



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
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	



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Information about this licence

Dictionary

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

Responsibilities of licensee

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

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

Variation of licence conditions

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

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

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

Duration of licence

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

Licence review

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

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

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



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The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

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

Transfer of licence

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

Public register and access to monitoring data

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

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

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

This licence is issued to:

AGL MACQUARIE PTY LIMITED
PRIVATE MAIL BAG 2
MUSWELLBROOK NSW 2333

subject to the conditions which follow.



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1 Administrative Conditions

A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

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

Scheduled Activity	Fee Based Activity	Scale
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 MARKED AND SHOWN AS "BAYSWATER EPL" ON THE PLAN TITLED "BAYSWATER EPL", PAGES 1 AND 2, PREPARED BY CHELACE GIS PTY. LTD., VERSION 06, DATED 14/12/2022 (EPA REFERENCE DOC22/1112853).

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:



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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 identi- fication 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 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

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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.

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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
25	Discharge to waters Discharge quality monitoring	Discharge to waters Discharge quality monitoring	Discharge to Lake Liddell of water piped from the Bayswater Ash Dam, to maintain a safe operating level in the Bayswater Ash Dam, marked and shown as EPL Monitors ID No. 25 on The Plans
26	Volume monitoring		Monitoring of the volume of water transferred from the Bayswater Ash Dam via pipeline to Lake Liddell, to maintain a safe operating level in the Bayswater Ash Dam, marked and shown as EPL Monitors ID No. 26 on The Plans
27	Groundwater monitoring		Groundwater bore marked and shown as "BQ-MW10" on the "Groundwater Monitoring Network Plan".

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28	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW13" on the "Groundwater Monitoring Network Plan".
29	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW14" on the "Groundwater Monitoring Network Plan".
30	Groundwater monitoring	Groundwater bore marked and shown as "BQ-EW-MW01" on the "Groundwater Monitoring Network Plan".
31	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW08" on the "Groundwater Monitoring Network Plan".
32	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW11" on the "Groundwater Monitoring Network Plan".
33	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW04" on the "Groundwater Monitoring Network Plan".
34	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW07" on the "Groundwater Monitoring Network Plan".
35	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW03" on the "Groundwater Monitoring Network Plan".
36	Groundwater monitoring	Groundwater bore marked and shown as "BQ-MW01" on the "Groundwater Monitoring Network Plan".
37	Groundwater monitoring	Groundwater bore marked and shown as "BA-MW03" on the "Groundwater Monitoring Network Plan".
38	Groundwater monitoring	Groundwater bore marked and shown as "B_51_ESMW01" located at Easting 307437.7, Northing 6413131.9, MGA Zone 56.

P1.3 For the purpose of the above condition, the "Groundwater Monitoring Network Plan" refers to "Figure F2 - Groundwater Monitoring Network" in Appendix A of the "Bayswater Ash Dam - Groundwater Monitoring Plan", prepared by AECOM Australia Pty Ltd, dated 30 November 2022 (EPA reference DOC22/1148425).

3 Limit Conditions

L1 Pollution of waters



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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.

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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% O ₂	1 hour
Chlorine	milligrams per cubic metre	20	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Fluorine	milligrams per cubic metre	30	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Hydrogen chloride	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Mercury	milligrams per cubic metre	0.05	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Nitrogen Oxides	milligrams per cubic metre	1500	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Solid Particles	milligrams per cubic metre	50	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Sulfuric acid mist and sulfur trioxide (as SO ₃)	milligrams per cubic metre	100	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Sulfur dioxide	milligrams per cubic metre	1700	Dry, 273K, 101.3kPA	7% O ₂	1 hour
Type 1 and Type 2 substances in aggregate	milligrams per cubic metre	0.75	Dry, 273K, 101.3kPA	7% O ₂	1 hour
volatile organic compounds as n-propane equivalent	milligrams per cubic metre	10	Dry, 273K, 101.3kPA	7% O ₂	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 (NO₂) or both, as NO₂ equivalent; and
- b) Fluorine means: fluorine and any compound containing fluorine, as total fluoride (HF equivalent).

L3.7 During the calibration, commissioning and testing of the Particulate Matter Continuous Emission Monitoring System (PM-CEMS) on Unit 1, Unit 2 and Unit 3, undertaken in accordance with condition E4, the licensed concentration limit for solid particles in the table under condition L3.4 does not apply to Point 3, Point 4 and



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Point 5 respectively; however, the solid particles concentration at Point 3, Point 4 and Point 5 must not exceed the standards of concentration provided in the Protection of the Environment Operations (Clean Air) Regulation 2022.

Note: For the purpose of determining compliance with the solid particulate's concentration limit applying to Points 3, 4 and 5 under condition L3.4 during the trial of the PM-CEMS, monitoring is to be undertaken in accordance with section M2.

L3.8 Water and/or Land Concentration Limits

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



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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

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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 Liddell Power Station	Sewage Treatment	Only permitted 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, 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 O5.2
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 O5.2

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	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 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 L5.1 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:
- ash
 - acid solutions or acids in solid form;
 - ash line poly pipe;
 - boiler cleaning residues;
 - coal fines from coal settling basins and plant and conveyor wash down;
 - cooling tower sediments;
 - demineralisation resins;
 - filter bags;
 - gypsum;
 - lime;
 - organic matter from the freshwater canal collected during filtration;
 - sediment basin clays;
 - treated sewage effluent;
 - water treatment residual chemicals;
 - any material approved in writing by the EPA to control dust emission from the ash dam; and
 - 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.

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L7 Other limit conditions

Exemption when complying with directions under National Electricity Rules

- L7.1 Air impurity exceedances due to compliance with an AEMO direction in accordance with section 74 of the Protection of the Environment Operations (Clean Air) Regulation 2022 do not count towards the accumulated hours for the purpose of calculating compliance with condition L3.5.

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.

- O2.2 The licensee must operate, and undertake ongoing maintenance and calibration, of the PM-CEMS installed on the Premises in accordance with the licensee's current 'Continuous Emissions Monitoring Systems - Quality Assurance and Control Procedures'.

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 4 of the Protection of the Environment Operations (General) Regulation 2021.

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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

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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 times per reporting period and serviced as required.
- O6.7 In relation to condition O6.6 above, the licensee must record the following:
- details of each inspection undertaken (date, time and personnel);
 - the results of any tests performed on the wastewater management system;
 - the finding and any actions required following each inspection; and
 - 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:
- any relevant Australian Standards for the liquids being stored;
 - within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund;
 - 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:
- in a legible form, or in a form that can readily be reduced to a legible form;
 - kept for at least 4 years after the monitoring or event to which they relate took place; and
 - produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- the date(s) on which the sample was taken;
 - the time(s) at which the sample was collected;
 - the point at which the sample was taken; and
 - the name of the person who collected the sample.



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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 6

Pollutant	Units of measure	Frequency	Sampling Method
Solid Particles	milligrams per cubic metre	Continuous	Special Method 2

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

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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 SO ₃)	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 (O ₂)	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 of this licence:

- 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;



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- 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, 'Special Method 2' means the PM-CEMS instrumentation and methods as detailed in the report "Summary of PM-CEMS Correlation Testing for Bayswater Power Station Unit 4" prepared by HRL Technology Group Pty Ltd and dated 9 May 2023 (EPA ref. DOC23/404503).
- M2.5 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 June 2024.
- 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 2024.
- M2.6 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.
- M2.7 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 21,25



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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	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

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Silver	milligrams per litre	Weekly during any discharge	Grab sample
Total suspended solids	milligrams per litre	Monthly during discharge	Grab sample

POINT 27,28,29,30,31,32,33,34,35,36,37,38

Pollutant	Units of measure	Frequency	Sampling Method
Aluminium	milligrams per litre	Quarterly	Grab sample
Ammonia	milligrams per litre	Quarterly	Grab sample
Antimony	milligrams per litre	Quarterly	Grab sample
Arsenic (III)	milligrams per litre	Quarterly	Grab sample
Arsenic (V)	milligrams per litre	Quarterly	Grab sample
Barium	milligrams per litre	Quarterly	Grab sample
Beryllium	milligrams per litre	Quarterly	Grab sample
Boron	milligrams per litre	Quarterly	Grab sample
Cadmium	milligrams per litre	Quarterly	Grab sample
Calcium	milligrams per litre	Quarterly	Grab sample
Chloride	milligrams per litre	Quarterly	Grab sample
Chromium (trivalent)	milligrams per litre	Quarterly	Grab sample
Chromium (VI)	milligrams per litre	Quarterly	Grab sample
Compounds			
Cobalt	milligrams per litre	Quarterly	Grab sample
Copper	milligrams per litre	Quarterly	Grab sample
Electrical conductivity	microsiemens per centimetre	Quarterly	Grab sample
Iron	milligrams per litre	Quarterly	Grab sample
Lead	milligrams per litre	Quarterly	Grab sample
Lithium	milligrams per litre	Quarterly	Grab sample
Magnesium	milligrams per litre	Quarterly	Grab sample
Manganese	milligrams per litre	Quarterly	Grab sample
Mercury	milligrams per litre	Quarterly	Grab sample
Molybdenum	milligrams per litre	Quarterly	Grab sample
Nickel	milligrams per litre	Quarterly	Grab sample
Nitrate	milligrams per litre	Quarterly	Grab sample
Nitrate + nitrite (oxidised nitrogen)	milligrams per litre	Quarterly	Grab sample
Nitrite	milligrams per litre	Quarterly	Grab sample
Nitrogen (total)	milligrams per litre	Quarterly	Grab sample
pH	pH	Quarterly	Grab sample
Phosphorus (dissolved reactive)	milligrams per litre	Quarterly	Grab sample
Phosphorus (total)	milligrams per litre	Quarterly	Grab sample
Potassium	milligrams per litre	Quarterly	Grab sample
Selenium	milligrams per litre	Quarterly	Grab sample
Silver	milligrams per litre	Quarterly	Grab sample
Sodium	milligrams per litre	Quarterly	Grab sample
Strontium (dissolved)	milligrams per litre	Quarterly	Grab sample

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Sulfate	milligrams per litre	Quarterly	Grab sample
Thallium	milligrams per litre	Quarterly	Grab sample
Titanium	milligrams per litre	Quarterly	Grab sample
Total alkalinity	milligrams of calcium carbonate per litre	Quarterly	Grab sample
Total dissolved solids	milligrams per litre	Quarterly	Grab sample
Total Hardness	milligrams of calcium carbonate per litre	Quarterly	Grab sample
Total Kjeldahl Nitrogen	milligrams per litre	Quarterly	Grab sample
Vanadium	milligrams per litre	Quarterly	Grab sample
Zinc	milligrams per litre	Quarterly	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:

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

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2022* 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 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 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



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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	°C	Continuous	15 minutes	AM-4
Temperature at 10m	°C	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



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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

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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

POINT 26

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

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.

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6 Reporting Conditions

R1 Annual return documents

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

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

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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 they became aware of the incident.

R3 Written report

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- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
- a) where this licence applies to premises, an event has occurred at the premises; or
 - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,
- and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
- a) the cause, time and duration of the event;
 - b) the type, volume and concentration of every pollutant discharged as a result of the event;
 - c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
 - d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
 - e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
 - f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
 - g) any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

R4 Other reporting conditions

- R4.1 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
 - 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 info@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

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contained in this condition once the delay is identified and specify the date when the stack testing is to be undertaken.

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 info@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.

Annual Groundwater Monitoring Report

- R4.5 By 30 September 2024, and then annually by 30 September each year thereafter, the licensee must provide an Annual Groundwater Monitoring Report. The Annual Groundwater Monitoring Report must include:

- i) the details and results of the groundwater monitoring required under section M2 of the licence for the previous reporting period;
- ii) spatial and temporal analysis of the trends of the groundwater monitoring results, with consideration of relevant environmental assessment criteria and any site specific environmental assessment criteria having regard to baseline data and regional elevations; and
- iii) actions taken or proposed to be taken to address any identified adverse trends.

The Annual Groundwater Monitoring Report must be provided by email to info@epa.nsw.gov.au.

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

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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

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

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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
PRP 16 - Stormwater Pipeline Program	The Stormwater Pipeline Program is proposed to upgrade/repair stormwater system. This will include replacement of sections and re-lining of sections. This program also links into investigations and improvements to address water balance issues, such as reducing inputs to the Bayswater Ash Dam.	30-March-2021
EIP 17 - Lake Liddell Seepage Water Improvement Works	The licensee is to construct a new seepage return station and associated works to capture the seepage water from Lake Liddell dam wall and return water to the dam.	31-May-2021
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
EIP 19 - Oil cooler upgrade	Upgrade to the oil coolers servicing Units 1-4 at the premises, to prevent oil from the oil coolers entering the cooling water systems and potentially polluting waters.	23-December-2020
PRS 20 - 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 21 - Bayswater water management system review	Identify 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 22 - Asset environmental management review	Identification and implementation of mitigation measures to minimise potential environmental impacts resulting from asset strategy, physical condition assessment and maintenance delivery.	23-December-2021

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PRS 23 - Bayswater Ash Dam Seepage South Investigation	Identification and assessment of any down gradient impacts from seepage from the Bayswater Ash Dam, and recommendation of any addition water management measures to minimise potential impacts	31-March-2021
PRS 24 - Coal handling plant water management feasibility study	Review and optimise water management related to improvements for the coal handling plant (CHP), to identify options to reduce the risk of coal fines discharging from the CHP to Tinkers Creek.	01-March-2021
EIP 25 - Antiene coal unloader - water system flow improvement	Implementation of improvement works to prevent and minimise the discharge of coal fines from the Antiene Coal Unloader to Maidswater Creek and therefore reducing the risk of polluting waters.	01-February-2021
PRS 28 - Bayswater Ash Dam Groundwater Monitoring Network	Preparation of a proposed groundwater monitoring program for the Bayswater Ash Dam.	23-December-2022
EIP 29 - 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 PRP 15 - Ravensworth Ash Line Containment Program

- U1.1 By 31 October 2023, 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 info@epa.nsw.gov.au.

U2 PRS 26 - Coal ash repository water sampling program and characterisation

- U2.1 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

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- (iv) all proposed sampling locations.
- (e) set out the proposed sampling program, that includes:
 - (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.

U2.2 The licensee must implement the Coal Ash Repository Water Sampling Program detailed in the report titled "Bayswater Ash Dam and Ravensworth Void North Watering Monitoring Program", prepared by AECOM Australia Pty Ltd, dated 13 May 2022 (EPA reference DOC22/387344).

U2.3 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 26. 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 in the ash water.

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

U3 EIP 30 - Coal Handling Plant Improvement Works Program

U3.1 The licensee must undertake upgrade works to optimise the operation of the Coal Handling Plant launder system as outlined in the licensee's report to submitted to the EPA on 1 March 2021 under PRS 24 - Coal Handling Plant Water Management Feasibility Study (EPA reference DOC21/148220) as clarified by the licensee's letter to the EPA dated 8 June 2023 (EPA reference DOC23/507906) on all remaining operational coal conveyers servicing the Coal Handling Plant which have a launder system installed.

Following the completion of the upgrade works, the licensee must:

- (i) monitor water use of the upgraded launder system to ensure that there has been a reduction in flows to the

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Coal Handling Basin, and therefore Tinkers Creek; and
 (ii) undertake routine surface water monitoring to characterise the quality of water discharged from the Coal Handling Basin to Tinkers Creek,
 for the purpose of evaluating the environmental benefits of the upgrade works.

- U3.2 By 31 August 2023, the licensee must provide a report to the EPA (Coal Handling Plant Water Improvement Works Program Report) that details:
- (i) the upgrade works undertake, and the date/s of completion;
 - (ii) a summary of the monitoring required above;
 - (iii) an evaluation of the environmental benefits of the upgrade works and whether further works are recommended.
- The Coal Handling Plant Improvement Works Program Report must be provided to the EPA by email to info@epa.nsw.gov.au.

U4 PRP 31 - Lake Liddell Seepage Collection and Return System Review

- U4.1 By 30 June 2023, the licensee must undertake an assessment of the Lake Liddell Seepage Collection and Return System installed at the premises in accordance with EIP 17 (Lake Liddell Seepage Collection and Return System Assessment). The Lake Liddell Seepage Collection and Return System Assessment must:
- (a) review whether the Lake Liddell Seepage Collection and Return System is adequately sized to collect all surface seepage from Lake Liddell to Bayswater Creek under current and proposed operations; and
 - (b) review whether any upgrades are required to the Lake Liddell Seepage Collection and Return System to provide additional reasonable and feasible failsafe measures to prevent saline surface seepage water from Lake Liddell discharging to Bayswater Creek.
- U4.2 By 30 June 2023, the licensee must provide a report to the EPA detailing the Lake Liddell Seepage Collection and Return System Assessment, its findings and any recommendations (Lake Liddell Seepage Collection and Return System Report). The Lake Liddell Seepage Collection and Return System Report must be provided by email to info@epa.nsw.gov.au.

Note: The licensee has completed an assessment and provided the report as required by the above PRP 31 conditions. The EPA is assessing this information for adequacy and to identify if further investigations are required.

U5 PRP 32 - Investigation of High Salinity Water in the Lake Liddell Seepage Collection and Return System

- U5.1 By 29 February 2024, the licensee must investigate and report on the source/s contributing to highly saline seepage water (with an electrical conductivity notably greater than Lake Liddell) collected in the Lake Liddell Seepage Collection and Return System. The report detailing the investigation, its findings and any recommendations must be provided to the EPA by email to info@epa.nsw.gov.au.

U6 PRS 33 - Liquid Chemicals and Hazardous Materials Storage Assessment

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- U6.1 By 31 March 2024, the licensee must undertake an assessment of all liquid chemical and hazardous material storages across Bayswater Power Station and identify any further reasonable and feasible works towards bringing the bunding into compliance with the standards specified in conditions O6.8 and O6.9 (Liquid Chemicals and Hazardous Materials Storage Assessment).
- U6.2 By 31 May 2024, the licensee must provide a report to the EPA detailing the findings of the Liquid Chemicals and Hazardous Materials Storage Assessment. The report must include recommendations, a risk rating of storage assessments to prioritise works, and proposed timing for further reasonable and feasible works (Liquid Chemicals and Hazardous Materials Storage Assessment Report). The Liquid Chemicals and Hazardous Materials Storage Assessment Report must be provided by email to info@epa.nsw.gov.au.

U7 PRP 34 - Contaminated Water Holding Pond

- U7.1 The licensee must carry out the following rectification works on the Bayswater Contaminated Water Holding Pond:
- a) upgrade of the broken section of the Contaminated Water Holding Pond Pipeline by 31 August 2023;
 - b) installation of a flowback valve at the inlet of the upgraded pipeline servicing the Contaminated Water Holding Pond by 30 September 2023;
 - c) verification of the performance of the pumps and the pipeline by 31 November 2023; and
 - d) removing the material built-up in the bottom of the Bayswater Contaminated Water Holding Pond and classifying and disposing of it to an appropriately licenced offsite waste facility by 30 March 2024.
- U7.2 By 30 April 2024, the licensee must notify the EPA in writing of the completion of the rectification works on the Bayswater Contaminated Water Holding Pond (required in the above condition). The notification must be provided by email to info@epa.nsw.gov.au.

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

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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 Ongoing Bayswater Ash Dam Seepage South Monitoring Program

- E2.1 The licensee must implement the recommendations of the "Bayswater Power Station - Ash Dam Seepage South: South Seepage - Geophysical and Water Sampling Investigation", prepared by Jacobs Group (Australia) Pty Limited, dated 26 March 2021 (EPA ref. DOC21/248710) in respect of further and ongoing surface and groundwater monitoring to assess the long-term impacts of seepage and monitor potential increases in concentrations of chemicals of potential concern and electrical conductivity (Ongoing Bayswater Ash Dam South Seepage Monitoring Program).
- E2.2 By 30 September 2024, and by 30 September every subsequent two years, the licensee must submit a report detailing and discussing the findings of the Ongoing Bayswater Ash Dam Seepage Monitoring Program. The report must detail actions recommended to address any identified issues or adverse trends. The report must be provided to the EPA by email to info@epa.nsw.gov.au.

E3 Bayswater Ash Dam Seepage Control Program

- E3.1 The licensee must prepare the Bayswater Ash Dam (BWAD) Seepage Control Program. The BWAD Seepage Control Program must be prepared by a suitably qualified and experienced hydrogeologist and detail a phased approach to adequately assess, capture and reduce uncontrolled discharges from the BWAD to groundwaters and associated surface expressions with the initial deliverables being as required by conditions E3.2 and E3.3.

The BWAD Seepage Control Program must include strategies that:

- a) Investigates, determines and establishes seepage management options, including:
 - i. any practicable interim strategies;
 - ii. treatment options for collected seepage prior to discharge to prevent the pollution of waters; and/or
 - iii. the collection and return of seepage to the confines of the BWAD.
- b) adopts and implements passive or active containment measures (for example, through lining improvements or interception bores).

The BWAD Seepage Control Program should not be limited to the south seepage expression but should also include improvements to the northern saddle wall and existing seepage management at the main embankment. The BWAD Seepage Control Program should account for current and potential future operations of the BWAD.

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- E3.2 By 31 August 2023, the licensee must prepare, and submit to the EPA, a BWAD Seepage Investigation Program (Investigation Program) that aims to characterise the quantity and quality of seepage coming from the BWAD on the eastern, southern and northern sides to address known knowledge gaps. The Investigation Program must outline the various phases and timings of works, including but not limited to: desktop reviews; drilling and site investigation (monitoring); and modelling and seepage control design work.

Note: Upon delivery and review of the Investigation Program, it is the EPA's intention to vary condition E3 to require the completion of the various phases of work in general accordance with the Investigation Program, including the delivery of the remaining stages of the BWAD Seepage Control Program.

- E3.3 By 30 September 2023, the licensee must prepare, and submit to the EPA, an Interim BWAD Seepage Control Program that details interim seepage mitigation and management measures that can be implemented in the short-term whilst the BWAD Seepage Investigation Program and BWAD Seepage Control Program are being completed.
- E3.4 The reports, documents and/or records required in Condition E3 must be provided to the EPA, in writing, by email to info@epa.nsw.gov.au.

E4 PM-CEMS Trial

- E4.1 The licensee must install, calibrate, commission and test Particulate Matter Continuous Emissions Monitoring Systems (PM-CEMS) on Unit 1, Unit 2 and Unit 3 to trial the continuous monitoring of solid particle emissions to air (PM-CEMS Trial), similar to that completed for Unit 4.

The PM-CEMS Trial must:

- a) test and attempt a correlation with US EPA Performance Specification 11 (PS-11); and
- b) be undertaken generally in accordance with the testing plan methods as detailed in the licensee's letter to the EPA dated 23 December 2022 (EPA ref. DOC22/1149725); the HRL Memo titled "Proposed PM-CEMS Implementation Approach" dated 5 October 2022 (EPA ref. DOC22/1149725-2); and, the "Bayswater PS Unit 4 PM CEMS Correlation Testing Risk Mitigation Plan" prepared by HRL, dated 8 November 2022 attached to the licensee's email to the EPA dated 4 January 2023 (EPA ref. DOC22/1149725-3)
- c) be undertaken generally in accordance with the installation and correlation schedule provided in the licensee's letter titled "Environment Protection Licence 779 - PM-CEMS" dated 23 June 2023 (EPA ref. DOC23/552349) as follows (or as approved in writing by the EPA):
 - i. Unit 1 - Installation December 2023; Correlation March 2024.
 - ii. Unit 2 - Installation December 2024; Correlation January 2025.
 - iii. Unit 3 - Installation August 2024; Correlation September 2024.

- E4.2 By no later than 2 months after the completion of each Units PM-CEMS correlation as required by the above condition, the licensee must prepare and provide to the EPA a report that details the PM-CEMS Trial required in the above condition (PM-CEMS Trial Reports) i.e. provision of three reports, one for each Unit. The PM-CEMS Trial Reports must provide an overview of the PM-CEMS installed, their location, the performance and correlation testing with PS-11 and findings, along with any recommendations. The PM-CEMS Trial Reports must be provided by email to info@epa.nsw.gov.au.



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Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

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flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .



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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 Grahame Clarke

Environment Protection Authority

(By Delegation)

Date of this edition: 20-April-2000

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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

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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
30	Licence varied by notice	1603865 issued on 11-Dec-2020
31	Licence varied by notice	1609900 issued on 05-Aug-2021
32	Licence varied by notice	1614239 issued on 11-Nov-2021
33	Licence format updated on 14-Dec-2021	
34	Licence varied by notice	1616139 issued on 24-Jan-2022
35	Licence varied by notice	1618674 issued on 09-May-2022
36	Licence varied by notice	1619790 issued on 21-Jun-2022
37	Licence varied by notice	1619946 issued on 27-Jun-2022
38	Licence varied by notice	1624479 issued on 15-Dec-2022
39	Licence varied by notice	1625331 issued on 16-Dec-2022
40	Licence varied by notice	1625718 issued on 24-Jan-2023
41	Licence varied by notice	1626407 issued on 03-Apr-2023
42	Licence varied by notice	1629892 issued on 29-Jun-2023
43	Licence varied by notice	1630802 issued on 28-Jul-2023