Environment Protection Licence

Licence - 779

Licence Details	
Number:	779
Anniversary Date:	01-July

Licensee
AGL MACQUARIE PTY LIMITED
PRIVATE MAIL BAG 2
MUSWELLBROOK NSW 2333

Premises
BAYSWATER POWER STATION
NEW ENGLAND HIGHWAY
MUSWELLBROOK NSW 2333

Scheduled Activity
Chemical storage
Coal works
Crushing, grinding or separating
Electricity generation

Fee Based Activity	Scale
Coal works	> 5000000 T annual handing capacity
Crushing, grinding or separating	> 2000000 T annual processing capacity
General chemicals storage	0-5000 kL storage capacity
Generation of electrical power from coal	> 4000 GWh annual generating capacity
Petroleum products storage	0-5000 kL storage capacity

Region
Metropolitan North - Newcastle
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Environment Protection Licence

Licence - 779

INFORMATION ABOUT THIS LICENCE ---------- 5

Dictionary ---------- 5

Responsibilities of licensee ---------- 5

Variation of licence conditions ---------- 5

Duration of licence ---------- 5

Licence review ---------- 5

Fees and annual return to be sent to the EPA ---------- 5

Transfer of licence ---------- 6

Public register and access to monitoring data ---------- 6

1 ADMINISTRATIVE CONDITIONS ---------- 7

A1 What the licence authorises and regulates ---------- 7

A2 Premises or plant to which this licence applies ---------- 7

A3 Other activities ---------- 8

A4 Information supplied to the EPA ---------- 8

2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND ---------- 8

P1 Location of monitoring/discharge points and areas ---------- 8

3 LIMIT CONDITIONS ---------- 10

L1 Pollution of waters ---------- 10

L2 Load limits ---------- 11

L3 Concentration limits ---------- 11

L4 Volume and mass limits ---------- 14

L5 Waste ---------- 14

L6 Potentially offensive odour ---------- 16

L7 Other limit conditions ---------- 16

4 OPERATING CONDITIONS ---------- 17

O1 Activities must be carried out in a competent manner ---------- 17

O2 Maintenance of plant and equipment ---------- 17

O3 Dust ---------- 17

O4 Emergency response ---------- 17

O5 Waste management ---------- 18

O6 Other operating conditions ---------- 18

5 MONITORING AND RECORDING CONDITIONS ---------- 19

M1 Monitoring records ---------- 19

M2 Requirement to monitor concentration of pollutants discharged ---------- 20

Environment Protection Licence

Licence - 779

M3 Testing methods - concentration limits ---- 24
M4 Testing methods - load limits ---- 24
M5 Environmental monitoring ---- 24
M6 Weather monitoring ---- 25
M7 Recording of pollution complaints ---- 25
M8 Telephone complaints line ---- 26
M9 Requirement to monitor volume or mass ---- 26
M10 Other monitoring and recording conditions ---- 27
M11 Noise monitoring ---- 27
6 REPORTING CONDITIONS ---- 27
R1 Annual return documents ---- 27
R2 Notification of environmental harm ---- 29
R3 Written report ---- 29
R4 Other reporting conditions ---- 30
7 GENERAL CONDITIONS ---- 31
G1 Copy of licence kept at the premises or plant ---- 31
G2 Contact number for incidents and responsible employees ---- 31
G3 Signage ---- 31
G4 Other general conditions ---- 31
8 POLLUTION STUDIES AND REDUCTION PROGRAMS ---- 33
U1 PRP 15 - Ravensworth Ash Line Containment Program ---- 33
U2 PRP 16 - Stormwater Pipeline Program ---- 33
U3 EIP 17 - Lake Liddell Seepage Water Improvement Works ---- 34
U4 EIP 19 - Oil cooler upgrade ---- 34
U5 PRS 20 - Alarm review ---- 34
U6 PRS 21 - Bayswater water management system review ---- 35
U7 PRS 22 - Asset environmental management review ---- 35
U8 PRS 23 - Bayswater Ash Dam Seepage South Investigation ---- 37
U9 PRS 24 - Coal handling plant water management feasibility study ---- 37
U10 EIP 25 - Antiene coal unloader - water system flow improvement ---- 38
9 SPECIAL CONDITIONS ---- 38
E1 Hunter River Salinity Trading Scheme ---- 38
E2 Dioxin and furan study ---- 39
E3 Site specific air emission monitoring plan ---- 40

Environment Protection Licence

Licence - 779

E4 Continuous emission monitoring systems - quality assurance and control procedures ---------- 40
E5 Air pollution control equipment - maintenance, operation and fault response procedure ---------- 41
E6 Continuous particle matter monitoring feasibility study ---------- 41
DICTIONARY ---------- 43
General Dictionary ---------- 43

Environment Protection Licence

Licence - 779

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);
- 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 - 779

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:

AGL MACQUARIE PTY LIMITED
PRIVATE MAIL BAG 2
MUSWELLBROOK NSW 2333

subject to the conditions which follow.

Environment Protection Licence

Licence - 779

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 annual handing capacity
Crushing, grinding or separating	Crushing, grinding or separating	> 2000000 T annual processing capacity
Chemical storage	General chemicals storage	0 - 5000 kL storage capacity
Electricity generation	Generation of electrical power from coal	> 4000 GWh annual generating capacity
Chemical storage	Petroleum products storage	0 - 5000 kL storage capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
BAYSWATER POWER STATION
NEW ENGLAND HIGHWAY
MUSWELLBROOK
NSW 2333
PREMISES DEFINED BY DOCUMENT(S) TITLED "BAYSWATER EPL" REFERENCES "PAGE 1" AND "PAGE 2" DATED 29/06/2020 AND PROVIDED TO THE EPA ON 29/06/2020 (EPA REFERENCE DOC20/545645 AND DOC20/545645-1).

A2.2 The document(s) referred to in condition A2.1 above are herein referred to in this licence as "The Plans".

Note: Page Break.

A3 Other activities

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

Ancillary Activity
Electricity generation (generation of electrical power from diesel)
Helicopter-related activities
Railway activities - railway infrastructure operations
Sewage treatment

A3.2 For the purpose of condition A3.1 above:
a) electricity generation (generation of electrical power from diesel) means the operation of the emergency diesel generator(s) in accordance with the conditions of this licence; and
b) all other activities listed in condition A3.1 are as defined by Schedule 1 of the Protection of the Environment Operations Act 1997 although not meeting the scheduled activity threshold.

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.

A4.2 Any other document and/or management plan is not to be taken as part of the documentation in condition A4.1 above, other than those documents and/or management plans specifically referenced in 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

Environment Protection Licence

Licence - 779

1		Discharge to air	Discharge of air emissions from stack serving boilers number 1 and 2 marked and shown as EPL Monitors ID No. 1 on The Plans
2		Discharge to air	Discharge of air emissions from stack serving boilers number 3 and 4 marked and shown as EPL Monitors ID No. 2 on The Plans
3	Air emission monitoring		Combined air emissions from boiler 1 via Points 7 and 8 to Point 1 marked and shown as EPL Monitors ID No. 3 on The Plans
4	Air emission monitoring		Combined air emissions from boiler 2 via Points 9 and 10 to Point 1 marked and shown as EPL Monitors ID No. 4 on The Plans
5	Air emission monitoring		Combined air emissions from boiler 3 via Points 11 and 12 to Point 2 marked and shown as EPL Monitors ID No. 5 on The Plans
6	Air emission monitoring		Combined air emissions from boiler 4 via Points 13 and 14 to Point 2 marked and shown as EPL Monitors ID No. 6 on The Plans
7	Air emission monitoring		Boiler number 1 exhaust - duct A marked and shown as EPL Monitors ID No. 7 on The Plans
8	Air emission monitoring		Boiler number 1 exhaust - duct B marked and shown as EPL Monitors ID No. 8 on The Plans
9	Air emission monitoring		Boiler number 2 exhaust - duct A marked and shown as EPL Monitors ID No. 9 on The Plans
10	Air emission monitoring		Boiler number 2 exhaust - duct B marked and shown as EPL Monitors ID No. 10 on The Plans
11	Air emission monitoring		Boiler number 3 exhaust - duct A marked and shown as EPL Monitors ID No. 11 on The Plans
12	Air emission monitoring		Boiler number 3 exhaust - duct B marked and shown as EPL Monitors ID No. 12 on The Plans
13	Air emission monitoring		Boiler number 4 exhaust - duct A marked and shown as EPL Monitors ID No. 13 on The Plans
14	Air emission monitoring		Boiler number 4 exhaust - duct B marked and shown as EPL Monitors ID No. 14 on The Plans
15	Meteorological weather monitoring		Savoy Hill meteorological weather marked and shown as EPL Monitors ID No. 15 on The Plans
16	Ambient air quality monitoring		Lake Liddell recreation area ambient air monitoring station marked and shown as EPL Monitors ID No. 16 on The Plans
17	Ambient air quality monitoring		Energy Australia Muswellbrook Depot ambient air monitoring station marked and shown as EPL Monitors ID No. 17 on The Plans

18	Ambient air quality monitoring	Ravensworth ambient air monitoring station marked and shown as EPL Monitors ID No. 18 on The Plans

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.

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
19	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge from cooling towers to Tinkers Creek marked and shown as EPL Monitors ID No. 19 on The Plans
20	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge from main station oil and water separator holding basin to Tinkers Creek marked and shown as EPL Monitors ID No. 20 on The Plans
21	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge from Bayswater Ash Dam unlined flood spillway (located near left abutment) to Chilcotts Creek marked and shown as EPL Monitors ID No. 21 on The Plans
22	Discharge to waters Volume monitoring	Discharge to waters Volume monitoring	Discharge of recirculated water from the Hunter River to Lake Liddell marked and shown as EPL Monitors ID No. 22 on The Plans
23	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality monitoring Volume monitoring	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality monitoring Volume monitoring	Discharge of saline waters from discharge pipe from the Lake Liddell dam wall marked and shown as EPL Monitors ID No. 23 on The Plans
24	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality monitoring Volume monitoring	Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality monitoring Volume monitoring	Discharge of saline waters from inlet pipe located at the Void 4 pontoon pump system marked and shown as EPL Monitors ID No. 24 on The Plans

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.

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

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)	
Benzene (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)	
Volatile organic compounds (Air)	

L3 Concentration limits

L3.1 For each monitoring/discharge point or utilisation area specified in the table\s 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\s.

L3.4 Air Concentration Limits

POINT 3,4,5,6

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Cadmium	milligrams per cubic metre	0.2	Dry, 273K, 101.3kPA	7% O2	1 hour
Chlorine	milligrams per cubic metre	20	Dry, 273K, 101.3kPA	7% O2	1 hour
Fluorine	milligrams per cubic metre	30	Dry, 273K, 101.3kPA	7% O2	1 hour
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 hour
Mercury	milligrams per cubic metre	0.05	Dry, 273K, 101.3kPA	7% O2	1 hour
Nitrogen Oxides	milligrams per cubic metre	1500	Dry, 273K, 101.3kPA	7% O2	1 hour
Solid Particles	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 hour
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	100	Dry, 273K, 101.3kPA	7% O2	1 hour
Sulfur dioxide	milligrams per cubic metre	1700	Dry, 273K, 101.3kPA	7% O2	1 hour
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	0.75	Dry, 273K, 101.3kPA	7% O2	1 hour
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	10	Dry, 273K, 101.3kPA	7% O2	1 hour

L3.5 In addition to the concentration limits specified in condition L3.4 above, the following 99th percentile concentration limits apply for points 3 to 6 utilising the same units of measure, reference conditions, oxygen correction and averaging period as above for each pollutant listed below:
a) nitrogen oxides: 1100 mg/m3; and
b) sulfur dioxide: 1400 mg/m3.

L3.6 For the purposes of conditions L3.4 and L3.5 of this licence:
a) Nitrogen Oxides mean: Nitric Oxide (NO) or Nitrogen Dioxide (NO_2) or both, as NO_2 equivalent; and
b) Fluorine means: fluorine and any compound containing fluorine, as total fluoride (HF equivalent).

L3.7 Water and/or Land Concentration Limits

Environment Protection Licence

Licence - 779

POINT 19

Pollutant	Units of Measure	50%Limit	90%Limit	3DGMLimit	100 percentile concentration limit
Conductivity	microsiemens per centimetre				4500
Oil and Grease	milligrams per litre				10
pH	pH				6.5-9.0

POINT 20

Pollutant	Units of Measure	50%Limit	90%Limit	3DGMLimit	100 percentile concentration limit
Oil and Grease	milligrams per litre				10
Total suspended solids	milligrams per litre				30

POINT 23

Pollutant	Units of Measure	50%Limit	90%Limit	3DGMLimit	100 percentile concentration limit
pH	pH				6.5-8.5
Total suspended solids	milligrams per litre				30

POINT 24

Pollutant	Units of Measure	50%Limit	90%Limit	3DGMLimit	100 percentile concentration limit
Boron	milligrams per litre				0.81
Cadmium	milligrams per litre				0.0003
Copper	milligrams per litre				0.001

Iron	milligrams per litre	0.27
Molybdenum	milligrams per litre	0.29
Nickel	milligrams per litre	0.019
pH	pH	6.5-9.5
Silver	milligrams per litre	0.0005
Total suspended solids	milligrams per litre	30

L4 Volume and mass limits

L4.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:
a) liquids discharged to water; or;
b) 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
19	megalitres per month	840
20	kilolitres per week	36400
23	megalitres per day	700
24	megalitres per day	20

L5 Waste

L5.1 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.

Code	Waste	Description	Activity	Other Limits
K130	Sewage products	Sewage generated at	Sewage Treatment	Only permitted

		the Liddell Power Station		when the Liddell Power Station sewage treatment plant and/or reticulation system is undergoing maintenance or repair
NA	Waste Water and Sludges	Lime and gypsum residues from drinking water treatment, as defined by and meeting the requirements of The Lime and Gypsum Residues from Drinking Water Treatment Exemption, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O5.2
NA	Drilling mud and/or muddy waters from drilling operations	As defined by and meeting the requirements of the Treated Drilling Mud Order and Exemption, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O5.2
NA	Organics	Compost, manure and mulch as defined by and meeting the requirements of the Compost, Manure and Mulch Orders and Exemptions, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O5.2
NA	Biosolids categorised as unrestricted use, or as restricted use 1, 2 or 3, in accordance with the criteria set out in the biosolids guidelines	As defined by and meeting the requirements of the Biosolids Order and Exemption, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O5.2
NA	Excavated natural material	As defined by and meeting the requirements of the Excavated Natural Material Order and Exemption, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O5.2
NA	Virgin excavated natural material	As defined by the Protection of the Environment Operations Act, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O5.2

L5.2 In addition to condition 5.1 above, the licensee may also use any waste nominated within the table above where the use of that waste is authorised for use by an instrument/approval issued under the Environment Planning and Assessment Act 1979 for the purpose specified.

L5.3 The following wastes generated at/or on the premises may be disposed of to the ash dam or within the ash dam catchment:
a) ash
b) acid solutions or acids in solid form;
c) ash line poly pipe;
d) boiler cleaning residues;
e) coal fines from coal settling basins and plant and conveyor wash down;
f) cooling tower sediments;
g) demineralisation resins;
h) filter bags;
i) gypsum;
j) lime;
k) organic matter from the freshwater canal collected during filtration;
l) sediment basin clays;
m) treated sewage effluent;
n) water treatment residual chemicals;
o) any material approved in writing by the EPA to control dust emission from the ash dam; and
p) any other material approved in writing by the EPA.

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.

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.

L7 Other limit conditions

Air concentration limit emergency exceedance provision

L7.1 The air concentration limits specified in conditions L3.4 and L3.5 of this licence may be temporarily exceeded under the following circumstances:
a) the Australian Electricity Market Operator (AEMO), or a person authorised by AEMO, directs the licensee, under the National Electricity Law and the National Electricity Rules, to take relevant actions to maintain or restore the security or reliability of the electricity network; and
b) the relevant AEMO direction referred to above remains in force; and
c) the licensee takes all practical measures to prevent or minimise air pollution.

L7.2 An exceedance under condition L7.1 above counts towards the hours accumulated for the purpose of

calculating compliance with the 99th percentile concentration limits specified in condition L3.5 of this licence.

L7.3 The licensee must notify the EPA of any and all limit exceedances due to the activation of condition L7.1 in accordance with conditions R4.1 and R4.2 of this 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:
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 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

O3.3 Trucks entering and leaving the premises that are carrying loads of dust generating materials must be covered at all times, except during loading and unloading.

O4 Emergency response

Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises in accordance with Part 5.7A of the Protection of the Environment Operations Act 1997 and Part 3A of the Protection of the Environment Operations (General) Regulation 2009.

Note: Page Break.

O5 Waste management

O5.1 The licensee must ensure that any liquid and non liquid waste generated and/or stored at the premises that is to be sent offsite:
a) is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time prior to leaving the premises; or
b) where the waste is covered by an in-force Resource Recovery Order and Exemption, the waste must meet the conditions of the relevant Order prior to leaving the premises.

O5.2 The licensee, when capping and remediating the Bayswater Power Station ash dam, must only use those wastes permitted by condition L5.1 of this licence to be received and used at the premises to the minimum extent possible.

Note: For the purposes of condition O5.2 and determining compliance with the term "minimum extent possible", the EPA will consider such matters as any instrument approving or otherwise authorising the capping and remediation activities and any relevant design specifications for the capping and remediation activities.

O6 Other operating conditions

Permitted fuels for start-up, combustion support and emergency firing of generator

O6.1 Distillate may be used for start-up and combustion support in Boilers 1 to 4.

O6.2 Distillate may be used for firing the emergency diesel generator(s) at the premises for the purposes of:
a) providing black-start capability for the Bayswater Power Station or at the direction of the Australian Electricity Market Operator (AEMO); and/or
b) operating the emergency diesel generator(s) up to a maximum of 200 hours per reporting period.

O6.3 Distillate fuel used in the Bayswater Power Station for start-up and combustion support and the firing of the emergency diesel generator(s) must comply with the Determination of Fuel Quality Standards (Automotive Diesel) 2019, made under section 21 of the Fuel Quality Standards Act 2000.

Testing of coal fuel

O6.4 The licensee must have in place a fuel testing program to collect and analyse a representative number of samples of coal fired in Boilers 1 to 4. At a minimum, the coal must be analysed for:
a) ash content (%);
b) sulfur content (%);
c) chlorine content (mg/kg);
d) fluorine content (mg/kg);
e) type 1 and 2 substances content (mg/kg); and
f) calorific value (MJ/kg).

Onsite sewage treatment system

O6.5 The licensee must construct, implement and operate/utilise a wastewater management system to manage the collection, storage, treatment, use and disposal of all sewage and related wastewater generated on

the premises.

O6.6 The wastewater management system(s) operated/utilised at the premises must be inspected by a suitably qualified and experienced wastewater technician at least once in each quarterly period of the reporting period and a minimum of four time per reporting period and serviced as required.

O6.7 In relation to condition O6.6 above, the licensee must record the following:
a) details of each inspection undertaken (date, time and personnel);
b) the results of any tests performed on the wastewater management system;
c) the finding and any actions required following each inspection; and
d) the date those actions were completed or the reasons they were not completed.

Chemical storage

O6.8 The licensee must store and handle all liquid chemicals and hazardous materials used at the premises within bunded areas that are constructed and maintained in accordance with the following:
a) any relevant Australian Standards for the liquids being stored;
b) within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund;
c) the Storing and Handling Liquids: Environmental Protection Participant's Manual (DECC, 2007); and
where any conflict exists between these requirements, the most stringent requirements apply.

O6.9 For the purpose of condition O6.8 above, any tanks or other storage vessels that are interconnected and may distribute their contents either by gravity or automated pumps must be considered a single vessel.

O6.10 For the purposes of condition O6.8 and O6.9 of this licence, failure to comply with these conditions is not to be taken as a non-compliance where there is a Pollution Studies and Reduction Program nominated on this licence that is in place to correct the non-compliance, for the period of time covered by that condition.

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 - 779

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 3,4,5,6

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-38
Chlorine	milligrams per cubic metre	Every 6 months	TM-38
Fluorine	milligrams per cubic metre	Every 6 months	TM-38
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-38
Mercury	milligrams per cubic metre	Every 6 months	TM-38
Nitrogen Oxides	milligrams per cubic metre	Continuous	TM-38
Solid Particles	milligrams per cubic metre	Quarterly	TM-38
Sulfur dioxide	milligrams per cubic metre	Continuous	TM-38
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-38
Type 1 and Type 2 substances in aggregate	milligrams per litre	Every 6 months	TM-38
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-38

POINT 7,10,11,14

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Every 6 months	TM-24
Chlorine	milligrams per cubic metre	Every 6 months	TM-7
Fluorine	milligrams per cubic metre	Every 6 months	TM-9
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-8
Nitrogen Oxides	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Sulfur dioxide	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1

Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-3
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-34

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

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-14
Flow rate	cubic metres per second	Continuous	CEM-6 and US EPA Procedure 1
Mercury	milligrams per cubic metre	Every 6 months	TM-14
Moisture	percent	Continuous	Special Method 1
Oxygen (O2)	percent	Continuous	CEM-3 and US EPA Procedure 1
Solid Particles	milligrams per cubic metre	Quarterly	TM-15
Temperature	degrees Celsius	Continuous	TM-2 and US EPA Procedure 1
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-12, TM-13 & TM-14

POINT 16

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

POINT 17,18

Pollutant	Units of measure	Frequency	Sampling Method
Fluorides	micrograms per cubic metre	Continuous	AM-8
Nitrogen Oxides	parts per hundred million	Continuous	AM-12
Sulfur dioxide	parts per hundred million	Continuous	AM-20

M2.3 For the purpose of condition M2.2 above:
a) every 6 months means: a minimum of two sampling events per reporting period, at approximately 6 monthly intervals and occurring no less than 3 months apart;
b) quarterly means: a minimum of four sampling events per reporting period, at approximately 3 monthly intervals and no less than 1 month apart; and

c) special method 1 means: any moisture monitoring method approved in writing by the EPA. The monitoring method and data must be quality assured on an ongoing basis in accordance with US EPA Procedure 1.

M2.4 For the purpose of condition M2.2 of this licence, the requirement to install, commission and continuously monitor for flow rate, moisture, oxygen and temperature at points 7 to 14 does not take effect until 31 October 2021.

Note: The EPA may consider a proposal for an extension of the due date in the condition above if it can be adequately demonstrated that additional time is required to install and commission the required monitoring equipment. A request for an extension of the due date in the condition above must be based on 1) alignment with scheduled plant maintenance shutdowns; and 2) avoidance of significant disruption to the electricity network. An application for an extension of the due date in the condition above must be made to the EPA via eConnect or in writing by 1 April 2021.

M2.5 For ambient air monitoring of pollutants, the recording of results and their reporting in the Annual Return must include “averaging periods” as follows:
a) fluoride averaging periods of 7 days, 30 days and 90 days;
b) nitrogen dioxide: averaging periods of one hour and annual; and
c) sulfur dioxide: averaging periods of one hour, 24 hour and annual.

M2.6 Water and/ or Land Monitoring Requirements

POINT 19

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm
Oil and Grease	milligrams per litre	Fortnightly	Grab sample
pH	pH	Continuous during discharge	Probe

POINT 20

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

POINT 21

Pollutant	Units of measure	Frequency	Sampling Method
Boron	milligrams per litre	Weekly during any discharge	Grab sample
Cadmium	milligrams per litre	Weekly during any discharge	Grab sample

Environment Protection Licence

Licence - 779

Conductivity	microsiemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm
Copper	milligrams per litre	Weekly during any discharge	Grab sample
Iron	milligrams per litre	Weekly during any discharge	Grab sample
Molybdenum	milligrams per litre	Weekly during any discharge	Grab sample
Nickel	milligrams per litre	Weekly during any discharge	Grab sample
pH	pH	Weekly during any discharge	Probe
Silver	milligrams per litre	Weekly during any discharge	Grab sample

POINT 23

Pollutant	Units of measure	Frequency	Sampling Method
Conductivity	microsiemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm
pH	pH	Daily during any discharge	Grab sample
Total suspended solids	milligrams per litre	Monthly during discharge	Grab sample

POINT 24

Pollutant	Units of measure	Frequency	Sampling Method
Boron	milligrams per litre	Weekly during any discharge	Grab sample
Cadmium	milligrams per litre	Weekly during any discharge	Grab sample
Conductivity	microsiemens per centimetre	Continuous during discharge	A probe designed to measure the range 0 to 10,000 uS/cm
Copper	milligrams per litre	Weekly during any discharge	Grab sample
Iron	milligrams per litre	Weekly during any discharge	Grab sample
Molybdenum	milligrams per litre	Weekly during any discharge	Grab sample
Nickel	milligrams per litre	Weekly during any discharge	Grab sample
pH	pH	Weekly during any discharge	Grab sample
Silver	milligrams per litre	Weekly during any discharge	Grab sample
Total suspended solids	milligrams per litre	Monthly during discharge	Grab sample

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 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 Testing methods - load limits

Note: Division 3 of the *Protection of the Environment Operations (General) Regulation 2009* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.

M5 Environmental monitoring

M5.1 The licensee must monitor acid deposition every three (3) years at the locations and as per the cultivation requirements stipulated by the table below using sampling and analytical techniques that are to the satisfaction of the EPA.

Vineyard	Cultivar Sampled	Location
James Estate (control site)	Shiraz	Baerami
James Estate (control site)	Cabernet Sauvignon	Baerami
Hollydene Arrowfield	Chardonnay	Jerry's Plains
Mt Arthur	Chardonnay on Vermentino	Muswellbrook

Mt Arthur	Chardonnay	Muswellbrook
Small Forest	Shiraz	Denman
Small Forest	Verdelho	Denman

M6 Weather monitoring

M6.1 For each monitoring point specified below (by point number), the licensee must monitor (by sampling and obtaining results by analysis) the parameter specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample frequency, specified opposite in the other columns:

POINT 15

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	1 hour	AM-4
Wind speed at 10m	m/s	Continuous	15 minutes	AM-2 & AM-4
Wind direction at 10m	°	Continuous	15 minutes	AM-2 & AM-4
Temperature at 2m	ºC	Continuous	15 minutes	AM-4
Temperature at 10m	ºC	Continuous	15 minutes	AM-4
Sigma theta at 10m	°	Continuous	15 minutes	AM-2 & AM-4
Solar radiation	W/m²	Continuous	15 minutes	AM-4
Additional Requirements				
siting				AM-1 & AM-4
measurement				AM-2 & AM-4

M6.2 For the purposes of condition M6.1 above, the requirement to monitor rainfall, temperature at 2m and solar radiation does not take effect until 31 December 2020.

M7 Recording of pollution complaints

M7.1 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.

M7.2 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.

M7.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M7.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M8 Telephone complaints line

M8.1 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.

M8.2 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.

M8.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

M8.4 For the purpose of condition M8.1 of this licence, operating hours are defined as twenty-four hours a day, seven days a week.

M9 Requirement to monitor volume or mass

M9.1 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;
c) the mass of pollutants emitted to the air;
at the frequency and using the method and units of measure, specified below.

POINT 19

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	megalitres per month	In line instrumentation

POINT 20

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

POINT 21

Frequency	Unit of Measure	Sampling Method
Daily during any discharge	kilolitres per day	Estimate

POINT 22

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

POINT 23

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	megalitres per day	Special Method 1

POINT 24

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	megalitres per day	In line instrumentation

M9.2 For the purposes of condition M9.1 above:
a) Special Method 1 means: in-line Magflo meter (Model MAG3100) and radio telemetry.

M10 Other monitoring and recording conditions

M10.1 The licensee must continuously operate and maintain communication equipment which makes the conductivity and flow measurements, taken at Point 23, available to the "Service Coordinator" within one hour of those measurements being taken and makes them available in the format specified in the “Hunter River Salinity Trading Scheme Discharge Point Telemetry Specification - Rev V1.0 Released 4 October 2018" as published by WaterNSW.

M10.2 The licensee must ensure that all monitoring data is within a margin of error of 5% for conductivity measurements and 10% for discharge flow measurement.

M10.3 The licensee must mark Point 23 with a sign which clearly indicates the name of the licensee, whether the monitoring point is up or down stream of the discharge point(s) and that it is a monitoring point for the Hunter River Salinity Trading Scheme.

M11 Noise monitoring

M11.1 The licensee, following the receipt of a noise related complaint and if required by the EPA, must undertake noise monitoring as required in writing by the EPA.

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:

1. a Statement of Compliance,

2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or 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 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.

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

R1.8 Within the Annual Return, the Statements 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.

Annual Air Emission Monitoring Report

R1.9 The licensee must submit with the Annual Return an Annual Air Emission Monitoring Report. The Annual Air Emission Monitoring Report must analyse and summarise emission monitoring data from the reporting period including, but not limited to:
a) a comprehensive summary (tabulated and graphical) of all periodic and continuous monitoring data as required by condition M2.2 of this licence, including a comparison with the concentration limits specified in conditions L3.4 and L3.5 of this licence;
b) analysis of trends in emission performance for all pollutants monitored as required under condition M2.2 of this licence. Trend analysis must include comparison of emission performance during the reporting period with emission performance from the previous 4 years;
c) details of any exceedances of air emission licence limits and details of plant operating conditions at the times the exceedances occurred;
d) details of plant operating conditions, including Boiler load (MW), during sampling for each Boiler;
e) demonstrated compliance with the CEMS Quality Assurance and Control Procedures required under condition E4.1 of the licence;
f) summary of fuel usage, including:
i. total coal and other permitted fuels consumed in each Boiler (including start-up),
ii. a statement about the representativeness of fuel quality during periodic air emission sampling compared to non-sampling periods,
iii. total fuel consumed by each Boiler during times when periodic air emission sampling was undertaken; and
g) detailed calculations used to determine the aggregated pollutant emission rates for points 3 to 6.

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

R4.1 The licensee must notify the EPA of any exceedances of any emission or concentration limit included as a condition of this licence in accordance with condition R2.1 no later than 5 days after becoming aware of any exceedance.

R4.2 Within 20 days of the notification made in accordance with condition R4.1 above, the licensee must provide a report to the EPA at hunter.region@epa.nsw.gov.au that includes, as a minimum, the following details:
a) the date and time the exceedance occurred;
b) the nature of the exceedance (i.e. the pollutants involved);
c) the duration of the exceedance;
d) plant operating conditions at the time of the exceedance;
e) the cause of the exceedance;
f) the remedial/corrective actions taken at the time the exceedance was made known; and
g) the actions taken and/or future actions to be taken, to prevent exceedances of a similar nature occurring in the future.

R4.3 The licensee must notify the EPA at hunter.region@epa.nsw.gov.au of the date of any periodic air emission sampling (stack testing) to be undertaken to satisfy a monitoring condition of this licence at least 7 days prior to the stack testing being carried out. If the licensee must delay the test due to unforeseen circumstances beyond the licensees control, the EPA must be notified immediately of the delay at the email address contained in this condition once the delay is identified and specify the date when the stack testing is to be undertaken.

Note: Page Break.

HRSTS Reporting

R4.4 The licensee must compile a written report of the activities under the Scheme for each scheme year. The scheme year shall run from 1 July to 30 June each year. The written report must be submitted to the EPA at hunter.region@epa.nsw.gov.au within 60 days after the end of each scheme year and be in a form and manner approved by the EPA. The information will be used by the EPA to compile an annual scheme report.

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.

G2 Contact number for incidents and responsible employees

G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
a) respond at all times to incidents relating to the premises; and
b) contact the licensee's senior employees or agents authorised at all times to:
i) speak on behalf of the licensee; and
ii) provide any information or document required under this licence.

G2.2 The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.

G3 Signage

G3.1 Each monitoring and discharge point must be clearly marked by a sign that indicates the EPA point identification number.

G3.2 Condition G3.1 above does not take effect until 1 October 2020.

G4 Other general conditions

G4.1 **Completed Programs**

Environment Protection Licence

Licence - 779

Program	Description	Completed Date
Map of premises	Licensee to provide map of premises to enable an accurate record of premises.	23-April-2004
Brine Concentrator Decant Basin Report	The licensee must prepare a report specifying the works that will be undertaken to prevent, contain and remediate saline seepage from the Brine Concentrator Decant Basin. The report must contain a proposed timeframe for the implementation. Improvement in groundwater quality.	11-August-2006
Seepage from Brine Concentrators Decant Basin	The licensee must conduct and complete a study to determine the optimum position of an interception curtain to intercept seepage from the Brine Concentrators Decant Basin.	16-July-2007
Brine Concentrators Decant Basin Groundwater Inception	The licensee must design, construct and maintain a barrier curtain (interception curtain) to intercept seepage from the Brine Concentrators Decant Basin by 1 October 2007.	16-July-2007
Brine Concentrators Decant Basin Remediation Works	The licensee must commence remediation works at the Brine Concentrators Decant Basin & surrounding contaminated areas by 21 December 2007 & complete remediation works to the BCDB & surrounded contaminated area within 12 months of commencement of works.	26-November-2008
Installation of a new crystalliser	The licensee must design, construct, install, commission and maintain an additional crystalliser to improve groundwater quality.	30-June-2009
PRP 1 - Bayswater Ash Dam water management investigation	Review of Ash Dam water management to maximise storage capacity.	27-September-2013
PRP 2 - Upgrade Water Quality Monitoring in Tinklers Creek	Installation of real-time monitoring of pH and conductivity at Point 7.	27-September-2013
PRP 3 - Review and Report on Spill Containment and Management - Alkalinity Reduction Plant	Review of bunding and spill containment in and around the alkalinity reduction plant.	29-November-2013
PRP - Bayswater Ash Dam - Waste Management Assessment	Assessment of all waste streams disposed to the ash dam.	25-July-2014
PRP - Water Quality Monitoring during Void 4 discharges	Monitoring program for Lake Liddell, Bayswater Creek and Hunter River during Void 4 discharges under the HRSTS.	14-February-2014
EIP - Antiene Coal Unloader Water Management Improvement Works	Works to improve water management associated with the coal unloader. This includes upgrades to 5 sediment basins, clean water diversions and water reuse.	14-August-2017

EIP 14 - Coal Handling Plant (CHP) - Assessment of water quality and management	Assessment of the quality of water discharged from and around the Coal Handling Plant (CHP) and to provide improvement options. Study includes sampling, catchment study, water balance and options assessment.	30-June-2017
PRS 18 - Void 5 Water Loss Investigation	The licensee must prepare a report investigating and determining the cause(s) and/or mechanism(s) for water losses in Void 5. To include a conceptual hydrogeological model.	31-December-2018

8 Pollution Studies and Reduction Programs

U1 PRP 15 - Ravensworth Ash Line Containment Program

U1.1 Ravensworth Ash Line Containment Report

By 30 SEPTEMBER 2017, the licensee must provide a report to the EPA that investigates and determines the most feasible options for a containment system for the Ravensworth Ash Slurry and Return Water Pipelines. The report must include, but need not be limited to, the following:

1. Investigate and identify appropriate containment locations based on:
    i) estimates of the likely volume and distance of leaks from the pipelines; and
    ii) site contours and topography, including creek crossing and pipeline corridors
2. Identify the most appropriate containment dam options for each of the containment locations including by:
    i) determining the appropriate size of the containment dam(s); and
    ii) assessing the feasibility and practicability of constructing appropriately sized containment dams in each containment location having regard to site factors such as site contours, available space and access constraints.

U1.2 Containment System Works

By 30 June 2022, the licensee must replace the original sections of the Ravensworth Ash Line (being those parts of the Ravensworth Ash Line constructed in 1997); and, notify the EPA upon completion of the works. The notification must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or by email to hunter.region@epa.nsw.gov.au.

U2 PRP 16 - Stormwater Pipeline Program

U2.1 Stormwater Pipeline Report

By 30 SEPTEMBER 2017, the licensee must provide a report to the EPA that investigates and determines the most feasible options to upgrade the stormwater management system. The report must include, but need not be limited to the following:

1. The replacement of relevant sections of the Stormwater Pipelines;

2. The re-lining of relevant sections of the Stormwater Pipelines; and
3. the decommissioning of any redundant elements of the Stormwater Pipelines

U2.2 Stormwater System Works

By 30 MARCH 2021, the licensee must complete all Stormwater System Works identified as part of the Bayswater Power Station Stormwater Pipeline Report.

U3 EIP 17 - Lake Liddell Seepage Water Improvement Works

U3.1 By 31 December 2020, the licensee must complete all Lake Liddell Seepage Return Works as detailed in AGL Macquarie correspondence titled "Bayswater Power Station Environment Protection Licence 779 Variation Application" dated 31 July 2017.

U4 EIP 19 - Oil cooler upgrade

U4.1 The licensee must implement upgrades to the oil coolers that service Units 1, 2, 3 and 4 at Bayswater Power Station to prevent oil from the oil coolers entering the cooling water systems, and therefore to prevent the pollution of waters. The upgrades are to include the removal of existing oil cooler tube bundles (which are made of aluminium brass) altogether and new cooler tube modules that are made of titanium. The licensee must complete the upgrade works within the following timeframes.

Stage 1 - Oil cooler in-service tube bundles replacement
(a) Replacement of all eight (8) in-services tube bundles of main turbines oil coolers of Units 1, 2, 3 and 4 - to be completed by 31 December 2020.

(b) Provision of a report to the EPA advising the completion of the Stage 1 upgrade works specified above by 1 February 2021. The report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Stage 2 - Oil coolers stand-by tube bundles replacement
(c) Replacement of all four (4) stand-by tube bundles of main turbines oil coolers of Units 1, 2, 3 and 4 - to be completed by 31 March 2021.

(d) Provision of a report to the EPA advising the completion of the Stage 2 upgrade works specified above by 30 April 2021. The report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

U5 PRS 20 - Alarm review

U5.1 The licensee must undertake a review of the management of key alarms for hydrocarbon and chemical storage areas on the premises (the Alarm Review). The Alarm Review must identify, and whether required, implement suitable alternative technologies which will provide the ability to monitor, alarm and continuously trend operating parameters for the licensee's operations remote to the main power station (that currently rely on local observation). Assets to be included as part of the Alarm Review must include, but are not limited to, the following:

(a) The two dosing plants;
(b) The two water treatment plants;
(c) The ammonia plant;
(d) The two BC chemical bunds;
(e) The six demin plants;
(f) The two rear chlorine dosing plants;
(g) The two turbine oil bunds;
(h) The two fire services pump diesel tanks;
(i) The Unit 3/4 chemical bund; and
(j) The two hydrogen plant turbine oil bunds.

The licensee must provide a report to the EPA that outlines the Alarm Review, including key investigations, recommendations and actions implemented. The Alarm Review Report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Date for completion: 1 March 2021.

U6 PRS 21 - Bayswater water management system review

U6.1 The licensee must undertake a review of the water management systems related to coal handling areas and other potentially impacted water capture areas on the premises (the Bayswater Water Management System Review). The Bayswater Water Management System Review must include, but is not limited to, coal handling areas; coal stockpiles; conveyor transfer points; and, flyash silos (Water Management Review Sites).

The Bayswater Water Management System Review must include the following activities in relation of the Water Management Review Sites.

(a) Review existing water management infrastructure;
(b) Analyse stormwater runoff and potential discharge points;
(c) Develop recommendations and/or designs for the diversion of clean water and contaminated waters, sediment basins and bunding etc.; and
(d) Develop recommendations for any changes to inspection and maintenance programs for relevant water management infrastructure.

The licensee must provide a report to the EPA that outlines the Bayswater Water Management System Review, including key findings and recommendations. The Bayswater Water Management System Review Report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Date for completion: 1 September 2020.

U7 PRS 22 - Asset environmental management review

U7.1 The licensee must undertake a review of external plant assets on the premises to identify and implement appropriate mitigation measures to minimise potential environmental impacts resulting from asset

strategy, physical condition assessment and maintenance delivery (Asset Environmental Management Review).

The Asset Environmental Management Review must focus on key external plant assets including, but not limited to, the water treatment plants, lime softening plant, diesel and chemical bulk storage areas and associated systems, ash and dust pipelines, and stormwater systems.

By 13 March 2020, the licensee must notify the EPA of the assets subject to the Asset Environmental Management Review; categorise their environment risk as either "High", "Medium" or "Low" (for the purpose of prioritising the timing of the Asset Environmental Management Review); and, provide the rationale for their categorisation. The notification must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au, for the EPA's approval.

The key activities to be undertaken as part of the Asset Environmental Management Review must include:

(a) A review of key external plant assets on the premises targeting environmental risk reduction. The review of each key external plant asset must include consideration of the following:

- Statutory requirements under the *Protection of the Environment Operations Act 1997*;
- Any prior environmental incidents in relation to the asset;
- Critical controls to manage environmental impacts relating to the asset;
- Engineering technical standards which apply to the asset;
- Existing operating manuals and procedures for the asset;
- The asset management plans for the incident; and
- The maintenance strategy for the asset.

(b) The review of key external plant assets on the premises must identify recommendations for each asset to improve asset health through a focus on asset strategy, physical condition assessment and maintenance delivery. This may include recommendations relating to:
- The use of alternatives technologies;
- Changes to operations and/or maintenance programs and inspections; and
- Further risk assessments to ensure key environmental risks are being controlled.

The licensee must complete the Asset Environmental Management Review detailed above by the following dates.
(i) Stage 1 - Completion of the Asset Environmental Management Review for those assets identified as having a "High" environmental Risk by 31 December 2020.
(ii) Provision of a report to the EPA that outlines the Asset Environmental Management Review for Stage 1, including key findings and recommendations. The report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au, by 31 March 2021.
(iii) Stage 2 - Completion of the Asset Environmental Management Review for those assets identified as having a "Medium" or "Low" environmental Risk by 30 September 2021.
(ii) Provision of a report to the EPA that outlines the Asset Environmental Management Review for Stage 2, including key findings and recommendations. The report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au, by 31 December 2021.

U8 PRS 23 - Bayswater Ash Dam Seepage South Investigation

U8.1 The licensee must investigate the impact of potential seepage to the south of the Bayswater Ash Dam that is captured by the existing seepage system (the Bayswater Ash Dam Seepage South Investigation). The Bayswater Ash Dam Seepage South Investigation must include, but is not limited to, the following.

(a) A review of available data to identify any data gaps and any further investigations required to address these data gaps.
(b) Further investigations, if required, to address any data gaps.
(c) Identification of the area of the Pikes Gully catchment that receives seepage from the Bayswater Ash Dam.
(d) Preparation of a conceptual site hydrogeological model.
(e) An assessment of the impact of seepage from the Bayswater Ash Dam on groundwater levels in the area.
(f) A review of the impact of any seepage on ground and surface water quality, and the receiving environment.
(g) Recommendations for any additional water management measures required to minimise any potential impacts.

The licensee must provide a report to the EPA that outlines the Bayswater Ash Dam Seepage South Investigation, including key investigations, findings and recommendations. The Bayswater Ash Dam Seepage South Investigation Report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Date for completion: 31 March 2021.

U9 PRS 24 - Coal handling plant water management feasibility study

U9.1 The licensee must review options for further water management relating to environmental improvement measures at the Bayswater Coal Handling Plant (the Bayswater Coal Handling Plant Water Management Feasibility Study). The Bayswater Coal Handling Plant Water Management Feasibility Study must include, but is not limited to, the following.

(a) A further assessment of options identified in the report titled "Bayswater Coal Handling Plant Sediment Basin" (AECOM, 2017), submitted to the EPA in response to *Coal Handling Plant (CHP) - Assessment of water quality and management* EIP (previously completed as condition of the licence). These options include, but are not limited to:

- Option 2 - Operational re-use of Coal Handling Plant sediment basin water;
- Option 11 - Flocculation;
- Option 12 - Optimising the launder system; and
- Option 13 - Upgrade the existing CHP basin.

(b) Identification and assessment of other potential options that may be available to deliver improved water management at the CHP.

(c) Consideration of the environmental outcomes, practicality, efficacy and cost.

(d) Determine practical and feasible option/s to reduce the risk of coal fines potentially discharging from the CHP to Tinkers Creek and causing the pollution of waters.

The licensee must provide a report to the EPA that outlines the Bayswater Coal Handling Plant Water Management Feasibility Study, including key investigations, findings and recommendations. The Bayswater Coal Handling Plant Water Management Feasibility Study Report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Date for completion: 1 March 2021.

U10 EIP 25 - Antiene coal unloader - water system flow improvement

U10.1 The licensee must implement further controls to prevent overflows containing coal fines from the area of the Antiene Coal Unloader to Maidswater Creek, so as to prevent the pollution of waters (the Antiene Coal Unloader Water System Flow Improvement). The Antiene Coal Unloader Water System Flow Improvement must include, but is not limited to, the following.

(a) Changes to the profile (hot-mix design) of the Antiene Coal Unloader handstand area to further control runoff and first flush profiles;
(b) Installation of an automated slide gate to divert first flush stormwater from Basin 3 to Basin 2; and
(c) Addressing various other smaller scope minor controls, including the Basin 3 to Basin 2 interconnect pipe diameter redesign and changes to the Basin level control.

The licensee must provide a report to the EPA that outlines the works undertaken as part of the Antiene Coal Unloader Water System Flow Improvement. The Antiene Coal Unloader Water System Flow Improvement Report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Date for completion: 31 December 2020.

9 Special Conditions

E1 Hunter River Salinity Trading Scheme

E1.1 This licence authorises the discharge of saline water into the Hunter River Catchment from an authorised discharge point (or points), in accordance with the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002.

E1.2 For the purposes of Clauses 23 and 29 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002 the licensee must apply the conversion factor of 0.6.

E1.3 The licensee must not exceed the hourly volume discharge limit calculated using the following formula, at all discharge point(s) on this licence titled "Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS)":

H = V / RRT

Where:
H is the hourly volume discharge limit (in megalitres per hour);

V is the licence holder's volume discharge limit for the block (in megalitres) calculated in accordance with clause 23 of the Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation 2002; and

RRT *is the difference between the discharge stop and start times shown on the river register for that block (in hours)*

Note 1: The intent of this condition is to prevent spikes of saline water in the Hunter River as a result of discharges of less than the duration permitted by the river register.

Note 2: A river register is issued by the Service Co-ordinator and allows participants of the Hunter River Salinity Trading Scheme (HRSTS) to discharge saline to the Hunter River during a discharge period.

E2 Dioxin and furan study

E2.1 The licensee must undertake dioxin and furan emission testing in accordance with the following:
a) a minimum of 1 round of testing on all Boilers at the premises that have only been fired on coal within the past 10 years;
b) a minimum of 2 rounds of testing on all Boilers at the premises that have been fired on a non-standard fuel within the past 10 years; and
c) testing must be undertaken in accordance with TM-18, as defined in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

E2.2 Following the dioxin and furan emission testing required by condition E2.1 above, the licensee must prepare a report which includes the following:
a) details of the sampling program undertaken;
b) details of the sampling methodology and emission monitoring conducted (including description of sampling time(s) and sampling location(s) for all test runs) and including a statement of compliance with the relevant test method(s);
c) detailed description of any deviation from the relevant test method(s) including analysis of the likely effect of any deviation on the final test results (as appropriate);
d) detailed description of all plant operating conditions at the time emission monitoring was conducted, including, but not limited to fuel rate, fuel quality and composition and production load(s);
e) summary of all test results including a statement on the representativeness of final test results, including a statement of expected characterisation of long-term emission performance from the plant;
f) all air emission monitoring results and reports, including analytical reports;
g) recommendation on the need for any future or follow-up testing; and
h) all additional reporting requirements prescribed in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW for stationary source monitoring.

E2.3 The dioxin and furan testing and report required by conditions E2.1 and E2.2 of this licence must be completed and the report provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 1 July 2021.

E2.4 Where historical dioxin and furan testing and operating data are available for the premises which robustly

satisfies the testing and reporting requirements listed in conditions E2.1 and E2.2 of this licence, the licensee may use the historic data to satisfy these special conditions however; any historical data used to satisfy these conditions must not be more than 5 years old.

E3 Site specific air emission monitoring plan

E3.1 The licensee must develop and submit a Site Specific Air Emission Monitoring Plan to the EPA which supports the comprehensive management of air emission monitoring required by this licence. As a minimum, the Site Specific Air Emission Monitoring Plan must describe in detail the following:
a) monitoring and discharge points;
b) detailed description of the operational measures used for ensuring the representativeness of emission measurements during monitoring including any procedures relating to pre-test planning, setting operating conditions and process data collection and recording;
c) detailed description of sampling methodology and test procedures;
d) description of any deviation from the relevant test methods, including analysis of the likely effect of any deviation on the final sampling and test results;
e) detailed description of quality assurance and quality control procedures used for collecting, verifying and reporting emission test data;
f) responsible personnel and roles; and
g) governance/version control, review and updating procedures for the plan; and
h) a detailed methodology and all supporting calculations used to determine the aggregated emission concentration for each pollutant associated with points 3 to 6 as stipulated by conditions L3.4 and L3.5. All calculations must, at a minimum, meet the requirements of TM-38.

E3.2 The Site Specific Air Emission Monitoring Plan required by condition E3.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E4 Continuous emission monitoring systems - quality assurance and control procedures

E4.1 The licensee must develop and submit a CEMS quality assurance (QA) and quality control (QC) procedure to the EPA which enables the evaluation of the quality of data produced by any CEMS monitoring required by conditions of this licence. As a minimum, the CEMS QA/QC procedure must describe in detail the following:
a) calibration and adjustment measures;
b) preventive maintenance measures (including spare parts inventory);
c) data handling, recording and calculation procedures;
d) processes for evaluating, verifying and reporting monitoring data;
e) accuracy audit measures including sampling and analysis methods;
f) fault identification and corrective action measures; and
g) process for ongoing review and evaluation of the effectiveness of the CEMS QA/QC procedures.

E4.2 The CEMS QA/QC procedure required by condition E4.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 March 2021.

E5 Air pollution control equipment - maintenance, operation and fault response procedure

E5.1 The licensee must develop and submit an air pollution control equipment - maintenance, operation and fault response procedure to the EPA which ensures that air pollution control equipment is maintained and operated in accordance with conditions O1.1 and O2.1 of this licence. As a minimum, the procedure must describe in detail the following:
a) procedures for routine operations including equipment start-up and shut-down;
b) procedures for routine and non-routine inspections and maintenance;
c) procedures for faults and failure response and emergency situations;
d) spare parts inventory;
e) reporting and training procedures;
f) verification procedures incorporating performance indicators and benchmarks relating to:
i. performance monitoring,
ii. operational efficiency, and
iii. data quality,
g) planning, reporting, record keeping and tracking systems; and
h) process for ongoing review and evaluating air pollution control equipment - maintenance, operation and fault response procedure.

E5.2 The air pollution control equipment - maintenance, operation and fault response procedure must be peer reviewed and endorsed by a suitably qualified air pollution control practitioner, affirming the suitability of the procedure for meeting its objectives.

E5.3 The air pollution control equipment - maintenance, operation and fault response procedure required by condition E5.1 of this licence must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E6 Continuous particle matter monitoring feasibility study

E6.1 The licensee must prepare and submit a continuous particle matter monitoring feasibility study report which assesses the feasibility of installing and operating a monitoring system capable of measuring particle emissions from each Boiler on a continuous basis. The proposed system must be capable of being correlated against a gravimetric reference method in accordance with US EPA Performance Specification 11. As a minimum, the study must:
a) be prepared in consultation with a suitably qualified and experienced air monitoring practitioner who has demonstrated experience in the installation and operation of PM-CEMS at large industrial plant;
b) be prepared with reference to information provided in the PM-CEMS guidance document (Chiappalone Consulting, Feasibility of Continuous Particle Monitoring at NSW Coal Fired Power Stations: Guidance Document (September 2019);
c) include a statement about the general feasibility of installing a PM-CEMS;
d) evaluate potential monitoring options based on site specific factors including, but not limited to: i. process and stack conditions,
ii. particle concentration range, and
iii. reliability and life cycle cost,
e) evaluate potential installation locations. As a minimum, feasibility analysis must be undertaken for installing monitors on each flue gas duct on the exit side of each baghouse, at a location capable of achieving a representative PM measurement.

E6.2 Where it is considered generally feasible to install a PM-CEMS, the Report must:
a) include proposed actions for the implementation of PM-CEMS;
b) identify the proposed locations for monitor installations;
c) include proposed timing for the installation of PM-CEMS;
d) include a proposed installation and commissioning plan for the PM-CEMS; and
e) detail procedures for evaluating the performance of the PM-CEMS following installation.

E6.3 Where it is considered not feasible to install a PM-CEMS, the Report must:
a) provide a detailed explanation and robust justification of why installation and operation of PM-CEMS is not feasible; and
b) detail proposed alternative monitoring and reporting options that ensure ongoing representativeness of particle emission monitoring and report at the premises. Alternative options must have suitable temporal resolution to ensure all significant emission variability is accounted for.

E6.4 The continuous particle matter monitoring feasibility study required by conditions E6.1 to E6.3 of this licence must be provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 31 March 2021.

Environment Protection Licence

Licence - 779

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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 - 779

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 Environmen t 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 mo nths. 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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 779

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

Mr Grahame Clarke

Environment Protection Authority

(By Delegation)

Date of this edition: 20-April-2000

Environment Protection Licence

Licence - 779

End Notes

1	Licence varied by notice V/M upgrade, issued on 07-Jul-2000, which came into effect on 07-Jul-2000.
2	Licence varied by notice 1002313, issued on 09-Nov-2000, which came into effect on 04-Dec-2000.
3	Licence varied by notice 1003163, issued on 06-Dec-2000, which came into effect on 31-Dec-2000.
4	Licence varied by 010623, issued on 14-Jul-2000, which came into effect on 08-Aug-2000.
5	Condition HRSTS Dis Note varied by notice issued on <issue date> which came into effect on <effective date>
6	Licence varied by notice 1013308, issued on 07-Dec-2001, which came into effect on 01-Jan-2002.
7	Licence varied by notice 1016493, issued on 22-Dec-2003, which came into effect on 16-Jan-2004.
8	Licence varied by notice 1046433, issued on 18-May-2005, which came into effect on 19-May-2005.
9	Licence varied by notice 1049911, issued on 18-Jul-2005, which came into effect on 12-Aug-2005.
10	Licence varied by notice 1050842, issued on 22-Feb-2006, which came into effect on 08-Mar-2006.
11	Licence varied by notice 1066631, issued on 06-Nov-2006, which came into effect on 06-Nov-2006.
12	Licence varied by notice 1073184, issued on 25-May-2007, which came into effect on 25-May-2007.
13	Licence varied by notice 1075562, issued on 12-Sep-2007, which came into effect on 12-Sep-2007.
14	Licence varied by notice 1084432, issued on 09-Apr-2008, which came into effect on 09-Apr-2008.
15	Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
16	Licence varied by notice 1093671, issued on 01-Dec-2008, which came into effect on 01-Dec-2008.
17	Licence varied by notice 1503268 issued on 27-Jul-2012
18	Licence varied by notice 1515755 issued on 20-Sep-2013
19	Licence varied by notice 1519097 issued on 31-Jan-2014

Environment Protection Licence

Licence - 779

20	Licence transferred through application 1524624 approved on 29-Aug-2014 , which came into effect on 02-Sep-2014
21	Licence varied by notice 1535045 issued on 17-Mar-2016
22	Licence varied by notice 1548850 issued on 28-Feb-2017
23	Licence varied by notice 1555659 issued on 07-Sep-2017
24	Licence varied by notice 1569903 issued on 18-Oct-2018
25	Licence varied by notice 1580485 issued on 03-Jun-2019
26	Licence varied by notice 1589835 issued on 18-Dec-2019
27	Licence fee period changed by notice 1590399 on 01-Feb-2020
28	Licence varied by notice 1590451 issued on 06-Feb-2020
29	Licence varied by notice 1591556 issued on 23-Jul-2020

Environment Protection Licence

Licence - 2122

Licence Details	
Number:	2122
Anniversary Date:	01-July

Licensee

AGL MACQUARIE PTY LIMITED

PRIVATE MAIL BAG 2

MUSWELLBROOK NSW 2333

Premises

LIDDELL POWER STATION

NEW ENGLAND HIGHWAY

LIDDELL NSW 2333

Scheduled Activity

Chemical storage

Coal works

Crushing, grinding or separating

Electricity generation

Fee Based Activity	Scale
Coal works	> 2000000-5000000 T annual handing capacity
Crushing, grinding or separating	> 2000000 T annual processing capacity
General chemicals storage	0-5000 kL storage capacity
Generation of electrical power from coal	> 4000 GWh annual generating capacity
Petroleum products storage	0-5000 kL storage capacity

Region

Metropolitan North - Newcastle

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 - 2122

INFORMATION ABOUT THIS LICENCE ---- 4
Dictionary ---- 4
Responsibilities of licensee ---- 4
Variation of licence conditions ---- 4
Duration of licence ---- 4
Licence review ---- 4
Fees and annual return to be sent to the EPA ---- 4
Transfer of licence ---- 5
Public register and access to monitoring data ---- 5
1 ADMINISTRATIVE CONDITIONS ---- 6
A1 What the licence authorises and regulates ---- 6
A2 Premises or plant to which this licence applies ---- 6
A3 Other activities ---- 7
A4 Information supplied to the EPA ---- 7
2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND ---- 7
P1 Location of monitoring/discharge points and areas ---- 7
3 LIMIT CONDITIONS ---- 9
L1 Pollution of waters ---- 9
L2 Load limits ---- 9
L3 Concentration limits ---- 10
L4 Waste ---- 12
L5 Potentially offensive odour ---- 13
L6 Other limit conditions ---- 14
4 OPERATING CONDITIONS ---- 14
O1 Activities must be carried out in a competent manner ---- 14
O2 Maintenance of plant and equipment ---- 14
O3 Dust ---- 14
O4 Effluent application to land ---- 15
O5 Emergency response ---- 15
O6 Waste management ---- 15
O7 Other operating conditions ---- 16
5 MONITORING AND RECORDING CONDITIONS ---- 17
M1 Monitoring records ---- 17
M2 Requirement to monitor concentration of pollutants discharged ---- 17

Environment Protection Licence

Licence - 2122

M3 Testing methods - concentration limits ---- 21
M4 Testing methods - load limits ---- 22
M5 Weather monitoring ---- 22
M6 Recording of pollution complaints ---- 22
M7 Telephone complaints line ---- 23
M8 Requirement to monitor volume or mass ---- 23
M9 Noise monitoring ---- 24
6 REPORTING CONDITIONS ---- 24
R1 Annual return documents ---- 24
R2 Notification of environmental harm ---- 25
R3 Written report ---- 26
R4 Other reporting conditions ---- 26
7 GENERAL CONDITIONS ---- 27
G1 Copy of licence kept at the premises or plant ---- 27
G2 Contact number for incidents and responsible employees ---- 27
G3 Signage ---- 27
G4 Other general conditions ---- 28
8 POLLUTION STUDIES AND REDUCTION PROGRAMS ---- 29
U1 PRS 17 - Alarm review ---- 29
U2 PRS 18 - Liddell water management system review ---- 30
U3 PRS 19 - Asset environmental management review ---- 30
9 SPECIAL CONDITIONS ---- 31
E1 Dioxin and furan study ---- 31
E2 Site specific air emission monitoring plan ---- 32
E3 Continuous emission monitoring systems - quality assurance and control procedures ---- 32
E4 Air pollution control equipment - maintenance, operation and fault response procedure ---- 33
E5 Continuous particle matter monitoring feasibility study ---- 33
E6 O2 and CO2 relationship proposal ---- 34
DICTIONARY ---- 35
General Dictionary ---- 35

Environment Protection Licence

Licence - 2122

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);
- 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 - 2122

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:

AGL MACQUARIE PTY LIMITED
PRIVATE MAIL BAG 2
MUSWELLBROOK NSW 2333

subject to the conditions which follow.

Environment Protection Licence

Licence - 2122

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 annual handing capacity
Crushing, grinding or separating	Crushing, grinding or separating	> 2000000 T annual processing capacity
Chemical storage	General chemicals storage	0 - 5000 kL storage capacity
Electricity generation	Generation of electrical power from coal	> 4000 GWh annual generating capacity
Chemical storage	Petroleum products storage	0 - 5000 kL storage capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
LIDDELL POWER STATION
NEW ENGLAND HIGHWAY
LIDDELL
NSW 2333
PREMISES DEFINED BY DOCUMENT(S) TITLED "LIDDELL EPL" REFERENCES "PAGE 1" AND "PAGE 2" DATED 29/06/2020 AND PROVIDED TO THE EPA ON 29/06/2020 (EPA REFERENCE DOC20/517017 AND DOC20/517017-1).

A2.2 The document(s) referred to in condition A2.1 above are herein referred to in this licence as "The Plans".

Note: Page Break.

Environment Protection Licence

Licence - 2122

A3 Other activities

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

Ancillary Activity
Electricity generation (generation of electrical power from diesel)
Helicopter-related activities
Sewage treatment

A3.2 For the purpose of condition A3.1 above:
a) electricity generation (generation of electrical power from diesel) means the operation of the emergency diesel generator(s) and the Hunter Valley Gas Turbine(s) in accordance with the conditions of this licence; and
b) all other activities listed in condition A3.1 are as defined by Schedule 1 of the Protection of the Environment Operations Act 1997 although not meeting the scheduled activity threshold.

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.

A4.2 Any other document and/or management plan is not to be taken as part of the documentation in condition A4.1 above, other than those documents and/or management plans specifically referenced in 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

Environment Protection Licence

Licence - 2122

1		Discharge to air	Discharge of air emissions from stack serving boilers number 1 and 2 marked and shown as EPL Monitors ID No. 1 on The Plans
2		Discharge to air	Discharge of air emissions from stack serving boilers number 3 and 4 marked and shown as EPL Monitors ID No. 2 on The Plans
3	Air emission monitoring		Combined air emissions from boiler 1 via Points 7 and 8 to Point 1 marked and shown as EPL Monitors ID No. 3 on The Plans
4	Air emission monitoring		Combined air emissions from boiler 2 via Points 9 and 10 to Point 1 marked and shown as EPL Monitors ID No. 4 on The Plans
5	Air emission monitoring		Combined air emissions from boiler 3 via Points 11 and 12 to Point 2 marked and shown as EPL Monitors ID No. 5 on The Plans
6	Air emission monitoring		Combined air emissions from boiler 4 via Points 13 and 14 to Point 2 marked and shown as EPL Monitors ID No. 6 on The Plans
7	Air emission monitoring		Boiler number 1 exhaust - duct A marked and shown as EPL Monitors ID No. 7 on The Plans
8	Air emission monitoring		Boiler number 1 exhaust - duct B marked and shown as EPL Monitors ID No. 8 on The Plans
9	Air emission monitoring		Boiler number 2 exhaust - duct A marked and shown as EPL Monitors ID No. 9 on The Plans
10	Air emission monitoring		Boiler number 2 exhaust - duct B marked and shown as EPL Monitors ID No. 10 on The Plans
11	Air emission monitoring		Boiler number 3 exhaust - duct A marked and shown as EPL Monitors ID No. 11 on The Plans
12	Air emission monitoring		Boiler number 3 exhaust - duct B marked and shown as EPL Monitors ID No. 12 on The Plans
13	Air emission monitoring		Boiler number 4 exhaust - duct A marked and shown as EPL Monitors ID No. 13 on The Plans
14	Air emission monitoring		Boiler number 4 exhaust - duct B marked and shown as EPL Monitors ID No. 14 on The Plans
15	Meteorological weather monitoring		Meteorological weather station marked and shown as EPL Monitors ID No. 15 on The Plans

P1.2 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.

P1.3 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.

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
16	Discharge to waters Discharge quality monitoring	Discharge to waters Discharge quality monitoring	Discharge of cooling water from the cooling water outlet canal to Lake Liddell marked and shown as EPL Monitors ID No. 16 on The Plans
17	Discharge to waters Discharge quality monitoring	Discharge to waters Discharge quality monitoring	Discharge from oil and grit trap weir overflow to Lake Liddell marked and shown as EPL Monitors ID No. 17 on The Plans
18	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge from skimmer dam overflow spillway (located at the left abutment of the skimmer dam) to Lake Liddell marked and shown as EPL Monitors ID No. 18 on The Plans
19	Discharge to utilisation area Volume monitoring	Discharge to utilisation area Volume monitoring	Discharge of effluent from the final pond of the onsite sewage treatment system adjacent to utilisation area marked and shown as EPL Monitors ID No. 19 on The Plans

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.

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

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)	

Benzene (Air)
Benzo(a)pyrene (equivalent) (Air)
Coarse Particulates (Air)
Fine Particulates (Air)
Fluoride (Air)
Lead (Air)
Mercury (Air)
Nitrogen Oxides (Air)
Sulfur Oxides (Air)
Volatile organic compounds (Air)

L3 Concentration limits

L3.1 For each monitoring/discharge point or utilisation area specified in the table\s 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\s.

L3.4 Air Concentration Limits

POINT 3,4,5,6

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Cadmium	milligrams per cubic metre	0.2	Dry, 273K, 101.3kPA	7% O2	1 hour
Chlorine	milligrams per cubic metre	20	Dry, 273K, 101.3kPA	7% O2	1 hour
Fluorine	milligrams per cubic metre	30	Dry, 273K, 101.3kPA	7% O2	1 hour
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 hour
Mercury	milligrams per cubic metre	0.05	Dry, 273K, 101.3kPA	7% O2	1 hour
Nitrogen Oxides	milligrams per cubic metre	1500	Dry, 273K, 101.3kPA	12% CO2	1 hour

Solid Particles	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 hour
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	100	Dry, 273K, 101.3kPA	7% O2	1 hour
Sulfur dioxide	milligrams per cubic metre	1900	Dry, 273K, 101.3kPA	12% CO2	1 hour
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	0.75	Dry, 273K, 101.3kPA	7% O2	1 hour
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	10	Dry, 273K, 101.3kPA	7% O2	1 hour

L3.5 In addition to the concentration limits specified in condition L3.4 above, the following 99th percentile concentration limits apply for points 3 to 6 utilising the same units of measure, reference conditions, oxygen correction and averaging period as above for each pollutant listed below:
a) nitrogen oxides: 1100 mg/m3; and
b) sulfur dioxide: 1400 mg/m3.

L3.6 For the purposes of conditions L3.4 and L3.5 of this licence:
a) Nitrogen Oxides mean: Nitric Oxide (NO) or Nitrogen Dioxide (NO_2) or both, as NO_2 equivalent; and
b) Fluorine means: fluorine and any compound containing fluorine, as total fluoride (HF equivalent).

L3.7 For the purposes of nitrogen oxides at points 3 to 6 and in accordance with the Protection of the Environment Operations (Clean Air) Regulation 2010, Boilers 1 to 4 are taken to belong to Group 2 until 1 January 2022 or unless otherwise approved in writing by the EPA.

L3.8 Water and/or Land Concentration Limits

POINT 16,17,18

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				6.5-9.0

Environment Protection Licence

Licence - 2122

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.

Code	Waste	Description	Activity	Other Limits
K130	Sewage products	Sewage generated at the Bayswater Power Station	Sewage Treatment	Only permitted when the Bayswater Power Station sewage treatment plant and/or reticulation system is undergoing maintenance or repair
NA	Waste Water and Sludges	Lime and gypsum residues from drinking water treatment, as defined by and meeting the requirements of The Lime and Gypsum Residues from Drinking Water Treatment Exemption, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O6.2
NA	Drilling mud and/or muddy waters from drilling operations	As defined by and meeting the requirements of the Treated Drilling Mud Order and Exemption, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O6.2
NA	Organics	Compost, manure and mulch as defined by and meeting the requirements of the Compost, Manure and Mulch Orders and Exemptions, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O6.2
NA	Biosolids categorised as unrestricted use, or as restricted use 1, 2 or 3,	As defined by and meeting the requirements of the	Waste storage As specified in each particular resource	See condition O6.2

	in accordance with the criteria set out in the biosolids guidelines	Biosolids Order and Exemption, as in-force from time to time	recovery exemption Capping of Ash Dam	
NA	Excavated natural material	As defined by and meeting the requirements of the Excavated Natural Material Order and Exemption, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O6.2
NA	Virgin excavated natural material	As defined by the Protection of the Environment Operations Act, as in-force from time to time	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O6.2

L4.2 In addition to condition 4.1 above, the licensee may also use any waste nominated within the table above where the use of that waste is authorised for use by an instrument/approval issued under the Environment Planning and Assessment Act 1979 for the purpose specified.

L4.3 The following wastes generated at/or on the premises may be disposed of to the ash dam or within the ash dam catchment:
a) ash
b) acid solutions or acids in solid form;
c) ash line poly pipe;
d) boiler cleaning residues;
e) coal fines from coal settling basins and plant and conveyor wash down;
f) cooling tower sediments;
g) demineralisation resins;
h) filter bags;
i) gypsum;
j) lime;
k) sediment basin clays;
l) treated sewage effluent;
m) water treatment residual chemicals;
n) any material approved in writing by the EPA to control dust emission from the ash dam; and
o) any other material approved in writing by the EPA.

L5 Potentially offensive odour

L5.1 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.

L6 Other limit conditions

Air concentration limit emergency exceedance provision

L6.1 The air concentration limits specified in conditions L3.4 and L3.5 of this licence may be temporarily exceeded under the following circumstances:
a) the Australian Electricity Market Operator (AEMO), or a person authorised by AEMO, directs the licensee, under the National Electricity Law and the National Electricity Rules, to take relevant actions to maintain or restore the security or reliability of the electricity network; and
b) the relevant AEMO direction referred to above remains in force; and
c) the licensee takes all practical measures to prevent or minimise air pollution.

L6.2 An exceedance under condition L6.1 above counts towards the hours accumulated for the purpose of calculating compliance with the 99th percentile concentration limits specified in condition L3.5 of this licence.

L6.3 The licensee must notify the EPA of any and all limit exceedances due to the activation of condition L6.1 in accordance with conditions R4.1 and R4.2 of this 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:
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 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

O3.3 Trucks entering and leaving the premises that are carrying loads of dust generating materials must be

covered at all times, except during loading and unloading.

O4 Effluent application to land

O4.1 Spray from effluent application must not drift beyond the boundary of the premises.

O4.2 Effluent application must not occur in a manner that causes surface runoff.

O4.3 Effluent application must not be carried out if soil moisture conditions are such that surface runoff or ponding is likely to occur.

O4.4 The utilisation areas must be maintained in a proper and efficient condition so as to provide adequate percolation, evaporation and transpiration of effluent.

O4.5 The quantity of effluent applied to the utilisation area must not exceed the capacity of the area to effectively utilise the effluent where for the purpose of this condition, 'effectively utilise' includes the use of the effluent for pasture or crop production, as well as the ability of the soil to absorb the nutrient, salt, hydraulic load and organic material.

O4.6 Public access to any effluent utilisation area must be denied during effluent application and until the effluent application area has dried.

O4.7 For the purpose of this licence, conditions O4.1 to O4.6 only relate to the discharge of effluent to the utilisation area authorised via point 19.

O5 Emergency response

Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises in accordance with Part 5.7A of the Protection of the Environment Operations Act 1997 and Part 3A of the Protection of the Environment Operations (General) Regulation 2009.

O6 Waste management

O6.1 The licensee must ensure that any liquid and non liquid waste generated and/or stored at the premises that is to be sent offsite:
a) is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time prior to leaving the premises; or
b) where the waste is covered by an in-force Resource Recovery Order and Exemption, the waste must meet the conditions of the relevant Order prior to leaving the premises.

O6.2 The licensee, when capping and remediating the Liddell Power Station ash dam, must only use those wastes permitted by condition L4.1 of this licence to be received and used at the premises to the minimum extent possible.

Note: For the purposes of condition O6.2 and determining compliance with the term "minimum extent possible", the EPA will consider such matters as any instrument approving or otherwise authorising the capping and remediation activities and any relevant design specifications for the capping and remediation activities.

O7 Other operating conditions

Permitted fuels for start-up, combustion support and emergency firing of generator

O7.1 Distillate may be used for start-up and combustion support in Boilers 1 to 4 and firing the Hunter Valley Gas Turbine(s).

O7.2 Distillate may be used for firing the emergency diesel generator(s) at the premises for the purposes of:
a) providing black-start capability for the Liddell Power Station or at the direction of the Australian Electricity Market Operator (AEMO); and/or
b) operating the emergency diesel generator up to a maximum of 200 hours per reporting period.

O7.3 Distillate fuel used in the Liddell Power Station for start-up and combustion support, the firing of the Hunter Valley Gas Turbine(s) and the firing of the emergency diesel generator(s) must comply with the Determination of Fuel Quality Standards (Automotive Diesel) 2019, made under section 21 of the Fuel Quality Standards Act 2000.

Other fuels permitted for use

O7.4 Waste mineral oils generated on the premises can be used as fuel under the following restrictions:
a) must only be fed to the Boilers during coal firing and at a maximum feed rate of less than or equal to 4% of the coal feed rate; and
b) must not exceed 0.5% of sulfur by weight.

Testing of coal fuel

O7.5 The licensee must have in place a fuel testing program to collect and analyse a representative number of samples of coal fired in Boilers 1 to 4. At a minimum, the coal must be analysed for:
a) ash content (%);
b) sulfur content (%);
c) chlorine content (mg/kg);
d) fluorine content (mg/kg);
e) type 1 and 2 substances content (mg/kg); and
f) calorific value (MJ/kg).

Onsite sewage treatment system

O7.6 The licensee must construct, implement and operate/utilise a wastewater management system to manage the collection, storage, treatment, use and disposal of all sewage and related wastewater generated on the premises.

O7.7 The wastewater management system(s) operated/utilised at the premises must be inspected by a suitably qualified and experienced wastewater technician at least once in each quarterly period of the reporting period and a minimum of four time per reporting period and serviced as required.

O7.8 In relation to condition O7.7 above, the licensee must record the following:
a) details of each inspection undertaken (date, time and personnel);
b) the results of any tests performed on the wastewater management system;
c) the finding and any actions required following each inspection; and
d) the date those actions were completed or the reasons they were not completed.

Chemical storage

O7.9 The licensee must store and handle all liquid chemicals and hazardous materials used at the premises within bunded areas that are constructed and maintained in accordance with the following:
a) any relevant Australian Standards for the liquids being stored;
b) within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund;
c) the Storing and Handling Liquids: Environmental Protection Participant's Manual (DECC, 2007); and
where any conflict exists between these requirements, the most stringent requirements apply.

O7.10 For the purpose of condition O7.9 above, any tanks or other storage vessels that are interconnected and may distribute their contents either by gravity or automated pumps must be considered a single vessel.

O7.11 For the purposes of condition O7.9 and O7.10 of this licence, failure to comply with these conditions is not to be taken as a non-compliance where there is a Pollution Studies and Reduction Program nominated on this licence that is in place to correct the non-compliance, for the period of time covered by that condition.

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

POINT 3,4,5,6

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-38
Chlorine	milligrams per cubic metre	Every 6 months	TM-38
Fluorine	milligrams per cubic metre	Every 6 months	TM-38
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-38
Mercury	milligrams per cubic metre	Every 6 months	TM-38
Nitrogen Oxides	milligrams per cubic metre	Continuous	TM-38
Solid Particles	milligrams per cubic metre	Quarterly	TM-38
Sulfur dioxide	milligrams per cubic metre	Continuous	TM-38
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-38
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-38
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-38

POINT 7,10,11,14

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Continuous	CEM-3 and US EPA Procedure 1
Chlorine	milligrams per cubic metre	Every 6 months	TM-7
Fluorine	milligrams per cubic metre	Every 6 months	TM-9
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-8
Nitrogen Oxides	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Sulfur dioxide	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-3

volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-34

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

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-14
Flow rate	cubic metres per second	Continuous	CEM-6 and US EPA Procedure 1
Mercury	milligrams per cubic metre	Every 6 months	TM-14
Moisture	percent	Continuous	Special Method 1
Oxygen (O2)	percent	Continuous	CEM-3 and US EPA Procedure 1
Solid Particles	milligrams per cubic metre	Quarterly	TM-15
Temperature	degrees Celsius	Continuous	TM-2 and US EPA Procedure 1
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-12, TM-13 & TM-14

M2.3 For the purpose of condition M2.2 above:
a) every 6 months means: a minimum of two sampling events per reporting period, at approximately 6 monthly intervals and occurring no less than 3 months apart;
b) quarterly means: a minimum of four sampling events per reporting period, at approximately 3 monthly intervals and occurring no less than 1 month apart; and
c) special method 1 means: any moisture monitoring method approved in writing by the EPA. The monitoring method and data must be quality assured on an ongoing basis in accordance with US EPA Procedure 1.

M2.4 For the purpose of condition M2.2 of this licence, the requirement to install, commission and continuously monitor for flow rate, moisture, oxygen and temperature at points 7 to 14 does not take effect until 1 July 2023.

M2.5 Water and/ or Land Monitoring Requirements

POINT 16,17

Pollutant	Units of measure	Frequency	Sampling Method
Ammonia	milligrams per litre	Fortnightly	Grab sample
Antimony	milligrams per litre	Fortnightly	Grab sample
Arsenic	milligrams per litre	Fortnightly	Grab sample

Barium	milligrams per litre	Fortnightly	Grab sample
Beryllium	milligrams per litre	Fortnightly	Grab sample
Boron	milligrams per litre	Fortnightly	Grab sample
Cadmium	milligrams per litre	Fortnightly	Grab sample
Chlorine	milligrams per litre	Fortnightly	Grab sample
Chromium (trivalent)	milligrams per litre	Fortnightly	Grab sample
Chromium (VI) Compounds	milligrams per litre	Fortnightly	Grab sample
Cobalt	milligrams per litre	Fortnightly	Grab sample
Conductivity	microsiemens per centimetre	Fortnightly	Grab sample
Copper	milligrams per litre	Fortnightly	Grab sample
Fluoride	milligrams per litre	Fortnightly	Grab sample
Lead	milligrams per litre	Fortnightly	Grab sample
Manganese	milligrams per litre	Fortnightly	Grab sample
Mercury	milligrams per litre	Fortnightly	Grab sample
Methylene Blue Active Substances	milligrams per litre	Fortnightly	Grab sample
Molybdenum	milligrams per litre	Fortnightly	Grab sample
Nickel	milligrams per litre	Fortnightly	Grab sample
Nitrogen	milligrams per litre	Fortnightly	Grab sample
Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample
pH	pH	Daily during any discharge	Grab sample
Phosphorus	milligrams per litre	Fortnightly	Grab sample
Selenium	milligrams per litre	Fortnightly	Grab sample
Sulfur	milligrams per litre	Fortnightly	Grab sample
Temperature	degrees Celsius	Fortnightly	In situ
Tin	milligrams per litre	Fortnightly	Grab sample
Total dissolved solids	milligrams per litre	Fortnightly	Grab sample
Total organic carbon	milligrams per litre	Fortnightly	Grab sample
Total suspended solids	milligrams per litre	Fortnightly	Grab sample
Vanadium	milligrams per litre	Fortnightly	Grab sample
Zinc	milligrams per litre	Fortnightly	Grab sample

POINT 18

Pollutant	Units of measure	Frequency	Sampling Method
Arsenic	milligrams per litre	Weekly during any discharge	Grab sample
Boron	milligrams per litre	Weekly during any discharge	Grab sample
Cadmium	milligrams per litre	Weekly during any discharge	Grab sample
Chromium (trivalent)	milligrams per litre	Weekly during any discharge	Grab sample

Chromium (VI) Compounds	milligrams per litre	Weekly during any discharge	Grab sample
Copper	milligrams per litre	Weekly during any discharge	Grab sample
Electrical conductivity	microsiemens per centimetre	Weekly during any discharge	Grab sample
Fluoride	milligrams per litre	Weekly during any discharge	Grab sample
Lead	milligrams per litre	Weekly during any discharge	Grab sample
Mercury	milligrams per litre	Weekly during any discharge	Grab sample
Oil and Grease	milligrams per litre	Weekly during any discharge	Grab sample
pH	pH	Weekly during any discharge	Grab sample
Selenium	milligrams per litre	Weekly during any discharge	Grab sample
Total suspended solids	milligrams per litre	Weekly during any discharge	Grab sample
Zinc	milligrams per litre	Weekly during any discharge	Grab sample

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 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.

Note: Page Break.

M4 Testing methods - load limits

Note: Division 3 of the *Protection of the Environment Operations (General) Regulation 2009* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.

M5 Weather monitoring

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

POINT 15

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	1 hour	AM-4
Wind speed at 10m	m/s	Continuous	15 minutes	AM-2 & AM-4
Temperature at 2m	ºC	Continuous	15 minutes	AM-4
Wind direction at 10m	º	Continuous	15 minutes	AM-2 & AM-4
Temperature at 10m	ºC	Continuous	15 minutes	AM-4
Sigma theta at 10m	º	Continuous	15 minutes	AM-2 & AM-4
Solar radiation	W/m²	Continuous	15 minutes	AM-4
Additional Requirements				
siting				AM-1 & AM-4
measurement				AM-2 & AM-4

M5.2 For the purposes of condition M5.1 above, the requirement to monitor rainfall, temperature at 2m and solar radiation does not take effect until 31 December 2020.

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:
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.

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.

M7.4 For the purpose of condition M7.1 of this licence, operating hours are defined as twenty-four hours a day, seven days a week.

M8 Requirement to monitor volume or mass

M8.1 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;
c) the mass of pollutants emitted to the air;
at the frequency and using the method and units of measure, specified below.

POINT 18

Frequency	Unit of Measure	Sampling Method
Daily	kilolitres per day	Level sensor and continuous logger

POINT 19

Frequency	Unit of Measure	Sampling Method
Daily	kilolitres per day	In line instrumentation

Note: Page Break.

M9 Noise monitoring

M9.1 The licensee, following the receipt of a noise related complaint and if required by the EPA, must undertake noise monitoring as required in writing by the EPA.

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:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or 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 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.

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

R1.8 Within the Annual Return, the Statements 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.

Annual Air Emission Monitoring Report

R1.9 The licensee must submit with the Annual Return an Annual Air Emission Monitoring Report. The Annual Air Emission Monitoring Report must analyse and summarise emission monitoring data from the reporting period including, but not limited to:
a) a comprehensive summary (tabulated and graphical) of all periodic and continuous monitoring data as required by condition M2.2 of this licence, including a comparison with the concentration limits specified in conditions L3.4 and L3.5 of this licence;
b) analysis of trends in emission performance for all pollutants monitored as required under condition M2.2 of this licence. Trend analysis must include comparison of emission performance during the reporting period with emission performance from the previous 4 years;
c) details of any exceedances of air emission licence limits and details of plant operating conditions at the times the exceedances occurred;
d) details of plant operating conditions, including Boiler load (MW), during sampling for each Boiler;
e) demonstrated compliance with the CEMS Quality Assurance and Control Procedures required under condition E3.1 of the licence;
f) summary of fuel usage, including:
i. total coal and other permitted fuels consumed in each Boiler (including start-up),
ii. a statement about the representativeness of fuel quality during periodic air emission sampling compared to non-sampling periods,
iii. total fuel consumed by each Boiler during times when periodic air emission sampling was undertaken; and
g) detailed calculations used to determine the aggregated pollutant emissions rates for points 3 to 6.

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

R4.1 The licensee must notify the EPA of any exceedances of any emission or concentration limit included as a condition of this licence in accordance with condition R2.1 no later than 5 days after becoming aware of any exceedance.

R4.2 Within 20 days of the notification made in accordance with condition R4.1 above, the licensee must provide a report to the EPA at hunter.region@epa.nsw.gov.au that includes, as a minimum, the following details:
a) the date and time the exceedance occurred;
b) the nature of the exceedance (i.e. the pollutants involved);
c) the duration of the exceedance;
d) plant operating conditions at the time of the exceedance;

e) the cause of the exceedance;
f) the remedial/corrective actions taken at the time the exceedance was made known; and
g) the actions taken and/or future actions to be taken, to prevent exceedances of a similar nature occurring in the future.

R4.3 The licensee must notify the EPA at hunter.region@epa.nsw.gov.au of the date of any periodic air emission sampling (stack testing) to be undertaken to satisfy a monitoring condition of this licence at least 7 days prior to the stack testing being carried out. If the licensee must delay the test due to unforeseen circumstances beyond the licensees control, the EPA must be notified immediately of the delay at the email address contained in this condition once the delay is identified and specify the date when the stack testing is to be undertaken.

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.

G2 Contact number for incidents and responsible employees

G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
a) respond at all times to incidents relating to the premises; and
b) contact the licensee's senior employees or agents authorised at all times to:
i) speak on behalf of the licensee; and
ii) provide any information or document required under this licence.

G2.2 The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.

G3 Signage

G3.1 Each monitoring and discharge point must be clearly marked by a sign that indicates the EPA point identification number.

G3.2 Condition G3.1 above does not take effect until 1 October 2020.

Environment Protection Licence

Licence - 2122

G4 Other general conditions

G4.1 Completed Programs

Program	Description	Completed Date
PRP 1 - Stack Emission Testing During Co-firing	During the co-firing of the alternative fuel 'treated oyster stakes' Macquarie Generation are to conduct stack emission testing to monitor emission to air. This will allow the quantification stack emissions to air during the co-firing of treated oyster stakes and determine compliance with the re-testing specifications to allow the burning of alternative fuels.	24-October-2003
PRP 2 - Replace the Existing Air Monitors	Macquarie Generation are to replace the existing continuous air monitors to allow continuous monitoring of each boiler on the premises in accordance with the EPA's approved test methods. This will extend continuous monitoring on boiler units not previously monitored to enable quantification of emissions to air from the boiler units.	30-June-2004
PRP3 - Upgrade Continuous Air Monitoring Equipment	Upgrade of continuous air monitoring equipment. To test compliance with Air Regulations and minimise air pollution.	12-July-2007
PRP 4 - Emission Testing Trial	Emission testing trial co-firing combined blend of manufactured wooden beam off-cuts and chipboard waste. This will allow the quantification of stack emissions to air during the co-firing of timber off-cuts and determine compliance with the re-testing specifications to allow burning of alternative fuels.	12-July-2007
PRP 5 - Determination of Compliance of Air Emission	Determination of compliance of air emission measurement sampling planes. Assessment of compliance/performance of emission testing location and equipment in accordance with approved test methods.	30-June-2007
PRP 6 - Report Results to EPA	Hire appropriate consultant to assist meeting TM-1, test No. 4 Generation Unit in accordance with TM-1 and report results to EPA. Minimise air emissions.	31-December-2007
Water Softening Plant - backwash management	Backwash cycles from the water softening plant (sulphuric acid and sodium hydroxide) have historically discharged high and low pH water to Lake Liddell. This PRP will require licensee to undertake a feasibility study on appropriate controls to prevent the discharge of such water.	19-December-2013
Liddell Ash Dam water management investigation	Assess water management systems associated with ash dam and provide report on the better management of the ash water.	17-December-2013

Upgrade to water and ash management - Liddell Ash Line Settling Pond	Upgrade to ash line settling pond to minimise risk of overflow from this pond to Tinkers Creek	17-December-2013
Water Treatment Plant Backwash Effluent Management Upgrade Works	Licensee to undertake and complete water treatment plant upgrade works as detailed in report "Water Treatment Plant Backwash Effluent Management - Feasibility Study" dated 19 December 2013.	31-March-2016
Liddell Power Station Outfall Canal and Oil and Grit Trap Water Quality Assessment	Licensee to undertake a water quality assessment of discharges from the Outfall Canal and the Oil and Grit Trap discharge points, and potential impacts to Lake Liddell.	06-May-2015
Liddell Power Station Ash Dam - Waste Assessment	Licensee to undertake an adequacy assessment of the Liddell Power Station Ash Dam, including assessment of waste stream inputs and an integrity assessment of the ash dam.	30-June-2016
Upgrade to water and ash management - Ash Settling Pond	Complete works to upgrade ash line settling pond	30-September-2016
PRP - NOx emission reduction	The aim of this Pollution Reduction Program is to assess the feasibility of achieving reductions in the emission of NOx from the premises	28-June-2017

8 Pollution Studies and Reduction Programs

U1 PRS 17 - Alarm review

U1.1 The licensee must undertake a review of the management of key alarms for hydrocarbon and chemical storage areas on the premises (the Alarm Review). The Alarm Review must identify, and whether required, implement suitable alternative technologies which will provide the ability to monitor, alarm and continuously trend operating parameters for the licensee's operations remote to the main power station (that currently rely on local observation). Assets to be included as part of the Alarm Review must include, but are not limited to, the following:

(a) The ammonia plant;
(b) The bulk fuel inground catch tanks;
(c) The two clarifier bunds;
(d) The seven demin plant bunds; and
(e) The Hunter Valley Gas Turbines' (HVGT) fuel bund.

The licensee must provide a report to the EPA that outlines the Alarm Review, including key investigations, recommendations and actions implemented. The Alarm Review Report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Date for completion: 1 March 2021.

U2 PRS 18 - Liddell water management system review

U2.1 The licensee must undertake a review of the water management systems related to coal handling areas and other potentially impacted water capture areas on the premises (the Liddell Water Management System Review). The Liddell Water Management System Review must include, but is not limited to, coal stockpiles; conveyor transfer points; and the Hunter Valley Gas Turbines (Water Management Review Sites).

The Liddell Water Management System Review must include the following activities in relation of the Water Management Review Sites.

(a) Review existing water management infrastructure;
(b) Analyse stormwater runoff and potential discharge points;
(c) Develop recommendations and/or designs for the diversion of clean water and contaminated waters, sediment basins and bunding etc.; and
(d) Develop recommendations for any changes to inspection and maintenance programs for relevant water management infrastructure.

The licensee must provide a report to the EPA that outlines the Liddell Water Management System Review, including key findings and recommendations. The Liddell Water Management System Review Report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au.

Date for completion: 1 September 2020.

U3 PRS 19 - Asset environmental management review

U3.1 The licensee must undertake a review of external plant assets on the premises to identify and implement appropriate mitigation measures to minimise potential environmental impacts resulting from asset strategy, physical condition assessment and maintenance delivery (Asset Environmental Management Review).

The Asset Environmental Management Review must focus on key external plant assets including, but not limited to, the water treatment plants, diesel and chemical bulk storage areas and associated systems, ash and dust pipelines, and stormwater systems.

By 13 March 2020, the licensee must notify the EPA of the assets subject to the Asset Environmental Management Review; categorise their environment risk as either "High", "Medium" or "Low" (for the purpose of prioritising the timing of the Asset Environmental Management Review); and, provide the rationale for their categorisation. The notification must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au, for the EPA's approval.

The key activities to be undertaken as part of the Asset Environmental Management Review must include:

(a) A review of key external plant assets on the premises targeting environmental risk reduction. The review of each key external plant asset must include consideration of the following:

- Statutory requirements under the *Protection of the Environment Operations Act 1997*;
- Any prior environmental incidents in relation to the asset;
- Critical controls to manage environmental impacts relating to the asset;
- Engineering technical standards which apply to the asset;
- Existing operating manuals and procedures for the asset;
- The asset management plans for the incident; and
- The maintenance strategy for the asset.

(b) The review of key external plant assets on the premises must identify recommendations for each asset to improve asset health through a focus on asset strategy, physical condition assessment and maintenance delivery. This may include recommendations relating to:
- The use of alternatives technologies;
- Changes to operations and/or maintenance programs and inspections; and
- Further risk assessments to ensure key environmental risks are being controlled.

The licensee must complete the Asset Environmental Management Review detailed above by the following dates.
(i) Stage 1 - Completion of the Asset Environmental Management Review for those assets identified as having a "High" environmental Risk by 31 December 2020.
(ii) Provision of a report to the EPA that outlines the Asset Environmental Management Review for Stage 1, including key findings and recommendations. The report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au, by 31 March 2021.
(iii) Stage 2 - Completion of the Asset Environmental Management Review for those assets identified as having a "Medium" or "Low" environmental Risk by 30 September 2021.
(ii) Provision of a report to the EPA that outlines the Asset Environmental Management Review for Stage 2, including key findings and recommendations. The report must be provided to the EPA at PO Box 488G, Newcastle NSW 2300, or emailed to hunter.region@epa.nsw.gov.au, by 31 December 2021.

9 Special Conditions

E1 Dioxin and furan study

E1.1 The licensee must undertake dioxin and furan emission testing in accordance with the following:
a) a minimum of 1 round of testing on all Boilers at the premises that have only been fired on coal within the past 10 years;
b) a minimum of 2 rounds of testing on all Boilers at the premises that have been fired on a non-standard fuel within the past 10 years; and
c) testing must be undertaken in accordance with TM-18, as defined in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

E1.2 Following the dioxin and furan emission testing required by condition E1.1 above, the licensee must prepare a report which includes the following:
a) details of the sampling program undertaken;
b) details of the sampling methodology and emission monitoring conducted (including description of sampling time(s) and sampling location(s) for all test runs) and including a statement of compliance with the relevant test method(s);
c) detailed description of any deviation from the relevant test method(s) including analysis of the likely effect of any deviation on the final test results (as appropriate);

d) detailed description of all plant operating conditions at the time emission monitoring was conducted, including, but not limited to fuel rate, fuel quality and composition and production load(s);
e) summary of all test results including a statement on the representativeness of final test results, including a statement of expected characterisation of long-term emission performance from the plant;
f) all air emission monitoring results and reports, including analytical reports;
g) recommendation on the need for any future or follow-up testing; and
h) all additional reporting requirements prescribed in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW for stationary source monitoring.

E1.3 The dioxin and furan testing and report required by conditions E1.1 and E1.2 of this licence must be completed and the report provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 1 July 2021.

E1.4 Where historical dioxin and furan testing and operating data are available for the premises which robustly satisfies the testing and reporting requirements listed in conditions E1.1 and E1.2 of this licence, the licensee may use the historic data to satisfy these special conditions however; any historical data used to satisfy these conditions must not be more than 5 years old.

E2 Site specific air emission monitoring plan

E2.1 The licensee must develop and submit a Site Specific Air Emission Monitoring Plan to the EPA which supports the comprehensive management of air emission monitoring required by this licence. As a minimum, the Site Specific Air Emission Monitoring Plan must describe in detail the following:
a) monitoring and discharge points;
b) detailed description of the operational measures used for ensuring the representativeness of emission measurements during monitoring including any procedures relating to pre-test planning, setting operating conditions and process data collection and recording;
c) detailed description of sampling methodology and test procedures;
d) description of any deviation from the relevant test methods, including analysis of the likely effect of any deviation on the final sampling and test results;
e) detailed description of quality assurance and quality control procedures used for collecting, verifying and reporting emission test data;
f) responsible personnel and roles;
g) governance/version control, review and updating procedures for the plan; and
h) a detailed methodology and all supporting calculations used to determine the aggregated emission concentration for each pollutant associated with points 3 to 6 as stipulated by conditions L3.4 and L3.5 at the discharge point for each boiler. All calculations must, at a minimum, meet the requirements of TM-38.

E2.2 The Site Specific Air Emission Monitoring Plan required by condition E2.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E3 Continuous emission monitoring systems - quality assurance and control procedures

E3.1 The licensee must develop and submit a CEMS quality assurance (QA) and quality control (QC) procedure to the EPA which enables the evaluation of the quality of data produced by any CEMS monitoring required by conditions of this licence. As a minimum, the CEMS QA/QC procedure must

describe in detail the following:
a) calibration and adjustment measures;
b) preventive maintenance measures (including spare parts inventory);
c) data handling, recording and calculation procedures;
d) processes for evaluating, verifying and reporting monitoring data;
e) accuracy audit measures including sampling and analysis methods;
f) fault identification and corrective action measures; and
g) process for ongoing review and evaluation of the effectiveness of the CEMS QA/QC procedures.

E3.2 The CEMS QA/QC procedure required by condition E3.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 March 2021.

E4 Air pollution control equipment - maintenance, operation and fault response procedure

E4.1 The licensee must develop and submit an air pollution control equipment - maintenance, operation and fault response procedure to the EPA which ensures that air pollution control equipment is maintained and operated in accordance with conditions O1.1 and O2.1 of this licence. As a minimum, the procedure must describe in detail the following:
a) procedures for routine operations including equipment start-up and shut-down;
b) procedures for routine and non-routine inspections and maintenance;
c) procedures for faults and failure response and emergency situations;
d) spare parts inventory;
e) reporting and training procedures;
f) verification procedures incorporating performance indicators and benchmarks relating to:
i. performance monitoring,
ii. operational efficiency, and
iii. data quality,
g) planning, reporting, record keeping and tracking systems; and
h) process for ongoing review and evaluating air pollution control equipment - maintenance, operation and fault response procedure.

E4.2 The air pollution control equipment - maintenance, operation and fault response procedure must be peer reviewed and endorsed by a suitably qualified air pollution control practitioner, affirming the suitability of the procedure for meeting its objectives.

E4.3 The air pollution control equipment - maintenance, operation and fault response procedure required by condition E4.1 of this licence must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E5 Continuous particle matter monitoring feasibility study

E5.1 The licensee must prepare and submit a continuous particle matter monitoring feasibility study report which assesses the feasibility of installing and operating a monitoring system capable of measuring particle emissions from each Boiler on a continuous basis. The proposed system must be capable of being correlated against a gravimetric reference method in accordance with US EPA Performance Specification 11. As a minimum, the study must:

a) be prepared in consultation with a suitably qualified and experienced air monitoring practitioner who has demonstrated experience in the installation and operation of PM-CEMS at large industrial plant;
b) be prepared with reference to information provided in the PM-CEMS guidance document (Chiappalone Consulting, Feasibility of Continuous Particle Monitoring at NSW Coal Fired Power Stations: Guidance Document (September 2019);
c) include a statement about the general feasibility of installing a PM-CEMS;
d) evaluate potential monitoring options based on site specific factors including, but not limited to: i. process and stack conditions,
ii. particle concentration range, and
iii. reliability and life cycle cost,
e) evaluate potential installation locations. As a minimum, feasibility analysis must be undertaken for installing monitors on each flue gas duct on the exit side of each baghouse, at a location capable of achieving a representative PM measurement.

E5.2 Where it is considered generally feasible to install a PM-CEMS, the Report must:
a) include proposed actions for the implementation of PM-CEMS;
b) identify the proposed locations for monitor installations;
c) include proposed timing for the installation of PM-CEMS;
d) include a proposed installation and commissioning plan for the PM-CEMS; and
e) detail procedures for evaluating the performance of the PM-CEMS following installation.

E5.3 Where it is considered not feasible to install a PM-CEMS, the Report must:
a) provide a detailed explanation and robust justification of why installation and operation of PM-CEMS is not feasible; and
b) detail proposed alternative monitoring and reporting options that ensure ongoing representativeness of particle emission monitoring and report at the premises. Alternative options must have suitable temporal resolution to ensure all significant emission variability is accounted for.

E5.4 The continuous particle matter monitoring feasibility study required by conditions E5.1 to E5.3 of this licence must be provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 31 March 2021.

E6 O2 and CO2 relationship proposal

E6.1 The licensee must submit to the EPA a proposal for the use of a carbon dioxide correction value which has been demonstrated to be equivalent to 7% oxygen v/v. The proposal must be supported by a detailed analysis of the relationship between oxygen and carbon dioxide in the flue gases of all boiler units at the premises.

E6.2 The O2 and CO2 relationship proposal required by condition E6.1 above must be completed and the report provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 1 October 2020.

Environment Protection Licence

Licence - 2122

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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 - 2122

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 Environmen t 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 mo nths. 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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 2122

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

Mr Bernie Weir

Environment Protection Authority

(By Delegation)

Date of this edition: 26-April-2000

Environment Protection Licence

Licence - 2122

End Notes

1	Licence varied by notice 1004079, issued on 30-May-2003, which came into effect on 24-Jun-2003.
2	Licence varied by notice 1032951, issued on 02-Apr-2004, which came into effect on 27-Apr-2004.
3	Licence varied by notice 1037103, issued on 21-Jun-2004, which came into effect on 16-Jul-2004.
4	Licence varied by notice 1039422, issued on 26-Oct-2004, which came into effect on 20-Nov-2004.
5	Licence varied by notice 1064038, issued on 09-May-2007, which came into effect on 09-May-2007.
6	Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
7	Licence varied by notice 1093943, issued on 10-Mar-2009, which came into effect on 10-Mar-2009.
8	Licence fee period changed by notice 1101276 approved on .
9	Licence varied by notice 1101344, issued on 18-May-2009, which came into effect on 18-May-2009.
10	Licence varied by admin corrections to annual return, issued on 02-Jul-2009, which came into effect on 02-Jul-2009.
11	Licence varied by notice 1104682, issued on 15-Sep-2009, which came into effect on 15-Sep-2009.
12	Licence varied by notice 1110855, issued on 02-Feb-2010, which came into effect on 02-Feb-2010.
13	Licence varied by notice 1509106 issued on 24-Jun-2013
14	Licence varied by notice 1515942 issued on 20-Sep-2013
15	Licence varied by notice 1519337 issued on 31-Jan-2014
16	Licence transferred through application 1524623 approved on 29-Aug-2014 , which came into effect on 02-Sep-2014
17	Licence varied by notice 1531453 issued on 29-Jun-2015
18	Licence varied by notice 1534817 issued on 15-Feb-2016
19	Licence varied by notice 1543814 issued on 23-Jan-2017
20	Licence varied by notice 1552483 issued on 09-May-2018

Environment Protection Licence

Licence - 2122

21	Licence varied by notice	1590324 issued on 06-Feb-2020
22	Licence varied by notice	1591555 issued on 23-Jul-2020

Environment Protection Licence

Licence - 761

Licence Details	
Number:	761
Anniversary Date:	01-July

Licensee
SUNSET POWER INTERNATIONAL PTY LTD
PO BOX 7285
MANNERING PARK NSW 2259

Premises
VALES POINT POWER STATION AND COAL UNLOADER
VALES POINT ROAD
MANNERING PARK NSW 2259

Scheduled Activity
Chemical storage
Coal works
Crushing, grinding or separating
Electricity generation
Energy recovery

Fee Based Activity	Scale
Coal works	> 2000000-5000000 T annual handing capacity
Crushing, grinding or separating	> 2000000 T annual processing capacity
Energy recovery from general waste	Any capacity
General chemicals storage	0-5000 kL storage capacity
Generation of electrical power from coal	> 4000 GWh annual generating capacity
Petroleum products storage	0-5000 kL storage capacity

Environment Protection Licence

Licence - 761

Region
Metropolitan North - Newcastle
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 - 761

INFORMATION ABOUT THIS LICENCE ---------- 5

Dictionary ---------- 5

Responsibilities of licensee ---------- 5

Variation of licence conditions ---------- 5

Duration of licence ---------- 5

Licence review ---------- 5

Fees and annual return to be sent to the EPA ---------- 5

Transfer of licence ---------- 6

Public register and access to monitoring data ---------- 6

1 ADMINISTRATIVE CONDITIONS ---------- 7

A1 What the licence authorises and regulates ---------- 7

A2 Premises or plant to which this licence applies ---------- 7

A3 Other activities ---------- 8

A4 Information supplied to the EPA ---------- 8

2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND ---------- 8

P1 Location of monitoring/discharge points and areas ---------- 8

3 LIMIT CONDITIONS ---------- 11

L1 Pollution of waters ---------- 11

L2 Load limits ---------- 11

L3 Concentration limits ---------- 11

L4 Volume and mass limits ---------- 14

L5 Waste ---------- 14

L6 Potentially offensive odour ---------- 16

L7 Other limit conditions ---------- 16

4 OPERATING CONDITIONS ---------- 16

O1 Activities must be carried out in a competent manner ---------- 16

O2 Maintenance of plant and equipment ---------- 17

O3 Dust ---------- 17

O4 Effluent application to land ---------- 17

O5 Emergency response ---------- 17

O6 Waste management ---------- 17

O7 Other operating conditions ---------- 18

5 MONITORING AND RECORDING CONDITIONS ---------- 19

M1 Monitoring records ---------- 19

Environment Protection Licence

Licence - 761

M2 Requirement to monitor concentration of pollutants discharged ---- 20
M3 Testing methods - concentration limits ---- 26
M4 Testing methods - load limits ---- 27
M5 Weather monitoring ---- 27
M6 Recording of pollution complaints ---- 28
M7 Telephone complaints line ---- 28
M8 Requirement to monitor volume or mass ---- 28
M9 Noise monitoring ---- 29
6 REPORTING CONDITIONS ---- 29
R1 Annual return documents ---- 29
R2 Notification of environmental harm ---- 31
R3 Written report ---- 31
R4 Other reporting conditions ---- 32
7 GENERAL CONDITIONS ---- 32
G1 Copy of licence kept at the premises or plant ---- 32
G2 Contact number for incidents and responsible employees ---- 33
G3 Signage ---- 33
G4 Other general conditions ---- 33
8 SPECIAL CONDITIONS ---- 34
E1 Discharge of cooling waters into Lake Macquaire ---- 34
E2 Seagrass monitoring program ---- 34
E3 Solid alternative fuel ---- 35
E4 Dioxin and furan study ---- 35
E5 Site specific air emission monitoring plan ---- 36
E6 Continuous emission monitoring systems - quality assurance and control procedures ---- 37
E7 Air pollution control equipment - maintenance, operation and fault response procedure ---- 37
E8 Continuous particle matter monitoring installation report ---- 38
E9 Dust suppressant toxicity assessment ---- 38
E10 Groundwater assessment (south-east portion of ash dam) ---- 39
DICTIONARY ---- 40
General Dictionary ---- 40

Environment Protection Licence

Licence - 761

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);
- 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 - 761

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:

SUNSET POWER INTERNATIONAL PTY LTD
PO BOX 7285
MANNERING PARK NSW 2259

subject to the conditions which follow.

Environment Protection Licence

Licence - 761

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 annual handing capacity
Crushing, grinding or separating	Crushing, grinding or separating	> 2000000 T annual processing capacity
Energy recovery	Energy recovery from general waste	Any capacity
Chemical storage	General chemicals storage	0 - 5000 kL storage capacity
Electricity generation	Generation of electrical power from coal	> 4000 GWh annual generating capacity
Chemical storage	Petroleum products storage	0 - 5000 kL storage capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
VALES POINT POWER STATION AND COAL UNLOADER
VALES POINT ROAD
MANNERING PARK
NSW 2259
PREMISES DEFINED BY DOCUMENT(S) TITLED "VALES POINT POWER STATION - ENVIRONMENT - LICENCE MONITORING LOCATIONS - LAYOUT & DETAILS" REFERENCES "VX837351-1" AND "VX837351-2" DATED 03/06/2020 AND PROVIDED TO THE EPA ON 05/06/2020 (EPA REFERENCE DOC20/476695 AND DOC20/476695-1).

A2.2 The document(s) referred to in condition A2.1 above are herein referred to in this licence as "The Plans".

Environment Protection Licence

Licence - 761

A3 Other activities

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

Ancillary Activity
Electricity generation (generation of electrical power from diesel)
Railway activities - railway infrastructure operations
Sewage treatment

A3.2 For the purpose of condition A3.1 above:
a) electricity generation (generation of electrical power from diesel) means the operation of the emergency diesel generator(s) in accordance with the conditions of the licence; and
b) all other activities listed in condition A3.1 are as defined by Schedule 1 of the Protection of the Environment Operations Act 1997 although not meeting the scheduled activity threshold.

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.

A4.2 Any other document and/or management plan is not to be taken as part of the documentation in condition A4.1 above, other than those documents and/or management plans specifically referenced in 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
1		Discharge to air	Discharge of air emissions from stack serving boilers number 5 and 6 marked and shown as EPA ID 1 on The Plans

2	Air emission monitoring	Combined air emissions from boiler 5 via Points 4 to 7 to Point 1 marked and shown as EPA ID 2 on The Plans
3	Air emission monitoring	Combined air emissions from boiler 6 via Points 8 to 11 to Point 1 marked and shown as EPA ID 3 on The Plans
4	Air emission monitoring	Boiler number 5 exhaust - duct A marked and shown as EPA ID 4 on The Plans
5	Air emission monitoring	Boiler number 5 exhaust - duct B marked and shown as EPA ID 5 on The Plans
6	Air emission monitoring	Boiler number 5 exhaust - duct C marked and shown as EPA ID 6 on The Plans
7	Air emission monitoring	Boiler number 5 exhaust - duct D marked and shown as EPA ID 7 on The Plans
8	Air emission monitoring	Boiler number 6 exhaust - duct A marked and shown as EPA ID 8 on The Plans
9	Air emission monitoring	Boiler number 6 exhaust - duct B marked and shown as EPA ID 9 on The Plans
10	Air emission monitoring	Boiler number 6 exhaust - duct C marked and shown as EPA ID 10 on The Plans
11	Air emission monitoring	Boiler number 6 exhaust - duct D marked and shown as EPA ID 11 on The Plans
12	Air emission monitoring	Boiler number 5 combined exhaust - duct A and B (points 4 and 5) marked and shown as EPA ID 12 on The Plans
13	Air emission monitoring	Boiler number 5 combined exhaust - duct C and D (points 6 and 7) marked and shown as EPA ID 13 on The Plans
14	Air emission monitoring	Boiler number 6 combined exhaust - duct A and B (points 8 and 9) marked and shown as EPA ID 14 on The Plans
15	Air emission monitoring	Boiler number 6 combined exhaust - duct C and D (points 10 and 11) marked and shown as EPA ID 15 on The Plans
16	Meteorological weather monitoring Ambient air quality monitoring	Meteorological weather and ambient air monitoring station at Wyee marked and shown as EPA ID 16 on The Plans
17	Ambient air quality monitoring	Dust deposition gauge marked and shown as EPA ID 17 on The Plans
18	Ambient air quality monitoring	Dust deposition gauge marked and shown as EPA ID 18 on The Plans
19	Ambient air quality monitoring	Dust deposition gauge marked and shown as EPA ID 19 on The Plans
20	Ambient air quality monitoring	Dust deposition gauge marked and shown as EPA ID 20 on The Plans
21	Ambient air quality monitoring	Dust deposition gauge marked and shown as EPA ID 21 on The Plans

P1.2 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.

P1.3 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.

Environment Protection Licence

Licence - 761

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
22	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge of cooling water from the cooling water outlet canal to Wyee Bay marked and shown as EPA ID 22 on The Plans
23	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge of supernatant water from the ash dam to the cooling water outlet canal to Wyee Bay marked and shown as EPA ID 23 on The Plans
24	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge of seepage water from the ash dam rehabilitation area to Mannering Bay marked and shown as EPA ID 24 on The Plans
25	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge of over boarded water from the ash dam to Mannering Bay marked and shown as EPA ID 25 on The Plans
26	Discharge to utilisation area Volume monitoring	Discharge to utilisation area Volume monitoring	Discharge of effluent from the onsite sewage treatment plant to the ash dam effluent application area marked and shown as EPA ID 26 on The Plans
27	Background water quality monitoring		Water quality monitoring in Crangan Bay marked and shown as EPA ID 27 on The Plans
28	Ambient water quality monitoring		Water quality monitoring in Wyee Bay marked and shown as EPA ID 28 on The Plans
29	Ambient water quality monitoring		Water quality monitoring in Chain Valley Bay marked and shown as EPA ID 29 on The Plans
30	Groundwater quality monitoring		Groundwater quality monitoring bore marked and shown as EPA ID 30 on The Plans
31	Groundwater quality monitoring		Groundwater quality monitoring bore marked and shown as EPA ID 31 on The Plans
32	Groundwater quality monitoring		Groundwater quality monitoring bore marked and shown as EPA ID 32 on The Plans
33	Groundwater quality monitoring		Groundwater quality monitoring bore marked and shown as EPA ID 33 on The Plans
34	Groundwater quality monitoring		Groundwater quality monitoring bore marked and shown as EPA ID 34 on The Plans

Environment Protection Licence

Licence - 761

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.

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

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)	
Benzene (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)	
Volatile organic compounds (Air)	

L3 Concentration limits

L3.1 For each monitoring/discharge point or utilisation area specified in the table\s 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\s.

L3.4 Air Concentration Limits

POINT 2,3

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Cadmium	milligrams per cubic metre	0.2	Dry, 273K, 101.3kPa	7% O2	1 hour
Chlorine	milligrams per cubic metre	20	Dry, 273K, 101.3kPa	7% O2	1 hour
Fluorine	milligrams per cubic metre	30	Dry, 273K, 101.3kPa	7% O2	1 hour
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPa	7% O2	1 hour
Mercury	milligrams per cubic metre	0.05	Dry, 273K, 101.3kPa	7% O2	1 hour
Nitrogen Oxides	milligrams per cubic metre	1500	Dry, 273K, 101.3kPa	7% O2	1 hour
Solid Particles	milligrams per cubic metre	50	Dry, 273K, 101.3kPa	7% O2	1 hour
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	100	Dry, 273K, 101.3kPa	7% O2	1 hour
Sulfur dioxide	milligrams per cubic metre	1700	Dry, 273K, 101.3kPa	7% O2	1 hour
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	0.75	Dry, 272K, 101.3kPa	7% O2	1 hour
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	10	Dry, 273K, 101.3kPa	7% O2	1 hour

L3.5 In addition to the concentration limits specified in condition L3.4 above, the following 99th percentile concentration limits apply for points 2 and 3 utilising the same units of measure, reference conditions, oxygen correction and averaging period as above for each pollutant listed below:
a) nitrogen oxides: 1100 mg/m3; and
b) sulfur dioxide: 1400 mg/m3.

L3.6 For the purpose of condition L3.5 above, the 99th percentile concentration limit for nitrogen oxides does

not apply to Boiler 6 until 1 January 2021.

L3.7 For the purposes of conditions L3.4 and L3.5 of this licence:
a) Nitrogen Oxides mean: Nitric Oxide (NO) or Nitrogen Dioxide (NO_2) or both, as NO_2 equivalent; and
b) Fluorine means: fluorine and any compound containing fluorine, as total fluoride (HF equivalent).

L3.8 For the purposes of nitrogen oxides at point 2 and 3 and in accordance with the Protection of the Environment Operations (Clean Air) Regulation 2010, Boilers 5 and 6 are taken to belong to Group 2 until 1 January 2022 or unless otherwise approved in writing by the EPA.

L3.9 Water and/or Land Concentration Limits

POINT 22

Pollutant	Units of Measure	50%Limit	90%Limit	97%Limit	100 percentile concentration limit
Chlorine (free residual)	milligrams per litre				0.2
Copper	milligrams per litre				0.005
Iron	milligrams per litre				0.3
Selenium	milligrams per litre				0.005
Temperature	degrees Celsius			35	37.5

POINT 23,24

Pollutant	Units of Measure	50%Limit	90%Limit	97%Limit	100 percentile concentration limit
pH	pH				6.5-9.5
Total suspended solids	milligrams per litre				50

POINT 25

Pollutant	Units of Measure	50%Limit	90%Limit	97%Limit	100 percentile concentration limit

pH	pH	6.5-9
Total suspended solids	milligrams per litre	50

L3.10 In addition to the concentration limits specified in condition L3.9 above, the following applies to point 22:
a) the 97% limit specified for the pollutant 'Temperature' at point 22 means that during normal electricity supply conditions, cooling waters may be discharged over 35°C and up to, but not exceeding, a maximum temperature of 37.5°C for up to a total of 262 hours during the reporting period;
b) an additional 69 hours are available to allow compliance during periods of high electricity demand to avoid potential shortfall of electricity supply as per conditions E1.1 to E1.4 of this licence where cooling waters may be discharged over 35°C and up to, but not exceeding, a maximum temperature of 37.5°C over a reporting period;
c) the 100% limit specified for the pollutant 'Temperature' at point 22 means cooling waters discharged may never exceed the maximum temperature of 37.5°C except in accordance with conditions E1.1 to E1.4 of this licence; and
d) in the event that the licensee exceeds the 97 percentile temperature limit, the licensee must advise the EPA on a weekly basis, every day such an exceedance occurs.

L3.11 For the purpose of compliance with the temperature limits at conditions L3.9 and L3.10 of this licence, the limits are based on a 10-minute averaging period.

L4 Volume and mass limits

L4.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:
a) liquids discharged to water; or;
b) 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
22	megalitres per day	6500
23	megalitres per day	120
26	kilolitres per day	380

L5 Waste

L5.1 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.

Code	Waste	Description	Activity	Other Limits
NA	Sandstone	Sandstone as defined by and meeting the requirements of The Sydney Metro Harbour Tunnel Sandstone Specific Resource Recovery Order and Exemption	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O6.2
NA	Organics	Compost, manure and mulch as defined by and meeting requirements of the Compost, Manure and Mulch Orders and Exemptiosn, as in-force from time to time	Waste storage Capping of Ash Dam As specified in each particular resource recovery exemption	See condition O6.2
NA	Excavated natural material	As defined by and meeting the requirements of the Excavated Natural Material Order and Exemption, as in-force from time to time	Waste storage Capping of Ash Dam As specified in each particular resource recovery exemption	See condition O6.2
NA	Virgin excavated natural material	As defined by the Protection of the Environment Operations Act, as in-force from time to time	Waste storage Capping of Ash Dam	See condition O6.2

L5.2 The following wastes generated at/on the premises may be disposed of to the ash dam or within the ash dam catchment:
a) ash;
b) mill pyrites, residual detergents and oil sheens, sand, concrete products, boiler blowdown, minor chemical spill residues, chemicals for environmental control, ash dam water treatment plant residues, dust returned from the ash recovery plant, marine growth, debris, seaweed, chemical cleaning solutions, oil and chemically impacted soil, silt from settling basins, dredge spoil, waste wood, wood chips, dirty water from drains, treatment plant discharges, coal handling plant stormwater, neutralised demineralisation effluent, polisher plant effluent, spent ion exchange resins, chlorine plant storage vessel precipitates, cable tunnel drainage water, fabric filter bags, coal chitter and soil capping materials, coal mine dewatering discharges;
c) a spent solvent in the form of dilute ammonia of less than 5% concentration and at pH of not more than 9. Those discharges from the post combustion carbon capture facility must only occur whilst this facility is operational. The total annual volume discharged must not exceed 5 tonnes; and
d) any other material approved in writing by the EPA.

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.

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.

L7 Other limit conditions

L7.1 The licensee must not discharge from point 25 unless rainfall measured at point 16 is greater than 400mm over the 31 day period immediately prior to the discharge.

Air concentration limit emergency exceedance provision

L7.2 The air concentration limits specified in conditions L3.4 and L3.5 of this licence may be temporarily exceeded under the following circumstances:
a) the Australian Electricity Market Operator (AEMO), or a person authorised by AEMO, directs the licensee, under the National Electricity Law and the National Electricity Rules, to take relevant actions to maintain or restore the security or reliability of the electricity network; and
b) the relevant AEMO direction referred to above remains in force; and
c) the licensee takes all practical measures to prevent or minimise air pollution.

L7.3 An exceedance under condition L7.2 above counts towards the hours accumulated for the purpose of calculating compliance with the 99th percentile concentration limits specified in condition L3.5 of this licence.

L7.4 The licensee must notify the EPA of any and all limit exceedances due to the activation of condition L7.2 in accordance with conditions R4.1 and R4.2 of this 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:
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.

Note: Page Break.

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 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

O3.3 Trucks entering and leaving the premises that are carrying loads of dust generating material must be covered at all times, except during loading and unloading.

O4 Effluent application to land

O4.1 Spray from effluent application must not drift beyond the boundary of the premises.

O4.2 Effluent application must not occur in a manner that causes surface runoff.

O4.3 Irrigation of treated effluent and wastewater must not be carried out if soil moisture conditions are such that surface runoff or ponding is likely to occur.

O4.4 Public access to any effluent utilisation area must be denied during effluent application and until the effluent application area has dried.

O5 Emergency response

Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises in accordance with Part 5.7A of the Protection of the Environment Operations Act 1997 and Part 3A of the Protection of the Environment Operations (General) Regulation 2009.

O6 Waste management

O6.1 The licensee must ensure that any liquid and non liquid waste generated and/or stored at the premises that is to be sent offsite:
a) is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time prior to leaving the premises; or
b) where the waste is covered by an in-force Resource Recovery Order and Exemption, the waste must meet the conditions of the relevant Order prior to leaving the premises.

O6.2 The licensee, when capping and remediating the Vales Point Power Station ash dam, must only use those wastes permitted by condition L5.1 of this licence to be received and used at the premises to the minimum extent possible.

Note: For the purposes of condition O6.2 and determining compliance with the term "minimum extent possible", the EPA will consider such matters as any instrument approving or otherwise authorising the capping and remediation activities and any relevant design specifications for the capping and remediation activities.

O7 Other operating conditions

Permitted fuels for start-up, combustion support and emergency firing of generator

O7.1 Distillate may be used for start-up and combustion support in Boilers 5 and 6.

O7.2 Distillate may be used for firing the emergency diesel generator(s) at the premises for the purposes of:
a) providing black-start capability for the Vales Point Power Station or at the direction of the AEMO; and/or
b) operating the emergency diesel generator(s) up to a maximum of 200 hours per reporting period.

O7.3 Distillate fuel used in the Vales Point Power Station for start-up and combustion support and the firing of the emergency diesel generator(s) must comply with the Determination of Fuel Quality Standards (Automotive Diesel) 2019, made under section 21 of the Fuel Quality Standards Act 2000.

Other fuels permitted for use

O7.4 Biomass in the form of sawmill residue and recycled wood blended with coal may be used at the premises in accordance with conditions E3.1 to E3.6 of this licence.

O7.5 Methane sourced from the Newvale Colliery may be co-fired in Boiler 6.

Testing of coal fuel

O7.6 The licensee must have in place a fuel testing program to collect and analyse a representative number of samples of coal fired in Boilers 5 and 6. At a minimum, the coal must be analysed for:
a) ash content (%);
b) sulfur content (%);
c) chlorine content (mg/kg);
d) fluorine content (mg/kg);
e) type 1 and 2 substances content (mg/kg); and
f) calorific value (MJ/kg).

Cooling water

O7.7 Chlorine may be added to the cooling water system at a rate of not more than 1200 kilograms of chlorine per day.

O7.8 The anti-foaming agents DEAIREX 8042 or DEAIREX 7055 trading now as Defoamer PS may be added to the cooling water outlet canal and/or the onsite ash and dust pit at a rate of not more than 1680 litres per day to control the discharge of floating foam or as otherwise specified in writing by the EPA.

Onsite sewage treatment system

O7.9 The licensee must construct, implement and operate/utilise a wastewater management system to manage the collection, storage, treatment, use and disposal of all sewage and related wastewater generated on the premises.

O7.10 The wastewater management system(s) operated/utilised at the premises must be inspected by a suitably qualified and experienced wastewater technician at least once in each quarterly period of the reporting period and a minimum of four time per reporting period and serviced as required.

O7.11 In relation to condition O7.10 above, the licensee must record the following:
a) details of each inspection undertaken (date, time and personnel);
b) the results of any tests performed on the wastewater management system;
c) the finding and any actions required following each inspection; and
d) the date those actions were completed or the reasons they were not completed.

Chemical storage

O7.12 The licensee must store and handle all liquid chemicals and hazardous materials used at the premises within bunded areas that are constructed and maintained in accordance with the following:
a) any relevant Australian Standards for the liquids being stored;
b) within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund;
c) the Storing and Handling Liquids: Environmental Protection Participant's Manual (DECC, 2007); and
where any conflict exists between these requirements, the most stringent requirements apply.

O7.13 For the purpose of condition O7.12 above, any tanks or other storage vessels that are interconnected and may distribute their contents either by gravity or automated pumps must be considered a single vessel.

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

POINT 2,3

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-38
Chlorine	milligrams per cubic metre	Every 6 months	TM-38
Fluorine	milligrams per cubic metre	Every 6 months	TM-38
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-38
Mercury	milligrams per cubic metre	Every 6 months	TM-38
Nitrogen Oxides	milligrams per cubic metre	Continuous	TM-38
Solid Particles	milligrams per cubic metre	Quarterly	TM-38
Sulfur dioxide	milligrams per cubic metre	Continuous	TM-38
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-38
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-38
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-38

POINT 4,5,6,7,8,9,10,11

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-14
Flow rate	cubic metres per second	Continuous	CEM-6 and US EPA Procedure 1
Mercury	milligrams per cubic metre	Every 6 months	TM-14

Environment Protection Licence

Licence - 761

Moisture	percent	Continuous	Special Method 1
Oxygen (O2)	percent	Continuous	CEM-3 and US EPA Procedure 1
Solid Particles	milligrams per cubic metre	Quarterly	TM-15
Temperature	degrees Celsius	Continuous	TM-2 and US EPA Procedure 1
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-12, TM-13 & TM-14

POINT 4,6,8,10

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Every 6 months	TM-24
Chlorine	milligrams per cubic metre	Every 6 months	TM-7
Fluorine	milligrams per cubic metre	Every 6 months	TM-9
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-8
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-3
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-34

POINT 12,13,14,15

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen Oxides	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Sulfur dioxide	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1

POINT 16

Pollutant	Units of measure	Frequency	Sampling Method
Fluorides	micrograms per cubic metre	Continuous	AM-8
Nitrogen dioxide	parts per hundred million	Continuous	AM-12
PM2.5	micrograms per cubic metre	Continuous	AM-22
Sulfur dioxide	parts per hundred million	Continuous	AM-20

POINT 17,18,19,20,21

Pollutant	Units of measure	Frequency	Sampling Method
Particulate matter	grams per square metre per month	Monthly	AM-19

M2.3 For the purpose of condition M2.2 above:
a) every 6 months means: a minimum of two sampling events per reporting period, at approximately 6 monthly intervals and occurring no less than 3 months apart;
b) quarterly means: a minimum of four sampling events per reporting period, at approximately 3 monthly intervals and occurring no less than 1 month apart; and
c) special method 1 means: any moisture monitoring method approved in writing by the EPA. The monitoring method and data must be quality assured on an ongoing basis in accordance with US EPA Procedure 1.

M2.4 For the purpose of condition M2.2 of this licence, the requirement to install, commission and continuously monitor for flow rate, moisture, oxygen and temperature at points 4 to 11 does not take effect until 31 October 2021.

Note: The EPA may consider a proposal for an extension of the due date in the condition above if it can be adequately demonstrated that additional time is required to install and commission the required monitoring equipment. A request for an extension of the due date in the condition above must be based on 1) alignment with scheduled plant maintenance shutdowns; and 2) avoidance of significant disruption to the electricity network. An application for an extension of the due date in the condition above must be made to the EPA via eConnect or in writing by 1 April 2021.

M2.5 For ambient air monitoring of pollutants, the recording of results and their reporting in the Annual Return must include “averaging periods” as follows:
a) fluoride averaging periods of 7 days, 30 days and 90 days;
b) nitrogen dioxide: averaging periods of one hour and annual;
c) PM2.5: averaging periods of 24 hour and annual; and
d) sulfur dioxide: averaging periods of one hour, 24 hour and annual.

M2.6 Water and/ or Land Monitoring Requirements

POINT 22

Pollutant	Units of measure	Frequency	Sampling Method
Chlorine (free residual)	milligrams per litre	Monthly during discharge	Grab sample
Copper	milligrams per litre	Monthly during discharge	Grab sample
Iron	milligrams per litre	Monthly during discharge	Grab sample
Oil and Grease	Visible	Continuous during discharge	In line instrumentation
Selenium	milligrams per litre	Monthly during discharge	Grab sample

Environment Protection Licence

Licence - 761

Temperature	degrees Celsius	Continuous during discharge	In line instrumentation

POINT 23,24

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Monthly during discharge	Grab sample
Ammonia	milligrams per litre	Monthly during discharge	Grab sample
Arsenic (III)	milligrams per litre	Monthly during discharge	Grab sample
Arsenic (V)	milligrams per litre	Monthly during discharge	Grab sample
Cadmium	milligrams per litre	Monthly during discharge	Grab sample
Chromium (trivalent)	milligrams per litre	Monthly during discharge	Grab sample
Chromium (VI) Compounds	milligrams per litre	Monthly during discharge	Grab sample
Copper	milligrams per litre	Monthly during discharge	Grab sample
Iron	milligrams per litre	Monthly during discharge	Grab sample
Lead	milligrams per litre	Monthly during discharge	Grab sample
Manganese	milligrams per litre	Monthly during discharge	Grab sample
Nickel	milligrams per litre	Monthly during discharge	Grab sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly during discharge	Grab sample
Nitrogen	milligrams per litre	Monthly during discharge	Grab sample
pH	pH	Monthly during discharge	Grab sample
Phosphorus	milligrams per litre	Monthly during discharge	Grab sample
Reactive Phosphorus	milligrams per litre	Monthly during discharge	Grab sample
Selenium	milligrams per litre	Monthly during discharge	Grab sample
Total Kjeldahl Nitrogen	milligrams per litre	Monthly during discharge	Grab sample
Total suspended solids	milligrams per litre	Monthly during discharge	Grab sample
Vanadium	milligrams per litre	Monthly during discharge	Grab sample
Zinc	milligrams per litre	Monthly during discharge	Grab sample

Environment Protection Licence

Licence - 761

POINT 25

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Ammonia	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Arsenic (III)	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Arsenic (V)	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Cadmium	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Chromium (trivalent)	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Chromium (VI) Compounds	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Copper	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Iron	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Lead	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Manganese	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Nickel	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Nitrogen	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
pH	pH	Daily for any discharge >2 hrs	Grab sample
Phosphorus	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Reactive Phosphorus	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Selenium	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Total Kjeldahl Nitrogen	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Total suspended solids	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Vanadium	milligrams per litre	Daily for any discharge >2 hrs	Grab sample
Zinc	milligrams per litre	Daily for any discharge >2 hrs	Grab sample

POINT 27,28,29

Pollutant	Units of measure	Frequency	Sampling Method

Environment Protection Licence

Licence - 761

Aluminium	milligrams per litre	Monthly	Representative sample
Ammonia	milligrams per litre	Monthly	Representative sample
Arsenic (III)	milligrams per litre	Monthly	Representative sample
Arsenic (V)	milligrams per litre	Monthly	Representative sample
Cadmium	milligrams per litre	Monthly	Representative sample
Chromium (trivalent)	milligrams per litre	Monthly	Representative sample
Chromium (VI) Compounds	milligrams per litre	Monthly	Representative sample
Copper	milligrams per litre	Monthly	Representative sample
Iron	milligrams per litre	Monthly	Representative sample
Lead	milligrams per litre	Monthly	Representative sample
Manganese	milligrams per litre	Monthly	Representative sample
Nickel	milligrams per litre	Monthly	Representative sample
pH	pH	Monthly	Representative sample
Selenium	milligrams per litre	Monthly	Representative sample
Total suspended solids	milligrams per litre	Monthly	Representative sample
Vanadium	milligrams per litre	Monthly	Representative sample
Zinc	milligrams per litre	Monthly	Representative sample

POINT 30,31,32,33,34

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Quarterly	Representative sample
Ammonia	milligrams per litre	Quarterly	Representative sample
Arsenic (III)	milligrams per litre	Quarterly	Representative sample
Arsenic (V)	milligrams per litre	Quarterly	Representative sample
Cadmium	milligrams per litre	Quarterly	Representative sample
Chromium (trivalent)	milligrams per litre	Quarterly	Representative sample
Chromium (VI) Compounds	milligrams per litre	Quarterly	Representative sample
Copper	milligrams per litre	Quarterly	Representative sample
Electrical conductivity	microsiemens per centimetre	Quarterly	Representative sample
Iron	milligrams per litre	Quarterly	Representative sample
Lead	milligrams per litre	Quarterly	Representative sample
Magnesium	milligrams per litre	Quarterly	Representative sample
Manganese	milligrams per litre	Quarterly	Representative sample
Nickel	milligrams per litre	Quarterly	Representative sample
pH	pH	Quarterly	Representative sample
Potassium	milligrams per litre	Quarterly	Representative sample
Selenium	milligrams per litre	Quarterly	Representative sample
Sodium	milligrams per litre	Quarterly	Representative sample
Standing Water Level	metres	Quarterly	In situ
Vanadium	milligrams per litre	Quarterly	Representative sample
Zinc	milligrams per litre	Quarterly	Representative sample

M2.7 The licensee must also undertake no less than two water quality surveys as specified below within Lake Macquarie during each quarter of the reporting period. The surveys must be scheduled so that there are at least two surveys in each season. For each of the points specified below, the licencee 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 and sample at the frequency specified opposite in the other columns.

POINTS 27, 28 & 29

Pollutant	Frequency	Sampling Method
Dissolved Oxygen	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Measured 0.5 metres below the surface
Temperature	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Measured 0.5 metres below the surface
Salinity	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Measured 0.5 metres below the surface
Water clarity	At least two(2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Using a Secchi disk

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 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 Testing methods - load limits

Note: Division 3 of the *Protection of the Environment Operations (General) Regulation 2009* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.

M5 Weather monitoring

M5.1 For each monitoring point specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the parameter 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 16

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	1 hour	AM-4
Wind speed at 10m	m/s	Continuous	15 minutes	AM-2 & AM-4
Wind direction at 10m	°	Continuous	15 minutes	AM-2 & AM-4
Sigma theta at 10m	°	Continuous	15 minutes	AM-2 & AM-4
Temperature at 2m	ºC	Continuous	15 minutes	AM-4
Temperature at 10m	ºC	Continuous	15 minutes	AM-4
Solar radiation	W/m²	Continuous	15 minutes	AM-4
Additional requirements				
- siting				AM-1 & AM-4
- measurement				AM-1 & AM-4

M5.2 The licensee may utilise the meteorological weather monitoring station at Chain Valley Colliery operated by Great Southern Energy Pty Ltd (Delta Coal) so long as:
a) the meteorological weather monitoring station is nominated on The Plans as the "Chain Valley Met Station";
b) the licensee has a written agreement with Delta Coal to obtain and utilise the data from the Chain Valley Met Station; and
c) where the Chain Valley Met Station is out of service or otherwise unavailable, the meteorological weather monitoring station identified at point 16 must be utilised in accordance with the conditions of this licence.

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:
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.

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.

M7.4 For the purpose of condition M7.1 of this licence, operating hours are defined as twenty four hours a day, seven days a week.

M8 Requirement to monitor volume or mass

M8.1 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;
c) the mass of pollutants emitted to the air;
at the frequency and using the method and units of measure, specified below.

POINT 22

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	megalitres per day	By Calculation (volume flow rate or pump capacity multiplied by operating time)

POINT 23

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

POINT 24

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

POINT 25

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	kilolitres per day	By Calculation (volume flow rate or pump capacity multiplied by operating time)

POINT 26

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

M9 Noise monitoring

M9.1 The licensee, following the receipt of a noise related complaint and if required by the EPA, must undertake noise monitoring as required in writing by the EPA.

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:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or 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 Statements 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 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.

Annual Air Emission Monitoring Report

R1.9 The licensee must submit with the Annual Return an Annual Air Emission Monitoring Report. The Annual Air Emission Monitoring Report must analyse and summarise emission monitoring data from the reporting period including, but not limited to:
a) a comprehensive summary (tabulated and graphical) of all periodic and continuous monitoring data as required by condition M2.2 of this licence, including a comparison with the concentration limits specified in conditions L3.4 and L3.5 of this licence;
b) analysis of trends in emission performance for all pollutants monitored as required under condition M2.2 of this licence. Trend analysis must include comparison of emission performance during the reporting period with emission performance from the previous 4 years;
c) details of any exceedances of air emission licence limits and details of plant operating conditions at the times the exceedances occurred;

d) details of plant operating conditions, including Boiler load (MW), during sampling for each Boiler;
e) demonstrated compliance with the CEMS Quality Assurance and Control Procedures required under conditions E6.1 of this licence;
f) summary of fuel usage, including:
i. total coal and other permitted fuels consumed in each Boiler (including start-up),
ii. a statement about the representativeness of fuel quality during periodic air emission sampling compared to non-sampling periods,
iii. total fuel consumed by each Boiler during times when periodic air emission sampling was undertaken;
g) detailed calculations used to determine the aggregate pollutant emissions rates for points 2 and 3.

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

R4.1 The licensee must notify the EPA of any exceedances of any emission or concentration limit included as a condition of this licence in accordance with condition R2.1 no later than 5 days after becoming aware of any exceedance.

R4.2 Within 20 days of the notification made in accordance with condition R4.1 above, the licensee must provide a report to the EPA at hunter.region@epa.nsw.gov.au that includes, as a minimum, the following details:
a) the date and time the exceedance occurred;
b) the nature of the exceedance (i.e. the pollutants involved);
c) the duration of the exceedance;
d) plant operating conditions at the time of the exceedance;
e) the cause of the exceedance;
f) the remedial/corrective actions taken at the time the exceedance was made known; and
g) the actions taken and/or future actions to be taken, to prevent exceedances of a similar nature occurring in the future.

R4.3 The licensee must notify the EPA at hunter.region@epa.nsw.gov.au of the date of any periodic air emission sampling (stack testing) to be undertaken to satisfy a monitoring condition of this licence at least 7 days prior to the stack testing being carried out. If the licensee must delay the test due to unforeseen circumstances beyond the licensees control, the EPA must be notified immediately of the delay at the email address contained in this condition once the delay is identified and specify the date when the stack testing is to be undertaken.

R4.4 Information collected as required by condition M2.7 of this licence must be supplied with the corresponding Annual Return.

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.

Environment Protection Licence

Licence - 761

G2 Contact number for incidents and responsible employees

G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
a) respond at all times to incidents relating to the premises; and
b) contact the licensee's senior employees or agents authorised at all times to:
i) speak on behalf of the licensee; and
ii) provide any information or document required under this licence.

G2.2 The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.

G3 Signage

G3.1 Each monitoring and discharge point must be clearly marked by a sign that indicates the EPA point identification number.

G3.2 The condition above does not apply to any background or ambient monitoring points on or within Lake Macquarie.

G4 Other general conditions

G4.1 **Completed Programs**

Program	Description	Completed Date
Air Quality Assessment to Determine Site Specific Air Emission Limits	Air quality assessment to determine site specific emission limits. Ensure emission limits are reflective of proper and efficient operation of plant and equipment and also do not have an impact on the receiving environment.	17-September-2002
Extent of Saline Estuarine Waters	Undertake a study of Wyee Creek and diversion channel to determine extent of estuarine waters. Identify appropriate location for discharge of saline waters from premises so that freshwater systems are not impacts	30-April-2012
Reduce Impact of Discharges	Mitigation measures to reduce impact of discharge from ash dam in wyee creek diversion channel. Reduce impact of saline water discharge on freshwater system	30-April-2012
Ash Dam Seepage - Groundwater Investigation	Investigate groundwater quality in vicinity of Ash Dam to determine any impact and associated mitigation measures	21-October-2015

Investigation of further controls to reduce Nitrogen Oxide Emissions	The Licensee must undertake a review of international best practice measures to minimise the generation, and emission, of nitrogen oxides (NOx) from coal fired electricity generation and identify control measures and techniques that can be implemented at Vales point.	29-June-2017

8 Special Conditions

E1 Discharge of cooling waters into Lake Macquaire

E1.1 The conditions listed under section E1 of this licence apply until 31 August 2021.

E1.2 In the event that:
a) the AEMO, or a person authorised by the AEMO, directs the licensee, under the National Electricity Rules, to maintain, increase or be available to increase power generation, for system security, the licensee may exceed the maximum operating hours above 35°C and the maximum temperature specified in conditions L3.9 and L3.10 of this licence; or
b) the EPA may, by notice in writing, in response to circumstances that the EPA considers may impact on the function of the NSW electricity supply, grant the licensee an approval to exceed the cooling water temperature limits specified in conditions L3.9 and L3.10 of this licence,
then any such direction by the AEMO or approval by the EPA remains in place for the period specified in the direction or approval or if no period is specified, for 72 hours from the date and time of the direction or approval.

E1.3 If the licensee receives a direction from the AEMO as detailed under condition E1.2a) above, the licensee must immediately notify the EPA in writing of the time and date the direction was given and the period of time that the limits specified in conditions L3.9 and L3.10 of this licence were exceeded.

Note: An approval issued under condition E1.2b) of this licence does not count towards hours accumulated above cooling temperature parameters under this licence.

E1.4 When a direction issued under condition E1.2a) of this licence is revoked by the AEMO or ceases to have effect or an approval issued under condition E1.2b) of this licence is revoked by the EPA or ceases to have effect, the licensee must, as soon as practicable, decrease the cooling water discharge temperature to within the limits specified in conditions L3.9 and L3.10 of this licence.

Note: The EPA may vary the temperature limits at conditions L3.9 and L3.10 of this licence after 31 August 2021 following a review of studies undertaken on thermal discharges to Lake Macquarie.

E2 Seagrass monitoring program

E2.1 The licensee must implement and maintain on an annual basis a Seagrass Monitoring Program approved in writing by the EPA.

E2.2 Every year, the licensee must submit, with the Annual Return, a Seagrass Monitoring Program Report

that includes, but is not necessarily limited to:
a) provision of the data, analysis and conclusions of the Seagrass Monitoring Program required under condition E2.1 above; and
b) comparison and discussion of data collected since the commencement of the Seagrass Monitoring Program in the summer of 2016-2017 and any other relevant and/or previous studies.

E2.3 If the Seagrass Monitoring Program required by conditions E2.1 and E2.2 of this licence identifies observed changes that indicates a reduction in seagrass areas and/or species composition and where these changes are likely to be attributed to the licensed activities, the licensee must prepare a report that details the following:
a) a description of ameliorative measures, including the timeframe for the implementation of management actions; and
b) in the case where impacts are unavoidable, a description of how the impacts will be offset,
with the report submitted to the EPA at hunter.region@epa.nsw.gov.au within three months of obtaining the Seagrass Monitoring Program Report required under condition E2.2 above.

E3 Solid alternative fuel

E3.1 For the purpose of this licence, solid alternative fuel means timber products that are:
a) compliant 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 Renewable Energy (Electricity) Act 2000; and
b) biomass that is sustainably harvested as defined in the Greenhouse Gas Emissions from Electricity Supplied in NSW, Emissions Workbook, October 2000. Ministry of Energy and Utilities.

E3.2 Solid alternative fuel must only be co-fired with coal and at a rate not exceeding five (5) percent by weight of the coal feed rate.

E3.3 The concentration of Type 1 & 2 substances (as defined in the Protection of the Environment Operations (Clean Air) Regulation 2010) in any solid alternative fuel co-fired in the power station must not exceed 350 milligrams per kilogram.

E3.4 The licensee must have a statistically valid sampling and quality control program for all solid alternative fuel co-fired in the power station. The quality control program must include the determination of the solid alternative fuel's calorific value (MJ/kg), the concentration of Type 1 & 2 substances (as defined in the Protection of the Environment Operations (Clean Air) Regulation 2010) and the concentration of chlorine, copper, fluorine and sulfur. The concentration of the substances referred to above must be reported as milligrams per kilogram of solid alternative fuel.

E3.5 The licensee is prohibited from intentionally burning solid alternative fuel contaminated with paint, chemicals, timber preservatives and treatments or hazardous substances.

E4 Dioxin and furan study

E4.1 The licensee must undertake dioxin and furan emission testing in accordance with the following:
a) a minimum of 1 round of testing on all Boilers at the premises that have only been fired on coal within the past 10 years;

b) a minimum of 2 rounds of testing on all Boilers at the premises that have been fired on a non-standard fuel within the past 10 years; and
c) testing must be undertaken in accordance with TM-18, as defined in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

E4.2 Following the dioxin and furan emission testing required by condition E4.1 above, the licensee must prepare a report which includes the following:
a) details of the sampling program undertaken;
b) details of the sampling methodology and emission monitoring conducted (including description of sampling time(s) and sampling location(s) for all test runs) and including a statement of compliance with the relevant test method(s);
c) detailed description of any deviation from the relevant test method(s) including analysis of the likely effect of any deviation on the final test results (as appropriate);
d) detailed description of all plant operating conditions at the time emission monitoring was conducted, including, but not limited to fuel rate, fuel quality and composition and production load(s);
e) summary of all test results including a statement on the representativeness of final test results, including a statement of expected characterisation of long-term emission performance from the plant;
f) all air emission monitoring results and reports, including analytical reports;
g) recommendation on the need for any future or follow-up testing; and
h) all additional reporting requirements prescribed in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW for stationary source monitoring.

E4.3 The dioxin and furan testing and report required by conditions E4.1 and E4.2 of this licence must be completed and the report provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 1 July 2021.

E4.4 Where historical dioxin and furan testing and operating data are available for the premises which robustly satisfies the testing and reporting requirements listed in conditions E4.1 and E4.2 of this licence, the licensee may use the historic data to satisfy these special conditions however; any historical data used to satisfy these conditions must not be more than 5 years old.

E5 Site specific air emission monitoring plan

E5.1 The licensee must develop and submit a Site Specific Air Emission Monitoring Plan to the EPA which supports the comprehensive management of air emission monitoring required by this licence. As a minimum, the Site Specific Air Emission Monitoring Plan must describe in detail the following:
a) monitoring and discharge points;
b) detailed description of the operational measures used for ensuring the representativeness of emission measurements during monitoring including any procedures relating to pre-test planning, setting operating conditions and process data collection and recording;
c) detailed description of sampling methodology and test procedures;
d) description of any deviation from the relevant test methods, including analysis of the likely effect of any deviation on the final sampling and test results;
e) detailed description of quality assurance and quality control procedures used for collecting, verifying and reporting emission test data;
f) responsible personnel and roles;
g) governance/version control, review and updating procedures for the plan; and
h) a detailed methodology and all supporting calculations used to determine the aggregated emission concentration for each pollutant associated with points 2 and 3 as stipulated by conditions L3.4 and L3.5.

All calculations must, at a minimum, meet the requirements of TM-38.

E5.2 The Site Specific Air Emission Monitoring Plan required by condition E5.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E6 Continuous emission monitoring systems - quality assurance and control procedures

E6.1 The licensee must develop and submit a CEMS quality assurance (QA) and quality control (QC) procedure to the EPA which enables the evaluation of the quality of data produced by any CEMS monitoring required by conditions of this licence. As a minimum, the CEMS QA/QC procedure must describe in detail the following:
a) calibration and adjustment measures;
b) preventive maintenance measures (including spare parts inventory);
c) data handling, recording and calculation procedures;
d) processes for evaluating, verifying and reporting monitoring data;
e) accuracy audit measures including sampling and analysis methods;
f) fault identification and corrective action measures; and
g) process for ongoing review and evaluation of the effectiveness of the CEMS QA/QC procedures.

E6.2 The CEMS QA/QC procedure required by condition E6.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 March 2021.

E7 Air pollution control equipment - maintenance, operation and fault response procedure

E7.1 The licensee must develop and submit an air pollution control equipment - maintenance, operation and fault response procedure to the EPA which ensures that air pollution control equipment is maintained and operated in accordance with conditions O1.1 and O2.1 of this licence. As a minimum, the procedure must describe in detail the following:
a) procedures for routine operations including equipment start-up and shut-down;
b) procedures for routine and non-routine inspections and maintenance;
c) procedures for faults and failure response and emergency situations;
d) spare parts inventory;
e) reporting and training procedures;
f) verification procedures incorporating performance indicators and benchmarks relating to:
i. performance monitoring,
ii. operational efficiency, and
iii. data quality,
g) planning, reporting, record keeping and tracking systems; and
h) process for ongoing review and evaluating air pollution control equipment - maintenance, operation and fault response procedure.

E7.2 The air pollution control equipment - maintenance, operation and fault response procedure must be peer reviewed and endorsed by a suitably qualified air pollution control practitioner, affirming the suitability of the procedure for meeting its objectives.

E7.3 The air pollution control equipment - maintenance, operation and fault response procedure required by condition E7.1 of this licence must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E8 Continuous particle matter monitoring installation report

E8.1 The licensee must prepare a Particle Matter-Continuous Emission Monitoring System (PM-CEMS) installation report that must:
a) include proposed actions for the implementation of PM-CEMS;
b) identify the proposed locations for monitor installations;
c) include proposed timing for the installation of PM-CEMS;
d) include a proposed installation and commissioning plan for the PM-CEMS; and
e) detail procedures for evaluating the performance of the PM-CEMS following installation.

E8.2 The continuous particle matter monitoring installation report required by conditions E8.1 above must be provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 31 March 2021.

E9 Dust suppressant toxicity assessment

E9.1 The licensee must undertake and report on ecotoxicological testing of any dust suppressants used at/on the Vales Point Power Station Ash Dam (and any other localities at the premises) in accordance with the following:
a) be undertaken by a suitably qualified practitioner;
b) identify all dust suppressant products used at the premises and provide details of their chemical composition, application methods and application rates;
c) provide the dust suppressant product specifications and safety data sheets;
d) assess the toxicity of the dust suppressant products on aquatic biota with reference to ecotoxicology testing of at least 5 locally relevant test species covering at least 4 taxonomic groups (suitable existing data may be used where available);
e) assess the potential impacts of discharges of residual dust suppressants on the environmental values of the receiving waters consistent with the national Water Quality Guidelines (ANZG, 2018) based on monitoring of concentrations of residual dust suppressant chemicals in discharges and receiving waters; and
f) where relevant based on the findings above, recommend practical and reasonable measures to mitigate identified impacts.

E9.2 The licensee must provide a methodology to address condition E9.1 above to the EPA at hunter.region@epa.nsw.gov.au for consideration and approval within 2 months of commencing use of any dust suppressants.

E9.3 The licensee must provide a dust suppressant toxicity assessment report as required by conditions E9.1 to E9.2 of this licence to the EPA at hunter.region@epa.nsw.gov.au within 12 months of commencing use of any dust suppressants.

Environment Protection Licence

Licence - 761

E10 Groundwater assessment (south-east portion of ash dam)

E10.1 The licensee must undertake and report on a groundwater assessment of any localised induced changes to groundwater flow and quality caused by the Vales Point Power Station Ash Dam in the vicinity of and near to Lot 421; DP 578194. This assessment must:
a) be undertaken by a suitably qualified practitioner;
b) provide details of the methodology and results of al previous and relevant groundwater investigations;
c) provide an assessment of potential impacts on groundwater flow and quality;
d) identify information and/or data gaps that limit the findings of the assessment and recommendations to address these; and
e) where relevant based on the findings above, recommend practical and reasonable measure to mitigate identified impacts.

E10.2 The licensee must provide a methodology to address condition E10.1 above to the EPA at hunter.region@epa.nsw.gov.au for consideration and approval by 5pm on 30 October 2020 prior to undertaking the actual assessment.

E10.3 The licensee must provide a groundwater assessment report as required by condition E10.1 and E10.2 of this licence to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 31 December 2021.

Environment Protection Licence

Licence - 761

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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 - 761

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 Environmen t 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 mo nths. 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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 761

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

Mr Grahame Clarke

Environment Protection Authority

(By Delegation)

Date of this edition: 14-June-2000

Environment Protection Licence

Licence - 761

End Notes

1	Licence varied by notice V/M upgrade, issued on 08-Jul-2000, which came into effect on 08-Jul-2000.
2	Licence varied by notice 1001143, issued on 22-Sep-2000, which came into effect on 17-Oct-2000.
3	Licence varied by notice 1015942, issued on 24-May-2002, which came into effect on 18-Jun-2002.
4	Licence varied by notice 1019491, issued on 19-Dec-2003, which came into effect on 13-Jan-2004.
5	Licence varied by notice 1039721, issued on 12-Aug-2004, which came into effect on 06-Sep-2004.
6	Licence varied by notice 1053558, issued on 05-Dec-2005, which came into effect on 30-Dec-2005.
7	Licence varied by notice 1065959, issued on 01-Nov-2006, which came into effect on 01-Nov-2006.
8	Licence varied by notice 1068259, issued on 01-Nov-2007, which came into effect on 01-Nov-2007.
9	Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
10	Licence varied by notice 1096237, issued on 24-Dec-2008, which came into effect on 24-Dec-2008.
11	Licence varied by notice 1099216, issued on 07-May-2009, which came into effect on 07-May-2009.
12	Licence varied by notice 1105162, issued on 19-Aug-2009, which came into effect on 19-Aug-2009.
13	Licence varied by notice 1109542, issued on 01-Dec-2009, which came into effect on 01-Dec-2009.
14	Licence varied by notice 1117452, issued on 22-Nov-2010, which came into effect on 22-Nov-2010.
15	Licence varied by notice 1128999, issued on 16-Jun-2011, which came into effect on 16-Jun-2011.
16	Licence varied by notice 1502146 issued on 02-Nov-2011
17	Licence format updated on 03-Nov-2011
18	Licence fee period changed by notice 1502852 on 01-Jan-2012
19	Licence varied by notice 1503238 issued on 04-Jan-2012

Environment Protection Licence

Licence - 761

20	Licence varied by notice	1504645 issued on 01-May-2012
21	Licence varied by notice	1506558 issued on 14-Nov-2012
22	Licence varied by notice	1513810 issued on 13-Nov-2013
23	Licence varied by notice	1518777 issued on 04-Mar-2014
24	Licence varied by notice	1521871 issued on 05-Sep-2014
25	Licence varied by notice	1535348 issued on 14-Dec-2015
26	Licence transferred through application 1536547 approved on 17-Dec-2015 , which came into effect on 18-Dec-2015	
27	Licence varied by notice	1541050 issued on 18-Aug-2016
28	Licence varied by notice	1545995 issued on 14-Nov-2016
29	Licence varied by notice	1549284 issued on 10-Feb-2017
30	Licence varied by notice	1551199 issued on 31-May-2017
31	Licence varied by notice	1553516 issued on 27-Sep-2017
32	Licence varied by notice	1578786 issued on 21-May-2019
33	Licence varied by notice	1587222 issued on 23-Jul-2020

Environment Protection Licence

Licence - 13007

Licence Details	
Number:	13007
Anniversary Date:	01-January

Licensee
ENERGYAUSTRALIA NSW PTY LTD
350 BOULDER RD
PORTLAND NSW 2847

Premises
MOUNT PIPER POWER STATION
350 BOULDER ROAD
PORTLAND NSW 2847

Scheduled Activity
Chemical storage
Electricity generation

Fee Based Activity	Scale
General chemicals storage	0-5000 kL storage capacity
Generation of electrical power from coal	> 4000 GWh annual generating capacity
Petroleum products storage	0-5000 kL storage capacity

Region
Regional South - Bathurst
L102, 346 PANORAMA AVENUE BATHURST NSW 2795
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Environment Protection Licence

Licence - 13007

INFORMATION ABOUT THIS LICENCE ---- 4

Dictionary ---- 4

Responsibilities of licensee ---- 4

Variation of licence conditions ---- 4

Duration of licence ---- 4

Licence review ---- 4

Fees and annual return to be sent to the EPA ---- 4

Transfer of licence ---- 5

Public register and access to monitoring data ---- 5

1 ADMINISTRATIVE CONDITIONS ---- 6

A1 What the licence authorises and regulates ---- 6

A2 Premises or plant to which this licence applies ---- 6

A3 Other activities ---- 7

A4 Information supplied to the EPA ---- 7

2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND ---- 8

P1 Location of monitoring/discharge points and areas ---- 8

3 LIMIT CONDITIONS ---- 10

L1 Pollution of waters ---- 10

L2 Load limits ---- 11

L3 Concentration limits ---- 11

L4 Volume and mass limits ---- 14

L5 Waste ---- 14

L6 Potentially offensive odour ---- 15

4 OPERATING CONDITIONS ---- 16

O1 Activities must be carried out in a competent manner ---- 16

O2 Maintenance of plant and equipment ---- 16

O3 Dust ---- 16

O4 Emergency response ---- 16

O5 Other operating conditions ---- 17

5 MONITORING AND RECORDING CONDITIONS ---- 18

M1 Monitoring records ---- 18

M2 Requirement to monitor concentration of pollutants discharged ---- 18

M3 Testing methods - concentration limits ---- 23

M4 Testing methods - load limits ---- 24

Environment Protection Licence

Licence - 13007

M5 Weather monitoring ---- 24
M6 Recording of pollution complaints ---- 24
M7 Telephone complaints line ---- 25
M8 Requirement to monitor volume or mass ---- 25
6 REPORTING CONDITIONS ---- 25
R1 Annual return documents ---- 25
R2 Notification of environmental harm ---- 27
R3 Written report ---- 27
R4 Other reporting conditions ---- 28
7 GENERAL CONDITIONS ---- 29
G1 Copy of licence kept at the premises or plant ---- 29
G2 Contact number for incidents and responsible employees ---- 29
G3 Signage ---- 29
8 SPECIAL CONDITIONS ---- 29
E1 Dioxin and Furan Study ---- 29
E2 Site Specific Air Emission Monitoring Plan ---- 30
E3 Continuous Emissions Monitoring Sysytems Quality Assurance and Control Procedures ---- 31
E4 Air Pollution Control Equipment - Maintenance, Operation and Fault Response Procedure ---- 31
E5 Continuous Particle Matter Monitoring Feasibility and Installation Report ---- 32
E6 Toxicity Assessment of Dust Suppressants ---- 32
DICTIONARY ---- 34
General Dictionary ---- 34

Environment Protection Licence

Licence - 13007

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);
- 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

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:

ENERGYAUSTRALIA NSW PTY LTD
350 BOULDER RD
PORTLAND NSW 2847

subject to the conditions which follow.

Environment Protection Licence

Licence - 13007

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
Chemical storage	General chemicals storage	0 - 5000 kL storage capacity
Electricity generation	Generation of electrical power from coal	> 4000 GWh annual generating capacity
Chemical storage	Petroleum products storage	0 - 5000 kL storage capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
MOUNT PIPER POWER STATION
350 BOULDER ROAD
PORTLAND
NSW 2847
LOT 1 DP 325532, LOT 1 DP 400022, LOT 191 DP 629212, LOT 1 DP 702619, LOT 2 DP 702619, LOT 362 DP 740604, LOT 366 DP 740604, LOT 67 DP 751636, LOT 1 DP 803655, LOT 5 DP 804929, LOT 7 DP 804929, LOT 8 DP 804929, LOT 9 DP 804929, LOT 15 DP 804929, LOT 1 DP 813288, LOT 1 DP 829065, LOT 1 DP 920999, LOT 1 DP 999329, LOT 2 DP 999329, LOT 3 DP 999329, LOT 4 DP 999329, LOT 5 DP 999329, LOT 102 DP 1164619, LOT 103 DP 1164619, LOT 140 DP 1185660, LOT 141 DP 1185660, LOT 142 DP 1185660, LOT 146 DP 1185660, LOT 147 DP 1185660, LOT 148 DP 1185660, LOT 149 DP 1185660, LOT 150 DP 1185660, LOT 151 DP 1185660, LOT 152 DP 1185660
PREMISES DEFINED BY DRAWING TITLED EPL 13007 MONITORING POINTS MOUNT PIPER POWER STATION 17/6/2020 RECEIVED BY THE EPA ON 23/06/2020 (DOC20/509698)

A2.2 The premises does not include land within Lot 103 DP 1164619 identified under condition A2.1 of environment protection licence 20513 as the premises of Nu-Rock Technology Pty Limited (EPA DOC19/479448).

A2.3 The document referred to in condition A2.1 is herein referred to within this licence as "The Plan".

A2.4 The premises does not include land and associated pipeline infrastructure within part of Lot 191 DP 629212, Lot 2 DP 702619 and Lot 1 DP 829065 being land occupied by the Springvale Mine Water Treatment Facility as shown in Plan Figure 1: Springvale Mine Water Treatment Facility 3/05/2019 (EPA DOC19/479497).

A3 Other activities

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

Ancillary Activity
Coal works
Crushing, grinding or separating
Electricity generation (generation of electrical power from diesel)
Sewage treatment
Waste storage

A3.2 For the purpose of condition A3.1 above:
a) electricity generation (generation of electrical power from diesel) means the operation of the emergency diesel generator(s) in accordance with the conditions of the licence; and
b) all other activities are as per Schedule 1 of the Protection of the Environment Operations Act 1997.

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.

A4.2 Any other document and/or management plan is not to be taken as part of the documentation in condition A4.1, other than those documents and/or management plans specifically referenced in this licence.

2 Discharges to Air and Water and Applications to Land

Environment Protection Licence

Licence - 13007

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
1		Discharge to air	Discharge of air emissions from the Mt Piper Stack serving Boilers 1 and 2 marked and shown as EPA ID 1 on The Plan
2	Air emission monitoring		Discharge of combined air emissions from Boiler 1 via Points 4 and 5 to Point 1 marked and shown as EPA ID 2 on The Plan
3	Air emission monitoring		Discharge of combined air emissions from Boiler 2 via Points 6 and 7 to Point 1 marked and shown as EPA ID 3 on The Plan
4	Air emission monitoring		Boiler number 1 exhaust - Duct A marked and shown as EPA ID 4 (Duct 1A) on The Plan
5	Air emission monitoring		Boiler number 1 exhaust - Duct B marked and shown as EPA ID 5 (Duct 1B) on The Plan
6	Air emission monitoring		Boiler number 2 exhaust - Duct A marked and shown as EPA ID 6 (Duct 2A) on The Plan
7	Air emission monitoring		Boiler number 2 exhaust - Duct B marked and shown as EPA ID 7 (Duct 2B) on The Plan
8	Ambient air quality monitoring		Blackmans Flat Beta Attenuation Monitor marked and shown as EPA ID 8 (Blackmans Flat BAM) on The Plan
9	Ambient air quality monitoring		Wallerawang Beta Attenuation Monitor marked and shown as EPA ID 9 (Wallerawang BAM) on The Plan
10	Ambient air quality monitoring		Passive air quality monitoring marked and shown as EPA ID 10 (Newnes Plateau Passive) on The Plan
11	Meteorological weather monitoring		Weather station as indicated as EPA ID 4 (Mt Piper Weather Station) on figure EPL 13007 Monitoring Points Mount Piper Power Station 6/3/2020 received by the EPA on 10 March 2020 (DOC20/248527)

P1.2 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.

P1.3 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.

Environment Protection Licence

Licence - 13007

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
12	Discharge to waters Discharge quality monitoring Discharge volume monitoring	Discharge to waters Discharge quality monitoring Discharge volume monitoring	Overflow from CHP Settlement Basin marked as "weir" at EL931 on Figure 4 of the Aurecon CHP Coal Settling Basin Water Management Options Report Ref: 501396 21 August 2018 (EPA reference DOC18/644531).
13	Groundwater quality monitoring		Groundwater monitoring point D10 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
14	Groundwater quality monitoring		Groundwater monitoring point D102 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
15	Groundwater quality monitoring		Groundwater monitoring point D103 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
16	Groundwater quality monitoring		Groundwater monitoring point D104 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
17	Groundwater quality monitoring		Groundwater monitoring point D105 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
18	Groundwater quality monitoring		Groundwater monitoring point D106 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)

19	Groundwater quality monitoring	Groundwater monitoring point D107 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
20	Groundwater quality monitoring	Groundwater monitoring point D113 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
21	Groundwater quality monitoring	Groundwater monitoring point D3 as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
22	Surface water quality monitoring	Surface water monitoring point C as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
23	Surface water quality monitoring	Surface water monitoring point E as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
24	Surface water quality monitoring	Surface water monitoring point F as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)
25	Surface water quality monitoring	Surface water monitoring point G as shown on figure Groundwater and Surface Water Sampling Location ERM letter dated 21 November 2018 received by the EPA on 23 November 2018 (DOC19/854888)

3 Limit Conditions

L1 Pollution of waters

Environment Protection Licence

Licence - 13007

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.

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

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)	
Benzene (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)	
Volatile organic compounds (Air)	

L3 Concentration limits

L3.1 For each monitoring/discharge point or utilisation area specified in the table\s 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 Air Concentration Limits

Environment Protection Licence

Licence - 13007

POINT 2,3

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Mercury	milligrams per cubic metre	0.05	Dry, 273K, 101.3kPA	7% O2	1 Hour
Chlorine	milligrams per cubic metre	20	Dry, 273K, 101.3kPA	7% O2	1 Hour
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	0.75	Dry, 273K, 101.3kPA	7% O2	1 Hour
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	10	Dry, 273K, 101.3kPA	7% O2	1 Hour
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 Hour
Solid Particles	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 Hour
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	100	Dry, 273K, 101.3kPA	7% O2	1 Hour
Nitrogen Oxides	milligrams per cubic metre	1500	Dry, 273K, 101.3kPA	7% O2	1 Hour
Fluorine	milligrams per cubic metre	30	Dry, 273K, 101.3kPA	7% O2	1 Hour
Cadmium	milligrams per cubic metre	0.2	Dry, 273K, 101.3kPA	7% O2	1 Hour
Sulfur dioxide	milligrams per cubic metre	1700	Dry, 273K, 101.3kPA	7% O2	1 Hour

L3.3 In addition to the concentration limits specified in condition L3.2, the following 99th percentile concentration limits apply for points 2 and 3 utilising the same units of measure, reference conditions, oxygen correction and averaging period as above for each pollutant listed below:
a) nitrogen oxides: 1100 mg/m3; and
b) sulfur dioxide: 1400 mg/m3.

L3.4 For the purposes of conditions L3.2 and L3.3 of this licence:
a) Nitrogen Oxides mean: Nitric Oxide (NO_2) or both, as NO_2 equivalent; and
b) Flourine means: fluorine and any compound containing fluorine, as total flouride (HF equivalent).

L3.5 Air concentration limits specified in condition L3.2 may be temporarily exceeded under the following circumstances:

a) Australian Electricity Market Operator (AEMO), or a person authorised by the AEMO, directs the licensee, under the National Electricity Law and the National Electricity Rules, to take relevant actions to

maintain or restore the security or reliability of the power system; and
b) The relevant AEMO direction (refer to (a) above) remains in force; and
c) The licensee takes all practical measures to prevent or minimise air pollution.

L3.6 An exceedance under L3.5 counts towards hours accumulated for the purpose of calculating compliance with 99th percentile limits specified in L3.3

L3.7 The Licensee must notify the EPA of any and all limit exceedances in accordance with condition R4.1 of this licence.

L3.8 Water and/or Land Concentration Limits

POINT 12

Pollutant	Units of Measure	50% Limit	90% Limit	97% Limit	100 percentile concentration limit
Electrical conductivity	microsiemens per centimetre				500
Oil and Grease	milligrams per litre				10
pH	pH				6.5-8.5
Total suspended solids	milligrams per litre				50
Turbidity	nephelometric turbidity units				25

L3.9 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.

L3.10 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\s.

L3.11 The concentration limits stipulated by condition L3.8 for EPA identification point 12 are deemed not to apply when the discharge from the stormwater control structures (CHP sediment basin) occurs solely as a result of rainfall measured at the premises which exceeds:
a) a total of 56 millimetres of rainfall over any consecutive 5 day period.

Note: A 56mm rainfall event is defined by the EPA endorsed publication "Managing urban stormwater: soils and construction" (Landcom 2004; 6-24) as the rainfall depth in millimetres for a 95th percentile 5 day

rainfall event for "Lithgow" which is also consistent with the storage capacity (recommended minimum design criteria) for Type D sediment basins for mines and quarries (see "Managing urban stormwater: soils and construction, Volume 2E, mines and quarries" (DECC, 2008).

L3.12 The concentration limit for total suspended solids stipulated by condition L3.8 for EPA identification point 12 is deemed not to have been breached where:
a) the water discharged is covered by condition L3.11; or
b) when not covered by condition L3.11, the water discharged (in accordance with licence conditions O5.1 and O5.2) is within the pH range 6.5-8.5 and has a turbidity of no more than 25 Nephelometric Turbidity Units (NTU) at the time of the discharge; and
c) the EPA is advised of the completion of the sample testing and analysis in accordance with condition R4.1.

Note: The purpose of condition L3.12 is to expediate the assessment and subsequent discharge of the clarified water from the stormwater control structures (sediment basins).

L4 Volume and mass limits

L4.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:
a) liquids discharged to water; or;
b) 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
12	kilolitres	-

L5 Waste

L5.1 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.

Code	Waste	Description	Activity	Other Limits
NA	Excavated natural material	To be used for the rehabilitation of the Mt Piper Ash Repository, Mt Piper Brine in Ash Repository and the Lamberts North Ash	Capping of Ash Dam	Material to be generated from within the Bathurst and Lithgow local government

		Repository as well as progressive landforming of these sites as part of rehabilitation works at the premises.		areas only, or from other locations in New South Wales with approval from the relevant consent authority.
NA	Virgin excavated natural material	To be used for the rehabilitation of the Mt Piper Ash Repository, Mt Piper Brine in Ash Repository and the Lamberts North Ash Repository as well as progressive landforming of these sites as part of rehabilitation works at the premises.	Capping of Ash Dam	Material to be generated from within the Bathurst and Lithgow local government areas only, or from other locations in New South Wales with approval from the relevant consent authority.

L5.2 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.

L5.3 Only the following types of waste generated at the premises may be disposed of at the premises:

- Ash
- Mill pyrites
- Demineralisation and polisher plant effluents
- Chemical clean solutions
- Cooling tower sediments
- Ion exchange resins
- Fabric filter bags
- Brine conditioned fly ash
- Biomass co-firing ash
- Settling pond sediments
- Oil and grit trap sediments

L5.4 The wastes listed in condition L5.3 must only be disposed of to the ash disposal area at Mount Piper Power Station.

L5.5 The licensee is permitted to receive the following wastes generated outside the premises for storage, treatment, processing, reprocessing or disposal:

1) Brine water (solid and liquid) from the Springvale Mine Water Treatment Facility.

L6 Potentially offensive odour

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

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

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.
This includes:
a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

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

O3 Dust

O3.1 The premises must be maintained in a condition which prevents or minimises the emission of dust from the premises.

O3.2 All operations and activities occurring at the premises must be carried out in a manner that prevents or minimises the emission of dust from the premises.

O3.3 Trucks entering and leaving the premises that are carrying loads of materials which have the potential to cause emissions of dust must have their loads covered at all times, except during loading and unloading.

O4 Emergency response

Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises in accordance with Part 5.7A of the Protection of the Environment Operations Act 1997 and Part 3A of the Protection of the Environment Operations (General) Regulation 2009.

O5 Other operating conditions

O5.1 The licensee must undertake maintenance as necessary to desilt the storage basin indentified at EPA identification point 12 in order to retain the basins design storage capacity.

O5.2 Water discharged to comply with condition O5.1 may only be discharged to waters from the stormwater control structure (sediment basin) identified at EPA identification point 12 where the discharged water complies with the discharge limits stipulated at condition L3.8 (and taking into consideration condition L3.11).

Permitted fuels for start up, combustion support and emergency firing of generator

O5.3 Distillate, light fuel oils, heating oils and/or distillate refined oil blends may be used for start-up and combustion support in Boilers 1 and 2.

O5.4 Distillate, light fuel oils, heating oils, and/or distillate refined oil blends may be used for firing the emergency diesel generator at the premises for the purposes of:
a) providing black-start capability for the Mount Piper Power Station or at the direction of the Australian Electricity Market Operator (AEMO); and
b) operating the emergency diesel generator up to a maximum of 200 hours per reporting period.

O5.5 Distillate fuel used in the Mount Piper Power Station for start-up, combustion support and the firing of the emergency generator must comply with the Determination of Fuel Quality Standards (Automotive Diesel) 2019, made under section 21 of the Fuel Quality Standards Act 2000.

Testing of coal fuel

O5.6 The licensee must have in place a fuel testing program to collect and analyse a representative number of samples of coal fired in Boilers 1 and 2. At a minimum, monthly composite samples must be collected and analysed. The coal must be analysed for at least the following:
a) ash content (%);
b) sulfur content (%);
c) chlorine content (mg/kg);
d) fluorine content (mg/kg);
e) type 1 and 2 substances content (mg/kg); and
f) calorific value (MJ/kg).

O5.7 The licensee must store and handle all liquid chemicals and hazardous materials used at the premises within bunded areas that are constructed and maintained in accordance with the following:
a) any relevant Australian Standards for the liquids being stored;
b) within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund; and
c) the Storing and Handling Liquids: Environmental Protection Participant's Manual (DECC, 2007); and
where any conflict exists between these requirements, the most stringent requirements apply.

O5.8 For the purpose of condition O5.7 above, any tanks or other storage vessels that are interconnected and

may distribute their contents either by gravity or automated pumps must be considered a single vessel.

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

POINT 2,3

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-38
Chlorine	milligrams per cubic metre	Every 6 months	TM-38
Fluorine	milligrams per cubic metre	Every 6 months	TM-38
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-38
Mercury	milligrams per cubic metre	Every 6 months	TM-38
Nitrogen Oxides	milligrams per cubic metre	Continuous	TM-38
Solid Particles	milligrams per cubic metre	Quarterly	TM-38
Sulfur dioxide	milligrams per cubic metre	Continuous	TM-38

Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-38
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-38
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-38

POINT 4,5,6,7

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-14
Flow rate	cubic metres per second	Continuous	CEM-6 and US EPA Procedure 1
Mercury	milligrams per cubic metre	Every 6 months	TM-14
Moisture	percent	Continuous	Special Method 1
Nitrogen Oxides	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Oxygen (O2)	percent	Continuous	CEM-3 and US EPA Procedure 1
Solid Particles	milligrams per cubic metre	Quarterly	TM-15
Sulfur dioxide	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Temperature	degrees Celsius	Continuous	TM-2 and US EPA Procedure 1
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-12, TM-13 & TM-14

POINT 4,6

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Every 6 months	TM-24
Chlorine	milligrams per cubic metre	Every 6 months	TM-8
Fluorine	milligrams per cubic metre	Every 6 months	TM-9
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-8
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-3
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-34

POINT 8

Pollutant	Units of measure	Frequency	Sampling Method
Fluoride	micrograms per cubic metre	Continuous	AM-8

POINT 8,9

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen dioxide	parts per hundred million	Continuous	AM-12
PM2.5	micrograms per cubic metre	Continuous	Special Method 2
Sulfur dioxide	parts per hundred million	Continuous	AM-20

POINT 10

Pollutant	Units of measure	Frequency	Sampling Method
Nitrogen dioxide	parts per hundred million	Monthly	Special Method 3
Sulfur dioxide	parts per hundred million	Monthly	Special Method 3

M2.3 For the purpose of condition M2.2:
a) Every 6 months means: a minimum of two sampling events per reporting period, at approximately 6 monthly intervals and occurring no less than 3 months apart;
b) Quarterly means: a minimum of four sampling events per reporting period, at approximately 3 monthly intervals and occurring no less than 1 month apart;
c) Special method 1 means: any moisture monitoring method approved in writing by the EPA. The monitoring method and data must be quality assured on an ongoing basis in accordance with US EPA Procedure 1.
d) Moisture is taken to mean H2O expressed as a % (v/v).
e) Special method 2 means: measurement of PM2.5 by the Beta Attenuation Monitor in accordance with AS3580.9.12; and
f) Special method 3 means: CSIRO Method 1 (see DOC20/509698) for the measurement of Nitrogen Dioxide and Sulphur Dioxide at EPA ID Point 10.

M2.4 For the purpose of condition M2.2 of this licence, the requirement to install, commission and continuously monitor for flow rate, moisture, oxygen and temperature at points 4 to 7 does not take effect until 31 October 2021.

Note: The EPA may consider a proposal for an extension to this timeframe if it can be adequately demonstrated that additional time is required to install and commission the requisite monitoring equipment. A request for an extension under this condition may be based on 1) alignment with scheduled plant maintenance shutdowns; and 2) avoidance of significant disruption to NSW electricity supply. A request for an extension under this condition must be made to the EPA in writing by 1 April 2021.

M2.5 For ambient air monitoring points 8 and 9 the recording of results and their reporting in the Annual Return must include “averaging periods” as follows:
a) nitrogen dioxide: averaging periods of one hour and annual;
b) sulfur dioxide: averaging periods of one hour, 24 hour and annual;
c) PM2.5: averaging periods of 24 hour and annual; and
d) fluoride: averaging periods of 7 days, 30 days and 90 days.

M2.6 Water and/ or Land Monitoring Requirements

POINT 12

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

POINT 13,14,15,16,17,18,19,20,21

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Quarterly	Representative sample
Aluminium	milligrams per litre	Quarterly	Representative sample
Ammonia	milligrams per litre	Quarterly	Representative sample
Antimony	milligrams per litre	Quarterly	Representative sample
Arsenic	milligrams per litre	Quarterly	Representative sample
Barium	milligrams per litre	Quarterly	Representative sample
Beryllium	milligrams per litre	Quarterly	Representative sample
Bicarbonate alkalinity	milligrams per litre	Quarterly	Representative sample
Boron	milligrams per litre	Quarterly	Representative sample
Cadmium	milligrams per litre	Quarterly	Representative sample
Calcium	milligrams per litre	Quarterly	Representative sample
Carbonate	milligrams per litre	Quarterly	Representative sample
Chloride	milligrams per litre	Quarterly	Representative sample
Chromium	milligrams per litre	Quarterly	Representative sample
Chromium (hexavalent)	milligrams per litre	Quarterly	Representative sample
Chromium (trivalent)	milligrams per litre	Quarterly	Representative sample
Cobalt	milligrams per litre	Quarterly	Representative sample

Environment Protection Licence

Licence - 13007

Copper	milligrams per litre	Quarterly	Representative sample
Dissolved Oxygen	milligrams per litre	Quarterly	Representative sample
Electrical conductivity	microsiemens per centimetre	Quarterly	Representative sample
Iron	milligrams per litre	Quarterly	Representative sample
Lead	milligrams per litre	Quarterly	Representative sample
Magnesium	milligrams per litre	Quarterly	Representative sample
Manganese	milligrams per litre	Quarterly	Representative sample
Mercury	milligrams per litre	Quarterly	Representative sample
Molybdenum	milligrams per litre	Quarterly	Representative sample
Nickel	milligrams per litre	Quarterly	Representative sample
Nitrate	milligrams per litre	Quarterly	Representative sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Quarterly	Representative sample
Nitrite	milligrams per litre	Quarterly	Representative sample
pH	pH	Quarterly	Representative sample
Potassium	milligrams per litre	Quarterly	Representative sample
Selenium	milligrams per litre	Quarterly	Representative sample
Silver	milligrams per litre	Quarterly	Representative sample
Sodium	milligrams per litre	Quarterly	Representative sample
Standing Water Level	metres	Quarterly	In situ
Sulfate	milligrams per litre	Quarterly	Representative sample
Sulfur	milligrams per litre	Quarterly	Representative sample
Total dissolved solids	milligrams per litre	Quarterly	Representative sample
Vanadium	milligrams per litre	Quarterly	Representative sample
Zinc	milligrams per litre	Quarterly	Representative sample

POINT 22,23,24,25

Pollutant	Units of measure	Frequency	Sampling Method
Alkalinity (as calcium carbonate)	milligrams per litre	Monthly	Grab sample
Aluminium	milligrams per litre	Monthly	Grab sample
Ammonia	milligrams per litre	Monthly	Grab sample
Antimony	milligrams per litre	Monthly	Grab sample
Arsenic	milligrams per litre	Monthly	Grab sample
Barium	milligrams per litre	Monthly	Grab sample
Beryllium	milligrams per litre	Monthly	Grab sample
Bicarbonate alkalinity	milligrams per litre	Monthly	Grab sample
Boron	milligrams per litre	Monthly	Grab sample
Cadmium	milligrams per litre	Monthly	Grab sample
Calcium	milligrams per litre	Monthly	Grab sample
Chloride	milligrams per litre	Monthly	Grab sample
Chromium	milligrams per litre	Monthly	Grab sample

Cobalt	milligrams per litre	Monthly	Grab sample
Copper	milligrams per litre	Monthly	Grab sample
Dissolved Oxygen	milligrams per litre	Monthly	Grab sample
Electrical conductivity	microsiemens per centimetre	Monthly	Grab sample
Iron	milligrams per litre	Monthly	Grab sample
Lead	milligrams per litre	Monthly	Grab sample
Magnesium	milligrams per litre	Monthly	Grab sample
Manganese	milligrams per litre	Monthly	Grab sample
Mercury	milligrams per litre	Monthly	Grab sample
Molybdenum	milligrams per litre	Monthly	Grab sample
Nickel	milligrams per litre	Monthly	Grab sample
Nitrate	milligrams per litre	Monthly	Grab sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly	Grab sample
Nitrite	milligrams per litre	Monthly	Grab sample
pH	pH	Monthly	Grab sample
Potassium	milligrams per litre	Monthly	Grab sample
Selenium	milligrams per litre	Monthly	Grab sample
Silver	milligrams per litre	Monthly	Grab sample
Sodium	milligrams per litre	Monthly	Grab sample
Sulfate	milligrams per litre	Monthly	Grab sample
Sulfur	milligrams per litre	Monthly	Grab sample
Total dissolved solids	milligrams per litre	Monthly	Grab sample
Vanadium	milligrams per litre	Monthly	Grab sample
Zinc	milligrams per litre	Monthly	Grab sample

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 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 Testing methods - load limits

Note: Division 3 of the *Protection of the Environment Operations (General) Regulation 2009* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.

M5 Weather monitoring

M5.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.

POINT 11

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Rainfall	AM-4	millimetres	1 hour	Continuous
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	15 minutes	Continuous
Wind Direction at 10 metres	AM-2 & AM-4	Degrees in a clockwise direction from True North	15 minutes	Continuous
Sigma Theta	AM-2 & AM-4	Degrees in a clockwise direction from True North	15 minutes	Continuous
Temperature at 2 metres	AM-4	degrees Celsius	15 minutes	Continuous
Total Solar Radiation	AM-4	Watts per square metre	15 minutes	Continuous
Siting	AM-2 & AM-4	-	-	-

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:
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.

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.

M7.4 For the purpose of condition M7.1, operating hours are defined as twenty four hours a day, seven days a week.

M8 Requirement to monitor volume or mass

M8.1 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;
c) the mass of pollutants emitted to the air;
at the frequency and using the method and units of measure, specified below.

POINT 12

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

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:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,

3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or 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 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.

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

R1.8 Within the Annual Return, the Statements 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.

Annual Air Emission Monitoring Report

R1.9 The licensee must submit with the Annual Return an Annual Air Emission Monitoring Report. The Annual Air Emission Monitoring Report must analyse and summarise emission monitoring data from the reporting period including, but not limited to:
a) a comprehensive summary (tabulated and graphical) of all periodic and continuous monitoring data as required by condition M2.2 of this licence, including a comparison with the concentration limits specified in condition L3.2 and L3.3;
b) analysis of trends in emission performance for all pollutants monitored as required under condition M2.2. Trend analysis must include comparison of emission performance during the reporting period with emission performance from the previous 4 years;
c) details of any exceedances of air emission licence limits and details of plant operating conditions at the times the exceedances occurred;
d) details of plant operating conditions, including Boiler load (MW), during sampling for each Boiler;
e) demonstrated compliance with the CEMS Quality Assurance and Control Procedures required under condition E3 of the licence;
f) summary of fuel usage, including:
i. total coal and other permitted fuels consumed in each Boiler (including start-up);
ii. a statement about the representativeness of fuel quality during periodic air emission sampling compared to non-sampling periods;
iii. total fuel consumed by each Boiler during times when periodic air emission sampling was undertaken; and
g) detailed calculations used to determine the aggregated pollutant emission rates for each boiler.

R2 Notification of environmental harm

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.

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.

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

R4.1 The licensee must notify the EPA of any exceedances of emission or concentration discharge limits included as a condition of this licence in accordance with condition R2.1 no later than 5 days after becoming aware of any exceedance

R4.2 Within 20 days of the notification made in accordance with condition R4.1, the licensee must provide a report to the EPA at central.west@epa.nsw.gov.au that includes, as a minimum, the following details:
a) the date and time the exceedance occurred;
b) the nature of the exceedance (i.e. the pollutants involved);
c) the duration of the exceedance;
d) plant operating conditions at the time of the exceedance;
e) the cause of the exceedance;
f) the remedial/corrective actions taken at the time the exceedance was made known; and
g) the actions taken and/or future actions to be taken, to prevent exceedances of a similar nature occurring in the future.

R4.3 The licensee must notify the EPA at central.west@epa.nsw.gov.au of the date of any periodic air emission sampling (stack testing) to be undertaken to satisfy a monitoring condition of this licence at least 7 days prior to the stack testing being carried out. If the licensee must delay the test due to unforeseen circumstances beyond the licensees control, the EPA must be notified immediately of the delay at the email address contained in this condition once the delay is identified and specify the date when the stack testing is to be undertaken.

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.

G2 Contact number for incidents and responsible employees

G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
a) respond at all times to incidents relating to the premises; and
b) contact the licensee's senior employees or agents authorised at all times to:
i) speak on behalf of the licensee; and
ii) provide any information or document required under this licence

G2.2 The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.

G3 Signage

G3.1 Each monitoring and discharge point must be clearly marked by a sign that indicates the point identification number used in this licence and be located as close as practical to the point.

G3.2 The condition above does not apply to any background or ambient monitoring points.

8 Special Conditions

E1 Dioxin and Furan Study

E1.1 The licensee must undertake dioxin and furan emission testing in accordance with the following:
a) a minimum of 1 round of testing on all Boilers at the premises that have only been fired on coal within the past 10 years;
b) a minimum of 2 rounds of testing on all Boilers at the premises that have been fired on a non-standard fuel within the past 10 years; and
c) testing must be undertaken in accordance with TM-18, as defined in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

E1.2 Following the dioxin and furan emission testing required by condition E1.1, the licensee must prepare a report which includes the following:

a) details of the sampling program undertaken;
b) details of the sampling methodology and emission monitoring conducted (including description of sampling time(s) and sampling location(s) for all test runs) and including a statement of compliance with the relevant test method(s);
c) detailed description of any deviation from the relevant test method(s) including analysis of the likely effect of any deviation on the final test results (as appropriate);
d) detailed description of all plant operating conditions at the time emission monitoring was conducted, including, but not limited to fuel rate, fuel quality and composition and production load(s);
e) summary of all test results including a statement on the representativeness of final test results, including a statement of expected characterisation of long-term emission performance from the plant;
f) all air emission monitoring results and reports, including analytical reports;
g) recommendation on the need for any future or follow-up testing; and
h) all additional reporting requirements prescribed in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW for stationary source monitoring.

E1.3 The dioxin and furan testing and report required by conditions E1.1 and E1.2 must be completed and the report provided to the EPA at central.west@epa.nsw.gov.au by 5pm on 30 June 2021.

E1.4 Where historical dioxin and furan testing and operating data are available for the premises which robustly satisfies the testing and reporting requirements listed in conditions E1.1 and E1.2, the licensee may use the historic data to satisfy these special conditions however; any historical data used to satisfy these conditions must not be more than 5 years old.

E2 Site Specific Air Emission Monitoring Plan

E2.1 The licensee must develop and implement a Site Specific Air Emission Monitoring Plan which includes the following:
a) identify monitoring and discharge points;
b) detailed description of the operational measures used for ensuring the representativeness of emission measurements during monitoring including any procedures relating to pre-test planning, setting operating conditions and process data collection and recording;
c) detailed description of sampling methodology and test procedures;
d) description of any deviation from the relevant test methods, including analysis of the likely effect of any deviation on the final sampling and test results;
e) detailed description of quality assurance and quality control procedures used for collecting, verifying and reporting emission test data;
f) identify responsible personnel and roles; and
g) specify governance/version control, review and updating procedures for the plan.
h) a detailed methodology and all supporting calculations used to determine the aggregated emission concentration for each pollutant listed in condition M2.2 at the discharge point for each boiler. All calculations must, at a minimum, meet the requirements of TM-38.

E2.2 The Site Specific Air Emission Monitoring Plan required by condition E2.1 must be drafted and provided to the EPA at central.west@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E3 Continuous Emissions Monitoring Sysytems Quality Assurance and Control Procedures

E3.1 The licensee must develop and implement a CEMS quality assurance (QA) and quality control (QC) procedure which enables the evaluation of the quality of data produced by any CEMS monitoring required by conditions of this licence. As a minimum, the CEMS QA/QC procedure must describe in detail the following:
a) calibration and adjustment measures;
b) preventive maintenance measures (including spare parts inventory);
c) data handling, recording and calculation procedures;
d) processes for evaluating, verifying and reporting monitoring data;
e) accuracy audit measures including sampling and analysis methods;
f) fault identification and corrective action measures; and
g) process for ongoing review and evaluation of the effectiveness of the CEMS QA/QC procedures

E3.2 The CEMS QA/QC procedure required by condition E3.1 must be drafted and provided to the EPA at central.west@epa.nsw.gov.au for review and approval by 5pm on 31 March 2021.

E4 Air Pollution Control Equipment - Maintenance, Operation and Fault Response Procedure

E4.1 The licensee must develop and implement an air pollution control equipment - maintenance, operation and fault response procedure. The procedure must include:
a) procedures for routine operations including equipment start-up and shut-down;
b) procedures for routine and non-routine inspections and maintenance;
c) procedures for faults and failure response and emergency situations;
d) spare parts inventory;
e) reporting and training procedures;
f) planning, reporting, record keeping and tracking systems;
g) process for ongoing review and evaluating air pollution control equipment - maintenance, operation and fault response procedure, and
h) verification procedures incorporating performance indicators and benchmarks relating to:
i) performance monitoring;
ii) operational efficiency; and
iii)data quality

E4.2 The air pollution control equipment - maintenance, operation and fault response procedure must be peer reviewed and endorsed by a suitably qualified air pollution control practitioner, affirming the suitability of the procedure for meeting its objectives.

E4.3 The air pollution control equipment - maintenance, operation and fault response procedure required by condition E4.1 must be drafted and provided to the EPA at central.west@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E5 Continuous Particle Matter Monitoring Feasibility and Installation Report

E5.1 The licensee must prepare and submit a continuous particle matter monitoring feasibility study report which assesses the feasibility of installing and operating a monitoring system capable of measuring particle emissions from each Boiler on a continuous basis. The proposed system must be capable of being correlated against a gravimetric reference method in accordance with US EPA Performance Specification 11. As a minimum, the study must:
a) be prepared in consultation with a suitably qualified and experienced air monitoring practitioner who has demonstrated experience in the installation and operation of PM-CEMS at large industrial plant;
b) be prepared with reference to information provided in the PM-CEMS guidance document (Chiappalone Consulting, Feasibility of Continuous Particle Monitoring at NSW Coal Fired Power Stations: Guidance Document (September 2019);
c) include a statement about the general feasibility of installing a PM-CEMS;
d) evaluate potential installation locations. As a minimum, feasibility analysis must be undertaken for installing monitors on each flue gas duct on the exit side of each baghouse, at a location capable of achieving a representative PM measurement.
e) evaluate potential monitoring options based on site specific factors including, but not limited to:
i) process and stack conditions;
ii) particle concentration range; and
iii) reliability and life cycle cost

E5.2 Where the licensee has already completed a feasibility study and has satisfied the requirements of condition E5.1, the licensee may instead submit a delivery plan for the PM-CEMS equipment. This plan must:
a) include proposed actions for the implementation of PM-CEMS;
b) identify the proposed locations for monitor installations;
c) include proposed timing for the installation of PM-CEMS;
d) include a proposed installation and commissioning plan for the PM-CEMS; and
e) detail procedures for evaluating the performance of the PM-CEMS following installation.

E5.3 Where it is considered not feasible to install a PM-CEMS, the Report must:
a) provide a detailed explanation and robust justification of why installation and operation of PM-CEMS is not feasible; and
b) detail proposed alternative monitoring and reporting options that ensure ongoing representativeness of particle emission monitoring and report at the premises. Alternative options must have suitable temporal resolution to ensure all significant emission variability is accounted for.

E5.4 The continuous particle matter monitoring feasibility study and/or installation report required by conditions E5.1 to E5.3 must be provided to the EPA at central.west@epa.nsw.gov.au by 5pm on 31 March 2021.

E6 Toxicity Assessment of Dust Suppressants

E6.1 The licensee must undertake and report on ecotoxicological testing of any dust suppressants used at/on the Mount Piper Power Station Ash Repositories (and any other localities at the premises where a dust suppressant is used) in accordance with the following:
a) be undertaken by a suitably qualified practitioner;
b) identification of all dust suppressants used at the premises;
c) identification of all constituent ingredients and attachment of product specifications and Safety Data Sheets;

d) identification of relevant ANZECC/ARMCANZecotoxicology guidelines;
e) details of toxicology methodology which must include assessment of toxicology impacts to both aquatic plants (e.g. duckweed test) and aquatic species (e.g. algae, daphnia, hydra, rainbowfish and shrimp);
f) details of assessment results and attachment of raw results and reports;
g) assessment of whether constituent ingredients are present in any discharged waters from the Mount Piper Power Station Ash Repositories (or any other relevant discharges) and if so, assessment of concentrations;
h) assessment of any offsite impacts; and
i) any recommendations to prevent offsite discharges and mitigate any offsite impacts.

E6.2 The licensee must provide a methodology to address condition E6.1 above to the EPA at central.west@epa.nsw.gov.au within 2 months of commencing use of any dust suppressants.

E6.3 The licensee must provide a dust suppressant toxicity assessment report as required by conditions E6.1 to E2.2 of this licence to the EPA at central.west@epa.nsw.gov.au within 12 months of commencing use of any dust suppressants.

Environment Protection Licence

Licence - 13007

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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 - 13007

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 Environmen t 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 mo nths. 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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 13007

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

Mr Darryl Clift

Environment Protection Authority

(By Delegation)

Date of this edition: 01-January-2009

Environment Protection Licence

Licence - 13007

End Notes

1	Licence varied by correction to Load Limits table, issued on 07-Jan-2009, which came into effect on 07-Jan-2009.
2	Licence varied by notice 1110821, issued on 21-Jan-2010, which came into effect on 21-Jan-2010.
3	Licence varied by notice 1118174, issued on 20-Aug-2010, which came into effect on 20-Aug-2010.
4	Licence varied by notice 1516460 issued on 19-Aug-2013
5	Licence transferred through application 1516748 approved on 29-Aug-2013 , which came into effect on 02-Sep-2013
6	Licence varied by notice 1518361 issued on 21-Nov-2013
7	Licence format updated on 09-Jan-2015
8	Licence varied by notice 1529453 issued on 29-Jun-2015
9	Licence varied by notice 1556424 issued on 20-Dec-2017
10	Licence varied by notice 1568716 issued on 23-Aug-2018
11	Licence varied by notice 1569404 issued on 23-Jan-2019
12	Licence varied by notice 1575254 issued on 29-Jan-2019
13	Licence format updated on 30-Apr-2019
14	Licence varied by notice 1580740 issued on 07-Jun-2019
15	Licence varied by notice 1586399 issued on 23-Jul-2020
16	Licence format updated on 17-Aug-2020

Environment Protection Licence

Licence - 759

Licence Details	
Number:	759
Anniversary Date:	01-January

Licensee

GENERATOR PROPERTY MANAGEMENT PTY LIMITED

PO BOX 132

BUDGEWOI NSW 2262

Premises

MUNMORAH POWER STATION

OFF SCENIC DRIVE

DOYALSON NSW 2262

Scheduled Activity

N/A

Fee Based Activity	Scale
Miscellaneous licensed discharge to waters (at any time)	> 1000 ML maximum annual volume of discharge authorised

Region

Regional North - Newcastle

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 - 759

INFORMATION ABOUT THIS LICENCE ---- 4
Dictionary ---- 4
Responsibilities of licensee ---- 4
Variation of licence conditions ---- 4
Duration of licence ---- 4
Licence review ---- 4
Fees and annual return to be sent to the EPA ---- 4
Transfer of licence ---- 5
Public register and access to monitoring data ---- 5
1 ADMINISTRATIVE CONDITIONS ---- 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
4 OPERATING CONDITIONS ---- 9
O1 Activities must be carried out in a competent manner ---- 9
O2 Maintenance of plant and equipment ---- 9
O3 Emergency response ---- 9
5 MONITORING AND RECORDING CONDITIONS ---- 9
M1 Monitoring records ---- 9
M2 Requirement to monitor concentration of pollutants discharged ---- 10
M3 Testing methods - concentration limits ---- 11
M4 Recording of pollution complaints ---- 12
M5 Telephone complaints line ---- 12
6 REPORTING CONDITIONS ---- 12
R1 Annual return documents ---- 12
R2 Notification of environmental harm ---- 13
R3 Written report ---- 14
R4 Other reporting conditions ---- 14

Environment Protection Licence

Licence - 759

7 GENERAL CONDITIONS ---------- 15

G1 Copy of licence kept at the premises or plant ---------- 15

8 POLLUTION STUDIES AND REDUCTION PROGRAMS ---------- 15

U1 Remedial Action Plan ---------- 15

DICTIONARY ---------- 16

General Dictionary ---------- 16

Environment Protection Licence

Licence - 759

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);
- 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 - 759

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:

GENERATOR PROPERTY MANAGEMENT PTY LIMITED
PO BOX 132
BUDGEWOI NSW 2262

subject to the conditions which follow.

Environment Protection Licence

Licence - 759

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
N/A	Miscellaneous licensed discharge to waters (at any time)	> 1000 ML maximum annual volume of discharge authorised

A1.2 This licence regulates water pollution resulting from the activity/ies specified below carried out at the premises specified in A2.

Fee Based Activity	Scale
Miscellaneous licensed discharge to waters (at any time)	> 1000.00 ML maximum annual volume of discharge authorised

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
MUNMORAH POWER STATION
OFF SCENIC DRIVE
DOYALSON
NSW 2262
LOTS AND DPS DENOTED AS 'MUNMORAH LAND' IN DRAWING NO. 130285Y-01: "LAND TRANSFER PLAN MUNMORAH POWER STATION COLONGRA' PROVIDED TO THE EPA ON 7 JANUARY 2015 (DELTA OBJECTIVE ID NO. A644567; EPA REFERENCE DOC15/14899).

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
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 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.

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.

Water and land

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Discharge to waters Water quality monitoring	Discharge to waters Water quality monitoring	Cooling water outlet to Lake Budgewoi labelled as OUT01 in Figure A2.1 of the Cardno Report titled “Munmorah Power Station Decommissioning Project - Aquatic Ecological Assessment”.
2	Discharge to waters Discharge water quality monitoring	Discharge to waters Discharge water quality monitoring	Ash pond discharge to inlet canal labelled as MAD on Figure: Environment Monitoring Locations provided to the EPA on 4 May 2011.
17	Groundwater monitoring wells		Sentinal g/water wells monitoring diesel plume. Well numbers 319/319A (ref:DOC19/214919), 323, 327, 330, ref:DOC14/171906) and 328A (ref:DOC19/638768-1)
18	Groundwater monitoring wells		Wells and stormwater pits monitoring plume at UPSS - wells 219, 220, 221, 406, 407, stormwater pits D1 and D231 identifed in Appendix B-drawings 1, 2, and 3 of Summary Report on Groundwater Investigation dated August 2014 (DOC14/171906)

19	Discharge to waters - wet weather Discharge quality monitoring - wet weather	Discharge to waters - wet weather Discharge quality monitoring - wet weather	Munmorah Ash Dam spillway located on north-eastern bank of ash dam, discharges to trapezoidal channel and then overflows to 48m wide grassed channel via overland flow to Lake Munmorah

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\s 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\s.

L2.4 Water and/or Land Concentration Limits

POINT 2

Pollutant	Units of Measure	50%Limit	90%Limit	98.5%Limit	100 percentile concentration limit
pH	pH				6.5-9.5
Total suspended solids	milligrams per litre				50

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.

Note: Condition O2.1 is suspended for all equipment that is appropriately decommissioned and rendered environmentally safe or inert. Any equipment decommissioned that continues to hold or store chemcials or other fluids is to remain appropriately bunded.

O3 Emergency response

O3.1 The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises. The PIRMP must be developed in accordance with the requirements in Part 5.7A of the *Protection of the Environment Operations* (POEO) Act 1997 and POEO regulations. The licensee must keep the incident response plan on the premises at all times. The incident response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. The PIRMP must be tested at least annually or following a pollution incident.

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 Water and/ or Land Monitoring Requirements

POINT 1

Pollutant	Units of measure	Frequency	Sampling Method
TPH C10-C14 Fraction	micrograms per litre	Every 6 months	Grab sample
TPH C15-C28 Fraction	micrograms per litre	Every 6 months	Grab sample
TPH C29-C36 Fraction	micrograms per litre	Every 6 months	Grab sample
TPH C6-C9 Fraction	micrograms per litre	Every 6 months	Grab sample

POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per litre	Weekly during any discharge	Grab sample
Copper	milligrams per litre	Weekly during any discharge	Grab sample
Lead	milligrams per litre	Weekly during any discharge	Grab sample
Manganese	milligrams per litre	Weekly during any discharge	Grab sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Weekly during any discharge	Grab sample
pH	pH	Weekly during any discharge	Grab sample
Phosphorus (total)	milligrams per litre	Weekly during any discharge	Grab sample
Reactive Phosphorus	milligrams per litre	Weekly during any discharge	Grab sample
Selenium	milligrams per litre	Weekly during any discharge	Grab sample
Total suspended solids	milligrams per litre	Weekly during any discharge	Grab sample

Zinc	milligrams per litre	Weekly during any discharge	Grab sample

POINT 17,18

Pollutant	Units of measure	Frequency	Sampling Method
BTEX	micrograms per litre	Quarterly	Grab sample
Naphthalene	micrograms per litre	Quarterly	Grab sample
pH	pH	Quarterly	Grab sample
TPH C10-C14 Fraction	micrograms per litre	Quarterly	Grab sample
TPH C15-C28 Fraction	micrograms per litre	Quarterly	Grab sample
TPH C29-C36 Fraction	micrograms per litre	Quarterly	Grab sample
TPH C6-C9 Fraction	micrograms per litre	Quarterly	Grab sample

POINT 19

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per litre	Weekly during any discharge	Grab sample
Copper	milligrams per litre	Weekly during any discharge	Grab sample
Lead	milligrams per litre	Weekly during any discharge	Grab sample
Manganese	milligrams per litre	Weekly during any discharge	Grab sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Weekly during any discharge	Grab sample
pH	pH	Weekly during any discharge	Grab sample
Phosphorus	milligrams per litre	Weekly during any discharge	Grab sample
Selenium	milligrams per litre	Weekly during any discharge	Grab sample
Total suspended solids	milligrams per litre	Weekly during any discharge	Grab sample
Zinc	milligrams per litre	Weekly during any discharge	Grab sample

M3 Testing methods - concentration limits

M3.1 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

M4 Recording of pollution complaints

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

M4.2 The record must include details of the following:
a) the date and time of the complaint;
b) the method by which the complaint was made;
c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
d) the nature of the complaint;
e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
f) if no action was taken by the licensee, the reasons why no action was taken.

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

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

M5 Telephone complaints line

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

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

M5.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

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:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

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.

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

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or 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 Statements 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.

R2 Notification of environmental harm

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.

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.

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

R4.1 The Annual Return must be accompanied by a report that assesses to what extent the hydrocarbons which are monitored under Condition M2 (monitoring points 17 & 18), have mobilised and the associated risk of off site contamination posed by the hydrocarbon plumes.
In assessing the risk, the Licensee should consider the current understanding of the exposure pathway between the groundwater and stormwater systems in the area and any further works required to further understand the linkages between these two systems.
The report is to be submitted electronically to: hunter.region@epa.nsw.gov.au

R4.2 The licensee must notify the EPA immediately on becoming aware of any increased risk of off-site contamination related to the hydrocarbons that are the subject of condition R4.1.

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 Remedial Action Plan

U1.1 The licensee must carry out subsurface site investigations for; and prepare and submit a Remedial Action Plan that details actions, time frames and costs to remediate groundwater contamination plumes identified at the premises.

The licensee must submit on or before **30 October 2020** a Remedial Action Plan to the EPA for approval. The Remedial Action Plan must be accompanied by a Site Audit Statement prepared by an NSW EPA accredited site auditor. The licensee must seek endorsement from the NSW EPA accredited site auditor that the site can be made suitable for the intended use subject to the Remedial Action Plan as part of the scope of the Site Audit Statement.

All documents requiring submission as part of this condition must be submitted electronically to the Manager, Hunter Region at hunter.region@epa.nsw.gov.au.

Environment Protection Licence

Licence - 759

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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 - 759

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 Environmen t 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 mo nths. 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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 759

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

Mr Grahame Clarke

Environment Protection Authority

(By Delegation)

Date of this edition: 14-June-2000

Environment Protection Licence

Licence - 759

End Notes

1	Licence varied by notice V/M upgrade, issued on 07-Jul-2000, which came into effect on 07-Jul-2000.
2	Licence varied by notice 1002100, issued on 23-Oct-2000, which came into effect on 17-Nov-2000.
3	Licence varied by notice 1012998, issued on 26-Sep-2003, which came into effect on 21-Oct-2003.
4	Licence varied by notice 1039717, issued on 12-Aug-2004, which came into effect on 06-Sep-2004.
5	Licence varied by notice 1104462, issued on 24-Aug-2009, which came into effect on 24-Aug-2009.
6	Licence varied by notice 1115371, issued on 07-Jul-2011, which came into effect on 07-Jul-2011.
7	Licence varied by notice 1509816 issued on 11-Jan-2013
8	Licence varied by notice 1516866 issued on 07-Apr-2014
9	Licence varied by notice 1525902 issued on 21-Jan-2015
10	Licence varied by notice 1534970 issued on 14-Dec-2015
11	Licence transferred through application 1545923 approved on 20-Oct-2016 , which came into effect on 21-Oct-2016
12	Licence varied by notice 1565974 issued on 26-Jun-2018
13	Licence format updated on 18-Sep-2018
14	Licence varied by notice 1576069 issued on 26-Mar-2019
15	Licence varied by notice 1583906 issued on 24-Sep-2019
16	Licence varied by notice 1598039 issued on 26-Aug-2020

Environment Protection Licence

Licence - 1429

Licence Details	
Number:	1429
Anniversary Date:	01-July

Licensee
ORIGIN ENERGY ERARING PTY LTD
PO BOX 5044
DORA CREEK NSW 2264

Premises
ERARING POWER STATION
ROCKY POINT ROAD
ERARING NSW 2264

Scheduled Activity
Chemical storage
Coal works
Crushing, grinding or separating
Electricity generation

Fee Based Activity	Scale
Coal works	> 5000000 T annual handing capacity
Crushing, grinding or separating	> 2000000 T annual processing capacity
General chemicals storage	0-5000 kL storage capacity
Generation of electrical power from coal	> 4000 GWh annual generating capacity
Petroleum products storage	0-5000 kL storage capacity

Region
Metropolitan North - Newcastle
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 - 1429

INFORMATION ABOUT THIS LICENCE ---- 4

Dictionary ---- 4

Responsibilities of licensee ---- 4

Variation of licence conditions ---- 4

Duration of licence ---- 4

Licence review ---- 4

Fees and annual return to be sent to the EPA ---- 4

Transfer of licence ---- 5

Public register and access to monitoring data ---- 5

1 ADMINISTRATIVE CONDITIONS ---- 6

A1 What the licence authorises and regulates ---- 6

A2 Premises or plant to which this licence applies ---- 6

A3 Other activities ---- 7

A4 Information supplied to the EPA ---- 7

2 DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND ---- 7

P1 Location of monitoring/discharge points and areas ---- 7

3 LIMIT CONDITIONS ---- 10

L1 Pollution of waters ---- 10

L2 Load limits ---- 10

L3 Concentration limits ---- 11

L4 Volume and mass limits ---- 13

L5 Waste ---- 13

L6 Potentially offensive odour ---- 15

L7 Other limit conditions ---- 15

4 OPERATING CONDITIONS ---- 15

O1 Activities must be carried out in a competent manner ---- 15

O2 Maintenance of plant and equipment ---- 15

O3 Dust ---- 16

O4 Effluent application to land ---- 16

O5 Emergency response ---- 16

O6 Waste management ---- 16

O7 Other operating conditions ---- 17

5 MONITORING AND RECORDING CONDITIONS ---- 19

M1 Monitoring records ---- 19

Environment Protection Licence

Licence - 1429

M2 Requirement to monitor concentration of pollutants discharged ---- 20
M3 Testing methods - concentration limits ---- 25
M4 Testing methods - load limits ---- 26
M5 Weather monitoring ---- 26
M6 Recording of pollution complaints ---- 26
M7 Telephone complaints line ---- 27
M8 Requirement to monitor volume or mass ---- 27
M9 Noise monitoring ---- 28
6 REPORTING CONDITIONS ---- 28
R1 Annual return documents ---- 28
R2 Notification of environmental harm ---- 30
R3 Written report ---- 30
R4 Other reporting conditions ---- 30
7 GENERAL CONDITIONS ---- 31
G1 Copy of licence kept at the premises or plant ---- 31
G2 Contact number for incidents and responsible employees ---- 31
G3 Signage ---- 32
G4 Other general conditions ---- 32
8 SPECIAL CONDITIONS ---- 32
E1 Discharge of cooling waters into Lake Macquarie ---- 32
E2 Seagrass monitoring program ---- 33
E3 Emergency groundwater discharge ---- 33
E4 Dioxin and furan study ---- 34
E5 Site specific air emission monitoring plan ---- 35
E6 Continuous emission monitoring systems - quality assurance and control procedures ---- 35
E7 Air pollution control equipment - maintenance, operation and fault response procedure ---- 36
E8 Continuous particle matter monitoring feasibility study ---- 36
DICTIONARY ---- 38
General Dictionary ---- 38

Environment Protection Licence

Licence - 1429

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);
- 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 - 1429

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:

ORIGIN ENERGY ERARING PTY LTD
PO BOX 5044
DORA CREEK NSW 2264

subject to the conditions which follow.

Environment Protection Licence

Licence - 1429

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 annual handing capacity
Crushing, grinding or separating	Crushing, grinding or separating	> 2000000 T annual processing capacity
Chemical storage	General chemicals storage	0 - 5000 kL storage capacity
Electricity generation	Generation of electrical power from coal	> 4000 GWh annual generating capacity
Chemical storage	Petroleum products storage	0 - 5000 kL storage capacity

A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
ERARING POWER STATION
ROCKY POINT ROAD
ERARING
NSW 2264
PREMISES DEFINED BY DOCUMENT TITLED "PREMISES PLAN - ERARING POWER STATION" REFERENCE "245481-001-DRG-L1-004" DATED 16/06/2020 AND PROVIDED TO THE EPA ON 23/06/2020 (EPA REFERENCE DOC20/507504).

A2.2 The document referred to in condition A2.1 above is herein referred to in this licence as "The Plan".

Note: Page Break.

Environment Protection Licence

Licence - 1429

A3 Other activities

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

Ancillary Activity
Electricity generation (generation of electrical power from diesel)
Railway activities - railway infrastructure operations
Sewage treatment

A3.2 For the purpose of condition A3.1 above:
a) electricity generation (generation of electrical power from diesel) means the operation of the emergency turbine(s) in accordance with the conditions of this licence; and
b) all other activities listed in condition A3.1 are as defined by Schedule 1 of the Protection of the Environment Operations Act 1997 although not meeting the scheduled activity threshold.

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.

A4.2 Any other document and/or management plan is not to be taken as part of the documentation in condition A4.1 above, other than those documents and/or management plans specifically referenced in 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
1		Discharge to air	Discharge of air emissions from stack serving Boilers number 1 and 2 marked and shown as EPA 1 on The Plan

2		Discharge to air	Discharge of air emissions from stack serving Boilers number 3 and 4 marked and shown as EPA 2 on The Plan
3	Air emission monitoring		Combined air emissions from boiler 1 via Points 7 and 8 to Point 1 marked and shown as EPA 3 on The Plan
4	Air emission monitoring		Combined air emissions from boiler 2 via Points 9 and 10 to Point 1 marked and shown as EPA 4 on The Plan
5	Air emission monitoring		Combined air emissions from boiler 3 via Points 11 and 12 to Point 2 marked and shown as EPA 5 on The Plan
6	Air emission monitoring		Combined air emissions from boiler 4 via Points 13 and 14 to Point 2 marked and shown as EPA 6 on The Plan
7	Air emission monitoring		Boiler number 1 exhaust - duct A marked and shown as EPA 7 on The Plan
8	Air emission monitoring		Boiler number 1 exhaust - duct B marked and shown as EPA 8 on The Plan
9	Air emission monitoring		Boiler number 2 exhaust - duct A marked and shown as EPA 9 on The Plan
10	Air emission monitoring		Boiler number 2 exhaust - duct B marked and shown as EPA 10 on The Plan
11	Air emission monitoring		Boiler number 3 exhaust - duct A marked and shown as EPA 11 on The Plan
12	Air emission monitoring		Boiler number 3 exhaust - duct B marked and shown as EPA 12 on The Plan
13	Air emission monitoring		Boiler number 4 exhaust - duct A marked and shown as EPA 13 on The Plan
14	Air emission monitoring		Boiler number 4 exhaust - duct B marked and shown as EPA 14 on The Plan
15	Meteorological weather monitoring Ambient air quality monitoring		Dora Creek meteorological weather and ambient air monitoring station marked and shown as EPA 15 on The Plan
16	Ambient air quality monitoring		Marks Point ambient air monitoring station marked and shown as EPA 16 on The Plan
17	Ambient air quality monitoring		Dust deposition gauge marked and shown as EPA 17 on The Plan
18	Ambient air quality monitoring		Dust deposition gauge marked and shown as EPA 18 on The Plan
19	Ambient air quality monitoring		Dust deposition gauge marked and shown as EPA 19 on The Plan
20	Ambient air quality monitoring		Dust deposition gauge marked and shown as EPA 20 on The Plan

P1.2 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.

P1.3 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.

Water and land

Environment Protection Licence

Licence - 1429

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
21	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge of cooling water from the cooling water outlet canal to Myuna Bay marked and shown as EPA 21a and EPA 21b on The Plan
22	Discharge quality monitoring		Discharge from ash dam after the siphon pond weir marked and shown as EPA 22 on The Plan
23	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Emergency discharge from ash dam outlet at culvert under Main Road 217 marked and shown as EPA 23 on The Plan
24	Discharge to waters Discharge quality monitoring Volume monitoring	Discharge to waters Discharge quality monitoring Volume monitoring	Emergency discharge from ash dam toe drain collection pond marked and shown as EPA 24 on The Plan
25	Volume monitoring		Discharge from ash dam pipe to outlet canal (tunnel spillway) marked and shown as EPA 25 on The Plan
26	Discharge to utilisation area Volume monitoring	Discharge to utilisation area Volume monitoring	Discharge of effluent from the final pond of the onsite sewage treatment system adjacent to utilisation area marked and shown as EPA 26 on The Plan
27	Ambient water quality monitoring		Water quality monitoring between cooling water inlet and Hungary Point in Lake Macquarie marked and shown as EPA 27 on The Plan
28	Ambient water quality monitoring		Water quality monitoring near the old Wangi Wangi Power Station in Lake Macquarie marked and shown as EPA 28 on The Plan
29	Ambient water quality monitoring		Water quality monitoring near the Vales Point and Eraring Power Station mixing zone off Fishery Point in Lake Macquarie marked and shown as EPA 29 on The Plan
30	Ambient water quality monitoring		Water quality monitoring east of the Lake Macquarie Yacht Club in Lake Macquarie marked and shown as EPA 30 on The Plan
31	Ambient water quality monitoring		Water quality monitoring at the inlet canal for the cooling water intake in Lake Macquarie marked and shown as EPA 31 on The Plan
32	Groundwater quality monitoring		Groundwater quality monitoring bore MW01 marked and shown as EPA 32 on The Plan
33	Groundwater quality monitoring		Groundwater quality monitoring bore MW02 marked and shown as EPA 33 on The Plan

34	Groundwater quality monitoring	Groundwater quality monitoring bore MW06 marked and shown as EPA 34 on The Plan
35	Groundwater quality monitoring	Groundwater quality monitoring bore D26 marked and shown as EPA 35 on The Plan

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.

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

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)	
Benzene (Air)	
Benzo(a)pyrene (equivalent) (Air)	
Coarse Particulates (Air)	
Fine Particulates (Air)	
Fluoride (Air)	
Lead (Air)	
Mercury (Air)	
Nitrogen Oxides (Air)	
Salt (Estuarine Water)	
Selenium (Estuarine Water)	
Sulfur Oxides (Air)	
Total suspended solids (Estuarine Water)	
Volatile organic compounds (Air)	

Environment Protection Licence

Licence - 1429

L3 Concentration limits

L3.1 For each monitoring/discharge point or utilisation area specified in the table\s 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\s.

L3.4 Air Concentration Limits

POINT 3,4,5,6

Pollutant	Units of measure	100 percentile concentration limit	Reference conditions	Oxygen correction	Averaging period
Cadmium	milligrams per cubic metre	0.2	Dry, 273K, 101.3kPA	7% O2	1 hour
Chlorine	milligrams per cubic metre	20	Dry, 273K, 101.3kPA	7% O2	1 hour
Fluorine	milligrams per cubic metre	30	Dry, 273K, 101.3kPA	7% O2	1 hour
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 hour
Mercury	milligrams per cubic metre	0.05	Dry, 273K, 101.3kPA	7% O2	1 hour
Nitrogen Oxides	milligrams per cubic metre	1100	Dry, 273K, 101.3kPA	7% O2	1 hour
Solid Particles	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O2	1 hour
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	100	Dry, 273K, 101.3kPA	7% O2	1 hour
Sulfur dioxide	milligrams per cubic metre	1700	Dry, 273K, 101.3kPA	7% O2	1 hour
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	0.75	Dry, 273K, 101.3kPA	7% O2	1 hour

volatile organic compounds as n-propane equivalent	milligrams per cubic metre	10		Dry, 273K, 101.3kPA	7% O2	1 hour

L3.5 In addition to the concentration limits specified in condition L3.4 above, the following 99th percentile concentration limits apply for points 3 to 6 utilising the same units of measure, reference conditions, oxygen correction and averaging period as above for each pollutant listed below:
a) sulfur dioxide: 1400 mg/m3.

L3.6 For the purposes of condition L3.4 of this licence:
a) Nitrogen Oxides mean: Nitric Oxide (NO) or Nitrogen Dioxide (NO_2) or both, as NO_2 equivalent; and
b) Fluorine means: fluorine and any compound containing fluorine, as total fluoride (HF equivalent).

L3.7 Water and/or Land Concentration Limits

POINT 21

Pollutant	Units of Measure	90%Limit	96.5%Limit	99.8%Limit	100 percentile concentration limit
Copper	milligrams per litre				0.005
Iron	milligrams per litre				0.3
Selenium	milligrams per litre				0.002
Temperature	degrees Celsius		35.5	37.5	38.5

POINT 23,24

Pollutant	Units of Measure	90%Limit	96.5%Limit	99.8%Limit	100 percentile concentration limit
pH	pH				6-9.5
Total suspended solids	milligrams per litre				50

L3.8 In addition to the concentration limits specified in condition L3.7 above, the following applies to point 21:
a) the 96.5% limit specified for the pollutant ‘Temperature’ at point 21 means that during normal electricity supply conditions, cooling waters may be discharged over 35.5°C and up to, but not exceeding, a

maximum temperature of 37.5°C for up to a total of 307 hours during the reporting period;
b) an additional 18 hours are available to allow compliance during periods of high electricity demand to avoid potential shortfall of electricity supply as per conditions E1.1 to E1.4 of this licence where cooling waters may be discharged over 37.5°C and up to, but not exceeding, a maximum temperature of 38.5°C over a reporting period;
c) the 100% limit specified for the pollutant 'Temperature' at point 21 means cooling waters discharged may never exceed the maximum temperature of 38.5°C except in accordance with conditions E1.1 to E1.4 of this licence; and
d) in the event that the licensee exceeds the 96.5 or 99.8 percentile temperature limit, the licensee must advise the EPA on a weekly basis, every day such an exceedance occurs.

L3.9 For the purpose of compliance with the temperature limits at conditions L3.7 and L3.8 of this licence, the limits are based on 10 minute averaging periods.

L4 Volume and mass limits

L4.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:
a) liquids discharged to water; or;
b) 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
21	megalitres per day	11800
25	megalitres per day	150
26	kilolitres per day	250

L5 Waste

L5.1 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.

Code	Waste	Description	Activity	Other Limits
NA	Treated Effluent	Treated effluent for use within the water reclamation plant at the premises	-	Must only be received for use in the water reclamation plant at the premises
NA	Effluent	Effluent from the Myuan	Sewage Treatment	Must only be

		Bay Sport and Recreation Camp	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	received for treatment at the sewage treatment plant at the premises
NA	Recovered aggregate	As defined by and meeting the requirement of the Recovered Aggregate Exemption 2014, as in-force from time to time	As specified in each particular resource recovery exemption Waste storage Capping of Ash Dam	See condition O6.2
NA	Organics	Compost, manure and mulch as defined by and meeting the requirements of the Compost, Manure and Mulch Orders and Exemptions, as in-force from time to time	As specified in each particular resource recovery exemption Waste storage Capping of Ash Dam	See condition O6.2
NA	Biosolids categorised as unrestricted use, or as restricted use 1, 2 or 3, in accordance with the criteria set out in the biosolids guidelines	As defined by and meeting the requirements of the Biosolids Order and Exemption, as in-force from time to time	As specified in each particular resource recovery exemption Waste storage Capping of Ash Dam	See condition O6.2
NA	Excavated natural material	As defined by and meeting the requirements of the Excavated Natural Material Order and Exemption, as in-force from time to time	As specified in each particular resource recovery exemption Waste storage Capping of Ash Dam	See condition O6.2
NA	Virgin excavated natural material	As defined by the Protection of the Environment Operations Act, as in-force from time to time	Waste storage Capping of Ash Dam	See condition O6.2

L5.2 The following wastes generated at/on the premises may be disposed of to the ash dam or within the ash dam catchment:
a) ash;
b) dead sea grass and silt, natural lake shells and silt, silt removed from settlement basins, coal reject, conveyor wash-down, boiler chemical cleaning residues and rinse water, saline solutions from the water reclamation plant (including ferrous chloride used for phosphorous removal), water polishing plant residues and rinse waters, de-oiled fresh water, used fabric filters and mine dewatering from the Awaba State Mine;
c) any material approved in writing by the EPA to control dust emission from the ash dam; and
d) any other material approved in writing by the EPA.

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.

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.

L7 Other limit conditions

Air concentration limit emergency exceedance provision

L7.1 The air concentration limits specified in conditions L3.4 and L3.5 of this licence may be temporarily exceeded under the following circumstances:
a) the Australian Electricity Market Operator (AEMO), or a person authorised by AEMO, directs the licensee, under the National Electricity Law and the National Electricity Rules, to take relevant actions to maintain or restore the security or reliability of the electricity network; and
b) the relevant AEMO direction referred to above remains in force; and
c) the licensee takes all practical measures to prevent or minimise air pollution.

L7.2 An exceedance under condition L7.1 above counts towards the hours accumulated for the purpose of calculating compliance with the 99th percentile concentration limits specified in condition L3.5 of this licence.

L7.3 The licensee must notify the EPA of any and all limit exceedances due to the activation of condition L7.1 in accordance with conditions R4.1 and R4.2 of this 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:
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 All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.

O3.3 Trucks entering and leaving the premises that are carrying loads of dust generator material must be covered at all times, except during loading and unloading.

O4 Effluent application to land

O4.1 Spray from effluent application must not drift beyond the boundary of the premises.

O4.2 Effluent application must not occur in a manner that causes surface runoff.

O4.3 Irrigation of treated effluent and wastewater must not be carried out if soil moisture conditions are such that surface runoff or ponding is likely to occur.

O4.4 The utilisation areas must be maintained in a proper and efficient condition so as to provide adequate percolation, evaporation and transpiration of the treated effluent and wastewater.

O4.5 The quantity of effluent and solids applied to the utilisation area must not exceed the capacity of the area to effectively utilise the effluent and solids where for the purpose of this condition, 'effectively utilise' includes the use of the effluent and solids for pasture or crop production, as well as the ability of the soil to absorb the nutrient, salt, hydraulic load and organic material.

O4.6 Public access to any effluent utilisation area must be denied during effluent application and until the effluent application area has dried.

O5 Emergency response

Note: The licensee must maintain, and implement as necessary, a current Pollution Incident Response Management Plan (PIRMP) for the premises in accordance with Part 5.7A of the Protection of the Environment Operations Act 1997 and Part 3A of the Protection of the Environment Operations (General) Regulation 2009.

O6 Waste management

O6.1 The licensee must ensure that any liquid and non liquid waste generated and/or stored at the premises that is to be sent offsite:
a) is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force

from time to time prior to leaving the premises; or
b) where the waste is covered by an in-force Resource Recovery Order and Exemption, the waste must meet the conditions of the relevant Order prior to leaving the premises.

O6.2 The licensee, when capping and remediating the Eraring Power Station ash dam, must only use those wastes permitted by condition L5.1 of this licence to be received and used at the premises to the minimum extent possible.

Note: For the purposes of condition O6.2 and determining compliance with the term "minimum extent possible", the EPA will consider such matters as any instrument approving or otherwise authorising the capping and remediation activities and any relevant design specifications for the capping and remediation activities.

O7 Other operating conditions

Permitted fuels for start-up, combustion support and emergency firing of generator

O7.1 Distillate and/or heating oils and/or refined oil blends may be used for start-up and combustion support in Boilers 1 to 4.

O7.2 Distillate may be used for firing the emergency turbine(s) at the premises for the purposes of:
a) providing black-start capability for the Eraring Power Station or at the direction of the AEMO; and/or
b) operating the emergency turbine(s) up to a maximum of 200 hours per reporting period.

O7.3 Distillate fuel used in the Eraring Power Station for start-up and combustion support and the firing of the emergency turbine(s) must comply with the Determination of Fuel Quality Standards (Automotive Diesel) 2019, made under section 21 of the Fuel Quality Standards Act 2000.

O7.4 Heating oils and/or refined oil blends used in the power station for start-up and combustion support must comply with specifications in the table below:

Fuel characteristic	Limit	Unit	Test Method
Antimony (Sb)	<15	ppm	ASTM D5185
Arsenic (As)	<10	ppm	ASTM D5185
Beryllium (Be)	<10	ppm	ASTM D5185
Cadmium (Cd)	<5	ppm	ASTM D5185
Chlorine total (Cl)	0.5 max	% mass	PE 162
Chromium total (Cr)	<30	ppm	ASTM D5185
Cobalt (Co)	<10	ppm	ASTM D5185
Copper (Cu)	<50	ppm	ASTM D5185
Flourine total (F)	0.05 max	% mass	ASTM D808 / ISE
Lead (Pb)	<50	ppm	ASTM D5185
Manganese (Mn)	<50	ppm	ASTM D5185
Mercury (Hg)	<10	ppm	ASTM D5185

Molybdenum (Mo)	<50	ppm	ASTM D5185
Nickle (Ni)	<50	ppm	ASTM D5185
Selenium (Se)	<15	ppm	ASTM D5185
Silver (Ag)	<10	ppm	ASTM D5185
Sulfur total (S)	0.5 max	% mass	ASTM D5185 / IP336
Tin (Sn)	<40	ppm	ASTM D5185
Vanadium (V)	<40	ppm	ASTM D5185
Polychlorinated biphenyls	2 max	ppm	ASTM D4059 / D5185
Gross calorific value	43 min	MJ/kg	ASTM D240

Testing of coal fuel

O7.5 The licensee must have in place a fuel testing program to collect and analyse a representative number of samples of coal fired in Boilers 1 to 4. At a minimum, the coal must be analysed for:
a) ash content (%);
b) sulfur content (%);
c) chlorine content (mg/kg);
d) fluorine content (mg/kg);
e) type 1 and 2 substances content (mg/kg); and
f) calorific value (MJ/kg).

Cooling water

O7.6 Ferrous chloride may be added to the condenser cooling water system.

O7.7 Sawdust derived from untreated timber may be added to the condenser cooling water system at a rate not exceeding 10 cubic meters per year.

O7.8 Boiler blowdown may be discharged to the cooling water system.

O7.9 Uncontaminated overflow from the coal fines settling pond as a result of rainfall may be discharged to the cooling water system.

O7.10 Except under emergency conditions, any overflow from the ash dam must be discharged via the cooling water system and point 21.

O7.11 Under emergency conditions nominated in the condition above, the overflow from the ash dam may be discharged via Crooked Creek and point 23. Any such discharge must be reported immediately to the EPA in accordance with conditions R2.1 and R2.2 of this licence.

O7.12 Except under emergency conditions, water from the ash dam toe drains must be collected and returned to the ash dam.

O7.13 Under emergency conditions nominated above, the toe drain water may be discharged via point 24. Any such discharge must be reported immediately to the EPA in accordance with conditions R2.1 and R2.2.

O7.14 The anti-foaming agent SILIFAX D1760 or anti-foaming agent(s) approved in writing by the EPA may be used to control floating foam on the cooling water discharge canal.

Onsite sewage treatment system

O7.15 The licensee must construct, implement and operate/utilise a wastewater management system to manage the collection, storage, treatment, use and disposal of all sewage and related wastewater generated on the premises.

O7.16 The wastewater management system(s) operated/utilised at the premises must be inspected by a suitably qualified and experienced wastewater technician at least once in each quarterly period of the reporting period and a minimum of four time per reporting period and serviced as required.

O7.17 In relation to condition O7.16 above, the licensee must record the following:
a) details of each inspection undertaken (date, time and personnel);
b) the results of any tests performed on the wastewater management system;
c) the finding and any actions required following each inspection; and
d) the date those actions were completed or the reasons they were not completed.

Chemical storage

O7.18 The licensee must store and handle all liquid chemicals and hazardous materials used at the premises within bunded areas that are constructed and maintained in accordance with the following:
a) any relevant Australian Standards for the liquids being stored;
b) within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund;
c) the Storing and Handling Liquids: Environmental Protection Participant's Manual (DECC, 2007); and
where any conflict exists between these requirements, the most stringent requirements apply.

O7.19 For the purpose of condition O7.18 above, any tanks or other storage vessels that are interconnected and may distribute their contents either by gravity or automated pumps must be considered a single vessel.

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

POINT 3,4,5,6

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-38
Chlorine	milligrams per cubic metre	Every 6 months	TM-38
Fluorine	milligrams per cubic metre	Every 6 months	TM-38
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-38
Mercury	milligrams per cubic metre	Every 6 months	TM-38
Nitrogen Oxides	milligrams per cubic metre	Continuous	TM-38
Solid Particles	milligrams per cubic metre	Quarterly	TM-38
Sulfur dioxide	milligrams per cubic metre	Continuous	TM-38
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-38
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-38
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-38

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

Pollutant	Units of measure	Frequency	Sampling Method
Cadmium	milligrams per cubic metre	Every 6 months	TM-14
Flow rate	cubic metres per second	Continuous	CEM-6 and US EPA Procedure 1
Mercury	milligrams per cubic metre	Every 6 months	TM-14
Moisture	percent	Continuous	Special Method 1

Oxygen (O2)	percent	Continuous	CEM-3 and US EPA Procedure 1
Solid Particles	milligrams per cubic metre	Quarterly	TM-15
Temperature	degrees Celsius	Continuous	TM-2 and US EPA Procedure 1
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	Every 6 months	TM-12, TM-13 & TM-14

POINT 7,9,11,13

Pollutant	Units of measure	Frequency	Sampling Method
Carbon dioxide	percent	Every 6 months	TM-24
Chlorine	milligrams per cubic metre	Every 6 months	TM-7
Fluorine	milligrams per cubic metre	Every 6 months	TM-9
Hydrogen chloride	milligrams per cubic metre	Every 6 months	TM-8
Nitrogen Oxides	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Sulfur dioxide	milligrams per cubic metre	Continuous	CEM-2 and US EPA Procedure 1
Sulfuric acid mist and sulfur trioxide (as SO3)	milligrams per cubic metre	Every 6 months	TM-3
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	Every 6 months	TM-34

POINT 15,16

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

POINT 17,18,19,20

Pollutant	Units of measure	Frequency	Sampling Method
Particulate matter	grams per square metre per month	Monthly	AM-19

M2.3 For the purpose of condition M2.2 above:
a) every 6 months means: a minimum of two sampling events per reporting period, at approximately 6 monthly intervals and occurring no less than 3 months apart;

b) quarterly means: a minimum of four sampling events per reporting period, approximately 3 monthly intervals and occurring no less than 1 months apart; and
c) special method 1 means: any moisture monitoring method approved in writing by the EPA. The monitoring method and data must be quality assured on an ongoing basis in accordance with US EPA Procedure 1.

M2.4 For the purpose of condition M2.2 of this licence, the requirement to install, commission and continuously monitor for flow rate, moisture, oxygen and temperature at points 7 to 14 does not take effect until 31 October 2021.

Note: The EPA may consider a proposal for an extension of the due date in the condition above if it can be adequately demonstrated that additional time is required to install and commission the required monitoring equipment. A request for an extension of the due date in the condition above must be based on 1) alignment with scheduled plant maintenance shutdowns; and 2) avoidance of significant disruption to the electricity network. An application for an extension of the due date in the condition above must be made to the EPA via eConnect or in writing by 1 April 2021.

M2.5 For ambient air monitoring of pollutants, the recording of results and their reporting in the Annual Return must include “averaging periods” as follows:
a) nitrogen dioxide: averaging periods of one hour and annual; and
b) sulfur dioxide: averaging periods of one hour, 24 hour and annual.

M2.6 Water and/ or Land Monitoring Requirements

POINT 21

Pollutant	Units of measure	Frequency	Sampling Method
Copper	milligrams per litre	Monthly during discharge	Grab sample
Iron	milligrams per litre	Monthly during discharge	Grab sample
Selenium	milligrams per litre	Monthly during discharge	Grab sample
Temperature	degrees Celsius	Continuous during discharge	In line instrumentation

POINT 22,23,24

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Monthly during discharge	Grab sample
Ammonia	milligrams per litre	Monthly during discharge	Grab sample
Arsenic (III)	milligrams per litre	Monthly during discharge	Grab sample
Arsenic (V)	milligrams per litre	Monthly during discharge	Grab sample

Environment Protection Licence

Licence - 1429

Cadmium	milligrams per litre	Monthly during discharge	Grab sample
Chromium (trivalent)	milligrams per litre	Monthly during discharge	Grab sample
Chromium (VI) Compounds	milligrams per litre	Monthly during discharge	Grab sample
Copper	milligrams per litre	Monthly during discharge	Grab sample
Iron	milligrams per litre	Monthly during discharge	Grab sample
Lead	milligrams per litre	Monthly during discharge	Grab sample
Manganese	milligrams per litre	Monthly during discharge	Grab sample
Nickel	milligrams per litre	Monthly during discharge	Grab sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Monthly during discharge	Grab sample
Nitrogen	milligrams per litre	Monthly during discharge	Grab sample
pH	pH	Monthly during discharge	Grab sample
Phosphorus	milligrams per litre	Monthly during discharge	Grab sample
Reactive Phosphorus	milligrams per litre	Monthly during discharge	Grab sample
Selenium	milligrams per litre	Monthly during discharge	Grab sample
Total Kjeldahl Nitrogen	milligrams per litre	Monthly during discharge	Grab sample
Total suspended solids	milligrams per litre	Monthly during discharge	Grab sample
Vanadium	milligrams per litre	Monthly during discharge	Grab sample
Zinc	milligrams per litre	Monthly during discharge	Grab sample

POINT 27,28,29,30,31

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Monthly	Representative sample
Ammonia	milligrams per litre	Monthly	Representative sample
Arsenic (III)	milligrams per litre	Monthly	Representative sample
Arsenic (V)	milligrams per litre	Monthly	Representative sample
Cadmium	milligrams per litre	Monthly	Representative sample
Chromium (trivalent)	milligrams per litre	Monthly	Representative sample
Chromium (VI) Compounds	milligrams per litre	Monthly	Representative sample
Copper	milligrams per litre	Monthly	Representative sample
Iron	milligrams per litre	Monthly	Representative sample
Lead	milligrams per litre	Monthly	Representative sample

Environment Protection Licence

Licence - 1429

Manganese	milligrams per litre	Monthly	Representative sample
Nickel	milligrams per litre	Monthly	Representative sample
pH	pH	Monthly	Representative sample
Selenium	milligrams per litre	Monthly	Representative sample
Total suspended solids	milligrams per litre	Monthly	Representative sample
Vanadium	milligrams per litre	Monthly	Representative sample
Zinc	milligrams per litre	Monthly	Representative sample

POINT 32,33,34,35

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Quarterly	Representative sample
Ammonia	milligrams per litre	Quarterly	Representative sample
Arsenic (III)	milligrams per litre	Quarterly	Representative sample
Arsenic (V)	milligrams per litre	Quarterly	Representative sample
Cadmium	milligrams per litre	Quarterly	Representative sample
Calcium	milligrams per litre	Quarterly	Representative sample
Chromium (trivalent)	milligrams per litre	Quarterly	Representative sample
Chromium (VI) Compounds	milligrams per litre	Quarterly	Representative sample
Copper	milligrams per litre	Quarterly	Representative sample
Electrical conductivity	microsiemens per centimetre	Quarterly	Representative sample
Iron	milligrams per litre	Quarterly	Representative sample
Lead	milligrams per litre	Quarterly	Representative sample
Magnesium	milligrams per litre	Quarterly	Representative sample
Manganese	milligrams per litre	Quarterly	Representative sample
Nickel	milligrams per litre	Quarterly	Representative sample
pH	pH	Quarterly	Representative sample
Potassium	milligrams per litre	Quarterly	Representative sample
Selenium	milligrams per litre	Quarterly	Representative sample
Sodium	milligrams per litre	Quarterly	Representative sample
Standing Water Level	metres	Quarterly	In situ
Vanadium	milligrams per litre	Quarterly	Representative sample
Zinc	milligrams per litre	Quarterly	Representative sample

M2.7 The licensee must also undertake no less than two water quality surveys as specified below within Lake Macquarie during each quarter of the reporting period. The surveys must be scheduled so that there are at least two surveys in each season. For each of the points specified below, the licencee 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 and sample at the frequency specified opposite in the other columns.

POINTS 27, 28, 29, 30 & 31

Pollutant	Frequency	Sampling Method
Dissolved Oxygen	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Measured 0.5 metres below the surface
Temperature	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Measured 0.5 metres below the surface The licensee may use data obtained from any inline continuous temperature monitoring at Point 31 to satisfy this requirement for that point
Salinity	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Measured 0.5 metres below the surface
Water Quality	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Using a Secchi disk
Zooplankton - total count	At least two (2) surveys per three (3) month period with a minimum of four (4) weeks between each survey	Sampling may be preserved and counted annually, Samples must be reserved and retained for species identification if required by EPA This specific monitoring is not required at Point 31 due to site constraints

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 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.

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.

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".

M4 Testing methods - load limits

Note: Division 3 of the *Protection of the Environment Operations (General) Regulation 2009* requires that monitoring of actual loads of assessable pollutants listed in L2.2 must be carried out in accordance with the relevant load calculation protocol set out for the fee-based activity classification listed in the Administrative Conditions of this licence.

M5 Weather monitoring

M5.1 For each monitoring point specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the parameter 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 15

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	mm	Continuous	1 hour	AM-4
Wind speed at 10m	m/s	Continuous	15 minutes	AM-2 & AM-4
Wind direction at 10m	°	Continuous	15 minutes	AM-2 & AM-4
Sigma theta at 10m	°	Continuous	15 minutes	AM-2 & AM-4
Temperature at 2m	ºC	Continuous	15 minutes	AM-4
Temperature at 10m	ºC	Continuous	15 minutes	AM-4
Solar radiation	W/m²	Continuous	15 minutes	AM-4
Additional Requirements				
siting				AM-1 & AM-4
measurement				AM-2 & AM-4

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:
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.

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.

M7.4 For the purpose of condition M7.1 of this licence, operating hours are defined as twenty-four hours a day, seven days a week.

M8 Requirement to monitor volume or mass

M8.1 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;
c) the mass of pollutants emitted to the air;
at the frequency and using the method and units of measure, specified below.

POINT 21

Frequency	Unit of Measure	Sampling Method
Continuous during discharge	megalitres per day	By Calculation (volume flow rate or pump capacity multiplied by operating time)

POINT 23,24

Frequency	Unit of Measure	Sampling Method
Daily during any discharge	megalitres per day	Special Method 1

POINT 25

Frequency	Unit of Measure	Sampling Method
Daily during any discharge	megalitres per day	In line instrumentation

POINT 26

Frequency	Unit of Measure	Sampling Method
Daily during any discharge	kilolitres per day	Special Method 1

M8.2 For the purpose of condition M8.1:
a) special method 1 means: in-line instrumentation or where such in-line instrumentation is no available, the by calculation method may be used.

M9 Noise monitoring

M9.1 The licensee, following the receipt of a noise related complaint and if required by the EPA, must undertake noise monitoring as required in writing by the EPA.

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:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or 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 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.

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

R1.8 Within the Annual Return, the Statements 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.

Annual Air Emission Monitoring Report

R1.9 The licensee must submit with the Annual Return an Annual Air Emission Monitoring Report. The Annual Air Emission Monitoring Report must analyse and summarise emission monitoring data from the reporting period including, but not limited to:
a) a comprehensive summary (tabulated and graphical) of all periodic and continuous monitoring data as required by condition M2.2 of this licence, including a comparison with the concentration limits specified in conditions L3.4 and L3.5 of this licence;
b) analysis of trends in emission performance for all pollutants monitored as required under condition M2.2 of this licence. Trend analysis must include comparison of emission performance during the reporting period with emission performance from the previous 4 years;
c) details of any exceedances of air emission licence limits and details of plant operating conditions at the times the exceedances occurred;
d) details of plant operating conditions, including Boiler load (MW), during sampling for each Boiler;
e) demonstrated compliance with the CEMS Quality Assurance and Control Procedures required under condition E6.1 of the licence;
f) summary of fuel usage, including:
i. total coal and other permitted fuels consumed in each Boiler (including start-up),
ii. a statement about the representativeness of fuel quality during periodic air emission sampling compared to non-sampling periods,
iii. total fuel consumed by each Boiler during times when periodic air emission sampling was undertaken; and
g) detailed calculations used to determine the aggregate pollutant emissions rates for points 3 to 6.

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

R4.1 The licensee must notify the EPA of any exceedances of any emission or concentration limit included as a

condition of this licence in accordance with condition R2.1 no later than 5 days after becoming aware of any exceedance.

R4.2 Within 20 days of the notification made in accordance with condition R4.1 above, the licensee must provide a report to the EPA at hunter.region@epa.nsw.gov.au that includes, as a minimum, the following details:
a) the date and time the exceedance occurred;
b) the nature of the exceedance (i.e. the pollutants involved);
c) the duration of the exceedance;
d) plant operating conditions at the time of the exceedance;
e) the cause of the exceedance;
f) the remedial/corrective actions taken at the time the exceedance was made known; and
g) the actions taken and/or future actions to be taken, to prevent exceedances of a similar nature occurring in the future.

R4.3 The licensee must notify the EPA at hunter.region@epa.nsw.gov.au of the date of any periodic air emission sampling (stack testing) to be undertaken to satisfy a monitoring condition of this licence at least 7 days prior to the stack testing being carried out. If the licensee must delay the test due to unforeseen circumstances beyond the licensees control, the EPA must be notified immediately of the delay at the email address contained in this condition once the delay is identified and specify the date when the stack testing is to be undertaken.

R4.4 Information collected as required by condition M2.7 of this licence must be supplied with the corresponding Annual Return.

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.

G2 Contact number for incidents and responsible employees

G2.1 The licensee must operate 24-hour telephone contact lines for the purpose of enabling the EPA to directly contact one or more representatives of the licensee who can:
a) respond at all times to incidents relating to the premises; and
b) contact the licensee's senior employees or agents authorised at all times to:
i) speak on behalf of the licensee; and
ii) provide any information or document required under this licence.

G2.2 The licensee is to inform the EPA in writing of the appointment of any subsequent contact persons, or

changes to the person's contact details as soon as practicable and in any event within fourteen days of the appointment or change.

G3 Signage

G3.1 Each monitoring and discharge point must be clearly marked by a sign that indicates the EPA point identification number.

G3.2 The condition above does not apply to any background or ambient monitoring points on or within Lake Macquarie.

G4 Other general conditions

G4.1 **Completed Programs**

Program	Description	Completed Date
Civil diversion works	Civil diversion works to reduce stormwater flows into the ash dam. Reduced possibility of overflows an resultant discharges of selenium.	30-June-2006
Audit of emission monitoring points	Audit of emission monitoring points. Improved reliability of reported monitoring results.	31-December-2003
PRP 3 - Replace CEMS with Complying Instruments	Replace CEMS with complying instruments. Improved reliability of reported monitoring results.	31-December-2004
PRP 4 - Seagrass Monitoring Program	Seagrass monitoring progam with primary aim to monitor seagrass distribution in southern end of Lake Macquarie (Mynua Bay) and determine if any thermal effects of cooling water discharge impacts seagrass community.	31-August-2016

8 Special Conditions

E1 Discharge of cooling waters into Lake Macquarie

E1.1 The conditions listed under section E1 of this licence apply until 31 August 2021.

E1.2 In the event that:
a) the AEMO, or a person authorised by the AEMO, directs the licensee, under the National Electricity Rules, to maintain, increase or be available to increase power generation, for system security, the licensee may exceed the maximum operating hours above 35.5°C and the maximum temperature specified in conditions L3.7 and L3.8 of this licence; or
b) the EPA may, by notice in writing, in response to circumstances that the EPA considers may impact on the NSW electricity supply, grant the licensee an approval to exceed the cooling water temperature limits specified in conditions L3.7 and L3.8 of this licence,

then any such direction by the AEMO or approval by the EPA remains in place for the period specified in the direction or approval or if no period is specified, for 72 hours from the date and time of the direction or approval.

E1.3 If the licensee receives a direction from the AEMO as detailed under condition E1.2a) above, the licensee must immediately notify the EPA in writing of the time and date the direction was given and the period of time that the limits specified in conditions L3.7 and L3.8 of this licence were exceeded.

Note: An approval issued under condition E1.2b) of this licence does not count towards hours accumulated above cooling temperature parameters under this licence.

E1.4 When a direction issued under condition E1.2a) of this licence is revoked by the AEMO or ceases to have effect or an approval issued under condition E1.2b) of this licence is revoked by the EPA or ceases to have effect, the licensee must, as soon as practicable, decrease the cooling water discharge temperature to within the limits specified in conditions L3.7 and L3.8 of this licence.

Note: The EPA may vary the temperature limits at conditions L3.7 and L3.8 of this licence after 31 August 2021 following a review of studies undertaken on thermal discharges to Lake Macquarie.

E2 Seagrass monitoring program

E2.1 The licensee must implement and maintain on an annual basis a Seagrass Monitoring Program approved in writing by the EPA.

E2.2 Every year, the licensee must submit, with the Annual Return, a Seagrass Monitoring Program Report that includes, but is not necessarily limited to:
a) provision of the data, analysis and conclusions of the Seagrass Monitoring Program required under condition E2.1 above; and
b) comparison and discussion of data collected since the commencement of the Seagrass Monitoring Program in February 2011, and any other relevant and/or previous studies.

E2.3 If the Seagrass Monitoring Program required by conditions E2.1 and E2.2 of this licence identifies observed changes that indicates a reduction in seagrass areas and/or species composition and where these changes are likely to be attributed to the licensed activities, the licensee must prepare a report that details the following:
a) a description of ameliorative measures, including the timeframe for the implementation of management actions; and
b) in the case where impacts are unavoidable, a description of how the impacts will be offset,
with the report submitted to the EPA at hunter.region@epa.nsw.gov.au within three months of obtaining the Seagrass Monitoring Program Report required by condition E2.2 above.

E3 Emergency groundwater discharge

E3.1 The licensee may extract groundwater (associated with the seep occurring at the premises, which is understood to be from the Awaba underground colliery) from the groundwater dewatering bores to the west of the High Level Inlet Canal and discharge it to the Outlet Canal during the operation of the power station, until 30 June 2020.

E3.2 The licensee is required to obtain all consents, licenses, approvals, permits and/or allocations to lawfully extract and discharge the groundwater permitted to be discharged by condition E3.1 above.

E3.3 The licensee must not discharge the extracted groundwater to the Outlet Canal during a maintenance outage of the power station.

Note: During a maintenance outage of the power station, extracted groundwater may be discharged to the Ash Dam in accordance with condition L5.2b) of this licence.

E3.4 The licensee must monitor the quality of the groundwater it extracts from the dewatering bores that discharges groundwater to the Outlet Canal as permitted by condition E3.1 of this licence in accordance with the parameters listed in Table 4 of the report titled 'Revised Seep Water Data' (Jacobs, 12 September 2018 ("the Report") and be undertaken:
a) within two days of first commencing the discharge; and
b) monthly thereafter for the duration of the discharge.

E3.5 The licensee must compare the monitoring results required by condition E3.4 above against the average bore results presented in Table 6 of the Report and notify the EPA's Director Hunter by email at hunter.region@epa.nsw.gov.au if the monitoring results exceed the average results presented in Table 6 of the Report by more than 20%. The notification must be provided within three days of the licensee obtaining the monitoring results.

E3.6 The licensee must prepare and submit a Groundwater Seepage Rectification Progress Report that outlines:
a) the interactions undertaken between the licensee and Centennial Coal to identify a medium and long term solution to the groundwater seep which is understood to be from the Awaba underground colliery to the west of the High Level Inlet Canal;
b) the engineering and management options being investigated and considered; and
c) the indicative date that the preferred engineering and management option will be implemented,
with the report submitted to Director Hunter by email at hunter.region@epa.nsw.gov.au quarterly and by no later than 30 September 2019, 31 December 2019, 31 March 2020 and 30 June 2020.

E4 Dioxin and furan study

E4.1 The licensee must undertake dioxin and furan emission testing in accordance with the following:
a) a minimum of 1 round of testing on all Boilers at the premises that have only been fired on coal within the past 10 years;
b) a minimum of 2 rounds of testing on all Boilers at the premises that have been fired on a non-standard fuel within the past 10 years; and
c) testing must be undertaken in accordance with TM-18, as defined in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.

E4.2 Following the dioxin and furan emission testing required by condition E4.1 above, the licensee must prepare a report which includes the following:
a) details of the sampling program undertaken;
b) details of the sampling methodology and emission monitoring conducted (including description of sampling time(s) and sampling location(s) for all test runs) and including a statement of compliance with the relevant test method(s);

c) detailed description of any deviation from the relevant test method(s) including analysis of the likely effect of any deviation on the final test results (as appropriate);
d) detailed description of all plant operating conditions at the time emission monitoring was conducted, including, but not limited to fuel rate, fuel quality and composition and production load(s);
e) summary of all test results including a statement on the representativeness of final test results, including a statement of expected characterisation of long-term emission performance from the plant;
f) all air emission monitoring results and reports, including analytical reports;
g) recommendation on the need for any future or follow-up testing; and
h) all additional reporting requirements prescribed in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW for stationary source monitoring.

E4.3 The dioxin and furan testing and report required by conditions E4.1 and E4.2 of this licence must be completed and the report provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 1 July 2021.

E4.4 Where historical dioxin and furan testing and operating data are available for the premises which robustly satisfies the testing and reporting requirements listed in conditions E4.1 and E4.2 of this licence, the licensee may use the historic data to satisfy these special conditions however; any historical data used to satisfy these conditions must not be more than 5 years old.

E5 Site specific air emission monitoring plan

E5.1 The licensee must develop and submit a Site Specific Air Emission Monitoring Plan to the EPA which supports the comprehensive management of air emission monitoring required by this licence. As a minimum, the Site Specific Air Emission Monitoring Plan must describe in detail the following:
a) monitoring and discharge points;
b) detailed description of the operational measures used for ensuring the representativeness of emission measurements during monitoring including any procedures relating to pre-test planning, setting operating conditions and process data collection and recording;
c) detailed description of sampling methodology and test procedures;
d) description of any deviation from the relevant test methods, including analysis of the likely effect of any deviation on the final sampling and test results;
e) detailed description of quality assurance and quality control procedures used for collecting, verifying and reporting emission test data;
f) responsible personnel and roles;
g) governance/version control, review and updating procedures for the plan; and
h) a detailed methodology and all supporting calculations used to determine the aggregated emission concentration for each pollutant associated with points 3 to 6 as stipulated by conditions L3.4 and L3.5. All calculations must, at a minimum, meet the requirements of TM-38.

E5.2 The Site Specific Air Emission Monitoring Plan required by condition E5.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E6 Continuous emission monitoring systems - quality assurance and control procedures

E6.1 The licensee must develop and submit a CEMS quality assurance (QA) and quality control (QC)

procedure to the EPA which enables the evaluation of the quality of data produced by any CEMS monitoring required by conditions of this licence. As a minimum, the CEMS QA/QC procedure must describe in detail the following:
a) calibration and adjustment measures;
b) preventive maintenance measures (including spare parts inventory);
c) data handling, recording and calculation procedures;
d) processes for evaluating, verifying and reporting monitoring data;
e) accuracy audit measures including sampling and analysis methods;
f) fault identification and corrective action measures; and
g) process for ongoing review and evaluation of the effectiveness of the CEMS QA/QC procedures.

E6.2 The CEMS QA/QC procedure required by condition E6.1 above must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 March 2021.

E7 Air pollution control equipment - maintenance, operation and fault response procedure

E7.1 The licensee must develop and submit an air pollution control equipment - maintenance, operation and fault response procedure to the EPA which ensures that air pollution control equipment is maintained and operated in accordance with conditions O1.1 and O2.1 of this licence. As a minimum, the procedure must describe in detail the following:
a) procedures for routine operations including equipment start-up and shut-down;
b) procedures for routine and non-routine inspections and maintenance;
c) procedures for faults and failure response and emergency situations;
d) spare parts inventory;
e) reporting and training procedures;
f) verification procedures incorporating performance indicators and benchmarks relating to:
i. performance monitoring,
ii. operational efficiency, and
iii. data quality,
g) planning, reporting, record keeping and tracking systems; and
h) process for ongoing review and evaluating air pollution control equipment - maintenance, operation and fault response procedure.

E7.2 The air pollution control equipment - maintenance, operation and fault response procedure must be peer reviewed and endorsed by a suitably qualified air pollution control practitioner, affirming the suitability of the procedure for meeting its objectives.

E7.3 The air pollution control equipment - maintenance, operation and fault response procedure required by condition E7.1 of this licence must be drafted and provided to the EPA at hunter.region@epa.nsw.gov.au for review and approval by 5pm on 31 January 2021.

E8 Continuous particle matter monitoring feasibility study

E8.1 The licensee must prepare and submit a continuous particle matter monitoring feasibility study report which assesses the feasibility of installing and operating a monitoring system capable of measuring particle emissions from each Boiler on a continuous basis. The proposed system must be capable of

being correlated against a gravimetric reference method in accordance with US EPA Performance Specification 11. As a minimum, the study must:
a) be prepared in consultation with a suitably qualified and experienced air monitoring practitioner who has demonstrated experience in the installation and operation of PM-CEMS at large industrial plant;
b) be prepared with reference to information provided in the PM-CEMS guidance document (Chiappalone Consulting, Feasibility of Continuous Particle Monitoring at NSW Coal Fired Power Stations: Guidance Document (September 2019);
c) include a statement about the general feasibility of installing a PM-CEMS;
d) evaluate potential monitoring options based on site specific factors including, but not limited to: i. process and stack conditions,
ii. particle concentration range, and
iii. reliability and life cycle cost,
e) evaluate potential installation locations. As a minimum, feasibility analysis must be undertaken for installing monitors on each flue gas duct on the exit side of each baghouse, at a location capable of achieving a representative PM measurement.

E8.2 Where it is considered generally feasible to install a PM-CEMS, the Report must:
a) include proposed actions for the implementation of PM-CEMS;
b) identify the proposed locations for monitor installations;
c) include proposed timing for the installation of PM-CEMS;
d) include a proposed installation and commissioning plan for the PM-CEMS; and
e) detail procedures for evaluating the performance of the PM-CEMS following installation.

E8.3 Where it is considered not feasible to install a PM-CEMS, the Report must:
a) provide a detailed explanation and robust justification of why installation and operation of PM-CEMS is not feasible; and
b) detail proposed alternative monitoring and reporting options that ensure ongoing representativeness of particle emission monitoring and report at the premises. Alternative options must have suitable temporal resolution to ensure all significant emission variability is accounted for.

E8.4 The continuous particle matter monitoring feasibility study required by conditions E8.1 to E8.3 of this licence must be provided to the EPA at hunter.region@epa.nsw.gov.au by 5pm on 31 March 2021.

Environment Protection Licence

Licence - 1429

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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 - 1429

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 Environmen t 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 mo nths. 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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 1429

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

Mr Grahame Clarke

Environment Protection Authority

(By Delegation)

Date of this edition: 06-June-2000

Environment Protection Licence

Licence - 1429

End Notes

1	Licence varied by notice V/M upgrade, issued on 07-Jul-2000, which came into effect on 07-Jul-2000.
2	Licence transferred through application 140098, approved on 30-Nov-2000, which came into effect on 02-Aug-2000.
3	Licence varied by notice 1003063, issued on 07-Dec-2000, which came into effect on 19-Dec-2000.
4	Licence varied by notice 1007825, issued on 18-Jul-2001, which came into effect on 12-Aug-2001.
5	Licence varied by notice 1016571, issued on 27-Oct-2003, which came into effect on 21-Nov-2003.
6	Licence varied by notice 1042247, issued on 16-Feb-2005, which came into effect on 13-Mar-2005.
7	Licence varied by notice 1053525, issued on 05-Dec-2005, which came into effect on 30-Dec-2005.
8	Licence varied by notice 1066065, issued on 01-Nov-2006, which came into effect on 01-Nov-2006.
9	Licence varied by notice 1067535, issued on 28-Mar-2007, which came into effect on 28-Mar-2007.
10	Licence varied by notice 1079689, issued on 01-Nov-2007, which came into effect on 01-Nov-2007.
11	Licence varied by notice 1080433, issued on 18-Jan-2008, which came into effect on 18-Jan-2008.
12	Licence fee period changed by notice 1082099 approved on .
13	Licence varied by notice 1086281, issued on 09-May-2008, which came into effect on 09-May-2008.
14	Licence varied by notice 1088978, issued on 01-Aug-2008, which came into effect on 01-Aug-2008.
15	Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
16	Licence varied by notice 1093910, issued on 13-Nov-2008, which came into effect on 13-Nov-2008.
17	Licence varied by notice 1096239, issued on 24-Dec-2008, which came into effect on 24-Dec-2008.
18	Licence varied by notice 1098000, issued on 27-Mar-2009, which came into effect on 27-Mar-2009.

Environment Protection Licence

Licence - 1429

19	Licence varied by notice 1102931, issued on 30-Jun-2009, which came into effect on 30-Jun-2009.
20	Licence varied by admin corrections to annual return, issued on 02-Jul-2009, which came into effect on 02-Jul-2009.
21	Licence varied by correction to Annual Return record, issued on 02-Dec-2009, which came into effect on 02-Dec-2009.
22	Licence varied by notice 1117447, issued on 22-Nov-2010, which came into effect on 22-Nov-2010.
23	Licence varied by notice 1128029, issued on 13-Jul-2011, which came into effect on 13-Jul-2011.
24	Licence varied by notice 1502813 issued on 19-Jan-2012
25	Licence varied by notice 1513558 issued on 04-Jul-2013
26	Licence format updated on 11-Nov-2015
27	Licence varied by notice 1544589 issued on 26-Sep-2016
28	Licence varied by notice 1545609 issued on 08-Dec-2016
29	Licence varied by notice 1548389 issued on 17-Jan-2017
30	Licence varied by notice 1549289 issued on 10-Feb-2017
31	Licence varied by notice 1551505 issued on 28-Apr-2017
32	Licence varied by notice 1553512 issued on 18-Oct-2017
33	Licence varied by notice 1557834 issued on 26-Oct-2017
34	Licence format updated on 07-Nov-2017
35	Licence varied by notice 1559767 issued on 22-Dec-2017
36	Licence varied by notice 1561334 issued on 29-Jul-2018
37	Licence varied by notice 1571961 issued on 07-Nov-2018
38	Licence varied by notice 1575161 issued on 17-Jul-2019
39	Licence varied by notice 1589197 issued on 10-Jan-2020
40	Licence varied by notice 1590792 issued on 23-Jul-2020

Environment Protection Licence

Licence - 766

Licence Details	
Number:	766
Anniversary Date:	01-January

Licensee

GREENSPOT WALLERAWANG PTY LTD

PO BOX 945

WINDSOR NSW 2756

Premises

WALLERAWANG POWER STATION

1 MAIN STREET

WALLERAWANG NSW 2845

Scheduled Activity

Crushing, grinding or separating

Electricity generation

Fee Based Activity	Scale
Crushing, grinding or separating	0-30000 T annual processing capacity
Generation of electrical power from coal	0-250 GWh annual generating capacity

Region

Regional South - Bathurst

L102, 346 PANORAMA AVENUE
BATHURST NSW 2795

Phone: (02) 6333 3800

Fax: (02) 6333 3809

PO Box 1388

BATHURST NSW 2795

Environment Protection Licence

Licence - 766

INFORMATION ABOUT THIS LICENCE ---- 4
Dictionary ---- 4
Responsibilities of licensee ---- 4
Variation of licence conditions ---- 4
Duration of licence ---- 4
Licence review ---- 4
Fees and annual return to be sent to the EPA ---- 4
Transfer of licence ---- 5
Public register and access to monitoring data ---- 5
1 ADMINISTRATIVE CONDITIONS ---- 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 ---- 7
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 Waste ---- 8
L3 Noise limits ---- 9
L4 Blasting ---- 12
L5 Hours of operation ---- 12
L6 Potentially offensive odour ---- 13
4 OPERATING CONDITIONS ---- 13
O1 Activities must be carried out in a competent manner ---- 13
O2 Maintenance of plant and equipment ---- 13
O3 Dust ---- 13
O4 Processes and management ---- 14
O5 Other operating conditions ---- 14
5 MONITORING AND RECORDING CONDITIONS ---- 14
M1 Monitoring records ---- 14
M2 Weather monitoring ---- 15
M3 Recording of pollution complaints ---- 15
M4 Telephone complaints line ---- 16
M5 Blasting ---- 16

Environment Protection Licence

Licence - 766

6 REPORTING CONDITIONS ---------- 16

R1 Annual return documents ---------- 16

R2 Notification of environmental harm ---------- 17

R3 Written report ---------- 18

7 GENERAL CONDITIONS ---------- 18

G1 Copy of licence kept at the premises or plant ---------- 18

8 SPECIAL CONDITIONS ---------- 19

E1 Environmental Management Plans ---------- 19

DICTIONARY ---------- 20

General Dictionary ---------- 20

Environment Protection Licence

Licence - 766

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);
- 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 - 766

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:

GREENSPOT WALLERAWANG PTY LTD
PO BOX 945
WINDSOR NSW 2756

subject to the conditions which follow.

Environment Protection Licence

Licence - 766

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
Crushing, grinding or separating	Crushing, grinding or separating	0 - 30000 T annual processing capacity
Electricity generation	Generation of electrical power from coal	0 - 250 GWh annual generating capacity

A1.2 This licence regulates water pollution resulting from the activity/ies specified below carried out at the premises specified in A2.

Fee Based Activity	Scale
Crushing, grinding or separating	0.00-30000.00 T annual processing capacity
Generation of electrical power from coal	0.00-250.00 GWh annual generating capacity

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 C DP 394440, LOT D DP 394440, LOT E DP 394440, LOT 1 DP 443235, LOT 231 DP 622326, LOT 3 DP 778400, LOT 4 DP 778400, LOT 32 DP 827807, PART LOT 5 DP 829137, LOT 4 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, PART LOT 100 DP 1043966, LOT 3 DP 1087684, LOT 4 DP 1087684, PART LOT 171 DP 1131952, LOT 228 DP 1131953, LOT 1 DP 1131955, LOT 2 DP 1131955, LOT 171 DP 1131959, PART LOT 10 DP 1139978, LOT 11 DP 1139978, LOT 1 DP 1181412, LOT 2 DP 1181412, LOT 3 DP 1181412, LOT 1 DP 1196274, LOT 3 DP 1226927, LOT 4 DP 1226927
PREMISES DEFINED IN FIGURE 1 - PROPOSED EPL 766 SPLIT DATED 17 APRIL 2020, FIGURE 2 - PROPOSED EPL 766 SPLIT (ENERGY AUSTRALIA NSW) DATED 17 APRIL 2020 AND FIGURE 3 - PROPOSED EPL SPLIT - CAUSTIC INJECTION PLANT (ENERGY AUSTRALIA NSW) DATED 17 APRIL 2020 RECEIVED BY THE EPA ON 14 MAY 2020 (DOC20/675973)

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
b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

A3.2 Any other document and/or management plan is not to be taken as part of the documentation in condition A4.1, other than those documents and/or management plans specifically referenced in this licence.

2 Discharges to Air and Water and Applications to Land

P1 Location of monitoring/discharge points and areas

P1.1 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.

P1.2 The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.

Noise/Weather

EPA identification no.	Type of monitoring point	Location description

20	Noise monitoring	Noise Catchment Area Monitoring Point NCA1 as identified in Figure 4-1 of Wallerawang Power Station Demolition Statement of Environmental Effects 26 September 2018 (DOC20/4358-4)
21	Noise monitoring	Noise Catchment Area Monitoring Point NCA2 as identified in Figure 4-1 of Wallerawang Power Station Demolition Statement of Environmental Effects 26 September 2018 (DOC20/4358-4)
22	Noise monitoring	Noise Catchment Area Monitoring Point NCA3 as identified in Figure 4-1 of Wallerawang Power Station Demolition Statement of Environmental Effects 26 September 2018 (DOC20/4358-4)
23	Noise monitoring	Noise Catchment Area Monitoring Point NCA4 as identified in Figure 4-1 of Wallerawang Power Station Demolition Statement of Environmental Effects 26 September 2018 (DOC20/4358-4)
24	Meteorological Station	Wallerawang Meteorological Station - location to be determined

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 Waste

L2.1 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.

Code	Waste	Description	Activity	Other Limits
NA	Concrete	Concrete waste generated onsite which complies with the Recovered Aggregate Order and Exemption	Resource recovery Waste storage	Concrete waste must only be disposed of in the voids provided in section 2.2 of the

		under the POEO (Waste) Regulation 2014		Wallerawang Power Station Demolition Statement of Environment Effects 26 September 2018 (DOC20/4358-4)
NA	Asbestos waste	Asbestos waste generated onsite from demolition of Wallerawang Power Station	Waste disposal (application to land)	Quantity of Asbestos waste disposed must not exceed 11,000 cubic metres. Asbestos waste must only be disposed of in accordance with the "Wallerawang Power Station Proposed Asbestos Disposal Area EIS" (DOC20/4358-3).

L2.2 All waste generated during demolition at the premises must be disposed of offsite at a location which can lawfully accept it, unless the waste:

1. is identified in condition L2.1 above; or
2. can be reused or recycled; or
3. satisfies the requirements of a resource recovery order and/or exemption in accordance with the *Protection of the Environment Operations (Waste) Regulation 2014*.

L3 Noise limits

L3.1 Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.

POINT 20

Time period	Measurement parameter	Measurement frequency	Noise level dB(A)
Night	LAmax	-	60
Evening	LAeq (15 minute)	-	50

Night	LAeq (15 minute)	-	50
Day	LAeq (15 minute)	-	58

POINT 21

Time period	Measurement parameter	Measurement frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	70
Evening	LAeq (15 minute)	-	70
Night	LAeq (15 minute)	-	70

POINT 22

Time period	Measurement parameter	Measurement frequency	Noise level dB(A)
Day	LAeq (15 minute)	-	54
Evening	LAeq (15 minute)	-	45
Night	LAeq (15 minute)	-	45
Night	LAmax	-	55

POINT 23

Time period	Measurement parameter	Measurement frequency	Noise level dB(A)
Evening	LAeq (15 minute)	-	38
Night	LAeq (15 minute)	-	38
Night	LAmax	-	48
Day	LAeq (15 minute)	-	55

Note: The above noise limits do not apply at properties where the licensee has a written agreement with the landowner to exceed the noise limits.

L3.2 For the purpose of Condition L3.1:

a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays;

b) Evening is defined as the period from 6pm to 10pm; and
c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays

L3.3 The noise limits set out in condition L3.1 apply under all meteorological conditions except for 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.

L3.4 For the purpose of condition L3.3:

a) Data recorded by the meteorological station identified as EPA Licence Point 24 must be used to determine meteorological conditions; and
b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

L3.5 To determine compliance:

a) with the Leq(15 minute) noise limits in condition L3.1, the noise measurement equipment must be located:

i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
ii) within 30 metres of a dwelling façade, but not closer than 3 metres where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable
iii) within approximately 50 metres of the boundary of a National Park or Nature Reserve.

b) with the LA1(1 minute) noise limits in condition L3.1, the noise measurement equipment must be located within 1 metre of a dwelling façade.

c) with the noise limits in condition L3.1, the noise measurement equipment must be located:

i) at the most affected point at a location where there is no dwelling at the location; or
ii) at the most affected point within an area at a location prescribed by conditions L3.5(a) or L3.5(b).

L3.6 A non-compliance of L3.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:

(a) at a location other than an area prescribed by condition L3.5(a) and L3.5(b); and/or
(b) at a point other than the most affected pouint at a location.

L3.7 For the purposes of determining the noise generated at the premises the modification factors in Fact Sheet C of the Noise Policy for Industry (EPA, 2017) must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

Environment Protection Licence

Licence - 766

L4 Blasting

L4.1 Blasting in or on the premises must only be carried out between 9am and 5pm, Monday to Saturday. Blasting in or on the premises must not take place on Sundays or Public Holidays without the prior approval of the EPA.

L4.2 Blasting at the premises is limited to the following:

a) A maximum of 1 blast per day; and
b) A maximum of 1 blast per week.

L4.3 The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L4.4 The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L4.5 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L4.6 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

Note: 1. The airblast overpressure and groundvibration levels in conditions L4.3 to L4.6 do not apply at noise sensitive locations that are owned by the licensee or subject to a private agreement, relating to airblast overpressure and ground vibration levels, between the licensee and land owner.
2. "Noise sensitive locations" includes buildings used as a residence, hospital, school, child acre centres, places of public worshp and nursing homes. A noise sensitive location includes the land within 30 metres of the building.

L5 Hours of operation

L5.1 Activities at the premises, including trucks entering and leaving, must only be carried out between the hours of 0700 and 1800 Monday to Friday and 0800 to 1300 on Saturdays. No work is permitted on Sundays and public holidays.

L5.2 Activities outside the hours stipulated by condition L5.1 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,

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.

L5.3 All demolition works at the premises must cease when wind speeds are in excess of 39 km per hour as measured at licence point 24.

L5.4 Activities undertaken at the premises which result in impulsive or tonal noise must:

1. be limited to 9:00 am to 1:00 pm, Monday to Saturday and 2:00 pm to 5:00 pm, Monday to Friday;
2. not occur for more than three continuous hours; and
3. include a minimum one-hour respite period.

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.

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.
This includes:
a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

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

O3 Dust

O3.1 All areas in or on the premises must be maintained in a condition that prevents or minimises the emission into the air of air pollutants (which includes dust).

O3.2 Any activity in or on the premises must be carried out by such practicable means as to prevent or minimise the emission into the air of air pollutants (which includes dust).

O3.3 Any plant in or on the premises must be operated by such practicable means as to prevent or minimise the emission into the air or air pollutants (which includes dust).

O3.4 Trucks entering and leaving the premises that are carrying loads of dust generating materials must have their loads covered at all times, except during loading and unloading.

O4 Processes and management

O4.1 All chemicals, fuels and explosives must be handled and stored in a bunded area which complies with the specifications of the relevant Australian Standard and legislative requirements.

O4.2 Contingency and emergency management plans must be developed and implemented for the spill of any chemical and fuel.

O5 Other operating conditions

O5.1 All sensitive receivers within 2 kilometres of the premises must be notified at least 48 hours prior to any blast.

Note: "Sensitive receiver" includes all residences, hospitals, schools, child care centres, place of worship and nursing homes.

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

M2 Weather monitoring

M2.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.

POINT 24

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Wind Direction at 10 metres	AM-2 & AM-4	Degrees	15 minutes	Continuous
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	15 minutes	Continuous
Sigma Theta	AM-2 & AM-4	Degrees	15 minutes	Continuous
Rainfall	AM-4	millimetres	15 minutes	Continuous
Temperature at 10 metres	AM-4	degrees Celsius	15 minutes	Continuous
Relative humidity	AM-4	percent	15 minutes	Continuous

M2.2 Meteorological monitoring required by condition M2.1 above must be undertaken within one month of the commencement of demolition activities at the premises.

M3 Recording of pollution complaints

M3.1 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.

M3.2 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.

M3.3 The record must be produced to any authorised officer of the EPA who asks to see them.

M3.4 The record of a complaint must be kept for at least 4 years after the complaint was made.

M4 Telephone complaints line

M4.1 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.

M4.2 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.

M4.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

M5 Blasting

M5.1 To determine compliance with conditions L4.3, L4.4, L4.5 and L4.6:

a) Airblast overpressure and ground vibration levels must be measured and electronically recorded at the nearest noise sensitive receiver for the parameters specified in Column 1 of the table below; and

b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.

Parameter	Units of Measure	Frequency	Sampling Method
Airblast Overpressure	Decibels (Linear peak)	All blasts	Australian Standard AS2187.2-2006
Ground Velocity	Millimetres/second	All blasts	Australian Standard AS2187.2-2006

M5.2 "Noise sensitive receiver" includes all residences, hospitals, schools, child care centres, place of worship and nursing homes.

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:

1. a Statement of Compliance,
2. a Monitoring and Complaints Summary,
3. a Statement of Compliance - Licence Conditions,
4. a Statement of Compliance - Load based Fee,
5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee notification that the Annual Return is due.

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.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or 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 Statements 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.

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.

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 Special Conditions

Environment Protection Licence

E1 Environmental Management Plans

E1.1 The following management plans must be submitted to the EPA three-months prior to the commencement of demolition activities at the premises:

- Air quality;
- Noise and Vibration, which includes a blast management strategy;
- Soil and water;
- Waste; and
- Contaminated Land.

Environment Protection Licence

Licence - 766

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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.
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 - 766

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 Environmen t 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 mo nths. 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 *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales*.

Environment Protection Licence

Licence - 766

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

Mr Jim Clarence

Environment Protection Authority

(By Delegation)

Date of this edition: 29-September-2000

Environment Protection Licence

Licence - 766

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.

Environment Protection Licence

Licence - 766

18	Licence varied by notice 1112729, issued on 20-Apr-2010, which came into effect on 20-Apr-2010.
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
28	Licence varied by notice 1512499 issued on 23-Apr-2013
29	Licence transferred through application 1516747 approved on 29-Aug-2013 , which came into effect on 02-Sep-2013
30	Licence varied by notice 1518490 issued on 10-Jan-2014
31	Licence format updated on 09-Jan-2015
32	Licence varied by notice 1529425 issued on 19-Jun-2015
33	Licence varied by notice 1535746 issued on 04-Jan-2016
34	Licence format updated on 11-Jan-2016
35	Licence varied by notice 1543079 issued on 20-Dec-2016
36	Licence varied by notice 1556434 issued on 20-Dec-2017
37	Licence varied by notice 1571323 issued on 07-May-2020
38	Licence varied by notice 1594696 issued on 07-May-2020
39	Licence varied by notice 1599272 issued on 14-Sep-2020
40	Licence transferred through application 1600340 approved on 14-Sep-2020 , which came into effect on 15-Sep-2020