# **SEPA**

# **Annual Return**

#### **WAMBO COAL PTY LIMITED**

Licence 529

# A. Statement of Compliance - Licence Details

ALL Licence holders must check that the Licence details in Section A are correct.

If there are changes to any of these details, you must advise Environment Protection Authority (EPA) and apply as soon as possible for a variation to your Licence or for a Licence transfer.

Licence variation and transfer application forms are available on the EPA website at: http://www.epa.nsw.gov.au/licensing-and-regulation/licensing or from regional offices of the EPA, or by contacting by telephone 02 9995 5700.

If you are applying to vary or transfer your Licence, you must still complete and submit this Annual Return.

#### A1. Licence holder

Licence number : 529

Licence holder : WAMBO COAL PTY LIMITED

Trading name (if applicable)

ABN : 13 000 668 057 ACN : 000 668 057

**Reporting period** : From: 1-1-2019 To: 31-12-2019

#### A2. Premises to which Licence Applies (if applicable)

Common name (if any) : WAMBO COAL PTY LTD

Premises : JERRYS PLAINS ROAD WARKWORTH 2330 NSW

#### A3. Activities to which Licence Applies

Mining for coal

Coal works

#### A4. Other Activities (if applicable)

Sewage Treatment Systems

Chemical Storage Facilities

#### A5. Fee-Based Activity Classifications

Note that the fee based activity classification is used to calculate the administrative fee.

Fee-based activity	Activity scale	Unit of measure
Mining for coal	> 5,000,000.00	T annual production capacity



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Coal works > 5,000,000.00 T annual handing capacity

#### A6. Assessable Pollutants (if applicable)

**Note** that the identification of assessable pollutants is used to calculate the **load-based fee.** The following assessable pollutants are identified for the fee-based activity classifications in the licence:

# **B. Monitoring and Complaints Summary**

#### **B1. Number of Pollution Complaints**

Pollution Complaint Category	Complaints
Air	4
Water	0
Noise	46
Waste	0
Other	8
Total complaints recorded by the licensee during the reporting period	58

#### **B2. Concentration Monitoring Summary**

For each concentration monitoring point identified in your licence, details are displayed below. If concentration monitoring is not required by your licence, **no data** will appear below.

If data was provided from an uploaded file, the file name will be displayed below instead of any data. **Note** that this does not exclude the need to conduct appropriate concentration monitoring of assessable pollutants as required by load-based licensing (if applicable).

#### **Discharge & Monitoring Point 4**

Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality

Volume monitoring, HRSTS Outlet from Eagles Nest Dam at co-ordinates 313132 6393073 (Easting Northing) labelled as EPA4 on plan titled "Wambo Mine Environment Protection Licence 529 Plan of Premises - Monitoring Sites" DWG 2160-2 dated 3/3/2017 EPA Ref DOC17/147944

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Conductivity	microsiemens per centimetre	0	0	0	0	0
рН	рН	0	0	0	0	0
Total suspended solids	milligrams per litre	0	0	0	0	0



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#### **Monitoring Point 7**

Groundwater quality monitoring, Groundwater quality must be measured at locations representative of impacts likely to be experienced outside the premises as a result of the operation of the mine

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Conductivity	microsiemens per centimetre	120	82	531	3850	9570
рН	рН	120	82	6	7.3	8.4

#### **Monitoring Point 9**

Surface water monitoring, Surface water quality must be measured at locations representative of impacts likely to be experienced outside the premises as a result of the operation of the mine

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Conductivity	microsiemens per centimetre	30	1	289	289	289
рН	рН	30	1	7.5	7.5	7.5
Total suspended solids	milligrams per litre	30	1	1890	1890	1890

### **Monitoring Point 13**

Particulate Matter Monitoring, Monitor AQ01 at coordinates 314095 6393959 (Easting Northing) on plan titled "Wambo Mine Environment Protection Licence 529 Plan of Premises - Monitoring Sites" DWG 2160-2 dated 3/3/2017 EPA Ref DOC17/147944

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
PM10	micrograms per cubic metre	Continuous	359	0.0	32.7	238.4

#### **Monitoring Point 14**

Particulate Matter Monitoring, Monitor AQ02 at coordinates 312272 6390213 (Easting Northing) on plan titled "on plan titled "Wambo Mine Environment Protection Licence 529 Plan of Premises - Monitoring Sites" DWG 2160-2 dated 3/3/2017 EPA Ref DOC17/147944



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Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
PM10	micrograms per cubic metre	Continuous	356	0.0	34.0	1771.7

#### **Monitoring Point 15**

Particulate Matter Monitoring, Monitor AQ03 at coordinates 304503 6398522 (Easting Northing) on plan titled "Wambo Mine Environment Protection Licence 529 Plan of Premises - Monitoring Sites" DWG 2160-2 dated 3/3/2017 EPA Ref DOC17/147944

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
PM10	micrograms per cubic metre	Continuous	351	0	28	1439.9

#### **Monitoring Point 16**

Particulate Matter Monitoring, Monitor AQ04 at coordinates 305927 6399587 (Easting Northing) on plan titled "Wambo Mine Environment Protection Licence 529 Plan of Premises - Monitoring Sites" DWG 2160-2 dated 3/3/2017 EPA Ref DOC17/147944

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
PM10	micrograms per cubic metre	Continuous	356	0	32.8	709.1

#### **Discharge & Monitoring Point 18**

Discharge quality monitoring, STP Discharge monitoring point at coordinates 312057 6393219 (easting and northing) defined as STPD1 on plan titled "Wambo Mine Environment Protection Licence 529 Plan of Premises - Monitoring Sites" DWG 2160-2 dated 3/3/2017 EPA Ref DOC17/147944

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Faecal Coliforms	colony forming units per 100 millilitres	4	4	63	1321	3800



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#### **Discharge & Monitoring Point 19**

Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality Volume monitoring, Outlet from South Wambo Dam labelled as proposed discharge location on Figure 1 of the licence variation application (DOC18/128763)

Pollutant	Unit of measure	No. of samples required	No. of samples collected and analysed	Lowest sample value	Mean of sample	Highest sample value
Conductivity	microsiemens per centimetre	0	0	0	0	0
рН	рН	0	0	0	0	0
Total suspended solids	milligrams per litre	0	0	0	0	0

#### **B3. Volume or Mass Monitoring Summary**

For each volume or mass monitoring point identified in your licence, details are displayed below. If volume or mass monitoring is not required by your licence, **no data** will appear below.

If data was provided from an uploaded file, the file name will be displayed below instead of any data. **Note** that this does not exclude the need to conduct appropriate volume or mass monitoring of assessable pollutants are required by load-based licensing (if applicable).

#### **Discharge & Monitoring Point 4**

Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality

Volume monitoring, HRSTS Outlet from Eagles Nest Dam at co-ordinates 313132 6393073 (Easting Northing) labelled as EPA4 on plan titled "Wambo Mine Environment Protection Licence 529 Plan of Premises - Monitoring Sites" DWG 2160-2 dated 3/3/2017 EPA Ref DOC17/147944

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
megalitres per day	Continuous	0	0	0	0

#### **Discharge & Monitoring Point 19**

Discharge of saline water under the Hunter River Salinity Trading Scheme (HRSTS) Discharge quality Volume monitoring, Outlet from South Wambo Dam labelled as proposed discharge location on Figure 1 of the licence variation application (DOC18/128763)

Unit of measure	Frequency	No. of measurements made	Lowest result	Mean result	Highest result
megalitres per day	Continuous	0	0	0	0



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# C. Statement of Compliance - Licence Conditions

#### C1. Compliance with Licence Conditions

Were all conditions of the licence complied with (including monitoring	No
and reporting requirements)?	NO

#### C2. Details of Non-Compliance with Licence

# Licence condition number not complied with ▼

I 4 1

#### Summary of particulars of the non-compliance ▼

On 12th November 2019 the operation exceeded the LAeq (15 minute) EPL Noise limit of 40dB by 2dB (as a result of a 2dB low frequency penalty) at the N16 location (mine owned land).

#### Further details on particulars of non-compliance, if required ▼

The operation was notified, and changes were made prior to re-measure within 75 minutes which complied with the relevant criteria. A follow up measurement was completed within 7 days of the exceedance, and the operation complied with the EPL noise limits. The EPA was notified of the exceedance on 19 November 2019.

#### Number of times occurred ▼

1

#### Date(s) when the non-compliance occurred, if applicable ▼

12 Nov 2019

#### Cause of non-compliance ▼

The noise exceedance was attributed to excavator and rear dump truck noise from the open cut

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

No adverse effects. Changes to the operation were made during the time of the exceedance. I.e. mobile plant shut down or relocated to work areas and noise levels were compliant during the re-measure.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Wambo Coal will continue to use the real-time monitoring procedure to manage noise generated from the operation. Monitoring location N16 is currently located on mine owned land, Wambo has committed to reviewing the location of N16 and has updated the Noise Management Plan.

#### Uploaded Document Name ▼

Map 5 - Noise Exceedance Location.jpg

#### Uploaded Document Description ▼

Map 5 - Noise Exceedance Location

#### Licence condition number not complied with ▼

L5.3



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#### Summary of particulars of the non-compliance ▼

On the 21st September 2019 Wambo Coal initiated a blast event (ID: M\_27WMA\_433) which resulted in the exceedance of the airblast over pressure criteria of 120 dBL. The resulting airblast over pressure was 120.6 dBL at blast monitoring station BM05.

#### Further details on particulars of non-compliance, if required ▼

#### Number of times occurred ▼

1

#### Date(s) when the non-compliance occurred, if applicable ▼

21/09/2019

#### Cause of non-compliance ▼

The airblast over pressure may have been a result of possible low frequency mass air movement generated from free face geometry and piston movement, a dyke through the blast may have led to weaker than normal rock strength parallel to the open face leading to stemming relief and possible propagation of air-blast, after review of post drilling photographs no cutting piles showed an intersection with the dyke but review, and/or the two open face may have focused the initial air movement.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

The over pressure exceedance was recorded on mine owned property. No adverse effects as a result of the non-compliance. Following the airblast over pressure exceedance Wambo Coal has taken the following steps:

- i. Enactment of the Pollution Incident Response Management Plan (PIRMP);
- ii. Notification of the Community Consultative Committee (19 December 2019) Relevant community members were notified;
- iii. Inspection, maintenance and calibration of blast monitoring equipment;
- iv. Internal review of drone footage of the blast;
- v. Internal review of the blast design and process;
- vi. External review by technical expert of blast design, procedure, and modelling;
- vii. External review by technical expert of blast monitoring data and meteorological data.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Wambo Coal has committed to the following mitigation measures regarding airblast over pressure: improve identification and potential of geological structures on blasting outcomes, additional increase of burden on open face if geological structures are identified running parallel to them, increase stemming any holes that are identified to intersect a dyke; moving forward, and with more focus on dyke mapping holes adjacent to these structures will also have an increase in stemming applied, and consider findings of blast modelling that has been conducted by Dyno Nobel in future timing designs. The Wambo Coal Blast Management Plan will also be reviewed and updated.

#### Uploaded Document Name ▼

Map 6 - Airblast Overpressure Exceedance Location.JPG

#### Uploaded Document Description ▼

Map 6 - Airblast over pressure exceedance location

#### Licence condition number not complied with ▼

M2.2

#### Summary of particulars of the non-compliance ▼



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Air quality monitoring stations (AQ01, AQ02, AQ03, and AQ04) are required to monitor continuously. AQ01 and AQ02 stopped logging data on 8 separate occasions, AQ03 on 14 separate occasions, and AQ04 on 30 separate occasions.

#### Further details on particulars of non-compliance, if required ▼

#### Number of times occurred ▼

60

#### Date(s) when the non-compliance occurred, if applicable ▼

Please see attached for dates

#### Cause of non-compliance ▼

PM10 monitors ceased logging for varying lengths of time. These outages were a result of storms, Ausgrid maintenance, power outages, and communication errors.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

No adverse effects. During outages, field service technicians inspected and repaired the equipment for any faults and software to reconcile any communication or power outage issues.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Previously all computing hardware was housed with the AQ04 monitoring station. To minimise the re-occurrence of the non-compliance WCPL contracted a field technician to virtualise the computing hardware individually for each monitoring locations. Now all monitoring stations are remotely controlled by internal contractor equipment minimising the likelihood of data being lost as a result of faults/communication errors/ power outages. Regular preventative maintenance will continue on all 4 PM10 monitors.

#### **Uploaded Document Name** ▼

Map 3 - PM10 Non-compliances.JPG

#### Uploaded Document Description ▼

Map 3 - PM10 Monitoring Non-compliances

#### Licence condition number not complied with ▼

M2.3

#### Summary of particulars of the non-compliance ▼

Monthly groundwater quality monitoring was conducted in accordance with the frequency specified in the EPL. 120 samples are required 82 were collected. 38 samples were not collected as monitoring locations were dry or had insufficient water

#### Further details on particulars of non-compliance, if required ▼

Monitoring locations P106, P114, P315, GW08, and GW09 were monitored but a sample was unable to be taken on 8 Feb 2019, 3 April 2019, 5 June 2019, 6 August 2019, 3 October 2019, 3 December 2019 as they were dry or had insufficient water to provide a representative sample.

#### Number of times occurred ▼

38

#### Date(s) when the non-compliance occurred, if applicable ▼

8/02/2019, 3/04/2019, 5/06/2019, 6/08/2019

#### Cause of non-compliance ▼



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Groundwater monitoring boreholes were dry or had insufficient water required to obtain a representative sample.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

No adverse effects.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Wambo Coal will continue to monitor on a bi-monthly basis. Additional groundwater monitoring bores were installed in January 2020. The newly installed bores will be monitored on a bi-monthly basis to confirm the results of the previously monitored locations. If bores are recorded dry, investigations will be triggered in accordance with the Surface and Groundwater Response Plan.

#### Uploaded Document Name ▼

Map 1 - Groundwater Non-compliances.jpg

#### Uploaded Document Description ▼

Map 1 - Groundwater Non-compliances

#### Licence condition number not complied with ▼

M2.3

#### Summary of particulars of the non-compliance ▼

Monthly surface water monitoring was conducted in accordance with the frequency specified in the EPL. However, of the 30 samples required by the Surface Water Monitoring Plan and EPL, 1 sample was collected and analysed.

#### Further details on particulars of non-compliance, if required ▼

Monthly samples were unable to be collected at monitoring locations SW01, SW02, SW03, SW27/SW27a, SW32/SW32a, and SW08 as the location was dry or was not flowing in order to provide a representative sample. A representative sample was collected at SW32/SW32a on 21 January 2019.

Samples were unable to be collected on 2 January 2019, 21 January 2019, 27 February 2019, 18 March 2019, 1 April 2019, 31 May 2019, 24 June 2019, 25 July 2019, 27 August 2019, 27 September 2019, 29 Oct 2019, and 27 Novem

#### Number of times occurred ▼

29

#### Date(s) when the non-compliance occurred, if applicable ▼

#### Cause of non-compliance ▼

Drought conditions lead to reduced run off in catchments.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

No action required, no adverse effects.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

Non-compliance a result of climatic conditions. Going forward WCPL will continue to implement the Surface Water Monitoring Program and monitor on a monthly basis.

#### Uploaded Document Name ▼

Map 2 - Surface Water Non-compliances.jpg

#### Uploaded Document Description ▼



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Map 2 - Surface Water Non-compliances

#### Licence condition number not complied with ▼

M4 1

#### Summary of particulars of the non-compliance ▼

Weather monitoring is required to occur continuously. During the reporting period there was a total of 4 separate outages where weather monitoring data was not logged. In addition, the rain bucket was blocked during 2 separate occasions.

#### Further details on particulars of non-compliance, if required ▼

Weather monitoring data was not logged at the following times:

8/3/2019 23:50 to 9/3/2019 07:00

9/4/2019 17:00 to 9/4/2019 17:30

6/10/2019 01:40 to 6/10/2019 04:00

3/12/2019 23:50 to 5/12/2019 00:00

On following 2 occasions the rainfall data was not collected:

8/8/2019

4/6/2019

#### Number of times occurred ▼

5

#### Date(s) when the non-compliance occurred, if applicable ▼

#### Cause of non-compliance ▼

The non-compliance was a result of loss of connectivity and power. These outages may be a result of storms, Ausgrid maintenance, and communication errors. In addition, the rain bucket was blocked during 2 separate occasions as a result of bird excrement.

#### Action taken or that will be taken to mitigate any adverse effects of the non-compliance ▼

No adverse effects.

#### Action taken or that will be taken to prevent a recurrence of the non-compliance ▼

During outages, field service technicians inspected, cleaned and repaired the equipment for any faults, blockages, or software issues. Wambo Coal is committed to preventing and reconciling any issues by continued inspections and maintenance.

#### **Uploaded Document Name** ▼

Map 4 - Weather Monitoring Non-compliances.jpg

#### Uploaded Document Description ▼

Map 4 - Weather Monitoring Non-compliances

# D. Statement of Compliance - Load Based Fee Calculation

# SEPA

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If you are not required to monitor assessable pollutants by your licence, no data will appear below.

If assessable pollutants have been identified on your licence, the following worksheets for each assessable pollutant will determine your load based fee for the licence fee period to which this Annual Return relates.

Loads of assessable pollutants must be calculated using any of the methods provided in EPA's Load Calculation Protocol for the relevant activity. A Load Calculation Protocol would have been already sent to you with your licence. If you require additional copies, you can download the Protocol from the EPA's website or you can contact us on telephone 02 9995 5700.

You are required to keep all records used to calculate licence fees for four years after the licence fee was paid or became payable, whichever is the later date.

# E. Statement of Compliance - Requirement to Prepare PIRMP

	Incident Response Management Plan (PIRMP) A of the Protection of the Environment	Yes
Is the PIRMP available at the premis	es?	Yes
Is the PIRMP available in a prominent position on a publicly accessible website?		
Address of the web page where the	PIRMP can be accessed ▼	
https://www.peabodyenergy.com/ Approvals,-Plans-Reports	Operations/Australia-Mining/New-South-Wales-Mining/V	Vambo-
Has the PIRMP been tested?		Yes
The PIRMP was last tested on	24-12-2019	
Has the PIRMP been updated?		
The PIRMP was last updated on	25-1-2019	
Number of times the PIRMP was activated in this reporting period?		
The PIRMP was activated on	21-09-2019	

# F. Statement of Compliance - Requirement to Publish Pollution Monitoring Data

Are there any conditions attached to your licence that require pollution monitoring to be undertaken as required under section 66(6) of the Protection of the Environment Operations (POEO) Act 1997?  Do you operate a website?		
Do you operate a website?	Yes	
Is the pollution monitoring data published on your website in accordance with the EPA's written requirements for publishing pollution monitoring data?	Yes	
Address of the web page where the pollution monitoring data can be accessed ▼		
https://www.peabodyenergy.com/Operations/Australia-Mining/New-South-Wales-Mining/WApprovals,-Plans-Reports	ambo-	



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# **G. Statement of Compliance - Environment Management System and Practices**

Do you have an ISO 14001 certified Environmental Management System (EMS) OR any other system that EPA considers is equivalent to the accountability, procedures, documentation and record keeping requirements of an ISO 14001 certified EMS?	No
Have you conducted an assessment of your activities and operations to identify the aspects that have a potential to cause environmental impacts and implemented operational controls to address these aspects?	Yes
Have you established and implemented an operational maintenance program, including preventative maintenance?	Yes
Do you keep records of regular inspections and maintenance of plant and equipment?	Yes
Do you conduct regular (at least yearly) environmental audits at the premises that are conducted by a competent and independent person?	No
Have you undertaken an independent environmental audit covering documented environmental practices, procedures and systems in place during the annual return period?	No
Have you established and implemented an environmental improvement or management plan?	Yes
Do you train staff in environmental issues that may arise from your activities and operations at the premises and keep records of this?	Yes

# H. Signature and Certification

This Annual Return may only be signed by person(s) with legal authority to sign it as set out in following categories: an Individual, a Company, a Public authority or a Local council.

It is an offence under section 66 of the Protection of the Environment Operations Act 1997 to supply any information in this form that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum penalty of \$250,000 for a corporation and \$120,000 for an individual.

I/We

- declare that the information in the Monitoring and Complaints Summary in Section B of this Annual Return application is correct and not false or misleading in a material respect, and
- certify that the information in the Statement and Compliance in sections A, C, D, E, F, G and H and any other pages attached to Section C is correct and not false or misleading in a material respect.

Signed by: Director	
Name	Steve Hedges
Position	SVP Open-Cut Operations
Email Address	SHedges@peabodyenergy.com
Phone Number	07 3239 7615



#### WAMBO COAL PTY LIMITED

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Signed by: Director	
Name	Albert Scheepers
Position	General Manager: Wambo
Email Address	AScheepers@peabodyenergy.com
Phone Number	02 6570 2208

			Signature				
			Name				
			Position				
/	/		Date	,	/	/	
	/	/ /		Name Position	Name Position	Name Position	Name Position

#### **Declaration**

I declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and

I certify that the information in the Statement of Compliance in section A,C,D,E,F and G and any pages attached to Section C is correct and not false or misleading in a material respect.

#### Declaration

I declare that the information in the Monitoring and Complaints Summary in section B of this Annual Return is correct and not false or misleading in a material respect, and

I certify that the information in the Statement of Compliance in section A,C,D,E,F and G and any pages attached to Section C is correct and not false or misleading in a material respect.