{Aeq} (15 minute) L _{Amax} L _{A1} L _{A10} L _{A90} L _{A1} L _{A10} L _{Amin}	Every month for ½ hour (continuous) during full mining operations for day, evening and night time periods as defined by the EPA's Industrial Noise Policy (INP)	Attended Type 1 Noise Meter

Note: The frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.

POINTS: Within 30 metres of the residence on the properties "Old Colliery", "Railway View", "Hazeldene" and on a rotational basis between the properties "Escott", "Zeolite Australia", "Cintra" and "Preston Park".

Parameter	Units of measure	Frequency	Sampling Method
Blast Noise	dB (Lin Peak)	Every Blast	Type 1 Noise/Blast Logger
Blast Vibration	mm/s	Every Blast	Geophone Logger or similar

Note: The frequency of monitoring and the parameters to be monitored may be varied by the EPA once the variability of the noise impact is established.

M3 Testing methods - concentration limits

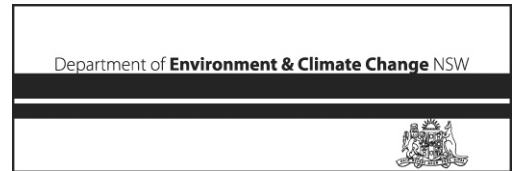
M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:

- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
- 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
- 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.

Note: The Protection of the Environment Operations (Clean Air) Regulation 2002 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".

Environment Protection Licence

Licence - 12290



M3.2 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

M4 Recording of pollution complaints

M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M4.2 The record must include details of the following:

- (a) the date and time of the complaint;
- (b) the method by which the complaint was made;
- (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- (d) the nature of the complaint;
- (e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- (f) if no action was taken by the licensee, the reasons why no action was taken.

M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M5 Telephone complaints line

M5.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.

M5.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.

M5.3 Conditions M5.1 and M5.2 do not apply until 3 months after:

- (a) the date of the issue of this licence or
- (b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.

M6 Requirement to monitor volume or mass

M6.1 Not applicable.



6 Reporting conditions

R1 Annual return documents

What documents must an Annual Return contain?

R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:

- (a) a Statement of Compliance; and
- (b) a Monitoring and Complaints Summary.

A copy of the form in which the Annual Return must be supplied to the EPA accompanies this licence. Before the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

Period covered by Annual Return

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

R1.3 Where this licence is transferred from the licensee to a new licensee:

- (a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
- (b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:

- (a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
- (b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

Deadline for Annual Return

R1.5 The Annual Return for the reporting period must be supplied to the EPA by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

Notification where actual load can not be calculated

R1.6 Not applicable.



Licensee must retain copy of Annual Return

R1.7 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

Certifying of Statement of Compliance and signing of Monitoring and Complaints Summary

R1.8 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- (a) the licence holder; or
- (b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R1.9 A person who has been given written approval to certify a certificate of compliance under a licence issued under the Pollution Control Act 1970 is taken to be approved for the purpose of this condition until the date of first review of this licence.

R2 Notification of environmental harm

Note: The licensee or its employees must notify the EPA of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R2.1 Notifications must be made by telephoning the EPA's Pollution Line service on 131 555.

R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- (a) where this licence applies to premises, an event has occurred at the premises; or
- (b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

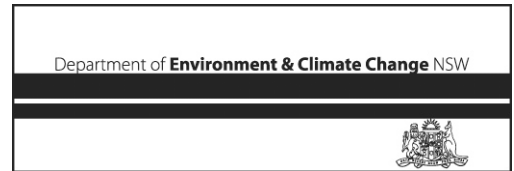
R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:

- (a) the cause, time and duration of the event;
- (b) the type, volume and concentration of every pollutant discharged as a result of the event;
- (c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;

Environment Protection Licence

Licence - 12290



- (d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- (e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
- (f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
- (g) any other relevant matters.

R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

General conditions

G1 Copy of licence kept at the premises

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

Pollution studies and reduction programs

U1 Noise Monitoring and Assessment Program

- U1.1 To justify the extension of operating hours from Stage 1 and Stage 2, the proponent must undertake a noise monitoring and assessment of the impacts of typical construction and mining activities on the premises. The noise monitoring and assessment program must be approved by the EPA prior to any activities commencing on the premises and must include, but not be limited to:
 - a) a full description of activities occurring during noise monitoring;
 - b) a range of representative noise monitoring at locations defined in condition P1.4 over the initial 6 month construction, mine operation and rail loading period (i.e. during *day*, *evening* and *night* time; temperature inversions; SE and NW winds up to and exceeding 3 m/s);
 - c) a comparison of actual noise monitoring results to those predicted in the noise assessment included in the EIS for the proposal;
 - d) modelling of noise impacts at locations defined in condition P1.4 for all activities at the mine for Stage 2 operating hours. The modelling must use actual noise modelling

Environment Protection Licence

Licence - 12290



results to calibrate the noise model and account for all site specific meteorological conditions as far as practicable (i.e. including temperature inversions and SE/NW winds up to and exceeding 3 m/s).

For the purposes of this condition, *Stage 1* and *Stage 2* are defined in conditions L7.2 and L7.3 of the licence respectively.

For the purposes of this condition, *day*, *evening* and *night* are defined in the EPA's Industrial noise Policy (INP).

Special conditions

Dictionary

General Dictionary

In this licence, unless the contrary is indicated, the terms below have the following meanings:

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
COD	Means chemical oxygen demand

Environment Protection Licence



Licence - 12290

composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 1998.
flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
industrial waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
inert waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 1998
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997

Environment Protection Licence



Licence - 12290

regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
reprocessing of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
treatment of waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste code	Means the waste codes listed in Appendix 5 of the EPA document A Guide to Licensing Part B.
waste type	Means Group A, Group B, Group C, inert, solid, industrial or hazardous waste

Mr Stephen O'Donoghue

Environment Protection Authority

(By Delegation)

Date of this edition - 16-Oct-2007

Environment Protection Licence

Licence - 12290



End Notes

- 1 Licence varied by notice 1059992, issued on 23-May-2006, which came into effect on 23-May-2006.
- 2 Licence varied by notice 1064880, issued on 14-Sep-2006, which came into effect on 14-Sep-2006.
- 3 Licence varied by notice 1067351, issued on 04-Jan-2007, which came into effect on 04-Jan-2007.
- 4 Licence fee period changed by notice 1079180 approved on .