

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

Contact Us
NSW EPA
6 Parramatta Square
10 Darcy Street
PARRAMATTA NSW 2150
Phone: 131 555
Email: info@epa.nsw.gov.au
Locked Bag 5022
PARRAMATTA NSW 2124



Licence - 2122

INF	ORMATION ABOUT THIS LICENCE	2
Dio	ctionary	
Re	esponsibilities of licensee	
	· riation of licence conditions	
Du	ıration of licence	
Lic	cence review	
Fe	es and annual return to be sent to the EPA	
Tra	ansfer of licence	Ę
Pu	ıblic register and access to monitoring data	{
1	ADMINISTRATIVE CONDITIONS	6
A1	What the licence authorises and regulates	{
A2		
A3		
A4		
2	DISCHARGES TO AIR AND WATER AND APPLICATIONS TO LAND	
P1	Location of monitoring/discharge points and areas	7
3	LIMIT CONDITIONS	8
L1	Pollution of waters	{
L2		
L3		{
L4		
L5		4-
4	•	12
01	Activities must be carried out in a competent manner	1.
02		
03		
04		
05		
06		
07	•	
5	MONITORING AND RECORDING CONDITIONS	
M1	1 Monitoring records	14
M2	-	
МЗ		
M4		



Licenc	pe - 2122	
M5	Weather monitoring	46
M6	Recording of pollution complaints	17
M7	Telephone complaints line	17
M8	Requirement to monitor volume or mass	18
М9	Noise monitoring	18
6	REPORTING CONDITIONS	18
R1	Annual return documents	48
R2	Notification of environmental harm	49
R3	Written report	2 0
R4	Other reporting conditions	20
7	GENERAL CONDITIONS	21
G1	Copy of licence kept at the premises or plant	2 1
G2	Contact number for incidents and responsible employees	2-1
G3	Signage	2 1
G4	Other general conditions	2-1
8	POLLUTION STUDIES AND REDUCTION PROGRAMS	23
U1	PRS 20 - Coal ash repository water sampling program and characterisation	2 3
DICT	IONARY	25
Gen	neral Dictionary	25
	•	



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).



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.



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".

A3 Other activities

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



Licence - 2122

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
- 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.

F	١	I	r

EPA identi- fication no.	Type of Monitoring Point	Type of Discharge Point	Location Description
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.



Licence - 2122

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 Identi- fication 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)	



Licence - 2122

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 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
рН	рН				6.5-9.0

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.



Licence - 2122

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, mulch, pasteurised garden organics and paper crumble as defined by and meeting the requirements of the respective Compost; Manure; Mulch; Pasteurised Garden Organics; and, AMCOR Botany Mill Solids 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, in accordance with the criteria set out in the	As defined by and meeting the requirements of the Biosolids Order and Exemption, as in-force	Waste storage As specified in each particular resource recovery exemption Capping of Ash Dam	See condition O6.2



Licence - 2122

	biosolids guidelines	from time to time		
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 L4.1 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;
 - I) 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.

4 Operating Conditions



Licence - 2122

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.



Licence - 2122

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 Chapter 4 of the Protection of the Environment Operations (General) Regulation 2022.

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

Onsite sewage treatment system

- O7.1 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.
- O7.2 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.
- O7.3 In relation to condition O7.2 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

O7.4 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:



Licence - 2122

- 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.
- O7.5 For the purpose of condition O7.4 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.
- O7.6 For the purposes of condition O7.4 and O7.5 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 Water and/ or Land Monitoring Requirements

POINT 16,17

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



Licence - 2122

L 1 L L			
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
рН	рН	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



Licence - 2122

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
рН	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 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 4 of the *Protection of the Environment Operations (General) Regulation 2022* 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



Licence - 2122

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	°C	Continuous	15 minutes	AM-4
Wind direction at 10m	0	Continuous	15 minutes	AM-2 & AM-4
Temperature at 10m	°C	Continuous	15 minutes	AM-4
Sigma theta at 10m	0	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 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.



Licence - 2122

- 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



Licence - 2122

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.

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.



Licence - 2122

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

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 info@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



Licence - 2122

g) the actions taken and/or future actions to be taken, to prevent exceedances of a similar nature occurring in the future.

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.

G4 Other general conditions

G4.1 Completed Programs

Program Description Completed Date



Licence - 2122

- 2122		
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



Licence - 2122

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
PRS 17 - Alarm review	Review of the management of key alarms for hydrocarbon and chemical storage to identify and implement alternate technologies to enable remote monitoring that will minimise the potential and scale of incidents.	01-March-2021
PRS 18 - Liddell water management system review	Identified recommendations for the construction or water management measures or changes to the management of water management infrastructure to minimise potential impacts.	01-September-2020
PRS 19 - Asset environmental management review	Identification an implementation of mitigation measures to minimise potential environmental impacts resulting from asset strategy, physical condition assessment and maintenance delivery.	23-December-2021
EIP 21 - Alarm Upgrade Works	Upgrade works to introduce a secondary real time alarm monitoring system across the key hydrocarbon and chemical storage assets at the Premises.	31-March-2023

8 Pollution Studies and Reduction Programs

U1 PRS 20 - Coal ash repository water sampling program and characterisation

- U1.1 By **28 February 2022**, the licensee must prepare, and submit to the EPA, a Coal Ash Repository Water Sampling Program (Program) aimed at characterising surface and groundwater (including seepage) discharges associated with coal ash repositories (including ash dams and open cut mine voids) at the Premises. The Program must:
 - (a) be prepared by a suitably qualified and experienced person/s in consultation with the EPA;
 - (b) be informed by contemporary information and data regarding the pollutants potentially present in coal ash dam water;
 - (c) be consistent with the *Approved methods for the sampling and analysis of water pollutants in New South Wales* (EPA, 2021);
 - (d) include a site map that clearly identifies the following:
 - (i) all relevant components of the coal ash water management system (e.g. ash dam cells, decant ponds, return water ponds, seepage collection system);
 - (ii) groundwater bores and piezometers;
 - (iii) all discharge points and flow paths to receiving waters, and
 - (iv) all proposed sampling locations.
 - (e) set out the proposed sampling program, that includes:



Licence - 2122

- (i) sampling of (as relevant):
- controlled discharges
- managed overflows
- surface water storages related to coal ash management (e.g. ash dam cells, decant ponds)
- seepage water (e.g. seepage collection ponds, surface expressions)
- any groundwater bores or piezometers screened within or adjacent to the coal ash repository
- (ii) the sampling conditions/frequency and the duration of the sampling program, including rationale and justification for the proposed sampling frequencies and duration of the program; and (iii) the analytical suite including all pollutants present at non-trivial levels, based on any existing monitoring data and a risk assessment of the range of potential pollutants that could be present.

The Program must be provided to the EPA via email to: info@epa.nsw.gov.au.

Note: The licensee has provided the Program to the EPA, satisfying the requirements of this condition.

- U1.2 The licensee must implement the Coal Ash Repository Water Sampling Program detailed in the report titled "Liddell Ash Dam Water Monitoring Program", prepared by AECOM Australia Pty Ltd, dated 11 May 2022 (EPA reference DOC22/387344).
- U1.3 By 30 November 2023, the licensee must prepare, and provide to the EPA, a Coal Ash Repository Water Characterisation Report (Water Characterisation Report) that details the findings of the Coal Ash Repository Water Sampling Program required under PRS 20. The Water Characterisation Report must:
 - (i) be prepared by a suitably qualified and experienced person/s and in consultation with the EPA;
 - (ii) include all sampling results and summary statistics;
 - (iii) include, as a separate electronic attachment, an Excel spreadsheet file of all results. This file must provide results in long format, with sampling dates as row labels and analytes as column labels;
 - (iv) screen sampling results for pollutants of concern with reference to relevant guidelines including the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, 2018). (Where no ANZG [2018] guideline value exists, relevant benchmark values from other sources, including other guidelines, scientific literature and grey literature, should be used);
 - (v) identify all potential pollutants of concern present in the ash water.

The Water Characterisation Report must be provided to the EPA by email to info@epa.nsw.gov.au.



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

Means the Protection of the Environment Operations Act 1997 Act

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

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 Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

(non-putrescible)



Licence - 2122

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 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.	
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997	
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997	
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997	

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.

TM



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	
Wellhead	Has the same meaning as in Schedule 1 to the Protection of the Environment Operations (General) Regulation 2021.	

Mr Bernie Weir

Environment Protection Authority

(By Delegation)

Date of this edition: 26-April-2000



Licence - 2122

End I	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=""></effective></issue>				
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				
21	Licence varied by notice 1590324 issued on 06-Feb-2020				



Licence - 2122

22	Licence varied by notice	1591555 issued on 23-Jul-2020
23	Licence varied by notice	1614215 issued on 11-Nov-2021
24	Licence varied by notice	1614631 issued on 15-Dec-2021
25	Licence varied by notice	1616140 issued on 24-Jan-2022
26	Licence varied by notice	1618673 issued on 04-May-2022
27	Licence varied by notice	1619947 issued on 27-Jun-2022
28	Licence varied by notice	1624541 issued on 15-Dec-2022
29	Licence varied by notice	1625332 issued on 16-Dec-2022
30	Licence varied by notice	1628472 issued on 23-May-2023