

# Licence Variation

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Licence - 766



DELTA ELECTRICITY

Trading as DELTA ELECTRICITY

ABN 67 139 819 642

LOCKED BAG 1

PORTLAND NSW 2847

Attention: Mr David Hogg

Notice Number      1512499  
File Number        LIC07/1276  
Date                 23-Apr-2013

## NOTICE OF VARIATION OF LICENCE NO. 766

### BACKGROUND

- A. DELTA ELECTRICITY Trading as DELTA ELECTRICITY ("the licensee") is the holder of Environment Protection Licence No. 766 ("the licence") issued under the *Protection of the Environment Operations Act 1997* ("the Act"). The licence authorises the carrying out of activities at 1 MAIN STREET, WALLERAWANG, NSW, 2845 ("the premises").
- B. On 28-Feb-2013 the Environment Protection Authority (EPA) received an application from the licensee for the variation of the licence.
- C. The licensee is currently committed by licence conditions U1.1 and U2.1 to undertake two Pollution Reduction Programs (PRPs) to upgrade the dust collection plants on electricity generating Unit 8 and Unit 7 by 30 June 2015 and 30 June 2017, respectively.
- D. Given the need for the licensee to consider the future electricity market when forward planning capital expenditure for Wallerawang power station, the licensee has applied to vary its licence to extend the dates by when it must complete the two PRPs.
- E. The licensee has applied to defer until June 2018 the completion of the PRPs for both U1.1 for Unit 8 and U2.1 for Unit 7.
- F. The licensee has provided information justifying an extension of time on the basis that the environmental performance of the power station will be either maintained at its current level (since 2010) or to improve because:
- of the reasonable prospect of single Unit operation within the foreseeable future which effectively halves the Solid Particle load being emitted from Wallerawang power station;
  - the operation of the Electrostatic Precipitators (ESPs) to achieve a goal of around 100 milligrams per cubic metre (mg/m<sup>3</sup>) for Solid Particles (which the licensee has achieved since 2010);

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- of the performance of the sulphur trioxide steam generators, including a catalyst replacement in 2011, improved maintenance programs and the availability of additional steam generators in the event of a failure of the two generators in service at any one time;
  - of a modest performance improvement of 10% to 15% of the ESP for Unit 7 on the basis of the installation and trial of higher rated transformer rectifiers; and
  - not operating the Units at maximum load for a 24 hour period (as assumed in the air quality modelling), which reduces the concentration of pollutants emitted.
- G. The licensee has provided information which demonstrates an improvement in air emissions since 2010 and proposes to continue to monitor the local air quality by maintaining its voluntary air monitoring program at Wallerawang and Blackmans Flat.
- H. The EPA has considered the licensee's application for both deadlines to be extended to 30 June 2018. However, while the EPA accepts the licensee's justification for an extension of some time and recognises the current uncertainty around electricity demands, the EPA cannot see justification to move the date of Unit 8 beyond the current completion date for Unit 7, of 30 June 2017. As such the EPA will align the dates for both PRPs to 30 June 2017.
- I. The EPA has considered matters of relevance under section 45 of the Act in varying the licence.

## VARIATION OF LICENCE NO. 766

1. By this notice the EPA varies licence No. 766. The attached licence document contains all variations that are made to the licence by this notice.
2. The following variations have been made to the licence:
  - For licence condition U1.1 the date to install and commission a dust collection plant (Unit 8) has been extended from 30 June 2015 to 30 June 2017.

.....  
**Richard Whyte**  
**Regional Manager**  
**South - Bathurst**  
(by Delegation)

## INFORMATION ABOUT THIS NOTICE

- This notice is issued under section 58(5) of the Act.
- Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (<http://www.environment.nsw.gov.au/prpoeo/index.htm>) in accordance with section 308 of the Act.

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## **Appeals against this decision**

- You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

## **When this notice begins to operate**

- The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.
- If an appeal is made against this decision to vary the licence and the Land and Environment Court directs that the decision is stayed the decision does not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).

# Environment Protection Licence



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Licence Details	
Number:	766
Anniversary Date:	01-January

Licensee
DELTA ELECTRICITY
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Premises
WALLERAWANG POWER STATION
1 MAIN STREET
WALLERAWANG NSW 2845

Scheduled Activity
Electricity Generation

Fee Based Activity	Scale
Generation of electrical power from coal	> 4000 Gwh generated

Region
South - Bathurst
Lvl 2, 203-209 Russell Street
BATHURST NSW 2795
Phone: (02) 6332 7600
Fax: (02) 6332 7630
PO Box 1388 BATHURST
NSW 2795

# Environment Protection Licence

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## 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).

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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:

DELTA ELECTRICITY
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subject to the conditions which follow.



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## 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
Electricity Generation	Generation of electrical power from coal	> 4000 Gwh generated

### A2 Premises or plant to which this licence applies

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

Premises Details
WALLERAWANG POWER STATION
1 MAIN STREET
WALLERAWANG
NSW 2845
LOT 1 DP 213770, LOT 2 DP 213770, LOT E DP 394440, LOT C DP 394440, LOT D DP 394440, LOT 1 DP 443235, LOT 1 DP 568265, LOT 231 DP 622326, LOT 3 DP 717025, LOT 3 DP 778400, LOT 4 DP 778400, LOT 1 DP 790970, LOT 1 DP 790971, LOT 32 DP 827807, LOT 2 DP 829137, LOT 3 DP 829137, LOT 5 DP 829137, LOT 101 DP 829410, LOT 4 DP 1016725, LOT 5 DP 1016725, LOT 6 DP 1016725, LOT 7 DP 1016725, LOT 8 DP 1016725, LOT 1 DP 1018958, LOT 2 DP 1018958, LOT 3 DP 1018958, LOT 4 DP 1018958, LOT 100 DP 1043966, LOT 92 DP 1043967, LOT 1 DP 1087684, LOT 4 DP 1087684, LOT 5 DP 1087684, LOT 171 DP 1131952, LOT 228 DP 1131953, LOT 1 DP 1131955, LOT 2 DP 1131955, LOT 171 DP 1131959, LOT 11 DP 1139978

### A3 Other activities

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

Ancillary Activity
Chemical Storage Facilities
Coal Works
Crushing, Grinding or Separating Works
Energy recovery

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Waste storage

## A4 Information supplied to the EPA

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

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

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

## 2 Discharges to Air and Water and Applications to Land

### P1 Location of monitoring/discharge points and areas

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

<i>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
13	Air emission monitoring Discharge to air	Air emission monitoring Discharge to air	Wallerawang Power Station Boiler 7, identified as "EPA ID 13" on a map provided to the EPA in a letter dated 18 March 2005 .
14	Air emissions monitoring Discharge to air	Air emissions monitoring Discharge to air	Wallerawang Power Station Boiler 8, identified as "EPA ID 14" on a map provided to the EPA in a letter dated 18 March 2005 .
15	Ambient air monitoring		Blackmans Flat location, identified as "EPA ID 15" on a map provided to the EPA in a letter dated 18 March 2005 .
16	Ambient air monitoring		Off Brays Lane Wallerawang location, identified as "EPA ID 16" on a map provided to the EPA in a letter dated 18 March 2005 .
17	Ambient air monitoring		Newnes Plateau location, identified as "EPA ID 17" on a map provided to the EPA in a letter dated 18 March 2005 .

- 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.

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## Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Volume monitoring Effluent quality monitoring Discharge to waters	Volume monitoring Effluent quality monitoring Discharge to waters	Discharge to Coxs River from Unit 7 cooling tower identified as "EPA ID 1" on a map provided to the EPA in a letter dated 18 March 2005 .
3	Volume monitoring Effluent quality monitoring Discharge to waters	Volume monitoring Effluent quality monitoring Discharge to waters	Caustic injection plant discharge to Coxs River, identified as "EPA ID 3" on a map provided to the EPA in a letter dated 18 March 2005 .
4	Volume monitoring Effluent quality monitoring Discharge to waters	Volume monitoring Effluent quality monitoring Discharge to waters	Discharge to Coxs River from Unit 7 & 8 cooling tower blowdown, identified as "EPA ID 4" on a map provided to the EPA in a letter dated 18 March 2005.
5	Discharge quality monitoring Discharge to waters	Discharge quality monitoring Discharge to waters	Overflow drain from southern retention basin to Coxs River, identified as "EPA ID 5" on a map provided to the EPA in a letter dated 18 March 2005 .
7	Ambient water monitoring.		Main Street Road Main Street Road Bridge upstream of all discharge points in the Wallerawang Power Station, identified as "EPA ID 7" on a map provided to the EPA in a letter dated 18 March 2005.
8	Ambient water monitoring.		Railway Bridge downstream of points 1, 2, 3 and 5 at Wallerawang Power Station, identified as "EPA ID 8" on a map provided to the EPA in a letter dated 18 March 2005.
18	Volume monitoring Discharge quality monitoring Discharge to water	Volume monitoring Discharge quality monitoring Discharge to water	Combined overflow drains from the coal stockpile settling basins at Wallerawang Power Station to Coxs River, identified as "EPA ID 18" on a map provided to the EPA in a letter dated 18 March 2005 .
21	Emergency discharge point	Emergency discharge point	Emergency discharge point just north of railway bridge and just upstream of ambient monitoring point LDP8.
22	Ambient water monitoring.		WX13 Coxs River below Lake Wallace upstream of Rocky Waterhole Road Bridge, identified as "WX13" on the map provided to the EPA attached in a letter (DOC12/43881) dated 19 October 2012.

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23	Ambient water monitoring.	COX4 Cocks River approximately 100 metres downstream of the confluence of Licensed Discharge Point 4, identified as "Cox4" on a map provided to the EPA in a letter (DOC12/43881) dated 19 October 2012.
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## 3 Limit Conditions

### L1 Pollution of waters

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

### L2 Load limits

- L2.1 The actual load of an assessable pollutant discharged from the premises during the reporting period must not exceed the load limit specified for the assessable pollutant in the table below.
- L2.2 The actual load of an assessable pollutant must be calculated in accordance with the relevant load calculation protocol.

Assessable Pollutant	Load limit (kg)
Arsenic (Air)	
Benzo(a)pyrene (equivalent) (Air)	
Coarse Particulates (Air)	
Fine Particulates (Air)	
Fluoride (Air)	
Lead (Air)	
Mercury (Air)	
Nitrogen Oxides (Air)	
Salt (Enclosed Water)	
Selenium (Enclosed Water)	
Sulfur Oxides (Air)	
Total suspended solids (Enclosed Water)	

Note: An assessable pollutant is a pollutant which affects the licence fee payable for the licence.

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## L3 Concentration limits

- L3.1 For each monitoring/discharge point or utilisation area specified in the table\ below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L3.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L3.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.
- L3.4 Air Concentration Limits

## POINT 13

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	milligrams per cubic metre	100	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Hydrogen chloride	milligrams per cubic metre	100	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Chlorine	milligrams per cubic metre	200	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Mercury	milligrams per cubic metre	1.0	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Nitrogen Oxides	milligrams per cubic metre	1500	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Solid Particles	milligrams per cubic metre	250	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Total Fluoride	milligrams per cubic metre	50	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	5.0	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Cadmium	milligrams per cubic metre	1.0	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		

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## POINT 14

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	milligrams per cubic metre	100	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Cadmium	milligrams per cubic metre	1.0	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	5.0	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Total Fluoride	milligrams per cubic metre	50	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Solid Particles	milligrams per cubic metre	250	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Chlorine	milligrams per cubic metre	200	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Hydrogen chloride	milligrams per cubic metre	100	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Nitrogen Oxides	milligrams per cubic metre	1500	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		
Mercury	milligrams per cubic metre	1.0	Dry, 273 K, 101.3 kPa, 7% O <sub>2</sub>		

L3.5 For the purpose of Clause 35 of the *Protection of the Environment Operations (Clean Air) Regulation 2010*:

- (a) the activity of electricity generation, and
- (b) the Wallerawang Power Station Boiler 7 and Boiler 8, as identified as "EPA ID 13" and "EPA ID 14" on a map provided to the EPA in a letter dated 18 March 2005,

are taken to belong to Group 2.

Note: This condition will expire 5 years after the date on which the licensee was notified of the imposition of the condition.

L3.6 Water and/or Land Concentration Limits

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## POINT 1

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Aluminium (dissolved)	milligrams per litre		0.055		
Arsenic (total)	milligrams per litre	0.015	0.020		0.024
Boron	milligrams per litre	0.4	0.8		1.0
Copper (total)	milligrams per litre		0.15		
Electrical conductivity	microsiemens per centimetre	1,800	2,500		2,900
Fluoride	milligrams per litre	2.3	2.5		3.0
Nickel (total)	milligrams per litre	0.04	0.05		0.06
pH	pH				6.5-9.0
Sulfate	milligrams per litre	1000	1200		1600
Zinc (total)	milligrams per litre		0.1		

## POINT 3

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
pH	pH				6.5-8.5
Sulfate	milligrams per litre				1200
Total suspended solids	milligrams per litre				30

## POINT 4

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
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Aluminium (dissolved)	milligrams per litre		0.055	
Arsenic (total)	milligrams per litre	0.015	0.02	0.024
Boron	milligrams per litre	0.4	0.8	1.0
Copper (total)	milligrams per litre		0.15	
Electrical conductivity	microsiemens per centimetre	1,800	2,500	2,900
Fluoride	milligrams per litre	2.3	2.5	3.0
Nickel (total)	milligrams per litre	0.04	0.05	0.06
pH	pH			6.5-9.0
Sulfate	milligrams per litre	1000	1200	1600
Total suspended solids	milligrams per litre			30
Turbidity	nephelometric turbidity units	10		25
Zinc (total)	milligrams per litre		0.10	

## POINT 5

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

## POINT 18

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



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Total suspended solids	milligrams per litre	30
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## POINT 21

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
Aluminium (dissolved)	milligrams per litre		0.055		
Arsenic (total)	milligrams per litre	0.015	0.02		0.024
Boron	milligrams per litre	0.4	0.8		1.0
Copper (total)	milligrams per litre		0.15		
Electrical conductivity	microsiemens per centimetre	1,800	2,500		2,900
Fluoride	milligrams per litre	2.3	2.5		3.0
Nickel (total)	milligrams per litre	0.04	0.05		0.06
pH	pH				6.5-9.0
Sulfate	milligrams per litre	1000	1200		1600
Zinc (total)	milligrams per litre		0.10		

L3.7 Results from monitoring carried out in accordance with conditions M2 and M3 can be used to determine compliance with the 50th, 90th and 100th percentile concentration limits specified in condition L3.

L3.8 Compliance with the 50th percentile and 90th percentile limits specified in condition L3.6 for Licensed Discharge Points (LDP) 1, 4 and 21, except for aluminium, copper and zinc (for which the 90th percentile limit applies at all times), is to be calculated using all monitoring data collected at these discharge points in accordance with condition M2.3 during each annual reporting period, with the exception of monitoring samples collected when the following events are occurring:

1. The State Water Corporation has imposed a restriction level on extractions in accordance with clause 5.2 of the Water Management Licence number 10WM000004 issued for the Fish River Scheme under the Water Act 1912; and/or
2. Lake Wallace exceeds 750 microsiemens per centimetre Electrical Conductivity for more than 7 days in any one month.

L3.9 Compliance with the dissolved aluminium 90th percentile concentration limit for Licensed Discharge

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Points 1, 4 and 21, is to be determined using all monitoring data collected at these discharge points in accordance with condition M2.3 during each annual reporting period, with the exception of sample results that are collected when the dissolved aluminium concentrations of any of the cooling water sources/make-up supply exceeds 0.055 mg/L.

- L3.10 The concentration of an impurity contained in the solid alternative fuel must not exceed the concentration specified for that impurity in the table below:

Impurity	Units of measure	100 percentile Concentration Limit
Type 1 and Type 2 substances in aggregate	milligrams per kilograms	350

## L4 Volume and mass limits

- L4.1 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 week	210000
4	kilolitres per week	105000
21	kilolitres per week	105000

- L4.2 Notwithstanding the volume limits specified in condition L4.1, the combined volume discharged from point(s) 1 and 4 shall not exceed 210,000 kL per week.
- L4.3 The volume/mass limits for point(s) 1 and 4 specified in condition L4.1 apply for dry weather conditions only.

## L5 Waste

- L5.1 The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by the licence.
- L5.2 Only the following types of waste may be disposed of at the premises:
- Ash
  - Asbestos
  - Mill pyrites
  - Demineralisation and polisher plant effluents
  - Chemical clean solutions
  - Cooling tower sediments

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- g) Ion exchange resins
- h) Fabric filter bags
- i) Brine conditioned fly ash
- j) Biomass co-firing ash
- k) Settling pond sediments (including from the settling ponds of the Springvale Water Transfer Scheme)
- l) Oil and grit trap sediments.

L5.3 The wastes listed in condition L5.2 must only be disposed of to the Kerosene Vale Ash Repository and Sawyers Swamp Creek Ash Dam at Wallerawang Power Station except asbestos which may only be disposed of at the approved asbestos burial site.

## L6 Noise limits

L6.1 Operational noise from the Kerosene Vale Ash Repository area must not exceed:

40dB(A) LAeq(15 minute) , at the nearest most affected noise sensitive location.

Note: LAeq means the equivalent continuous noise level – the level of noise equivalent to the energy-average of noise levels occurring over a measurement period.

L6.2 To determine compliance with condition(s) L6.1 noise must be measured at, or computed for, the nearest affected noise sensitive locations (such as a residence, school or hospital). A modifying factor correction must be applied for tonal, impulsive or intermittent noise in accordance with the "Environmental Noise Management - NSW Industrial Noise Policy (January 2000)".

L6.3 The noise emission limits identified in this licence apply under the following meteorological conditions:

- a) wind speeds up to 3 m/s at 10 metres height above ground; and/or
- b) temperature inversion conditions of up to 30C/100m and source to receiver gradient winds of up to 2 m/s at 10 metres height above ground.

Note: The noise emission limits identified in this licence do not apply at a noise sensitive location, where the licensee and the affected noise sensitive location have reached a negotiated agreement in regards to noise, and a copy of that agreement has been provided to the Department of Environment, Climate Change and Water.

## L7 Hours of operation

L7.1 Operational activities associated with the Kerosene Vale Ash Repository must only be carried out between the hours of 0700 and 2200 Monday to Sunday.

L7.2 Operational activities at the Kerosene Vale Ash Repository outside the hours stipulated by condition L7.1 are only permitted in the following situations;

- a) for the delivery of material, if that delivery is required by police or other authorities for safety reasons; and/or the operation or personnel or equipment are endangered.
- b) Where it is required to avoid the loss of lives, property and/or to prevent environmental harm,
- c) Where there is insufficient ash storage capacity at the Wallerawang Power Station outside the licence

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operating hours due to:

- i) a breakdown of plant and/or equipment, including ash haulage trucks,
- ii) a direction given to the licensee from the National Electricity Market Management Company under the National Electricity Rules to maintain, increase, or be available to increase power generation for system security.
- d) In such circumstances, prior notification must be provided to the EPA and affected residents as soon as possible or within a reasonable period in the case of emergency.

## **L8 Potentially offensive odour**

- L8.1 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.

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.

### **O4 Waste management**

- O4.1 The licensee may only dispose of asbestos that has been generated on-site, and disposal of asbestos

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must be undertaken in accordance with Clause 42 of the Protection of the Environment Operations (Waste) Regulation 2005. Any requirements relating to off site disposal specified under Clause 42, also apply to on site disposal.

Note: The requirement under section 4(a) of Clause 42 has been met in that Lithgow City Council has confirmed that disposal of asbestos within the licensed premises is permissible.

O4.2 The asbestos disposal area(s) must be clearly delineated on a map and reported to Lithgow City Council so as to prevent incompatible use of this land in future.

## O5 Other operating conditions

O5.1 The licensee must use an average of 15 Megalitres per day (ML/day) in any 7 consecutive day period when both Units 7 and 8 are in operation, with a minimum of 12 ML to be used on any one day, of water from the Fish River Scheme in the cooling process to minimise the pollutant concentrations contained in blowdown wastewater discharged from Licensed Discharge Points (LDP) 1, 4 and 21 except:

1. where the State Water Corporation has imposed a restriction level on extractions under the Water Management Licence number 10WM000004 issued for the Fish River Scheme under the Water Act 1912; or
2. when an outage occurs and electricity continues to be generated at the premises, in which case the licensee must use a minimum of 7.5 ML/day of water from the Fish River Scheme in the cooling process of the unit generating electricity.

O5.2 In the circumstances described by condition O5.1.2 the licensee must notify and provide the EPA with a statement specifying:

1. the maximum daily volume of water from the Fish River Scheme that is able to be used in the cooling process for the duration of the outage; and,
2. the reasons for this volume being the maximum daily volume that can practically be used in the cooling tower process for the duration of the outage.

O5.3 Notwithstanding condition O5.1, the licensee is not required to use water from the Fish River Scheme when both units are out of service and there is no discharge of cooling tower water from Licensed Discharge Points (LDP) 1, 4 and 21.

O5.4 The licensee must notify and provide documentary evidence to the EPA when any of the following events occur:

1. The State Water Corporation has imposed a restriction level on extractions in accordance with the Water Management Licence number 10WM000004 issued to the licensee for the Fish River Scheme under the Water Act 1912.
2. Outages and periods of peak load generation occur which require the licensee to use water from the Fish River Scheme within the ranges specified in conditions O5.1.2 and O5.2.2.
3. Lake Wallace exceeds 750 microsiemens per centimetre Electrical Conductivity for more than 7 days in any one month.
4. Conductivity of discharges from Licence Discharge Points (LDP) 1, 4 and 21 exceeds the 90th percentile for 2 consecutive weeks.

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5. The dissolved aluminium concentration of cooling tower water sources exceed 0.055 mg/L.

O5.5 The licensee must undertake the following actions when any sample result for aluminium, copper, and zinc required by M2.3 exceeds the respective 90th percentile limits for these pollutants at Licensed Discharge Points (LDP) 1, 4 or 21:

1. investigate the cause of the sample result; and
2. within 7 days of receiving the sample result, advise the EPA in writing of (a) the cause of the sample result; and (b) practical measures that will be taken to prevent or minimise the potential for a recurrence of a discharge in exceedance of the respective 90th percentile limits for aluminium, copper and zinc.

O5.6 In circumstances where the State Water Corporation has imposed a restriction level on extractions under the Water Management Licence number 10WM000004 issued for the Fish River Scheme under the Water Act 1912, the licensee must take all practical measures, taking into account the requirements of the Springvale Transfer Agreement, to use source water that minimises water pollution.

## 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.

### 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

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## POINT 13,14

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Yearly	TM-12
Carbon dioxide	percent	Yearly	TM-24
Chlorine	milligrams per cubic metre	Yearly	TM-7 & TM-8
Copper	milligrams per cubic metre	Yearly	TM-12, TM-13 & TM-14
Dry gas density	kilograms per cubic metre	Quarterly	TM-23
Hydrogen chloride	milligrams per cubic metre	Yearly	TM-7 & TM-8
Mercury	milligrams per cubic metre	Yearly	TM-12
Moisture content	percent	Quarterly	TM-22
Molecular weight of stack gases	grams per gram mole	Quarterly	TM-23
Nitrogen Oxides	grams per cubic metre	Quarterly	Special Method 2
Oxygen (O <sub>2</sub> )	percent	Quarterly	CEM-3
Solid Particles	milligrams per cubic metre	Quarterly	TM-15
Sulfuric acid mist and sulfur trioxide (as SO <sub>3</sub> )	milligrams per cubic metre	Yearly	TM-3
Sulphur dioxide	milligrams per cubic metre	Quarterly	TM-4
Temperature	degrees Celsius	Quarterly	TM-2
Total Fluoride	milligrams per cubic metre	Yearly	TM-9
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Yearly	TM-12, TM-13 & TM-14
Velocity	metres per second	Quarterly	TM-2
Volumetric flowrate	cubic metres per second	Quarterly	TM-2

## POINT 15,16

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen dioxide	parts per hundred million	Continuous	AM-12
Sulphur dioxide	parts per hundred million	Continuous	AM-20

## POINT 17

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen dioxide	parts per hundred million	Monthly	Special Method 1
Sulphur dioxide	parts per hundred million	Monthly	Special Method 1

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## M2.3 Water and/ or Land Monitoring Requirements

### POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Weekly during any discharge	Representative sample
Aluminium (total)	milligrams per litre	Weekly during any discharge	Representative sample
Arsenic (total)	milligrams per litre	Weekly during any discharge	Representative sample
Boron	milligrams per litre	Weekly during any discharge	Representative sample
Copper (dissolved)	milligrams per litre	Weekly during any discharge	Representative sample
Copper (total)	milligrams per litre	Weekly during any discharge	Representative sample
Electrical conductivity	microsiemens per centimetre	Weekly during any discharge	Representative sample
Fluoride	milligrams per litre	Weekly during any discharge	Representative sample
Nickel	milligrams per litre	Weekly during any discharge	Representative sample
pH	pH	Weekly during any discharge	Representative sample
Selenium	milligrams per litre	Monthly during discharge	Representative sample
Sulfate	milligrams per litre	Weekly during any discharge	Representative sample
Zinc (dissolved)	milligrams per litre	Weekly during any discharge	Representative sample
Zinc (total)	milligrams per litre	Weekly during any discharge	Representative sample

### POINT 3

Pollutant	Units of measure	Frequency	Sampling Method
Boron	milligrams per litre	Monthly during discharge	Representative sample
Electrical conductivity	microsiemens per centimetre	Weekly during any discharge	Representative sample
Filterable iron	milligrams per litre	Monthly during discharge	Representative sample
Filterable manganese	milligrams per litre	Monthly during discharge	Representative sample
Fluoride	milligrams per litre	Weekly during any discharge	Representative sample
pH	pH	Weekly during any discharge	Representative sample
Selenium	milligrams per litre	Monthly during discharge	Representative sample



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Sulfate	milligrams per litre	Weekly during any discharge	Representative sample
Total suspended solids	milligrams per litre	Weekly during any discharge	Representative sample

## POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Weekly	Representative sample
Aluminium (total)	milligrams per litre	Weekly	Representative sample
Arsenic	milligrams per litre	Weekly	Representative sample
Boron	milligrams per litre	Weekly	Representative sample
Copper (dissolved)	milligrams per litre	Weekly	Representative sample
Copper (total)	milligrams per litre	Weekly	Representative sample
Electrical conductivity	microsiemens per centimetre	Weekly	Representative sample
Fluoride	milligrams per litre	Weekly	Representative sample
Nickel	milligrams per litre	Weekly	Representative sample
pH	pH	Weekly	Representative sample
Selenium	milligrams per litre	Weekly	Representative sample
Sulfate	milligrams per litre	Weekly	Representative sample
Total suspended solids	milligrams per litre	Weekly	Representative sample
Turbidity	nephelometric turbidity units	Weekly	Representative sample
Zinc (dissolved)	milligrams per litre	Weekly	Representative sample
Zinc (total)	milligrams per litre	Weekly	Representative sample

## POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Monthly during discharge	Representative sample
Oil and Grease	milligrams per litre	Monthly during discharge	Representative sample
pH	pH	Monthly during discharge	Representative sample
Total suspended solids	milligrams per litre	Monthly during discharge	Representative sample

## POINT 7,8,22,23

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Monthly	Representative sample
Aluminium (total)	milligrams per litre	Monthly	Representative sample
Arsenic (total)	milligrams per litre	Monthly	Representative sample
Boron	milligrams per litre	Monthly	Representative sample

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Copper (total)	milligrams per litre	Monthly	Representative sample
Electrical conductivity	microsiemens per centimetre	Weekly	Representative sample
Fluoride	milligrams per litre	Monthly	Representative sample
Nickel (total)	milligrams per litre	Monthly	Representative sample
pH	pH	Weekly	Representative sample
Selenium	milligrams per litre	Monthly	Representative sample
Sulfate	milligrams per litre	Weekly	Representative sample
Zinc (total)	milligrams per litre	Monthly	Representative sample

## POINT 18

Pollutant	Units of measure	Frequency	Sampling Method
Electrical conductivity	microsiemens per centimetre	Monthly during discharge	Representative sample
Oil and Grease	milligrams per litre	Monthly during discharge	Representative sample
pH	pH	Monthly during discharge	Representative sample
Total suspended solids	milligrams per litre	Monthly during discharge	Representative sample

## POINT 21

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium (dissolved)	milligrams per litre	Weekly during any discharge	Representative sample
Aluminium (total)	milligrams per litre	Weekly during any discharge	Representative sample
Arsenic (total)	milligrams per litre	Weekly during any discharge	Representative sample
Boron	milligrams per litre	Weekly during any discharge	Representative sample
Copper (dissolved)	milligrams per litre	Weekly during any discharge	Representative sample
Copper (total)	milligrams per litre	Weekly during any discharge	Representative sample
Electrical conductivity	microsiemens per centimetre	Weekly during any discharge	Representative sample
Fluoride	milligrams per litre	Weekly during any discharge	Representative sample
Nickel	milligrams per litre	Weekly during any discharge	Representative sample
pH	pH	Weekly during any discharge	Representative sample
Sulfate	milligrams per litre	Weekly during any discharge	Representative sample
Total suspended solids	milligrams per litre	Weekly during any discharge	Representative sample
Zinc (dissolved)	milligrams per litre	Weekly during any discharge	Representative sample

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Zinc (total)	milligrams per litre	Weekly during any discharge	Representative sample
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M2.4 For the purposes of the tables above;

Special Method 1 means the CSIRO diffusion tube method.

Special Method 2 means sampling in accordance with TM-11 and include recording of the respective boiler MW Load at time of sampling, to enable reporting under condition R1.10.

For Point 1 and 4 above, where the licensee is utilising Metaflex EP in the cooling water system, the licensee must undertake the additional monitoring specified under Special Condition E2 of this licence.

M2.5 For the purposes of the tables above, a requirement to monitor for arsenic (points 1, 4 and 21) means a requirement to monitor for, and report, arsenic as the total and only differentiate the species of arsenic if the total exceeds 0.024 mg/L.

M2.6 For the purposes of the tables above;

For ambient air monitoring of pollutants, the recording of results and reporting for Annual Return purposes shall include "averaging periods" as stipulated in the National Environmental Protection (Ambient Air Quality) Measure (eg: Nitrogen Dioxide averaging periods of one hour and one year, and Sulphur Dioxide averaging periods of one hour, one day and one year).

M2.7 Samples taken pursuant to a requirement in this licence to monitor the volume, mass or concentration of pollutants, must be analysed and reported in accordance with the laboratory accreditation requirements set out in section 2.1.3 of the Load Calculation Protocol.

The Load Calculation Protocol is the Protocol referred to in clause 15 of the Protection of the Environment Operations (General) Regulation 2009. A copy of the Protocol was published in the Government Gazette on 25 June 1999 and can be purchased from the EPA or viewed at <http://www.environment.nsw.gov.au>.

M2.8 Monitoring at points 13 and 14 must be reported using the references bases set out in the tables in condition L3.4 in the column headed "Reference conditions".

## M3 Testing methods - concentration limits

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

- any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
- if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
- if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved

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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 Recording of pollution complaints**

- M4.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.
- M4.2 The record must include details of the following:
- a) the date and time of the complaint;
  - b) the method by which the complaint was made;
  - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
  - d) the nature of the complaint;
  - e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
  - f) if no action was taken by the licensee, the reasons why no action was taken.
- M4.3 The record must be produced to any authorised officer of the EPA who asks to see them.
- M4.4 The record of a complaint must be kept for at least 4 years after the complaint was made.

## **M5 Telephone complaints line**

- M5.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M5.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M5.3 The preceding two conditions do not apply until 3 months after:
- a) the date of the issue of this licence or
  - b) if this licence is a replacement licence within the meaning of the Protection of the Environment Operations (Savings and Transitional) Regulation 1998, the date on which a copy of the licence was served on the licensee under clause 10 of that regulation.

## **M6 Requirement to monitor volume or mass**

- M6.1 For each discharge point or utilisation area specified below, the licensee must monitor:
- a) the volume of liquids discharged to water or applied to the area;
  - b) the mass of solids applied to the area;

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c) 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
Continuous during discharge	kilolitres per day	Weir structure and level sensor

## POINT 3

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	kilolitres per day	Flow meter and continuous logger

## POINT 4

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	kilolitres per day	Flow meter and continuous logger

## POINT 5

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	kilolitres per day	Weir structure and level sensor

## POINT 21

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	kilolitres per day	Weir structure and level sensor

## M7 Other monitoring and recording conditions

M7.1 The licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1 contained in any solid alternative fuel, and the Calorific Value (MJ/kg) of the fuel. The licensee must use the units of measure, and sample at the frequency specified opposite in the other columns:

Parameter	Unit of measure	Frequency
Antimony (Sb)	mg/kg	Per batch, as processed
Arsenic (As)	mg/kg	Per batch, as processed
Beryllium (Be)	mg/kg	Per batch, as processed
Cadmium (Cd)	mg/kg	Per batch, as processed
Chlorine (Cl)	%	Per batch, as processed
Chromium (Cr) total	mg/kg	Per batch, as processed
Cobalt (Co)	mg/kg	Per batch, as processed
Copper (Cu)	mg/kg	Per batch, as processed

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Flourine (F)	%	Per batch, as processed
Lead (Pb)	mg/kg	Per batch, as processed
Manganese (Mn)	mg/kg	Per batch, as processed
Mercury (Hg)	mg/kg	Per batch, as processed
Nickel (Ni)	mg/kg	Per batch, as processed
Selenium (Se)	mg/kg	Per batch, as processed
Sulfur (S)	%	Per batch, as processed
Tin (Sn)	mg/kg	Per batch, as processed
Vanadium (V)	mg/kg	Per batch, as processed

- M7.2 To determine compliance with condition L6.1, monitoring of noise from the Kerosene Vale Ash Repository must be carried out at locations identified by and in accordance with, the Kerosene Vale Stage 2 Ash Repository Operational Environmental Management Plan 2008.

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

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

- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
  - b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

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- 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.
- R1.9 Where the licensee is unable to complete a part of the Annual Return by the due date because the licensee was unable to calculate the actual load of a pollutant due to circumstances beyond the licensee's control, the licensee must notify the EPA in writing as soon as practicable, and in any event not later than the due date. The notification must specify:
- a) the assessable pollutants for which the actual load could not be calculated; and
  - b) the relevant circumstances that were beyond the control of the licensee.
- R1.10 The Annual Return must include the following information:
- a) To validate the SSEF-PEMS for Nitrogen oxides approved by the EPA on 27 February 2008, the licensee must provide a report that plots the quarterly Nitrogen oxide concentration sampling results required by condition M2.1, against the historical Nitrogen oxide CEMS data curves for boiler units 7 and 8 at Wallerawang Power Station.
  - b) The licensee must report any exceedance of any discharge limit, standard, or concentration set by a condition of this licence. The report must include the sample results of the exceedance and indicate the name of the testing laboratory, parameter(s) monitored, the limit, standard, or concentration exceeded, the date of any exceedance and the result of any analysis.

## 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



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- 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**

- R4.1 In the event where circumstances outlined in O5.1.2 occur, in addition to the provision of monitoring data required by the licence, the licensee must report the results of the monitoring of discharges from Licensed Discharge Points (LDP) 1, 4 and 21 as a separate dataset.

## **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.



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## G2 Signage

- G2.1 The location of EPA point number(s) 1 to 19 must be clearly marked by signs that indicate the point identification number used in this licence and be located as close as practical to the point.

## 8 Pollution Studies and Reduction Programs

### U1 Upgrade Discharge Emission Controls Unit 8

- U1.1 By 30 June 2017, install and commission a dust collection plant (Unit 8) to replace the existing electrostatic precipitators at Wallerawang Power Station Boiler 8, identified as "EPA ID 14" on a map provided to the EPA in a letter dated 18 March 2005. Unit 8 must be capable of filtering emissions so that the end of stack discharge from the boiler does not exceed the standard of concentration for Group 6 plant used for the purpose of electricity generation in Schedule 3 to the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

### U2 Upgrade Discharge Emission Controls Unit 7

- U2.1 By 30 June 2017, install and commission a dust collection plant (Unit 7) to replace the existing electrostatic precipitators at Wallerawang Power Station Boiler 7, identified as "EPA ID 13" on a map provided to the EPA in a letter dated 18 March 2005. Unit 7 must be capable of filtering emissions so that the end of stack discharge from the boiler does not exceed the standard of concentration for Group 6 plant used for the purpose of electricity generation in Schedule 3 to the *Protection of the Environment Operations (Clean Air) Regulation 2010*.

### U3 Application of ANZECC Guidelines

- U3.1 By 15 February 2013, the licensee must apply the Australian and New Zealand Guidelines for Fresh and Marine Water Quality - Australian and New Zealand Environment Conservation Council (ANZECC 2000) and undertake a Direct Toxicity Assessment ("DTA") to assess the acute toxicity of pollutants (copper is specified as a pollutant that must be assessed) discharged from Licensed Discharge Point (LDP) 4.

The DTA must take into account:

- any events that are triggered by specified operational processes that would materially impact discharge water quality (eg. blowdown, de-scaling, antifouling etc);
- be laboratory based with testing commencing within 48 hours of sample collection;
- use, at a minimum, testing on algae, crustacean and larval fish; and
- in addition to testing for individual pollutants, testing for the toxicity of the combination of pollutants in the discharge.

The licensee must submit the results of the DTA to the EPA within 5 working days of receipt.

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## U4 Blowdown Water Recovery and Re-Use

U4.1 By 31 March 2013, the licensee must submit to the EPA a report on the feasibility of connecting the Unit 8 Cooling Tower plant to Unit 7 Cooling Tower plant for treatment in the Reverse Osmosis Plant ("the Option") to reduce pollution from the discharge from Licensed Discharge Point 4 (LDP4).

The report must:

1. describe the feasibility assessment of the Option undertaken by the licensee;
2. specify the volumes of water that would otherwise be discharged from LDP4 that could be treated by the Option, where the volumes are expressed in ML/day for 50 and 90 percent of the time;
3. calculate the discharge volumes and discharge pollutant concentrations\* for LDP4 that would be achieved 50 and 90 percent of the time by the implementation of the Option; and
4. include all supporting calculations and/or descriptions of model(s) used to calculate discharge volumes and pollutant concentrations\* for the Option.

\*pollutant concentrations includes all pollutants listed for LDP4 in condition L3.6.

U4.2 By 31 December 2015, the licensee must carry out and complete a program of works approved by the EPA for the recovery and re-use of cooling tower blowdown water at Wallerawang power station (Water Recovery Project) and for alternative procedures to manage the disposal of cooling tower blowdown water when the recovery and re-use processes are not operating due to routine maintenance or because of a malfunction (Alternative Management Plan), and any discharge to waters must be in accordance with the limit conditions prescribed by this licence.

U4.2.1 The program of works must include all works necessary to implement the Water Recovery Project and the Alternative Management Plan.

U4.2.2 By 31 December 2013, the licensee must submit to the EPA the details of the Water Recovery Project and Alternative Management Plan, and a timetable for carrying out and completing the works by 31 December 2015.

U4.2.3 On request by the EPA, the licensee must provide the EPA with written progress reports detailing the works that have been completed.

## 9 Special Conditions

### E1 Solid alternative fuel

E1.1 For the purposes of this Licence, solid alternative fuel means timber products that are either:-

- a) Biomass that is sustainably harvested as defined in "Greenhouse Gas Emissions from Electricity Supplied in NSW: Emissions Workbook, October 2000, Ministry of Energy and Utilities"; or
- b) Recycled timber products obtained from manufacturing, construction and demolition sources that comply with the alternate fuel air impurity specification for hazardous substances under condition L3.8; or
- c) In accordance with Regulation 8 (Special requirements – wood wastes) of Division 2.2 (Eligible renewable energy sources) in Part 2 of the Renewable Energy (Electricity) Regulations 2001 and

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Renewable Energy (Electricity) Act 2000.

E1.2 Solid alternative fuel may only be fed to the boiler during coal firing.

E1.3 Solid alternative fuel may only be fed to the boiler at a feed rate of less than or equal to 5 % weight of the coal feed rate.

## E2 Use of Metaflex EP Corrosion Inhibitor

E2.1 At all times when the licensee is adding Metaflex EP corrosion inhibitor product to the power station cooling water system;

1. the utilisation of Metaflex EP must be undertaken in the prescribed manner that facilitates the removal of excess Metaflex EP product (as total dithiocarbamates) in accordance with the procedures specified by the manufacturer.
2. for licensed discharge/monitoring point 1 and 4 , the concentration of the pollutant discharged at the point must not exceed the concentration limits specified for that pollutant in the table below:

Pollutant	Unit of Measure	100 percentile concentration limit
Metaflex EP total dithiocarbamates ingredients and derivatives	milligrams per litre	0.02

E2.2 For licensed discharge/monitoring points 1 and 4, the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1 of the table below. The licensee must use the sampling method, unit of measure, and sample at the frequency specified in the other columns of the table:

Pollutant	Unit of Measure	Frequency	Sampling Method
Metaflex EP total dithiocarbamates ingredients	mg/L	Weekly during discharge	Representative sample

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## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	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
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	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> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	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.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	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> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	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.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

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<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	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.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	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.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	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> .

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<b>TSP</b>	Means total suspended particles
<b>TSS</b>	Means total suspended solids
<b>Type 1 substance</b>	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
<b>Type 2 substance</b>	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
<b>utilisation area</b>	Means any area shown as a utilisation area on a map submitted with the application for this licence
<b>waste</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>waste type</b>	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Mr Jim Clarence

Environment Protection Authority

(By Delegation)

Date of this edition: 29-September-2000

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## End Notes

- 1 Licence varied by notice 1002514, issued on 15-Mar-2001, which came into effect on 30-Mar-2001.
- 2 Licence varied by notice 1006913, issued on 25-May-2001, which came into effect on 19-Jun-2001.
- 3 Licence varied by notice 1011875, issued on 12-Nov-2001, which came into effect on 12-Nov-2001.
- 4 Licence varied by notice 1014355, issued on 20-Mar-2002, which came into effect on 22-Mar-2002.
- 5 Licence varied by notice 1033370, issued on 13-May-2005, which came into effect on 07-Jun-2005.
- 6 Licence varied by notice 1053427, issued on 12-Dec-2005, which came into effect on 06-Jan-2006.
- 7 Licence varied by notice 1056197, issued on 04-Apr-2006, which came into effect on 04-Apr-2006.
- 8 Licence varied by notice 1060314, issued on 21-Jul-2006, which came into effect on 21-Jul-2006.
- 9 Licence varied by notice 1067372, issued on 22-Dec-2006, which came into effect on 22-Dec-2006.
- 10 Licence varied by notice 1077138, issued on 28-Sep-2007, which came into effect on 28-Sep-2007.
- 11 Licence varied by notice 1080218, issued on 16-Nov-2007, which came into effect on 16-Nov-2007.
- 12 Licence varied by notice 1083863, issued on 30-Jul-2008, which came into effect on 30-Jul-2008.
- 13 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 14 Licence varied by notice 1095281, issued on 01-Jan-2009, which came into effect on 01-Jan-2009.
- 15 Licence varied by notice 1099554, issued on 24-Apr-2009, which came into effect on 24-Apr-2009.
- 16 Licence varied by notice 1102924, issued on 27-Jul-2009, which came into effect on 27-Jul-2009.
- 17 Licence varied by notice 1104582, issued on 01-Feb-2010, which came into effect on 01-Feb-2010.
- 18 Licence varied by notice 1112729, issued on 20-Apr-2010, which came into effect on 20-Apr-2010.

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19	Licence varied by notice 1113579, issued on 05-May-2010, which came into effect on 05-May-2010.
20	Licence varied by notice 1114466, issued on 18-Jun-2010, which came into effect on 18-Jun-2010.
21	Licence varied by notice 1119263, issued on 16-Sep-2010, which came into effect on 16-Sep-2010.
22	Licence varied by notice 1125896, issued on 23-Jun-2011, which came into effect on 23-Jun-2011.
23	Licence varied by notice 1501292 issued on 14-Nov-2011
24	Licence varied by notice 1502871 issued on 22-Nov-2011
25	Licence varied by notice 1505157 issued on 02-Aug-2012
26	Licence varied by notice 1508429 issued on 30-Nov-2012
27	Licence varied by notice 1510807 issued on 28-Dec-2012