

Environment Protection Licence



Licence - 395

Licence Details

Number:	395
Anniversary Date:	01-January

Licensee

CENTENNIAL NEWSTAN PTY LIMITED

100 MILLER ROAD

FASSIFERN NSW 2283

Premises

NEWSTAN COLLIERY

100 MILLER ROAD

FASSIFERN NSW 2283

Scheduled Activity

Coal Works

Mining for Coal

Fee Based Activity

Scale

Coal works	> 2000000-5000000 T handled
Mining for coal	> 2000000-3500000 T produced

Region

North East - Hunter

Ground Floor, NSW Govt Offices, 117 Bull Street
NEWCASTLE WEST NSW 2302

Phone: (02) 4908 6800

Fax: (02) 4908 6810

PO Box 488G NEWCASTLE

NSW 2300

Environment Protection Licence

Licence - 395



INFORMATION ABOUT THIS LICENCE	4
Dictionary	4
Responsibilities of licensee	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	6
A1 What the licence authorises and regulates	6
A2 Premises or plant to which this licence applies	6
A3 Other activities	6
A4 Information supplied to the EPA	6
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	7
P1 Location of monitoring/discharge points and areas	7
3 LIMIT CONDITIONS	8
L1 Pollution of waters	8
L2 Concentration limits	8
L3 Volume and mass limits	11
L4 Waste	12
4 OPERATING CONDITIONS	12
O1 Activities must be carried out in a competent manner	12
O2 Maintenance of plant and equipment	12
O3 Dust	13
5 MONITORING AND RECORDING CONDITIONS	13
M1 Monitoring records	13
M2 Requirement to monitor concentration of pollutants discharged	14
M3 Testing methods - concentration limits	21
M4 Weather monitoring	22
M5 Recording of pollution complaints	22
M6 Telephone complaints line	23
M7 Requirement to monitor volume or mass	23
M8 Other monitoring and recording conditions	24
6 REPORTING CONDITIONS	24

Environment Protection Licence



Licence - 395

R1	Annual return documents	24
R2	Notification of environmental harm	25
R3	Written report	25
R4	Other reporting conditions	26
7	GENERAL CONDITIONS	26
G1	Copy of licence kept at the premises or plant	26
8	POLLUTION STUDIES AND REDUCTION PROGRAMS	26
U1	PRP 2 - Assessment of Potential Impacts of Metals	26
U2	Coal Mine Particulate Matter Control Best Practice	27
U3	Construction of a Water Treatment Plant	27
U4	Ecotoxicological Monitoring Program	29
9	SPECIAL CONDITIONS	30
E1	Transfer of waste water to Centennial Awaba	30
E2	Implementation of Additional Water Treatment Works	30
	DICTIONARY	31
	General Dictionary	31

Environment Protection Licence

Licence - 395



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).

Environment Protection Licence

Licence - 395



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

CENTENNIAL NEWSTAN PTY LIMITED
100 MILLER ROAD
FASSIFERN NSW 2283

subject to the conditions which follow.

Environment Protection Licence

Licence - 395



1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 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	Fee Based Activity	Scale
Coal Works	Coal works	> 2000000 - 5000000 T handled
Mining for Coal	Mining for coal	> 2000000 - 3500000 T produced

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
NEWSTAN COLLIERY
100 MILLER ROAD
FASSIFERN
NSW 2283
NEWSTAN COLLIERY, AS SHOWN ON PLAN NUMBER NS2932 - PLAN OF PREMISES FOR CONDITION A2.1 OF EPL 395" RECEIVED BY THE EPA ON 29 JUNE 2012, A COPY OF WHICH HAS BEEN FILED ON EPA FILE LIC08/510-06'

A3 Other activities

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

Ancillary Activity
SEWAGE TREATMENT SYSTEM

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.

Environment Protection Licence

Licence - 395



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.

<i>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
7	Dust deposition gauge		Labelled 'D1' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
8	Dust deposition gauge		Labelled 'D2' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
9	Dust deposition gauge		Labelled 'D3' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
10	Dust deposition gauge		Labelled 'D4' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
11	Dust deposition gauge		Labelled 'D5' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
12	Dust deposition gauge		Labelled 'D6' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
13	Dust deposition gauge		Labelled 'D7' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
14	Dust deposition gauge		Labelled 'D9' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
15	High volume air sampler		Labelled 'HVS1' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677
16	High volume air sampler		Labelled 'HVS2' on map titled Newstan Colliery Location of Dust Gauges and HV Samples NS2677

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

Environment Protection Licence

Licence - 395



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	Location Description
1	Discharge to waters Discharge water quality monitoring Volume monitoring	Discharge to waters Discharge water quality monitoring Volume monitoring	Outlet labelled as LDP1 - as shown on plan number NS2932 - Plan of Premises - received by the EPA on 29 June 2012.
2	Discharge to waters. Discharge water quality monitoring	Discharge to waters. Discharge water quality monitoring	Outlet labelled as "Final Pollution Dam Overflow LDP002" as shown on Fig NS2385 dated 18/12/07.
3	Ambient water quality monitoring		LT Creek labelled as "Upstream LDP002" on Fig NS2385, dated 18/12/07.
4	Ambient water quality monitoring		LT Creek labelled as "Downstream LDP002" on Fig NS2385, dated 18/12/07.
5	Ambient water quality monitoring		Upstream on LT Creek South Arm. Labelled as "Upstream on LT Creek South Arm" on Fig NS2385 dated 18/12/07.
6	Ambient water quality monitoring		Labelled as "Downstream on LT Creek South Arm near Haulage Rd" as shown on Figure NS2385, dated 18/12/07
17	Discharge to waters Discharge water quality monitoring. Volume monitoring.	Discharge to waters Discharge water quality monitoring. Volume monitoring.	Outlet labelled as Stony Creek Pipeline (WMP19) - as shown on Plan Number NS2932 - received by the EPA on 29 June 2012.
18	Ambient water quality monitoring		Upstream from Point 17 (Stony Creek Pipeline) (exact location to be advised)
19	Ambient water quality monitoring		Outlet labelled as "WMP03" on plan titled "Newstan Colliery, Surface Plan, All Water Monitoring Points" dated 25/02/2012.

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 Concentration limits

Environment Protection Licence



Licence - 395

Note: This is an interim condition that will apply until concentration limits for Point 1 are confirmed as referred to in condition U3.4(d)

L2.1 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.

L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.

L2.4 Water and/or Land Concentration Limits

POINT 1,17

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Aluminium (dissolved)	milligrams per litre				0.22
Antimony	micrograms per litre				9
Arsenic (dissolved)	micrograms per litre				42
Barium (dissolved)	micrograms per litre				250
Beryllium (dissolved)	micrograms per litre				4
Bicarbonate alkalinity	milligrams of calcium carbonate per litre				711
Boron (dissolved)	micrograms per litre				370
Cadmium (dissolved)	micrograms per litre				0.4
Calcium	milligrams per litre				38
Chloride	milligrams per litre				516
Chromium (dissolved)	micrograms per litre				6

Environment Protection Licence

Licence - 395



Cobalt (dissolved)	micrograms per litre	3
Conductivity	microsiemens per centimetre	3250
Copper (dissolved)	micrograms per litre	7
Iron (dissolved)	milligrams per litre	230
Lead (dissolved)	micrograms per litre	23
Lithium (dissolved)	micrograms per litre	164
Magnesium	milligrams per litre	16
Manganese (dissolved)	micrograms per litre	1200
Mercury (dissolved)	micrograms per litre	0.6
Molybdenum (dissolved)	micrograms per litre	45
Nickel (dissolved)	micrograms per litre	24
Nitrogen (total)	milligrams per litre	2.7
Oil and Grease	milligrams per litre	6
pH	pH	6.5-8.5
Phosphorus (total)	milligrams per litre	0.41
Potassium	milligrams per litre	6
Selenium (total)	micrograms per litre	11
Silica (dissolved)	milligrams per litre	24.8
Silver (dissolved)	micrograms per litre	<1
Sodium	milligrams per litre	635

Environment Protection Licence

Licence - 395



Sulfate	milligrams per litre	232
Tin	micrograms per litre	3
Titanium	micrograms per litre	10
TKN-N	milligrams per litre	2.6

POINT 1,2,17

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Total suspended solids	milligrams per litre				50

POINT 1,17

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Vanadium (dissolved)	micrograms per litre				<10
Zinc (dissolved)	micrograms per litre				40

POINT 2

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

L3 Volume and mass limits

- L3.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:
- liquids discharged to water; or;
 - solids or liquids applied to the area;
- must not exceed the volume/mass limit specified for that discharge point or area.

Environment Protection Licence



Licence - 395

Point	Unit of Measure	Volume/Mass Limit
1	kilolitres per day	11,000

L4 Waste

- L4.1 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.
- L4.2 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence.

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:
- the processing, handling, movement and storage of materials and substances used to carry out the activity; and
 - 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:
- must be maintained in a proper and efficient condition; and
 - must be operated in a proper and efficient manner.
- O2.2 The licensee is responsible for the correct operation of the sewage treatment system on their premises.
- O2.3 Correct operation involves regular supervision and system maintenance. The licensee must be aware of the system management requirements and must ensure that the necessary service contracts are in place.
- O2.4 The sewage treatment system must be serviced by a suitably qualified and experienced wastewater technician at least once in each quarterly period and a minimum of four times per year.
- O2.5 The licensee must record each inspection and any actions required or recommended by the technician including all results of tests performed on the sewage treatment system by the technician as required in Condition O4.3.
- O2.6 The licensee must prepare a sewage treatment system maintenance program. The program must include:
- Certification from the system provider that the sewage treatment system is operating within its capacity;

Environment Protection Licence

Licence - 395



- b) Date, time and results of all routine maintenance procedures undertaken to the sewage treatment system; and
- c) Provide written records of each quarterly inspection.

O3 Dust

- O3.1 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- O3.2 Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.
- O3.3 All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.
- O3.4 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.
- O3.5 The tailgates of all haulage trucks leaving the premises must be securely fixed prior to loading or immediately after unloading to prevent loss of material.
- O3.6 Coal stockpiles must be maintained in a condition that will minimise the generation and emission of dust on the premises.

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:
 - a) in a legible form, or in a form that can readily be reduced to a legible form;
 - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
 - c) 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:
 - a) the date(s) on which the sample was taken;
 - b) the time(s) at which the sample was collected;
 - c) the point at which the sample was taken; and
 - d) the name of the person who collected the sample.

Environment Protection Licence

Licence - 395



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:

M2.2 Air Monitoring Requirements

POINT 7,8,9,10,11,12,13,14

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19

POINT 15,16

Pollutant	Units of measure	Frequency	Sampling Method
Particulate matter	micrograms per cubic metre	Every 6 days	AM-18
Total suspended particles	micrograms per cubic metre	Every 6 days	AM-15

M2.3 Water and/ or Land Monitoring Requirements

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Weekly	Composite sample
Aluminium (total)	milligrams per litre	Weekly	Composite sample
Antimony	micrograms per litre	Weekly	Composite sample
Arsenic (dissolved)	micrograms per litre	Weekly	Composite sample
Arsenic (total)	micrograms per litre	Weekly	Composite sample
Barium	micrograms per litre	Weekly	Composite sample
Barium (dissolved)	micrograms per litre	Weekly	Composite sample
Beryllium (dissolved)	micrograms per litre	Weekly	Composite sample
Beryllium (total)	micrograms per litre	Weekly	Composite sample
Bicarbonate alkalinity	milligrams of calcium carbonate per litre	Weekly	Composite sample
Boron	micrograms per litre	Weekly	Composite sample
Boron (dissolved)	micrograms per litre	Weekly	Composite sample
Cadmium (dissolved)	micrograms per litre	Weekly	Composite sample
Cadmium (total)	micrograms per litre	Weekly	Composite sample

Environment Protection Licence



Licence - 395

Calcium	milligrams per litre	Weekly	Composite sample
Chloride	milligrams per litre	Weekly	Composite sample
Chromium (dissolved)	micrograms per litre	Weekly	Composite sample
Chromium (total)	micrograms per litre	Weekly	Composite sample
Cobalt (dissolved)	micrograms per litre	Weekly	Composite sample
Cobalt (total)	micrograms per litre	Weekly	Composite sample
Conductivity	microsiemens per centimetre	Daily	Composite sample
Copper (dissolved)	micrograms per litre	Weekly	Composite sample
Copper (total)	micrograms per litre	Weekly	Composite sample
Iron	milligrams per litre	Weekly	Composite sample
Iron (dissolved)	milligrams per litre	Weekly	Composite sample
Lead (dissolved)	micrograms per litre	Weekly	Composite sample
Lead (total)	micrograms per litre	Weekly	Composite sample
Lithium	micrograms per litre	Weekly	Composite sample
Lithium (dissolved)	micrograms per litre	Weekly	Composite sample
Magnesium	milligrams per litre	Weekly	Composite sample
Manganese (dissolved)	micrograms per litre	Weekly	Composite sample
Mercury (dissolved)	micrograms per litre	Weekly	Composite sample
Mercury (total)	micrograms per litre	Weekly	Composite sample
Molybdenum (dissolved)	micrograms per litre	Weekly	Composite sample
Molybdenum (total)	micrograms per litre	Weekly	Composite sample
Nickel (dissolved)	micrograms per litre	Weekly	Composite sample
Nickel (total)	micrograms per litre	Weekly	Composite sample
Nitrogen (total)	milligrams per litre	Weekly	Composite sample
Oil and Grease	milligrams per litre	Weekly	Composite sample
pH	pH	Weekly	Composite sample
Phosphorus	milligrams per litre	Weekly	Composite sample
Potassium	milligrams per litre	Weekly	Composite sample
Selenium (dissolved)	micrograms per litre	Weekly	Composite sample
Selenium (total)	micrograms per litre	Weekly	Composite sample
Silica	milligrams per litre	Weekly	Composite sample
Silica (dissolved)	milligrams per litre	Weekly	Composite sample
Silver (dissolved)	micrograms per litre	Weekly	Composite sample
Silver (total)	micrograms per litre	Weekly	Composite sample
Sodium	milligrams per litre	Weekly	Composite sample
Sulfate	milligrams per litre	Weekly	Composite sample
Tin	micrograms per litre	Weekly	Composite sample
Titanium	micrograms per litre	Weekly	Composite sample
TKN-N	milligrams per litre	Weekly	Composite sample
Total Heavy Metals	micrograms per litre	Weekly	Composite sample
Total suspended solids	milligrams per litre	Weekly	Composite sample
Turbidity	nephelometric turbidity units	Weekly	Grab sample

Environment Protection Licence



Licence - 395

Vanadium (dissolved)	micrograms per litre	Weekly	Composite sample
Vanadium (total)	micrograms per litre	Weekly	Composite sample
Zinc (dissolved)	micrograms per litre	Weekly	Composite sample
Zinc (total)	micrograms per litre	Weekly	Composite sample

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Weekly during any discharge	Grab sample
Aluminium (total)	milligrams per litre	Weekly during any discharge	Grab sample
Antimony	micrograms per litre	Weekly during any discharge	Grab sample
Arsenic (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Arsenic (total)	micrograms per litre	Weekly during any discharge	Grab sample
Barium	micrograms per litre	Weekly during any discharge	Grab sample
Beryllium (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Beryllium (total)	micrograms per litre	Weekly during any discharge	Grab sample
Boron	micrograms per litre	Weekly during any discharge	Grab sample
Cadmium (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Cadmium (total)	micrograms per litre	Weekly during any discharge	Grab sample
Calcium	milligrams per litre	Weekly during any discharge	Grab sample
Chromium (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Chromium (total)	micrograms per litre	Weekly during any discharge	Grab sample
Cobalt (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Cobalt (total)	micrograms per litre	Weekly during any discharge	Grab sample
Conductivity	microsiemens per centimetre	Special Frequency 1	Grab sample
Copper (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Copper (total)	micrograms per litre	Weekly during any discharge	Grab sample
Iron	milligrams per litre	Weekly during any discharge	Grab sample
Lead (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample

Environment Protection Licence



Licence - 395

Lead (total)	micrograms per litre	Weekly during any discharge	Grab sample
Lithium	micrograms per litre	Weekly during any discharge	Grab sample
Magnesium	milligrams per litre	Weekly during any discharge	Grab sample
Magnesium (dissolved)	milligrams per litre	Weekly during any discharge	Grab sample
Mercury (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Mercury (total)	micrograms per litre	Weekly during any discharge	Grab sample
Molybdenum (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Molybdenum (total)	micrograms per litre	Weekly during any discharge	Grab sample
Nickel (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Nickel (total)	micrograms per litre	Weekly during any discharge	Grab sample
Nitrogen (total)	milligrams per litre	Weekly during any discharge	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	Grab sample
Phosphorus	milligrams per litre	Weekly during any discharge	Grab sample
Potassium	milligrams per litre	Weekly during any discharge	Grab sample
Selenium (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Selenium (total)	micrograms per litre	Weekly during any discharge	Grab sample
Silica	milligrams per litre	Weekly during any discharge	Grab sample
Silver (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Silver (total)	micrograms per litre	Weekly during any discharge	Grab sample
Sodium	milligrams per litre	Weekly during any discharge	Grab sample
Sulfate	milligrams per litre	Weekly during any discharge	Grab sample
Tin	micrograms per litre	Weekly during any discharge	Grab sample
Titanium	micrograms per litre	Weekly during any discharge	Grab sample
Total Heavy Metals	micrograms per litre	Weekly during any discharge	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
Turbidity	nephelometric turbidity units	Special Frequency 1	Grab sample

Environment Protection Licence



Licence - 395

Vanadium (dissolved)	micrograms per litre	Weekly during any discharge	Grab sample
Vanadium (total)	micrograms per litre	Weekly during any discharge	Grab sample
Zinc (dissolved)	milligrams per litre	Weekly during any discharge	Grab sample
Zinc (total)	micrograms per litre	Weekly during any discharge	Grab sample

POINT 3,4,5,6

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Monthly during discharge	Grab sample
Aluminium (total)	milligrams per litre	Monthly during discharge	Grab sample
Arsenic (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Arsenic (total)	micrograms per litre	Monthly during discharge	Grab sample
Beryllium (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Beryllium (total)	micrograms per litre	Monthly during discharge	Grab sample
Cadmium (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Cadmium (total)	micrograms per litre	Monthly during discharge	Grab sample
Chromium (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Chromium (total)	micrograms per litre	Monthly during discharge	Grab sample
Cobalt (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Cobalt (total)	micrograms per litre	Monthly during discharge	Grab sample
Conductivity	microsiemens per centimetre	Special Frequency 1	Grab sample
Copper (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Copper (total)	micrograms per litre	Monthly during discharge	Grab sample
Lead (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Lead (total)	micrograms per litre	Monthly during discharge	Grab sample
Mercury (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Mercury (total)	micrograms per litre	Monthly during discharge	Grab sample
Molybdenum (dissolved)	micrograms per litre	Monthly during discharge	Grab sample

Environment Protection Licence



Licence - 395

Molybdenum (total)	micrograms per litre	Monthly during discharge	Grab sample
Nickel (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Nickel (total)	micrograms per litre	Monthly during discharge	Grab sample
Nitrogen (ammonia)	milligrams per litre	Monthly during discharge	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	Grab sample
Phosphorus	milligrams per litre	Monthly during discharge	Grab sample
Selenium (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Selenium (total)	micrograms per litre	Monthly during discharge	Grab sample
Silver (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Silver (total)	micrograms per litre	Monthly during discharge	Grab sample
Total Heavy Metals	micrograms per litre	Monthly during discharge	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
Turbidity	nephelometric turbidity units	Special Frequency 1	Grab sample
Vanadium (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Vanadium (total)	micrograms per litre	Monthly during discharge	Grab sample
Zinc (dissolved)	micrograms per litre	Monthly during discharge	Grab sample
Zinc (total)	micrograms per litre	Monthly during discharge	Grab sample

POINT 17

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Special Frequency 1	Grab sample
Aluminium (total)	milligrams per litre	Special Frequency 1	Grab sample
Antimony	micrograms per litre	Special Frequency 1	Grab sample
Arsenic (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Arsenic (total)	micrograms per litre	Special Frequency 1	Grab sample
Barium (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Beryllium (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Beryllium (total)	micrograms per litre	Special Frequency 1	Grab sample
Bicarbonate alkalinity	milligrams of calcium carbonate per litre	Special Frequency 1	Grab sample
Boron (dissolved)	micrograms per litre	Special Frequency 1	Grab sample

Environment Protection Licence



Licence - 395

Cadmium (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Cadmium (total)	micrograms per litre	Special Frequency 1	Grab sample
Calcium	milligrams per litre	Special Frequency 1	Grab sample
Chloride	milligrams per litre	Special Frequency 1	Grab sample
Chromium (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Chromium (total)	micrograms per litre	Special Frequency 1	Grab sample
Cobalt (dissolved)	micrograms per cubic metre	Special Frequency 1	Grab sample
Cobalt (total)	micrograms per litre	Special Frequency 1	Grab sample
Conductivity	microsiemens per centimetre	Special Frequency 2	Continuously
Copper (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Copper (total)	micrograms per litre	Special Frequency 1	Grab sample
Iron	milligrams per litre	Special Frequency 1	Grab sample
Iron (dissolved)	milligrams per litre	Special Frequency 1	Grab sample
Lead (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Lead (total)	micrograms per litre	Special Frequency 1	Grab sample
Lithium (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Magnesium	milligrams per litre	Special Frequency 1	Grab sample
Manganese (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Mercury (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Mercury (total)	micrograms per litre	Special Frequency 1	Grab sample
Molybdenum (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Molybdenum (total)	micrograms per litre	Special Frequency 1	Grab sample
Nickel (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Nickel (total)	micrograms per litre	Special Frequency 1	Grab sample
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	Grab sample
Phosphorus	milligrams per litre	Special Frequency 1	Grab sample
Potassium	milligrams per litre	Special Frequency 1	Grab sample
Selenium (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Selenium (total)	micrograms per litre	Special Frequency 1	Grab sample
Silica (dissolved)	milligrams per litre	Special Frequency 1	Grab sample
Silver (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Sodium	milligrams per litre	Special Frequency 1	Grab sample
Sulfate	milligrams per litre	Special Frequency 1	Grab sample
Temperature	degrees Celsius	Special Frequency 2	Continuously
Tin	micrograms per litre	Special Frequency 1	Grab sample
Titanium	micrograms per litre	Special Frequency 1	Grab sample
TKN-N	milligrams per litre	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample
Turbidity	nephelometric turbidity units	Special Frequency 2	Continuously

Environment Protection Licence

Licence - 395



Vanadium (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Vanadium (total)	micrograms per litre	Special Frequency 1	Grab sample
Zinc (dissolved)	micrograms per litre	Special Frequency 1	Grab sample
Zinc (total)	micrograms per litre	Special Frequency 1	Grab sample

POINT 18

Pollutant	Units of measure	Frequency	Sampling Method
Temperature	degrees Celsius	Special Frequency 2	Continuously

POINT 19

Pollutant	Units of measure	Frequency	Sampling Method
Copper (dissolved)	micrograms per litre	Weekly	Composite sample
Lead (dissolved)	micrograms per litre	Weekly	Composite sample
Selenium (dissolved)	micrograms per litre	Weekly	Composite sample
Zinc (dissolved)	micrograms per litre	Weekly	Composite sample

Note: Special Frequency 1 means in the event of a discharge, a grab sample of the water discharged must be collected:

- a) within the first 6 hours of any discharge occurring; and
- b) Every seven (7) days thereafter for the duration of the discharge;

Special Frequency 2 means continuous sampling during any discharge, subject to the following in respect of Point 17 and Point 18:

(a) A continuous monitoring system will be implemented by 31 March 2013, weather permitting. It is noted that, to minimise the possibility of a flow of mine wastewater through the pipeline during installation and excavation works, the installation of continuous monitoring equipment will not commence until there is a two (2) metre buffer from the water level in the seam to the Stoney Creek pipeline inlet.

(b) In the event of a discharge occurring prior to the implementation of continuous monitoring being installed, hourly monitoring must be carried out. This monitoring will commence within the first six (6) hours of any discharge occurring.

M2.4 The licensee must conduct monitoring for the pollutants listed in Condition M2.3. At the end of the first six (6) months monitoring all results must be submitted to the EPA to be reviewed.

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:

- 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

Environment Protection Licence

Licence - 395



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.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* 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".

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 Weather monitoring

M4.1 For each monitoring point specified in the table below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licence must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

POINT W1

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	24 hour	AM-4
Wind direction	degrees	Continuous	1 hour	AM-2 and AM-4
Wind speed	metres per second	Continuous	1 hour	AM-2 and AM-4

M4.2 For the purpose of condition M4.1, Point W1 refers to a meteorological station established on the premises.

M5 Recording of pollution complaints

M5.1 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.

M5.2 The record must include details of the following:

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

Environment Protection Licence



Licence - 395

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

M6.1 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.

M6.2 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.

M6.3 The preceding two conditions do not apply until 3 months after:

- the date of the issue of this licence or
- 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.

M7 Requirement to monitor volume or mass

M7.1 For each discharge point or utilisation area specified below, the licensee must monitor:

- the volume of liquids discharged to water or applied to the area;
- the mass of solids applied to the area;
- the mass of pollutants emitted to the air;

at the frequency and using the method and units of measure, specified below.

POINT 1

Frequency	Unit of Measure	Sampling Method
Daily during any discharge	megalitres per day	Continuously

POINT 2

Frequency	Unit of Measure	Sampling Method
Daily during any discharge	megalitres per day	Continuously

POINT 17

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	kilolitres per day	Continuously

Note: In relation to Point 17, volume/mass is to be determined in the event of a discharge by calculation until continuous monitoring equipment is installed as per note to condition M2.3

Environment Protection Licence

Licence - 395



M8 Other monitoring and recording conditions

M8.1 Sediment Monitoring

The licensee must undertake quarterly monitoring of the sediments within the Bywash Dam located downstream of Point 1 and at three locations (including one within the intertidal zone) within LT Creek downstream of the point referred to as "WMP03" for the purpose of continuing to assess the capacity of sediments in the downstream environment to adsorb metals. Monitoring must be undertaken of the sediments for the suite of nine metals provided in table 3.5.1 of the ANZECC and ARMCANZ Sediment Quality Guidelines.

Note 1: The location of the point referred to as "WMP03" is shown on the plan titled "Newstan Colliery, Surface Plan, All Water Monitoring Points" dated 25 November 2009 attached to the Licence Variation Application dated 23 February 2012.

Note 2: After the commissioning of a Water Treatment Plant, the frequency of the monitoring can occur at 6 month intervals. The EPA will review the frequency of monitoring when two years of data of the monitoring under this clause is available.

6 Reporting Conditions

R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
- a Statement of Compliance; and
 - a Monitoring and Complaints Summary.

At 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.

- 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:

- 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
- 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:

- in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or

Environment Protection Licence

Licence - 395



b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

- 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').
- R1.6 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.
- R1.7 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.
- R1.8 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 all relevant authorities of incidents causing or threatening material harm to the environment immediately 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 Environment 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;
 - d) the name, address and business hours telephone number of every other person (of whom the licensee

Environment Protection Licence

Licence - 395



- 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.

R4 Other reporting conditions

R4.1 The sewage treatment system maintenance program required by Condition M8.1 must be submitted annually to the EPA with the Annual Return.

R4.2 The licensee must retain a copy of each report required by Condition O4.4 for 3 years from the date each record is made.

7 General Conditions

G1 Copy of licence kept at the premises or plant

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.

8 Pollution Studies and Reduction Programs

U1 PRP 2 - Assessment of Potential Impacts of Metals

U1.1 Upon completion of 24 months of monitoring for metals the licensee must within (two) 2 months conduct an assessment of metals detected in wastewater discharges from the mine in accordance with ANZECC water quality guidelines and provide this assessment to EPA Regional Manager Hunter within (one) 1 month.

Note: EPA will use this assessment to vary the EPL to include metal discharge limits if the assessment in accordance with ANZECC criteria indicates limits may be required to protect receiving waters.

Environment Protection Licence

Licence - 395



U2 Coal Mine Particulate Matter Control Best Practice

- U2.1 The Licensee must conduct a site specific Best Management Practice (BMP) determination to identify the most practicable means to reduce particle emissions.
- U2.2 The Licensee must prepare a report which includes, but is not necessarily limited to, the following:
- identification, quantification and justification of existing measures that are being used to minimise particle emissions;
 - identification, quantification and justification of best practice measures that could be used to minimise particle emissions;
 - evaluation of the practicability of implementing these best practice measures; and
 - a proposed timeframe for implementing these best practice measures.
- In preparing the report, the Licensee must utilise the document entitled *Coal Mine Particulate Matter Control Best Practice – Site Specific Determination Guideline – November 2011*.
- U2.3 All cost related information is to be included as Appendix 1 of the Report required by condition U2.2 above.
- U2.4 The Report required by condition U2.2 must be submitted by the Licensee to the Office of Environment and Heritage's Regional Manager Hunter, at PO Box 488G, NEWCASTLE WEST 2302 by 28 September 2012.
- U2.5 The report required by condition U2.2 above, except for cost related information contained in Appendix 1 of the Report, must be made publicly available by the Licensee on the Licensee's website by 5 October 2012.

U3 Construction of a Water Treatment Plant

- U3.1 a) The licensee must design, construct, commission, operate and maintain a Water Treatment Plant capable of treating at least 11ML per day of water to be discharged from Point 1.
- b) The Water Treatment Plant must be designed and constructed such that the concentration of pollutants discharging the premises at Point 1 meet the indicative concentration limits specified in the table below. It is noted that these are indicative targets for design purposes and concentration limits will be confirmed following the commissioning and monitoring period (refer to condition U3.4 and condition U4.1). Until the concentration limits are confirmed as referred to in condition U3.4, the limits for Point 1 set out in condition L2.4 continue to apply for compliance purposes. Where pH quality is specified, pH must be within the range specified.
- c) To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.

Environment Protection Licence

Licence - 395



Pollutant	Concentration Limit
Total Suspended Solids	30mg/L
Conductivity	3000uS/cm
pH	6.5-8.5
Oil and grease	5mg/L
Bicarbonate alkalinity	662mg CaCO ₃ /L
TKN as N	0.6mg/L
Total nitrogen as N	0.6mg/L
Total phosphorous	0.5mg/L
Chloride	516mg/L
Sulfate	232mg/L
Calcium	38mg/L
Magnesium	16mg/L
Potassium	6mg/L
Sodium	635mg/L
Aluminium (dissolved)	55mg/L
Arsenic (dissolved)	13ug/L
Beryllium (dissolved)	2ug/L
Boron (dissolved)	290ug/L
Cadmium (dissolved)	0.2ug/L
Chromium	4ug/L
Cobalt (dissolved)	3ug/L
Copper (dissolved)	3.5ug/L
Iron (dissolved)	230ug/L
Lead (dissolved)	10ug/L
Lithium (dissolved)	150ug/L
Manganese (dissolved)	1200ug/L
Mercury (dissolved)	0.6ug/L
Molybdenum (dissolved)	30ug/L
Nickel (dissolved)	17ug/L
Selenium (total)	<10ug/L
Silica (dissolved)	24.8mg/L
Silver (dissolved)	<1ug/L
Vanadium (dissolved)	<1ug/L
Zinc (dissolved)	20ug/L

U3.2 The water treatment plant must be designed, constructed, operated and maintained such that the specified toxic effect of the effluent released from Point 1 on the specified test organism must not exceed

Environment Protection Licence

Licence - 395



the corresponding percentile limit listed for that organism in the table below.

Species (toxic effect)	Concentration limit (% effluent by volume)
Ceriodaphnia cf dubia reproduction (8-day EC50 reproductive impairment)	50
Eastern Rainbow fish embryo development and post-hatch survival test (10-day EC50)	50
Freshwater shrimp Paratya australiensis survival (10-day LC50)	50

U3.3 The water treatment plant must be constructed by 31 December 2013 at which time the three (3) month commissioning period will commence.

U3.4 a) The licensee must provide written notification to the EPA's Regional Manager - Hunter upon the date that the Water Treatment Plant is first used to treat water as part of its commissioning.

b) The licensee must complete the commissioning of the Water Treatment Plant within three (3) months of the Water Treatment plant being first used to treat water.

c) Within four (4) months of the Water Treatment Plant first being used to treat water as part of its commissioning the licensee must provide a report to EPA's Regional Manager - Hunter that provides the result of all concentration and volume monitoring undertaken during the three (3) month commissioning period, and report on the outcome of the plant's commissioning.

Note: Note: The EPA anticipates that it will confirm the concentration limits for Point 1 by 30 September 2014. These concentration limits will be determined by the EPA following consideration of the following:

- (i) the completion of the commissioning of the Water Treatment Plant;
- (ii) review of the results of monitoring referred to in condition U3.4 and condition U4.1
- (iii) any other outcomes of expert ecotoxicology assessments both prior to the Water Treatment Plant construction and six months following completion of commissioning; and
- (iv) any other information the EPA considers relevant to impacts on receiving waters.

U4 Ecotoxicological Monitoring Program

U4.1 (a) The licensee must engage a suitably qualified and experienced person to develop a monitoring program to monitor the effect of the discharge of waters from the premises, from the point referred to as Point 1, WMP3 and at the intertidal zone of LT Creek. The monitoring program must include, but is not limited to, chemical analysis, sediment analysis and macroinvertebrate studies at five or more locations. It must also include ecotoxicological testing at one site, being Point 1.

(b) A report detailing the monitoring program must be provided to the EPA's Regional Manager – Hunter by 16 November 2012.

Note 1 : It is the EPA's intention that, once it has reviewed and is satisfied with the monitoring program, it will vary the licence to formalise the undertaking of the monitoring program.

(c) The report detailing the results of the monitoring program must be provided to the EPA's Regional

Environment Protection Licence

Licence - 395



Manager - Hunter by 31 July 2014

9 Special Conditions

E1 Transfer of waste water to Centennial Awaba

E1.1 The licensee is permitted to transfer waste water to Awaba Colliery (EPL 443).

E1.2 In accordance with condition E1.1, the licensee is permitted to transfer a maximum of 4ML per day of waste water from the Newstan Colliery to the underground workings at Awaba Colliery.

E2 Implementation of Additional Water Treatment Works

E2.1 Should water quality monitoring and/or ecotoxicological monitoring indicate that effluent is failing to meet the required quality as set out in conditions of this Licence, or indicate toxicity, the Licensee must implement additional water treatment works to address the water quality issues to the satisfaction of the EPA within a reasonable period.

Environment Protection Licence



Licence - 395

Dictionary

General Dictionary

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 2009
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 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
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
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 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

Environment Protection Licence



Licence - 395

flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
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
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 2009
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
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.
restricted solid 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
special 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> .

Environment Protection Licence



Licence - 395

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 type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Ms Debbie Maddison

Environment Protection Authority

(By Delegation)

Date of this edition: 07-April-2000

End Notes

- 1 Licence varied by notice V/M upgrade, issued on 10-Jul-2000, which came into effect on 10-Jul-2000.
- 2 Licence varied by notice 1005872, issued on 24-Aug-2001, which came into effect on 24-Aug-2001.
- 3 Licence transferred through application 141587, approved on 21-Nov-2002, which came into effect on 07-Aug-2002.
- 4 Licence varied by notice 1073411, issued on 13-Feb-2008, which came into effect on 13-Feb-2008.
- 5 Licence varied by notice 1105209, issued on 24-Feb-2011, which came into effect on 24-Feb-2011.
- 6 Licence varied by notice 1130610, issued on 13-Jul-2011, which came into effect on 13-Jul-2011.
- 7 Licence varied by notice 1502224 issued on 20-Oct-2011
- 8 Licence varied by notice 1502524 issued on 21-Dec-2011
- 9 Licence varied by notice 1506640 issued on 15-Oct-2012

Environment Protection Licence



Licence - 365

Licence Details

Number:	365
Anniversary Date:	01-January

Licensee

CENTENNIAL MANDALONG PTY LIMITED

LEVEL 18, BT TOWER, 1 MARKET ST

SYDNEY NSW 2000

Premises

MANDALONG MINE, COORANBONG COLLIERY AND DELTA
COAL SERVICES SITEKERRY ANDERSON DRIVE, GRADWELLS ROAD AND
RUTLEYS ROAD

DORA CREEK NSW 2264

Scheduled Activity

Coal Works

Mining for Coal

Fee Based Activity

Scale

Coal works	> 5000000 T handled
Mining for coal	> 5000000 T produced

Region

North - Hunter

Ground Floor, NSW Govt Offices, 117 Bull Street
NEWCASTLE WEST NSW 2302

Phone: (02) 4908 6800

Fax: (02) 4908 6810

PO Box 488G NEWCASTLE

NSW 2300

Environment Protection Licence

Licence - 365



INFORMATION ABOUT THIS LICENCE	4
Dictionary	4
Responsibilities of licensee	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	6
A1 What the licence authorises and regulates	6
A2 Premises or plant to which this licence applies	6
A3 Information supplied to the EPA	6
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	7
P1 Location of monitoring/discharge points and areas	7
3 LIMIT CONDITIONS	8
L1 Pollution of waters	8
L2 Concentration limits	8
L3 Volume and mass limits	9
L4 Waste	9
L5 Noise limits	10
L6 Potentially offensive odour	12
4 OPERATING CONDITIONS	12
O1 Activities must be carried out in a competent manner	12
O2 Maintenance of plant and equipment	12
O3 Dust	12
5 MONITORING AND RECORDING CONDITIONS	13
M1 Monitoring records	13
M2 Requirement to monitor concentration of pollutants discharged	13
M3 Testing methods - concentration limits	14
M4 Environmental monitoring	15
M5 Weather monitoring	15
M6 Recording of pollution complaints	16
M7 Telephone complaints line	16
M8 Requirement to monitor volume or mass	16

Environment Protection Licence



Licence - 365

6	REPORTING CONDITIONS	17
R1	Annual return documents	17
R2	Notification of environmental harm	18
R3	Written report	18
R4	Other reporting conditions	18
7	GENERAL CONDITIONS	19
G1	Copy of licence kept at the premises or plant	19
8	POLLUTION STUDIES AND REDUCTION PROGRAMS	19
U1	PRP 1 - Assessment of Potential Impacts of Metals	19
DICTIONARY		21
General Dictionary		21

Environment Protection Licence

Licence - 365



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).

Environment Protection Licence

Licence - 365



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

CENTENNIAL MANDALONG PTY LIMITED

LEVEL 18, BT TOWER, 1 MARKET ST

SYDNEY NSW 2000

subject to the conditions which follow.

Environment Protection Licence

Licence - 365



1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 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	Fee Based Activity	Scale
Coal Works	Coal works	> 5000000 T handled
Mining for Coal	Mining for coal	> 5000000 T produced

A1.2 The licensee must not:

- (a) Produce by mining activities more than 6 million tonnes of coal within any 12 month period.
- (b) Undertake coal works handling more than 6 million tonnes within any 12 month period.

Note: These limits on the scale of the fee based activities are based on Development Consent DA97/800 granted, and modified, under the *Environmental Planning Assessment Act 1979* which limits extraction to 6 million tonnes of run of mine (ROM) coal per year.

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
MANDALONG MINE, COORANBONG COLLIERY AND DELTA COAL SERVICES SITE
KERRY ANDERSON DRIVE, GRADWELLS ROAD AND RUTLEYS ROAD
DORA CREEK
NSW 2264
LOT 1 DP 6747, LOT 2 DP 6747, LOT 54 DP 9632, LOT 5 DP 262159, LOT 6 DP 262159, LOT 169 DP 755218, LOT 179 DP 755218, LOT 186 DP 755218, LOT 327 DP 755242

A3 Information supplied to the EPA

A3.1 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

Environment Protection Licence

Licence - 365



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	Location Description
3	Dust monitoring		Dust deposition gauge located on the northern boundary of the coal stockpile area at the Wyee Coal Unloader, shown labelled as "DD1" on map titled MAE12511, dated 09/07/04 (on EPA file 270880A6).
4	Dust monitoring		Dust deposition gauge located on the boundary of 14 Rutleys Road, Wyee, shown labelled as "DD2" on map titled MAE12511, dated 09/07/04 (on EPA file 270880A6).
5	Dust monitoring		Dust deposition gauge located on the boundary of 13 Simmons Close, Wyee, shown labelled as "DD3" on map titled MAE12511, dated 09/07/04 (on EPA file 270880A6).
6	Ambient Air Monitoring		Location to be provided by the licensee

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	Location Description
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Environment Protection Licence

Licence - 365



1	Discharge to waters Discharge quality monitoring	Discharge to waters Discharge quality monitoring	Outlet from Settlement Pond that receives mine water and runoff waters from the processing area at the Cooranbong Colliery site, shown as "LDP001" on Plan titled "Mandalong Mine EPL365-Premises Plan", drawn 28/09/2010 (on EPA file LIC08/1648-02).
2	Discharge to waters Discharge quality monitoring	Discharge to waters Discharge quality monitoring	Overflow from the Clean Water Settlement Pond that receives runoff from the "clean" catchment areas of the Cooranbong Colliery site, shown as "LDP002" on Plan titled "Mandalong Mine EPL365-Premises Plan", drawn 28/09/2010 (on EPA file LIC08/1648-02).

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 Concentration limits

L2.1 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.

L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table.

L2.4 Water and/or Land Concentration Limits

POINT 1

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

Environment Protection Licence

Licence - 365



pH	pH	6.5-8.5
Total suspended solids	milligrams per litre	50

POINT 2

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				50

L3 Volume and mass limits

- L3.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:
- liquids discharged to water; or
 - solids or liquids applied to the area;
- must not exceed the volume/mass limit specified for that discharge point or area.

Point	Unit of Measure	Volume/Mass Limit
1	kilolitres per day	5000

- L3.2 Exceedance of the volume limit for Point 1 is permitted only if the discharge from Point 1 occurs solely as a result of rainfall at the premises exceeding 10mm during the 24 hours immediately prior to commencement of the discharge.

L4 Waste

- L4.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.
- Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.
- Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.
- This condition does not limit any other conditions in this licence.

Environment Protection Licence

Licence - 365



Code	Waste	Description	Activity	Other Limits
NA	General or Specific exempted waste	Waste that meets all the conditions of a resource exemption under Clause 51A of the Protection of the Environment Operations (waste) Regulation 2005.	As specified in each particular resource recovery exemption	NA

L4.2 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.

L4.3 This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence.

L5 Noise limits

L5.1 The licensee must ensure that noise generated by the activities within the premises do not exceed the following criteria measured by dB(A) at any of the following locations or on more than 25% of any privately-owned land.

Location	Day LAeq(15min)	Evening LAeq(15min)	Night LAeq(15min)	Night A(1min)
23 Gradwells Rd	38	38	38	45
26 Gradwells Rd	37	37	37	45
R1 (64) R2 (82) R4 (109)	35	35	35	45
R3 (97)	37	37	37	45
R5 (110)	36	36	36	45
R6 (86) (87)	40	40	40	45
R7 (85) (89)	43	43	43	45
R8 (72)	43	43	43	45
R9 (73)	40	40	40	45
R10 (66)	41	41	42	45
All other privately owned land	35	35	35	45

Note: Locations '23 and 26 Gradwells Road' are defined in Figure 2 of the Noise Impact Assessment contained within the *Mandalong Mine - Cooranbong Entry Site Environmental Assessment* dated May 2012. Locations 'R1 to R10' are defined in the *Mandalong Mine - Modification 4 to Development Consent Environment Assessment* dated September 2008.

The licensee may provide to the EPA written evidence of any agreement with a landholder which is

Environment Protection Licence



Licence - 365

subject to the above noise limits. The written evidence may be submitted with a licence variation to remove the landholder from the above table.

- L5.2 For the purpose of condition L5.1:
- (a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and public holidays;
 - (b) Evening is defined as the period 6pm to 10pm, and
 - (c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and public holidays.
- L5.3 The noise limits set out in conditions L5.1 apply under all meteorological conditions except for any one of the following:
- (a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or
 - (b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or
 - (c) Stability category G temperature inversion conditions.
- L5.4 For the purpose of condition L5.3:
- (a) the meteorological data to be used for determining meteorological conditions is the data recorded at the meteorological station identified in this licence as EPA Identification Point W1.
 - (b) Stability category temperature inversion conditions are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the *NSW industrial Noise Policy* (EPA 2000)
- Note: The weather station must be designed, commissioned and operated in a manner to obtain the necessary parameters required under the above condition.
- L5.5 For the purpose of determining the noise generated at the premises the licensee must use a Class 1 or Class 2 noise monitoring device as defined by AS IEC61672.1 and AS IEC61672.2-2004, or other noise monitoring equipment accepted by the EPA in writing.
- L5.6 To determine compliance:
1. With the $L_{Aeq(15\text{ min})}$ noise limits in condition L5.1, the licensee must locate noise monitoring equipment;
 - (a) within 30 metres of a dwelling facade (but not closer than 3 metres) where any dwelling on the property is situated more than 30 metres from the property boundary that is closest to the premises;
 - (b) approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises, or, where applicable,
 - (c) within approximately 50 metres if the boundary of a national park or nature reserve.
 2. With the $LA1(1\text{ minute})$ noise limits in condition L5.1, the noise monitoring equipment must be located within 1 metre of a dwelling facade.
 3. With the noise limits in condition L5.1, the noise monitoring equipment must be located;
 - (a) at the most affected point at a location where there is no dwelling at the location, or
 - (b) at the most affected point within an area at a location prescribed by conditions L5.6 1(a) or L5.6 1(b).
- L5.7 A non-compliance of condition L5.1 will still occur where noise generated from the premises in excess of the appropriate limit is measure;
- at a location other than an area prescribed by conditions L5.6 1(a) and L5.6 1(b), and /or
 - at a point other than the most affected point at a location.

Environment Protection Licence



Licence - 365

- L5.8 For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

L6 Potentially offensive odour

- L6.1 No condition of this licence identifies a potentially offensive odour for the purposes of Section 129 of the Protection of the Environment Operations Act 1997.

- L6.2 The licensee must not cause or permit the emission of offensive odour beyond the boundary of the premises.

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 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- O3.2 Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.
- O3.3 All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.

Environment Protection Licence

Licence - 365



- O3.4 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.
- O3.5 The tailgates of all haulage trucks leaving the premises must be securely fixed prior to loading or immediately after unloading to prevent loss of material.
- O3.6 Coal stockpiles must be maintained in a condition that will minimise the generation and emission of dust on the premises.

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:

M2.2 Air Monitoring Requirements

POINT 3,4,5

Pollutant	Units of measure	Frequency	Sampling Method
Particulates - Deposited Matter	grams per square metre per month	Monthly	AM-19

Environment Protection Licence

Licence - 365



POINT 6

Pollutant	Units of measure	Frequency	Sampling Method
PM10	milligrams per cubic metre	Continuous	AM-22
Total suspended particles	milligrams per cubic metre	Continuous	AM-22

M2.3 The licensee must fully comply (and provide notification to the EPA Regional Manager, at PO Box 488G Newcastle 2300) with the monitoring requirements at condition M2.2 by 30 June 2013.

M2.4 Water and/ or Land Monitoring Requirements

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Oil and Grease	milligrams per litre	Special Frequency 2	Grab sample
pH	pH	Special Frequency 2	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 2	Grab sample

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Oil and Grease	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	Grab sample
Total suspended solids	milligrams per litre	Special Frequency 1	Grab sample

M2.5 For Special Frequency 1 the licensee must monitor within 8 hours of commencing discharge and weekly thereafter during discharge

For Special Frequency 2 the licensee must monitor daily during discharge

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

Environment Protection Licence

Licence - 365



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 2010* 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".

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 Environmental monitoring

Requirement to monitor noise

M4.1 To determine compliance with condition L5.1, attended noise monitoring must be undertaken in accordance with conditions L5.5 and L5.6, and

- at each one of the locations listed in condition L5.1;
- occur annually within the reporting period of the Environment Protection Licence;
- occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 1.5 hours during the day; 30 minutes during the evening; and 1 hour during the night, and
- occur for three (3) consecutive days.

M5 Weather monitoring

M5.1 For each monitoring point specified in the table below, the licensee must monitor (by sampling obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns:
Point W1

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	24 hour	AM-4
Wind direction	degrees	Continuous	1 hour	AM-2 and AM-4
Wind speed	metres per second	Continuous	1 hour	AM-2 and AM-4
Air temperature	Degrees Celcius	Continuous	1 Hour	AM-4
Sigma-theta	Degrees	Conituous	15 minute	AM-2 and AM-4
Relative humidity	Percentage	Continuous	1 hour	AM-4

M5.2 For the purpose of condition M5.1 , Point W1 refers to meteorological station established on the premises.

M5.3 The licensee must fully comply with condition M5 by 30 June 2013.

Environment Protection Licence

Licence - 365



M6 Recording of pollution complaints

- M6.1 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.
- M6.2 The record must include details of the following:
- the date and time of the complaint;
 - the method by which the complaint was made;
 - any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - the nature of the complaint;
 - the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
 - if no action was taken by the licensee, the reasons why no action was taken.
- M6.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M6.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M7 Telephone complaints line

- M7.1 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.
- M7.2 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.
- M7.3 The preceding two conditions do not apply until 3 months after:
- the date of the issue of this licence or
 - 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.

M8 Requirement to monitor volume or mass

- M8.1 For each discharge point or utilisation area specified below, the licensee must monitor:
- the volume of liquids discharged to water or applied to the area;
 - the mass of solids applied to the area;
 - the mass of pollutants emitted to the air;
- at the frequency and using the method and units of measure, specified below.

POINT 1

Frequency	Unit of Measure	Sampling Method
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Environment Protection Licence

Licence - 365



Daily during any discharge	kilolitres per day	Electronic level sensor and continuous logger
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6 Reporting Conditions

R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
- a Statement of Compliance; and
 - a Monitoring and Complaints Summary.

At 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.

- 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:

- 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
- 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:

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

- 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').

- R1.6 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.

- R1.7 Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

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

- R1.8 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.

Environment Protection Licence

Licence - 365



R2 Notification of environmental harm

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately 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 Environment 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;
- 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.

R4 Other reporting conditions

Noise Monitoring Report

Environment Protection Licence

Licence - 365



- R4.1 The licensee must submit to the EPA a noise compliance assessment report at the end of each reporting period. The report must be submitted with the Environment Protection Licence Annual Return. The report must be prepared by a suitably qualified and experienced acoustical consultant which:
- (a) details the noise monitoring undertaken in accordance with condition M4;
 - (b) assess compliance with noise limits presented in condition L5.1, and
 - (c) outlines any management actions taken within the monitoring period to address any exceedences of limits contained in condition L5.1.

7 General Conditions

G1 Copy of licence kept at the premises or plant

- 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.

8 Pollution Studies and Reduction Programs

U1 PRP 1 - Assessment of Potential Impacts of Metals

- U1.1 At Point 1 and 2 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.

Upon completion of 24 months of monitoring for metals the licensee must within (two) 2 months conduct an assessment of metals detected in wastewater discharges from the mine in accordance with ANZECC water quality guidelines and provide this assessment to EPA regional Manager Hunter within (one) 1 month.

Note: EPA will use this assessment to vary the EPL to include metal discharge limits if the assessment in accordance with ANZECC criteria indicates limits may be required to protect receiving waters.

POLLUTANT	UNIT OF MEASURE	FREQUENCY	SAMPLING METHOD
Aluminium (dissolved)	micrograms per litre	monthly during discharge	grab sample
Aluminium (total)	micrograms per litre	monthly during discharge	grab sample
Anitomy	micrograms per litre	monthly during discharge	grab sample
Arsenic (dissolved)	micrograms per litre	monthly during discharge	grab sample
Arsenic (total)	micrograms per litre	monthly during discharge	grab sample
Barium	micrograms per litre	monthly during discharge	grab sample

Environment Protection Licence

Licence - 365



Boron	micrograms per litre	monthly during discharge	grab sample
Cadmium (dissolved)	micrograms per litre	monthly during discharge	grab sample
Cadmium (total)	micrograms per litre	monthly during discharge	grab sample
Calcium	micrograms per litre	monthly during discharge	grab sample
Cobalt (dissolved)	micrograms per litre	monthly during discharge	grab sample
Copper (dissolved)	micrograms per litre	monthly during discharge	grab sample
Copper (total)	micrograms per litre	monthly during discharge	grab sample
Iron (dissolved)	micrograms per litre	monthly during discharge	grab sample
Lead (dissolved)	micrograms per litre	monthly during discharge	grab sample
Lead (total)	micrograms per litre	monthly during discharge	grab sample
Lithium	micrograms per litre	monthly during discharge	grab sample
Magnesium	micrograms per litre	monthly during discharge	grab sample
Manganese (dissolved)	micrograms per litre	monthly during discharge	grab sample
Mercury (dissolved)	micrograms per litre	monthly during discharge	grab sample
Mercury (total)	micrograms per litre	monthly during discharge	grab sample
Molybdenum (total)	micrograms per litre	monthly during discharge	grab sample
Nickel (dissolved)	micrograms per litre	monthly during discharge	grab sample
Nickel (total)	micrograms per litre	monthly during discharge	grab sample
Potassium	micrograms per litre	monthly during discharge	grab sample
Silica	micrograms per litre	monthly during discharge	grab sample
Silver (dissolved)	micrograms per litre	monthly during discharge	grab sample
Sodium	micrograms per litre	monthly during discharge	grab sample
Sulfur	micrograms per litre	monthly during discharge	grab sample
Titanium	micrograms per litre	monthly during discharge	grab sample
Vanadium (total)	micrograms per litre	monthly during discharge	grab sample
Zinc (dissolved)	micrograms per litre	monthly during discharge	grab sample
Zinc (total)	micrograms per litre	monthly during discharge	grab sample
Conductivity	microsiemens per centimetre	monthly during discharge	grab sample

Environment Protection Licence



Licence - 365

Dictionary

General Dictionary

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 2009
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 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
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
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 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

Environment Protection Licence



Licence - 365

flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
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
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 2009
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
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.
restricted solid 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
special 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> .

Environment Protection Licence



Licence - 365

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 type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Ms Debbie Maddison

Environment Protection Authority

(By Delegation)

Date of this edition: 30-May-2000

Environment Protection Licence

Licence - 365



End Notes

- 1 Licence varied by notice V/M upgrade, issued on 10-Jul-2000, which came into effect on 10-Jul-2000.
- 2 Licence varied by notice 1001798, issued on 22-Sep-2000, which came into effect on 17-Oct-2000.
- 3 Licence varied by notice 1006334, issued on 30-Jul-2001, which came into effect on 30-Jul-2001.
- 4 Licence varied by change of contact details, issued on 16-Apr-2002, which came into effect on 16-Apr-2002.
- 5 Licence transferred through application 141583, approved on 21-Nov-2002, which came into effect on 07-Aug-2002.
- 6 Licence varied by notice 1024287, issued on 23-Jan-2003, which came into effect on 17-Feb-2003.
- 7 Licence varied by notice 1041458, issued on 11-Nov-2004, which came into effect on 06-Dec-2004.
- 8 Licence varied by notice 1049934, issued on 27-Jul-2005, which came into effect on 21-Aug-2005.
- 9 Licence varied by notice 1072355, issued on 23-Jul-2007, which came into effect on 23-Jul-2007.
- 10 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 11 Licence varied by notice 1105232, issued on 22-Feb-2011, which came into effect on 22-Feb-2011.
- 12 Licence varied by notice 1502360 issued on 21-Dec-2011
- 13 Licence varied by notice 1506641 issued on 14-Feb-2013