



# Licence

## *Environmental Protection Act 1986, Part V*

**Licensee:** **Bluewaters Power 1 Pty Ltd**  
**Bluewaters Power 2 Pty Ltd**

**Licence:** **L8326/2008/5**

**Registered office:** Level 33  
 225 George Street  
 SYDNEY NSW 2000

**ACN:** 106 034 879  
 122 896 968

**Premises address:** Bluewaters I & II Power Station  
 Boys Home Road  
 PALMER WA 6225  
 Being Part of Lot 101 on Plan 61201 as depicted in Schedule 1

**Issue date:** Friday, 10 October 2014

**Commencement date:** Saturday, 18 October 2014

**Expiry date:** Tuesday, 17 October 2017

**Prescribed premises category**

Schedule 1 of the *Environmental Protection Regulations 1987*

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
12	Screening, etc. of material	50 000 tonnes or more per year	2.42 million tonnes per annual period
52	Electric power generation	20 megawatts or more in aggregate (using natural gas) 10 megawatts or more in aggregate (using a fuel other than natural gas)	429 MWe per annual period

**Conditions**

This Licence is subject to the conditions set out in the attached pages.

Date signed: 21 January 2016

.....  
 Jonathan Bailes  
 Manager Licensing (Process Industries)  
 Officer delegated under section 20  
 of the *Environmental Protection Act 1986*



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## Introduction

This Introduction is not part of the Licence conditions.

### **DER's industry licensing role**

The Department of Environment Regulation (DER) is a Government Department for the State of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the Environmental Protection Act 1986 (the Act) for the licensing of prescribed premises. Through this process DER works with the business owners, community, consultants, industry and other representatives to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

### **Licence requirements**

This licence is issued under Part V of the Act. Conditions contained with the licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- Environmental Protection (Unauthorised Discharges) Regulations 2004 – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- Environmental Protection (Controlled Waste) Regulations 2004 - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- Environmental Protection (Noise) Regulations 1997 – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

### **Licence fees**

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non-payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

### **Ministerial conditions**

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for the Environment. You are required to comply with any conditions imposed by the Minister.

### **Premises description and Licence summary**

Bluewaters I & II Power Station (BWI&II) is a 468 MWe (maximum capacity) power station located approximately 4 km northeast of the town of Collie in the Coolangatta Industrial Estate. There is another coal-fired power station, a flyash reuse operation, and a biotechnical collagen production plant adjacent to the industrial estate, and open cut coal mining operations in the immediate vicinity. The nearest residential neighbours are approximately 2.5 km to the south and west of the premises. Electricity generated at this facility supplies customers via the South-West Interconnected System (SWIS).

BWI&II consists of two linked power stations constructed in two phases that are operated as a single power station. The power station uses conventional pulverised coal-fired power generation technology, with coal burnt to heat water in a closed steam/water circuit, with this steam turning the turbines. Coal is supplied from the adjacent Ewington operation. Approximately 1.6 million tonnes of coal and 1,800 tonnes of fuel oil are burnt, and 6.25 GL of raw water is consumed per year at the facility.

Occasional periods of non-standard operations will occur in response to scheduled and unscheduled maintenance, where boilers are shut down and either hot-started by reigniting coal present within the boiler, or by cold-starting using fuel oil to pre-heat the boiler to a temperature where the combustion of coal will be sustained. Cold starts typically result in the use of fuel oil with a sulfur content of less than 0.35%, and produce less than 15% of station capacity and corresponding lower emissions to air. Pollution control equipment is operational during periods of non-standard operations.

Evaporation of water in the cooling water circuit increases the salinity of water. A reverse osmosis plant is used to treat the water and recycle it into the power station. The remaining brine solution is sent to the adjacent Collie A power station where it is treated before being discharged to an ocean outfall pipeline. Approximately 1 GL of saline water is discharged from the premises per year.

Exhaust gases from the combustion of coal are directed to atmosphere through two separate 100-metre stacks. The primary emissions within the exhaust gases are carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>) and particulates, with minor emissions of metals and organic compounds. Pollution control strategies at the site include the use of baghouses (with fabric filters), the combustion of low-sulfur (selectively mined and blended) coal, and continuous monitoring at both stacks and ambient locations. Emissions to air are managed through the implementation of the Stack Emissions Management and Ambient Air Quality Monitoring Plan that was required by conditions in the Ministerial Statements for the Project. Emissions of SO<sub>2</sub> are managed under this Part V licence.



Ash from the combustion of coal is collected as flyash in the baghouses and as bottom ash. Approximately 220,000 – 300,000 tonnes per year of flyash are co-disposed with mine overburden into the adjacent Ewington mine void, consistent with the Ministerial Statements for the project.

This Licence is the result of an amendment sought by the Licensee to correct the stated height of meteorological monitoring sensors that were changed in error at the last licence amendment. As part of this amendment, DER has also conducted a review of improvement conditions, and reporting and notification requirements. Changes to conditions consistent with the current DER licence template have also been included.

The licences and works approvals issued for the Premises since 16/02/2006 are:

<b>Instrument Log</b>		
<b>Instrument</b>	<b>Issued</b>	<b>Description</b>
W4098	16/02/2006	New application (Bluewaters I Power Station)
W4098	07/12/2006	Amendment to Bluewaters I Power Station works approval
W4294/2006/1	11/10/2007	New application (Bluewaters II Power Station)
L8326/2008/1	12/03/2009	New application following completion of W4098. Bluewaters I only.
L8326/2008/1	10/12/2009	Amendment to include Bluewaters II on the licence.
L8326/2008/2	04/03/2010	Licence re-issue
L8326/2008/3	03/03/2011	Licence re-issue. Global changes and Change the location to most recent survey title location
L8326/2008/4	01/03/2012	Licence re-issue. Change the location to most recent survey title location
L8326/2008/4	19/07/2012	DEC initiated amendment to authorise the construction of coal stockpile hardstand, settling pond and stormwater discharge.
L8326/2008/4	10/03/2014	Short term licence re-issue (amendment).
L8326/2008/5	10/10/2014	Licence re-issue and DER initiated amendment to convert to current template and establish ambient SO <sub>2</sub> targets.
L8326/2008/5	25/06/2015	Licence amendment to remove sampling completion date from condition 4.1.1 Improvement Requirement IR1.
L8326/2008/5	01/10/2015	Licence amendment to allow sludge from the Ash Conditioning Ponds to be stored in the coal basin sediment pond and update to current format licence.
L8326/2008/5	21/01/2016	Licence amendment to correct errors, remove completed improvement requirements and update reporting and notification requirements.

### Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

### END OF INTRODUCTION



## Licence conditions

### 1 General

#### 1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

1.1.2 For the purposes of this Licence, unless the contrary intention appears:

**'Act'** means the *Environmental Protection Act 1986*;

**'annual period'** means the inclusive period from 1 July until 30 June in the following year;

**'AS/NZS 3580.1.1'** means the Australian Standard AS 3580.1.1 *Methods for sampling and analysis of ambient air – Guide to siting air monitoring equipment*;

**'AS 3580.4.1'** means the Australian Standard AS 3580.4.1 *Methods for sampling and analysis of ambient air - Determination of sulfur dioxide - Direct reading instrumental method*;

**'AS 3580.9.8'** means the Australian Standard AS 3580.9.8 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM<sub>10</sub> continuous direct mass method using tapered element oscillating microbalance analyser*;

**'AS/NZS 3580.9.13'** means the Australian Standard AS 3580.9.13 *Methods for sampling and analysis of ambient air - Determination of suspended particulate matter - PM<sub>2.5</sub> continuous direct mass method using tapered element oscillating microbalance analyser*;

**'AS 3580.14'** means the Australian Standard AS 3580.14 *Methods for sampling and analysis of ambient air - Meteorological monitoring for ambient air quality monitoring applications*;

**'AS 4323.1'** means the Australian Standard AS4323.1 *Stationary Source Emissions Method 1: Selection of sampling positions*;

**'AS/NZS 5667.1'** means the Australian Standard AS/NZS 5667.1 *Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples*;

**'AS/NZS 5667.10'** means the Australian Standard AS/NZS 5667.10 *Water Quality – Sampling – Guidance on sampling of waste waters*;

**'averaging period'** means the time over which a limit or target is measured or a monitoring result is obtained;

**'CEMS'** means continuous emissions monitoring system;

**'CEMS Code'** means the current version of the Continuous Emission Monitoring System (CEMS) Code for Stationary Source Air Emissions, Department of Environment & Conservation, Government of Western Australia;

**'CEO'** means Chief Executive Officer of the Department of Environment Regulation;



**'CEO'** for the purpose of correspondence means:  
Chief Executive Officer  
Department Administering the Environmental Protection Act 1986  
Locked Bag 33  
CLOISTERS SQUARE WA 6850  
Email: info@der.wa.gov.au

**'Collie airshed power generators'** means the occupiers of the following part V licences in force during the term of this Licence:

1. Bluewaters I & II Power Station; Bluewaters Power 1 Pty Ltd & Bluewaters Power 2 Pty Ltd, L8326/2008;
2. Collie 'A' Power Station, Electricity Generation and Retail Corporation T/A Synergy, L6637/1995;
3. Muja Power Station, Electricity Generation and Retail Corporation T/A Synergy, L4076/1972; and
4. Worsley Alumina Refinery, BHP Billiton Worsley Alumina Pty Ltd, L4504/1981;

**'Licence'** means this Licence numbered L8326/2008/5 and issued under the Act;

**'Licensee'** means the person or organisation named as Licensee on page 1 of the Licence;

**'MWe'** means power output (electricity generated) in megawatts;

**'MWth'** means power input (thermal) in megawatts;

**'NATA'** means the National Association of Testing Authorities, Australia;

**'NATA accredited'** means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

**'normal operating conditions'** means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring;

**'NOx'** means oxides of nitrogen, calculated as the sum of nitric oxide and nitrogen dioxide and expressed as nitrogen dioxide;

**'PM'** means total particulate matter including both solid fragments of material and minuscule droplets of liquid;

**'PM<sub>2.5</sub>'** means particles with an aerodynamic diameter of less or equal to 2.5 µm;

**'PM<sub>10</sub>'** means particles with an aerodynamic diameter of less or equal to 10 µm;

**'Premises'** means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

**'Schedule 1'** means Schedule 1 of this Licence unless otherwise stated;

**'Schedule 2'** means Schedule 2 of this Licence unless otherwise stated;

**'shut-down'** means the period when plant or equipment is brought from normal operating conditions to inactivity;

**'six monthly'** means the two inclusive periods from 1 July to 31 December and 1 January to 30 June in the following year;



**'SODAR'** means a Sonic Detection and Ranging meteorological instrument (also known as a wind profiler) which measures the three-dimensional wind field (i.e. wind speed and direction) at various heights above the ground and the thermodynamic structure of the lowest layer of the atmosphere;

**'spot sample'** means a discrete sample representative at the time and place at which the sample is taken;

**'stack test'** means a discrete set of samples taken over a representative period at normal operating conditions;

**'start-up'** means the period when plant or equipment is brought from inactivity to normal operating conditions;

**'STP dry'** means standard temperature and pressure (0°Celsius and 101.325 kilopascals respectively), dry;

**'USEPA'** means United States (of America) Environmental Protection Agency;

**'USEPA Method 13B'** means a test method for Determination of Total Fluoride Emission from Stationary Sources using Ion Electrode Method;

**'USEPA Method 18'** means a test method for Determination of Gaseous Organic Compounds Emissions by Gas Chromatography;

**'USEPA Method 29'** means a test method for Determination of Metals Emissions from Stationary Sources;

**'USEPA Method 201A'** means a test method for the Determination of PM10 and PM2.5 from Stationary Sources (Constant Sampling Rate Procedure);

**'USEPA SW846 Method 0010'** means the Modified Method 5 - Sampling Train;

**'USEPA SW846 Method 0023A'** means the Sampling Method for Polychlorinated Dibenzo-p-dioxins and Polychlorinated dibenzofurans Emissions from Stationary Sources;

**'USEPA SW846 Method 0061'** means the Sampling Method for Determination of Hexavalent Chromium Emissions from Stationary Sources.

**'usual working day'** means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia;

- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.
- 1.1.4 Any reference to a guideline or code of practice in the Licence means the version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline or code of practice made during the term of this Licence.
- 1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
  - (a) pollution;
  - (b) unreasonable emission;
  - (c) discharge of waste in circumstances likely to cause pollution; or
  - (d) being contrary to any written law.



**1.2 General conditions**

- 1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer’s specification or any relevant and effective internal management system.
- 1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials that are liquids, outside an engineered containment system.
- 1.2.3 The Licensee shall implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises.

**1.3 Premises operation**

- 1.3.1 The Licensee shall ensure that material specified in Table 1.3.1 is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in that Table.

<b>Table 1.3.1: Containment infrastructure</b>		
<b>Vessel or compound</b>	<b>Material</b>	<b>Requirements</b>
Coal stockpile storage basin	Coal	Clay lined
Ash conditioning pond 1 and 2	Contaminated and ash water drainage	Concrete base with blue metal gravel sides
Wastewater pond 1 and 2	Cooling tower blowdown, Contaminated water drainage from boiler and turbine area	Heavy polyethylene plastic lined
Sediment pond	Stormwater runoff from roadways	Clay lined
Coal stockpile storage basin collection pond	Stormwater runoff from the coal stockpile storage basin and sludge from the ash conditioning ponds	Clay lined
Service water pond	Raw water from mine treated as cooling tower feedstock	Heavy polyethylene plastic lined
Saline water tank 1, 2 & 3	Saline water from water treatment plant	Lined tanks located within the stormwater catchment area. Tanks shall be visually monitored daily for integrity.

**2 Emissions**

**2.1 General**

- 2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit or target specified in any part of section 2 of this licence.





## 2.2 Point source emissions to air

2.2.1 The Licensee shall ensure that where waste is emitted to air from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this licence.

**Table 2.2.1: Emission points to air**

Emission point reference and location on map of emission points	Emission point and source, including abatement	Emission point height (m)
A1	Bluewaters unit 1 (217 MWe) via baghouse	100
A2	Bluewaters unit 2 (212 MWe) via baghouse	100

2.2.2 The Licensee shall target point source emissions to air at or below the levels specified in Table 2.2.2.

**Table 2.2.2: Point source emission targets to air**

Emission point reference	Parameter	Target (including units) <sup>1,2</sup>	Averaging period
A1 - A2	Sulfur dioxide	320.7 g/sec	CEMS (60 minute average)
A1 - A2	PM	47 mg/m <sup>3</sup>	CEMS (60 minute average)

Note 1: All units are referenced to STP dry

Note 2: Concentration units are referenced to 7% O<sub>2</sub>. Correction for continuous monitoring should be made continuously.

2.2.3 The Licensee shall take the management action specified in Table 2.2.3 in the case of an event specified in that table.

**Table 2.2.3: Management actions**

Emission point reference	Event/ action reference	Event	Management action
A1 – A2	EA1	USEPA Performance Specification 11 CEMS correlation via manual stack sampling causes an exceedance of particulates target.	The Licensee shall notify the CEO in writing seven days prior to the commencement of the annual CEMS calibration curve correlation.
A1 – A2	EA2	Exceedance of particulates emission target.	The Licensee shall complete a review of the operation of the baghouse and CEMS within 24 hours of the event unless the management action specified for event EA1 has been completed.
A1 – A2	EA3	Exceedance of sulfur dioxide emission target.	The Licensee shall have completed monitoring of coal sulfur content as specified in Table 3.4.1 during the period and investigated the feasibility of using low sulfur coal.

## 2.3 Emissions to land

2.3.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.3.1 it is done so in accordance with the conditions of this Licence.



<b>Table 2.3.1: Emissions to land</b>		
<b>Emission point reference and location on map of containment infrastructure</b>	<b>Description</b>	<b>Source including abatement</b>
L1	Coal stockpile storage basin collection pond overflow point	Coal stockpile storage basin collection pond

### **3 Monitoring**

#### **3.1 General monitoring**

3.1.1 The licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10; and
- (c) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

3.1.2 The Licensee shall ensure that:

- (a) monthly monitoring is undertaken at least 15 days apart;
- (b) quarterly monitoring is undertaken at least 45 days apart; and
- (c) annual monitoring is undertaken at least 9 months apart.

3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.

3.1.4 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications.

3.1.5 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

#### **3.2 Monitoring of point source emissions to air**

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.



<b>Table 3.2.1: Monitoring of point source emissions to air</b>						
<b>Emission point reference</b>	<b>Parameter</b>	<b>Units<sup>1,3</sup></b>	<b>Averaging period</b>	<b>Frequency<sup>2</sup></b>	<b>Method</b>	
A1-A2	Volumetric flow rate	m <sup>3</sup> /s	N/A	Continuous	CEMS	
	Stack temperature	°C				
	Carbon monoxide	mg/m <sup>3</sup>				
	Nitrogen oxides					
	Sulfur dioxide					
	PM					
	PM <sub>10</sub>	Stack Test (minimum 60 Minute average)	Annually	USEPA Method 201A		
	PM <sub>2.5</sub>					
	Total Volatile Organic Compounds				Stack Test (minimum 30 Minute average)	USEPA Method 18
	Benzene				Stack Test (minimum 60 Minute average)	USEPA Method 29 USEPA SW846 Method 0061
	Metals - As, Be, Cd, Co, Cr (total and speciated), Cu, Hg, Mn, Ni, Pb, Zn					
	Total Fluorides					
	Polycyclic Aromatic Hydrocarbons (BaP-TEQ)				Stack Test (minimum 60 Minute average)	USEPA SW846 Method 0010
Dioxins and Furans (I-Teq)	Stack Test (minimum 60 Minute average)	USEPA Method 23				

Note 1: All units are referenced to STP dry

Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

Note 3: Concentration units are referenced to 7% O<sub>2</sub>.

Note 4: Where applicable, USEPA Performance Specification 11 including Appendix F, Procedure 2 will be used to convert and substantiate the calculation of particulate matter from raw instrument data.

3.2.2 The Licensee shall ensure that sampling required under Condition 3.2.1 of the Licence is undertaken at sampling locations in accordance with the AS 4323.1 or relevant part of the CEMS Code.

3.2.3 The Licensee shall ensure that all non-continuous sampling and analysis undertaken pursuant to condition 3.2.1 is undertaken by a holder of NATA accreditation for the relevant methods of sampling and analysis.

3.2.4 For any parameter in Table 3.2.1 requiring continuous monitoring, the Licensee shall ensure that the CEMS is regularly operated, maintained and calibrated in accordance with the CEMS Code.



### 3.3 Monitoring of emissions to land

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

<b>Table 3.3.1: Monitoring of emissions to land</b>					
<b>Emission point reference</b>	<b>Monitoring point reference</b>	<b>Parameter</b>	<b>Units</b>	<b>Frequency</b>	<b>Averaging period</b>
L1	M1 (coal stockpile storage basin collection pond prior to release)	Total Recoverable Hydrocarbons (TRH) Metals including Aluminium, Arsenic, Beryllium, Cadmium, Cobalt, Total Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel and Zinc	mg/L	Quarterly when flowing	Spot sample

### 3.4 Monitoring of inputs and outputs

3.4.1 The Licensee shall undertake the monitoring in Table 3.4.1 according to the specifications in that table.

<b>Table 3.4.1: Monitoring of inputs and outputs</b>				
<b>Input/Output</b>	<b>Parameter</b>	<b>Units</b>	<b>Frequency<sup>1</sup></b>	<b>Averaging period</b>
Coal	Sulfur	% by weight	Daily samples (when available)	Daily

Note 1: Composite samples shall be collected.

### 3.5 Ambient environmental quality monitoring

3.5.1 The Licensee shall undertake the monitoring in Table 3.5.1 according to the specifications in that table.

<b>Table 3.5.1: Monitoring of ambient air quality</b>				
<b>Monitoring point reference and location on map of monitoring locations</b>	<b>Parameter</b>	<b>Units<sup>1</sup></b>	<b>Frequency<sup>2</sup></b>	<b>Method</b>
BWPS1 (Bluewaters 1 North Collie)	Sulfur dioxide	ppb	Continuous (minimum 5 minute intervals)	AS 3580.4.1

Note 1: All units are referenced to ambient conditions

Note 2: Intervals must be referenced by the end time of the interval with the first interval of a calendar day ending at 00:05 and the last interval ending at 24:00.

3.5.2 The Licensee shall ensure that the monitoring equipment is operated and calibrated in accordance with the required methodology and is maintained so as to provide valid data for greater than 90% of the measurement intervals in every calendar month, and greater than 95% of the measurement intervals over any 12 consecutive calendar months.

3.5.3 The Licensee shall target ambient concentrations in air at or below the levels specified in Table 3.5.2.



<b>Table 3.5.2: Ambient Air Quality Targets</b>			
<b>Monitoring point reference</b>	<b>Parameter</b>	<b>Target (including units)<sup>1</sup></b>	<b>Averaging period<sup>2</sup></b>
BWPS1 (Bluewaters 1 North Collie)	Sulfur dioxide	200ppb	Continuous (1 hour average)

Note 1: All units are referenced to ambient conditions.

Note 2: Clock hour average. Averaging periods must be referenced by the end time of the averaging period with the first averaging period of a calendar day ending at 01:00am.

3.5.4 The Licensee shall take the specified management action in the case of an event in Table 3.5.3.

<b>Table 3.5.3: Management actions</b>			
<b>Monitoring point reference</b>	<b>Event/ action reference</b>	<b>Event</b>	<b>Management action</b>
BWPS1 (Bluewaters 1 North Collie)	EA4	The ambient monitoring data from Table 3.5.1 indicates an exceedance of ambient sulfur dioxide target specified in Table 3.5.2.	The Licensee shall investigate the cause of the exceedance within two usual working days of the event and provide a report to the CEO within five usual working days of the exceedance. The report shall contain a summary of: <ul style="list-style-type: none"> <li>i. The date, time, location and length of the exceedance;</li> <li>ii. Operating conditions of the site for the 48hrs preceding the exceedance, including fuel consumption, load and coal sulphur content;</li> <li>iii. Any ambient monitoring data conducted by the Licensee for the 48hrs preceding the exceedance;</li> <li>iv. Any meteorological data conducted by the Licensee for the 48hrs preceding the exceedance;</li> <li>v. Any actions that the licensee has taken towards preventing, controlling or abating pollution or environmental harm; and</li> <li>vi. Any other factors relevant to the exceedance of the target.</li> </ul>



- 3.5.5 The Licensee shall review their operations upon written notification from DER of any ambient target exceedance within the Collie area, as represented on the map of ambient air emission monitoring sites operated and maintained by Collie airshed power generators. The Licensee shall provide a report within five usual working days containing a summary of:
- (a) operating conditions of the site for the 48hrs preceding and following the exceedance, including fuel consumption, load and coal sulphur content;
  - (b) any ambient monitoring data conducted by the Licensee for the 48hrs preceding and following the exceedance;
  - (c) any meteorological monitoring data conducted by the Licensee for the 48hrs preceding and following the exceedance;
  - (d) any actions that the licensee has taken towards preventing, controlling or abating pollution or environmental harm since receiving the report; and
  - (e) any other factors relevant to the exceedance of the target.

### 3.6 Meteorological monitoring

- 3.6.1 The Licensee shall undertake the meteorological monitoring in Table 3.6.1 according to the specifications in that table.

<b>Table 3.6.1: Meteorological monitoring</b>				
<b>Monitoring point reference and location on map of monitoring locations</b>	<b>Parameter</b>	<b>Units</b>	<b>Height</b>	<b>Method</b>
BWPS1 (Bluewaters 1 North Collie)	Wind speed	m/s	10 m	AS 3580.14
	Wind direction	Degrees	10 m	
	Wind direction standard deviation	Degrees	10 m	
	Air temperature	°C	10 m	
	Relative humidity	%	10 m	
BWPS2 (Bluewaters SODAR)	Wind speed	m/s	10 m intervals starting at 50 m above surface	SODAR <sup>1</sup>
	Wind direction	Degrees		

Note 1: The SODAR shall be maintained and operated in accordance with:

- (i) USEPA Meteorological Monitoring Guidance for Regulatory Modeling Applications; and
- (ii) USEPA Quality Assurance Handbook for Air Pollution Measurement Systems Volume IV: Meteorological Measurements.

- 3.6.2 The Licensee shall ensure that the monitoring equipment is operated and calibrated in accordance with the required methodology and is maintained so as to provide valid data for greater than 90% of the measurement intervals in every calendar month, and greater than 95% of the measurement intervals over any 12 consecutive calendar months.



## **4 Information**

### **4.1 Records**

- 4.1.1 All information and records required by the Licence shall:
- (a) be legible;
  - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
  - (c) except for records listed in 4.1.1(d) be retained for at least six years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
  - (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
    - (i) off-site environmental effects; or
    - (ii) matters which affect the condition of the land or waters.
- 4.1.2 The Licensee shall ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
  - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 4.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

### **4.2 Reporting**

- 4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 30 September in each year. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.



<b>Table 4.2.1: Annual Environmental Report</b>		
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Format or form<sup>1</sup></b>
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 2.2.2	Summary of point source emission to air target exceedances	
Table 3.2.1	Results of point source emission to air monitoring (stack tests)	
	Point source emission to air CEMS monitoring raw data	As condition 4.2.3
Table 3.3.1	Results of emissions to land from coal stockpile storage basin collection pond	None specified
Table 3.4.1	Results of monitoring inputs and outputs	Table
Table 3.5.1	Monthly summary of ambient SO <sub>2</sub> monitoring results including the daily maximum 24 hour, 60 minute and 5-minute averages.	None specified
Table 3.5.2	Summary of ambient air quality SO <sub>2</sub> target exceedances	
4.1.2	Compliance	Annual Audit Compliance Report (AACR)
4.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

- 4.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- any relevant process, production or operational data recorded under Condition 3.1.3; and
  - an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.
- 4.2.3 The Licensee shall ensure that results from CEMS are reported in the Annual Environmental Report as tabulated data and time series graphs including:
- times and dates;
  - unavailability of abatement;
  - target or limit exceedances; and
  - an assessment of the information contained within the report against previous submissions and Licence limits and/or targets.
- 4.2.4 The Licensee shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.





<b>Table 4.2.2: Non-annual reporting requirements</b>					
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Averaging period</b>	<b>Reporting period</b>	<b>Reporting date (after end of the reporting period)</b>	<b>Format or form</b>
Table 2.2.2	Exceedance of point source emissions target for SO <sub>2</sub> and particulates and outcome of the corresponding management action specified in Table 2.2.3	CEMS (60-minute average)	Monthly	Within 14 days	ET1 <sup>1</sup>
Table 3.4.1	Concentration of Sulfur in coal (% by weight)	Daily	Monthly	Within 28 days	None specified
3.5.2	Sulfur dioxide data recovery (%)	Monthly	Monthly	Within 14 days	None specified
Table 3.5.1	Sulfur dioxide	5 minute average			
3.6.1	Wind speed	5-minute average	Monthly	Within 14 days	None specified
	Wind direction				
	Air temperature <sup>2</sup>				
	Wind direction standard deviation <sup>2</sup>				
	Relative humidity <sup>2</sup>				
3.6.2	Meteorological monitoring data recovery (%)	Monthly			
3.5.2	Calibration report	Not applicable	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties
3.6.2		Not applicable			
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not applicable	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties

Note 1: Forms are in Schedule 2

Note 2: Air temperature, wind direction standard deviation and relative humidity are not required for BWPS2.

### 4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.



<b>Table 4.3.1: Notification requirements</b>			
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Notification requirement<sup>1</sup></b>	<b>Format or form<sup>1</sup></b>
3.1.4	Calibration report	As soon as practicable.	None specified.
Table 3.5.2	Exceedance of ambient sulfur dioxide target for the site for any of the averaging periods	Within 48 hours of the ambient sulfur dioxide target exceedance being detected	None specified.
		Within five usual working days	A listing of sulfur dioxide emissions from each source listed in the Licence and located within the boundary of the licensed Premises, for the period which includes and extends one hour either side of the period in which the exceedance occurred.
			A listing of ambient sulfur dioxide data from each monitoring station, for the period which includes and extends one hour either side of the period in which the exceedance occurred.
			A listing of wind speed, wind direction and air temperature for the period which includes and extends one hour either side of the period in which the target exceedance in Table 3.5.2 occurred.

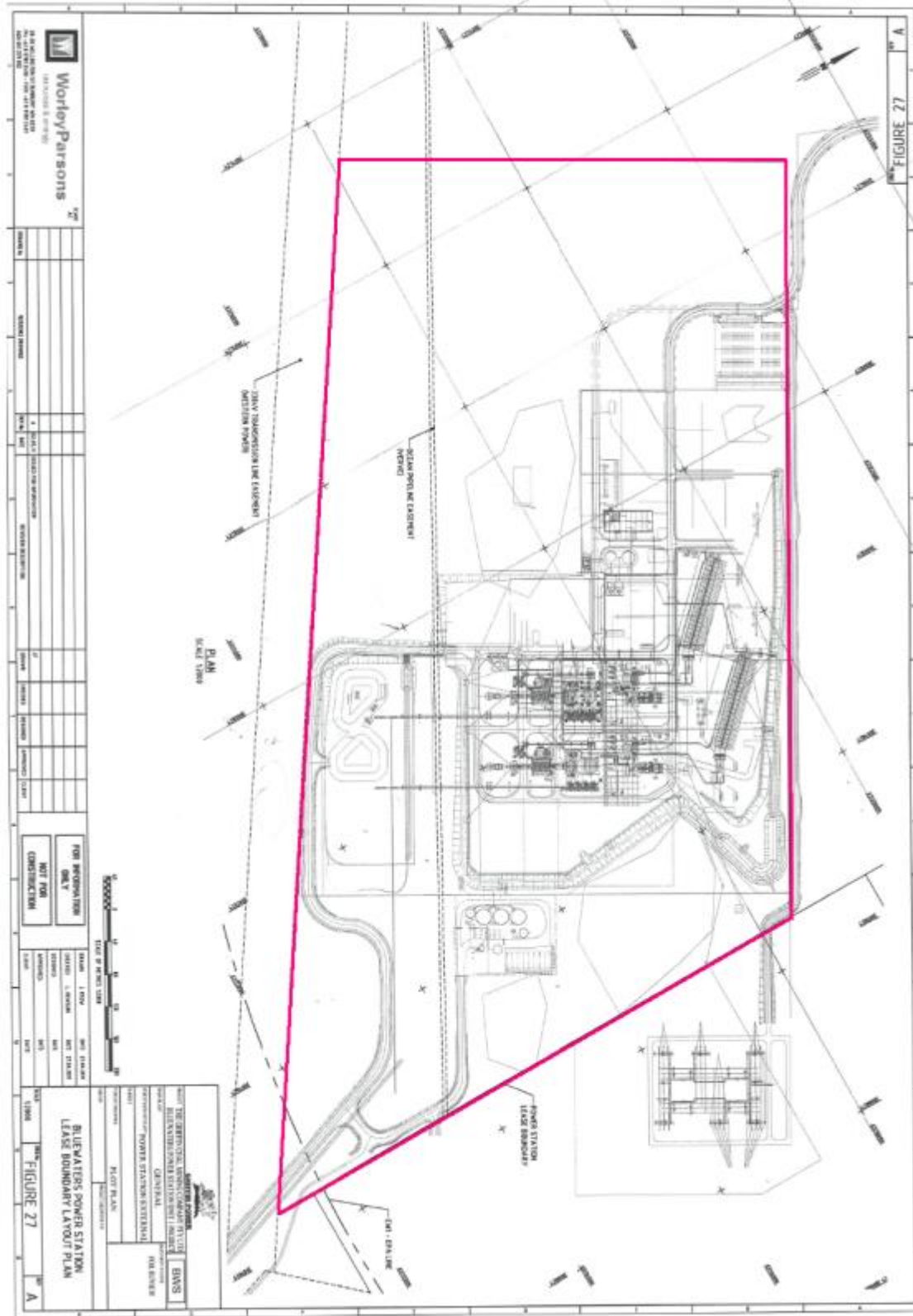
Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act



# Schedule 1: Maps

## Premises map

The Premises is shown in the map below. The pink line depicts the Premises boundary.





### Map of Containment Infrastructure

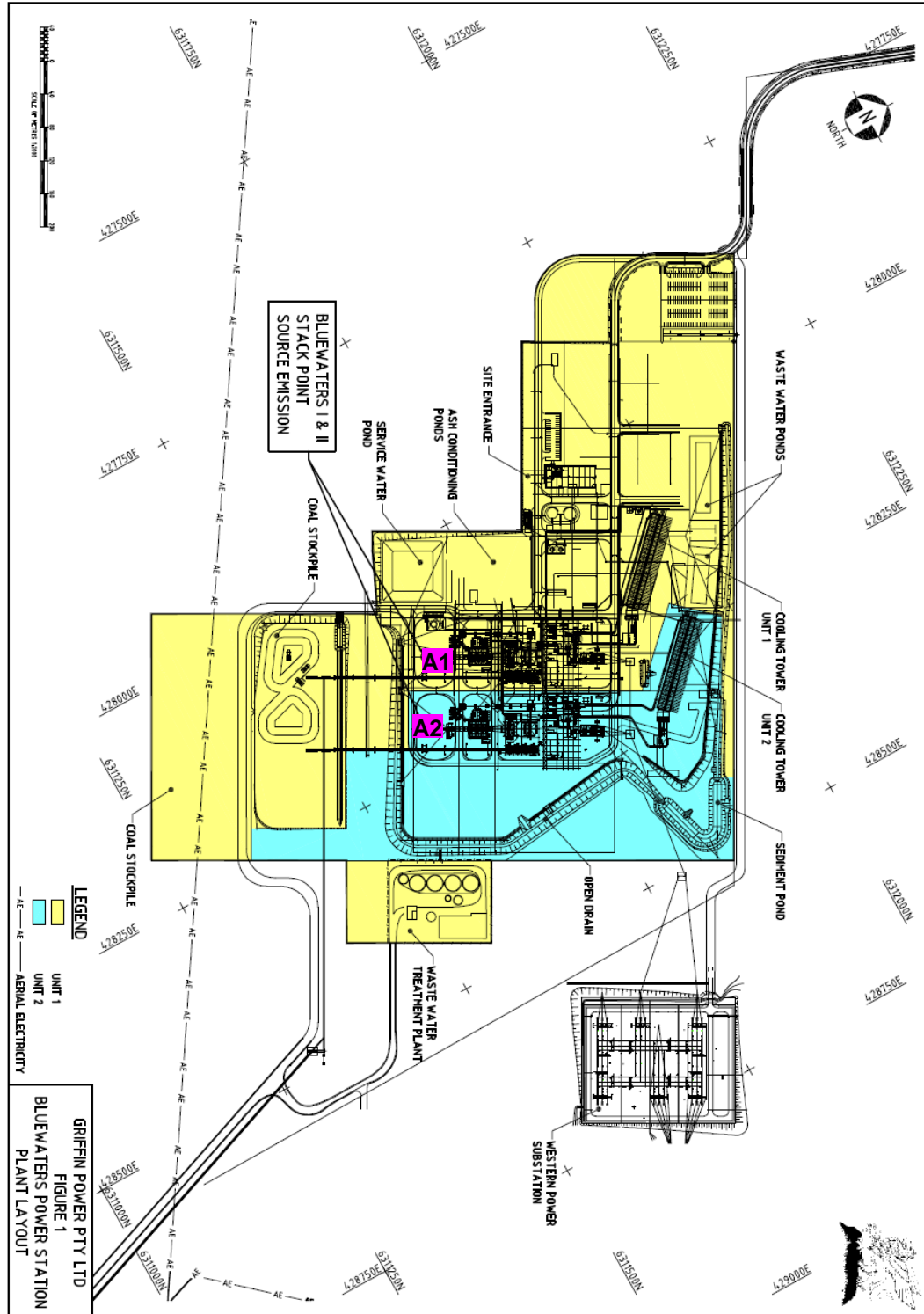
The locations of the coal stockpile storage basin defined in Table 1.3.1 and the discharge point L1 is shown below





### Map of emission points

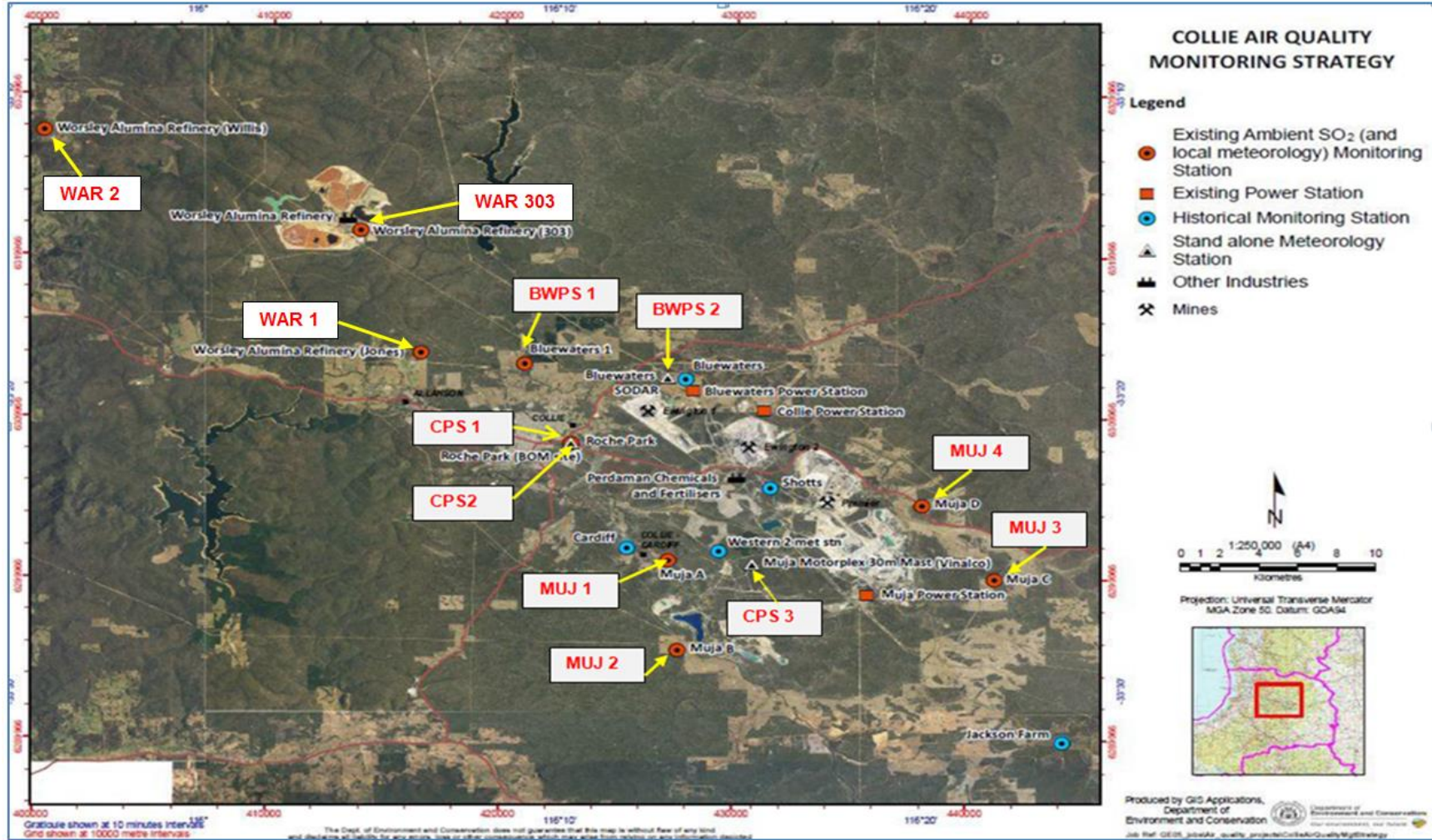
The locations of the emission points defined in Table 2.2.1 are shown below.





### Map of monitoring locations

The locations of the emission points defined in Tables 3.5.1 and 3.6.1 are shown below.





## Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

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Licence: L8326/2008/5 Licensee: Bluewaters Power 1 Pty  
 Ltd Bluewaters Power 2 Pty Ltd  
 Form: AACR Period :  
 Name: Annual Audit Compliance Report

## ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

### SECTION A

#### LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name:	ABN:
Trading as:	
Reporting period: _____ to _____	

#### STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of the licence complied with within the reporting period? (please tick the appropriate box)

Yes  Please proceed to Section C

No  Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:







## SECTION C

### SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is		The Annual Audit Compliance Report must be signed and certified:
An individual	<input type="checkbox"/> <input type="checkbox"/>	by the individual licence holder, or by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other unincorporated company	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A corporation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the Corporations Act 2001; or by two directors of the licensee; or by a director and a company secretary of the licensee, or if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority (other than a local government)	<input type="checkbox"/> <input type="checkbox"/>	by the principal executive officer of the licensee; or by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	<input type="checkbox"/> <input type="checkbox"/>	by the chief executive officer of the licensee; or by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

NAME:  
(printed) \_\_\_\_\_

NAME:  
(printed) \_\_\_\_\_

POSITION: \_\_\_\_\_

POSITION: \_\_\_\_\_

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_

DATE: \_\_\_\_/\_\_\_\_/\_\_\_\_



Licence: L8326/2008/5  
 Form: ET1  
 Name: Target exceedances

Licensee: Bluewaters Power 1 Pty Ltd and Bluewaters Power 2 Pty Ltd  
 Period:

**Form ET1: Target exceedances**

Please provide an analysis of the target exceedances for the month, including but not limited to:

- (a) the emission point
- (b) the date and time of the exceedance and period over which the exceedance occurred
- (c) the root cause analysis for the exceedances;
- (d) any common or contributory factors including but not limited to fuel, mass emissions, gas flow rates, inlet & exit temperature, abatement status;
- (e) a description of remedial measures taken or planned to be taken, including those taken to prevent recurrence of the exceedances;
- (f) complaints received that may have been caused by this exceedance; and
- (g) for those exceedances that may have caused complaints, meteorological details: temperature, wind speed and wind direction, humidity.

Signed on behalf of Bluewaters Power 1 Pty Ltd and Bluewaters Power 2 Pty Ltd: ..... Date: .....



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** **Bluewaters Power 1 Pty Ltd**  
**Bluewaters Power 2 Pty Ltd**

**Licence:** **L8326/2008/5**

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**Registered office:** Level 33  
225 George Street  
SYDNEY NSW 2000

**ACN:** 106 034 879  
122 896 968

**Premises address:** Bluewaters I & II Power Station  
Part of Lot 101 on Plan 61201  
Boys Home Road  
PALMER WA 6225

**Issue date:** Friday, 10 October 2014

**Commencement date:** Saturday, 18 October 2014

**Expiry date:** Tuesday, 17 October 2017

### **Decision**

Based on the assessment detailed in this document, the Department of Environment Regulation (DER) has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision document prepared by: Amine Callegari  
Licensing Officer

Decision Document Authorised By: Jonathan Bailes  
Delegated Officer



## Contents

1	Purpose of this Document	2
2	Administrative summary	3
3	Executive summary of proposal and assessment	4
4	Decision Table	5
5	Advertisement and Consultation Table	9
6	Risk Assessment	9

## 1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



## 2 Administrative summary

Administrative Details		
Application Type	Works Approval <input type="checkbox"/>	
	New Licence <input type="checkbox"/>	
	Licence Amendment <input checked="" type="checkbox"/>	
	Works Approval Amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category Number(s)</b>	<b>Design Capacity</b>
	12 – Screening, etc of material	2.42 million tonnes per annual period
	52 – Electric power generation	468MWTh 429MWe
Application Verified	Date: NA	
Application Fee Paid	Date: NA	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome	N/A	
Is the proposal a Major Resource Project?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Referral Decision No: 1487 & 1765; 1525 & 1766 Managed under Part V <input type="checkbox"/> Assessed under Part IV <input checked="" type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial Statement No:685 & 803; 724 & 804 EPA Report No: 1160 & 1331; 1177& 1332
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i> )?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		



### **3 Executive summary of proposal and assessment**

Bluewaters I & II Power Station (BWI&II) is a 468 MWe (maximum thermal capacity) power station located approximately 4 km northeast of the town of Collie in the Coolangatta Industrial Estate. There is another coal-fired power station, a flyash reuse operation, and a biotechnical collagen production plant adjacent to the industrial estate, and open cut coal mining operations in the immediate vicinity. The nearest residential neighbours are approximately 2.5 km to the south and west of the premises. Electricity generated at this facility supplies customers via the South-West Interconnected System (SWIS).

BWI&II consists of two linked power stations constructed in two phases that are operated as a single power station. The power station uses conventional pulverised coal-fired power generation technology, with coal burnt to heat water in a closed steam/water circuit, with this steam turning the turbines. Coal is supplied from the adjacent Ewington operation. Approximately 1.6 million tonnes of coal and 1,800 tonnes of fuel oil are burnt, and 6.25 GL of raw water is consumed per year at the facility.

Exhaust gases from the combustion of coal are directed to atmosphere through two separate 100-metre stacks. The primary emissions of the exhaust gases are carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), oxides of nitrogen (NO<sub>x</sub>) and particulates, with minor emissions of metals and organic compounds. Pollution control strategies at the site include the use of baghouses (with fabric filters), the combustion of low-sulfur (selectively mined and blended) coal, and continuous monitoring at both stacks and ambient locations. Emissions to air are managed through the implementation of the Stack Emissions Management and Ambient Air Quality Monitoring Plan that was required by conditions in the Ministerial Statements for the Project. Emissions of SO<sub>2</sub> are managed under this Part V licence.

This Licence is the result of an amendment sought by the Licensee to correct the stated height of meteorological monitoring sensors that was changed in error at the last amendment. As part of this amendment, DER has also conducted a review of improvement conditions, and reporting and notification requirements. Changes to conditions consistent with the current DER licence template have also been included.



## 4 Decision Table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

<b>DECISION TABLE</b>			
<b>Licence Section</b>	<b>Condition Number</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference Documents</b>
<b>Premises operations</b>	L1.3.1	<p>Condition 1.3.1 has been updated to include the containment infrastructure requirements for the coal stockyard storage basin based on the outcomes of the licensee's investigation of the permeability of the coal stockyard storage basin in accordance with the requirements of previous improvement condition IR7.</p> <p>Table 1.3.1 has been updated as it did not adequately describe the existing coal stockpile storage basin collection pond as part of the site's containment infrastructure. The sediment pond is the containment pond located on the premises which captures stormwater runoff from the power station roadways. The coal stockpile storage basin collection pond collects all runoff from the coal storage area and is also used periodically for temporary storage and drying of ash sludge transferred from the ash conditioning ponds. This pond is also the specified stormwater discharge point for the premises during high rainfall events.</p> <p>The descriptions of the licensed emission point to land (and associated monitoring location) have also been updated in Tables 2.3.1 and 3.3.1 to provide a more clear and accurate description of the emission point.</p>	Coal Stockpile Infiltration Testing Report, Worley Parsons, 2014
<b>Fugitive emissions</b>	L2.4.1	Condition 2.4.1 relating to fugitive dust management was previously included on the licence, based on the licensee having submitted a dust management plan to DER as a requirement of previous improvement condition 4.1.1 IR5. Ministerial Statements 685 and 724 for the Bluewaters Power Station also requires the development and implementation of an operational Dust Management Plan. In accordance with DER's Guidance Statement on setting condition - licence conditions will not duplicate the requirements imposed on licensees by the EP Act, which in this case includes the conditions of the Ministerial	<p>DER Guidance Statement – Setting conditions</p> <p>Bluewaters Power Station Operational Dust Management Plan 2015</p>



DECISION TABLE			
Licence Section	Condition Number	Justification (including risk description & decision methodology where relevant)	Reference Documents
		Statements and section 49 of the EP Act (causing pollution and unreasonable emissions). Accordingly, condition 2.4.1 has been removed.	
<b>Ambient environmental quality</b>	L3.5.2 L3.6.2	<p>The Licensee has conducted a review and audit of the existing ambient SO<sub>2</sub> and meteorological monitoring station BWPS1 (Bluewaters 1 North Collie). The review identified that the ambient monitoring station location does not meet all siting requirements of Australian Standard 3580.1.1. This non-conformance is due to the location of a tree line to the north and trees to the south-west that obstruct the clear sky angle around the monitoring station. An assessment of the likely impact of this non-compliance has been undertaken by a technical expert. The assessment determined:</p> <ul style="list-style-type: none"> <li>• That the trees were unlikely to affect materially measured SO<sub>2</sub> concentrations but would likely reduce recorded wind speeds from the northern arc.</li> <li>• The wind monitoring at BWPS1 will still provide relevant data for identifying sources of measured SO<sub>2</sub>. The meteorological monitoring station will not provide useful wind measurement data for modelling emissions plumes, as wind measurements at 10m (the height of the meteorological monitoring station) are inadequate for determining plume heights. Ideally, data at or near stack height is required.</li> <li>• The existing and proposed SODAR and 100m tall meteorological station situated in the Collie airshed are the most appropriate sources of data for Collie Airshed modelling.</li> </ul> <p>As the monitoring station is already established and has been for some years, DER considers that moving the station to an alternate location is not warranted to comply with the siting requirement stated in the licence. Additionally, the requirement for the monitoring location to meet AS3580.1.1 was included in the licence in October 2014, which was several years after the site had already been established. Previous condition 3.5.2, which required the siting of ambient air monitoring equipment to comply with AS3580.1.1, has therefore been removed from the licence as the location of BWPS1 is suitable for the purpose of the monitoring.</p> <p>The Licensee has provided confirmation that improvement condition 4.1.1 IR6 and IR8 have been completed with required repairs, upgrades, maintenance and calibration undertaken</p>	<p>Bluewaters Power North Collie Station Siting Audits, Ecotech</p> <p>North Collie SO<sub>2</sub> Monitoring Site – Site Inspection Memo, Air Assessments</p> <p>Compliance with condition 4.1.2 of Environmental Licence Number – L8326/2008/5 and attachments (May 2015)</p>





<b>DECISION TABLE</b>			
<b>Licence Section</b>	<b>Condition Number</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference Documents</b>
		on the ambient monitoring instrumentation. References to completion of the improvement requirements in conditions 3.5.2 and 3.6.2 have therefore been removed.	
<b>Improvements</b>	L4.1.1-L4.1.2	Previous improvement requirements IR1 to IR7 have been removed as part of this licence amendment as the licensee has provided submissions meeting the improvement requirements by the specified dates of completion. Correspondence has been provided to the licensee advising of DER's review and assessment of the improvement conditions for IR2-IR7.	<p>Compliance with Conditions of Environmental Licence Number – L8326/2008/5 and attachments (June 2015)</p> <p>Bluewaters Power Station Operational Dust Management Plan</p> <p>Compliance with condition 4.1.2 of Environmental Licence Number – L8326/2008/5 and attachments (May 2015)</p> <p>Coal Stockpile Infiltration Testing Report, Worley Parsons, 2014</p> <p>Bluewaters Power Station Response to the WA DER Licence L8326/2008/5 Condition IR 1, Report No. R001564</p> <p>Ministerial Statements 685 and 724 – Proposed Interim Implementation Conditions (October 2015)</p>
<b>Information</b>	L5.2.1 Table 5.2.1) L5.2.3 L5.2.4 (Table 5.2.2)	A review of reporting and notification conditions in the licence has been conducted to clarify requirements and remove those which are either repeated in the licence or are not required for compliance, data collection, or the Collie airshed SO <sub>2</sub> study purposes. Administrative errors have also been corrected in Table 5.3.1.	Bluewaters 2015 monthly reports



DECISION TABLE			
Licence Section	Condition Number	Justification (including risk description & decision methodology where relevant)	Reference Documents
	L5.3.1 (Table 5.3.1)	<p>The following changes have been made to the annual reporting requirements in Table 5.2.1:</p> <ul style="list-style-type: none"><li>- Reporting of point source emission to air monitoring data has been separated into stack testing reporting and CEMS reporting, as a different report format is required for CEMS raw data due to the volume of data recorded.</li><li>- A summary of ambient SO<sub>2</sub> monitoring results was not specified as a requirement in the annual report but is required for review purposes. Monthly reporting of maximum five-minute, 60-minute and 24-hour averages has been removed and alternatively specified as an annual reporting requirement.</li></ul> <p>The following changes have been made to the non-annual reporting requirements in Table 5.2.2:</p> <ul style="list-style-type: none"><li>- Monthly reporting of the maximum five-minute, 60-minute and 24-hour averages has been removed as the information is not required for the Collie airshed SO<sub>2</sub> study. The requirement has been included as an annual reporting requirement.</li><li>- Monthly reporting of daily sulfur dioxide data recovery has been removed as there is no daily data recovery requirement specified in the licence.</li><li>- Monthly reporting of meteorological monitoring data recovery has been added to demonstrate and assess compliance with availability requirements specified in condition 3.6.2.</li><li>- Monthly reporting of ambient sulfur dioxide target exceedances has been removed from the table due to investigation and reporting of exceedances already being specified in condition 3.5.4, Table 3.5.3, and Table 4.3.1.</li></ul>	



## 5 Advertisement and Consultation Table

Date	Event	Comments received/Notes	How comments were taken into consideration
DRAFT	Proponent sent a copy of draft amended instrument	Clarifications requested around wording in Table 2.2.1 and Table 2.2.3.	Clarification provided and wording in column two of Table 2.2.1 updated.

## 6 Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

**Table 1: Emissions Risk Matrix**

Likelihood	Consequence				
	Insignificant	Minor	Moderate	Major	Severe
Almost Certain	Moderate	High	High	Extreme	Extreme
Likely	Moderate	Moderate	High	High	Extreme
Possible	Low	Moderate	Moderate	High	Extreme
Unlikely	Low	Moderate	Moderate	Moderate	High
Rare	Low	Low	Moderate	Moderate	High