

Licence Variation

Licence - 20850



MACH ENERGY AUSTRALIA PTY LTD
ABN 34 608 495 441 ACN 608 495 441
GPO Box 94
BRISBANE QLD 4001

Attention: Richard Bailey

Notice Number 1573657
File Number EF16/11941
Date 01-May-2019

NOTICE OF VARIATION OF LICENCE NO. 20850

BACKGROUND

- A. MACH ENERGY AUSTRALIA PTY LTD ("the licensee") is the holder of Environment Protection Licence No. 20850 ("the licence") issued under the *Protection of the Environment Operations Act 1997* ("the Act"). The licence authorises the carrying out of activities at 1100 WYBONG ROAD, MUSWELLBROOK, NSW, 2333 ("the premises").
- B. The licence limits the carrying out of dust generating activities under certain conditions to reduce potential dust impacts on the township of Muswellbrook. In October 2018 the licensee commenced discussions with the Environment Protection Authority ("EPA") on options to refine these conditions to allow information from other sources to be used to determine when dust generating activities needed to cease.
- C. On 02-Nov-2018 the EPA received an application for the variation of the licence to vary conditions relating to dust and the triggers for defining adverse weather conditions.
- D. The licence variation application seeks to:
 - i. Change the weather monitoring location used for monitoring wind direction from the existing on-site weather station to the Muswellbrook North West Upper Hunter Air Quality Network monitoring station;
 - ii. Permit the ongoing operation of the coal handling and preparation plant ("CHPP") under adverse weather conditions when specific dust control measures are activated; and
 - iii. Add an alternative weather monitoring location if the Muswellbrook North West Network monitor is not operating and/or data cannot be accessed.
- E. On 4 January 2019 the licensee provided a revised monitoring plan that specifies the location of the alternative weather monitoring station.
- F. On 15 February 2019 a draft notice of licence variation was provided to the licensee for comment.

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- G. On 26 February 2019 the EPA met with the licensee and discussed air quality controls associated with the operation of the CHPP. Details of the controls were provided in writing by the licensee on 1 March 2019. A further meeting was held on 11 March 2019 to clarify how effective performance of these controls would be reflected in the licence.
- H. On 1 April 2019 the licensee provided a plan identifying the CHPP & materials handling areas.
- I. On 8 April 2019 a further draft notice of licence variation was provided to the licensee who responded on 10 April 2019 advising that they have no further comments.
- J. Variation of this licence does not authorise a significant increase in the environmental impact of the activity authorised or controlled by the licence. The conditions of the licence will continue to reduce the potential adverse particulate impacts on the township of Muswellbrook as a result of operations at the premises.

VARIATION OF LICENCE NO. 20850

- 1. By this notice the EPA varies licence No. 20850. The attached licence document contains all variations that are made to the licence by this notice.
- 2. The following variations have been made to the licence:

Discharges To Air and Water and Applications to Land

P1.3 - Addition of monitoring point 11 being the alternative weather monitoring location if the Muswellbrook North West Network monitor is not operating and/or data cannot be accessed.

Operating Conditions

O3.5 (b) - has been changed to specify the weather monitoring location as the Muswellbrook North West Upper Hunter Air Quality Monitoring Network station and included changes to the wind direction applicable for that location.

O3.5(e) - has been added to permit the operation of the Coal Handling and Preparation Plant and activities in the materials handling area during adverse conditions, but only when air quality controls are operational to mitigate air impurities emissions in these areas.

O3.8 - has been changed to permit the use of alternative monitoring stations when data from the Muswellbrook North West Upper Hunter Air Quality Monitoring Network station cannot be accessed.

Note Below condition O3.8 for the negotiation of an PM10 alternative monitoring location has been removed as this has been undertaken.

O3.9 - has been added to ensure there is no visible dust emissions from the premises as a result of the operation of the Coal Handling and Preparation Plant, and activities in the materials handling area, during adverse weather conditions.

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Monitoring and Recording Conditions

M4.1 - has been changed to include monitoring of wind speed and wind direction at monitoring point 11.

Special Conditions

E1.1 & E1.2 have been removed as the Hunter Valley Dust Risk Forecasting Trial of Spring 2017 has been completed and the conditions complied with.

A blue ink signature of Mark Hartwell, consisting of a large, stylized 'M' and 'H' followed by a horizontal line.

Mark Hartwell

Unit Head

North - Hunter

(by Delegation)

INFORMATION ABOUT THIS NOTICE

- This notice is issued under section 58(5) of the Act.
- Details provided in this notice, along with an updated version of the licence, will be available on the EPA's Public Register (<http://www.epa.nsw.gov.au/prpoeo/index.htm>) in accordance with section 308 of the Act.

Appeals against this decision

- You can appeal to the Land and Environment Court against this decision. The deadline for lodging the appeal is 21 days after you were given notice of this decision.

When this notice begins to operate

- The variations to the licence specified in this notice begin to operate immediately from the date of this notice, unless another date is specified in this notice.

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- If an appeal is made against this decision to vary the licence and the Land and Environment Court directs that the decision is stayed the decision does not operate until the stay ceases to have effect or the Land and Environment Court confirms the decision or the appeal is withdrawn (whichever occurs first).

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Licence Details

Number:	20850
Anniversary Date:	24-November

Licensee

MACH ENERGY AUSTRALIA PTY LTD
GPO BOX 94
BRISBANE QLD 4001

Premises

MOUNT PLEASANT OPERATION
1100 WYBONG ROAD
MUSWELLBROOK NSW 2333

Scheduled Activity

Coal works
Mining for coal

Fee Based Activity

Scale

Coal works	> 5000000 T annual handling capacity
Mining for coal	> 5000000 T annual production capacity

Region

North - Hunter
Ground Floor, NSW Govt Offices, 117 Bull Street
NEWCASTLE WEST NSW 2302
Phone: (02) 4908 6800
Fax: (02) 4908 6810
PO Box 488G
NEWCASTLE NSW 2300

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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:

MACH ENERGY AUSTRALIA PTY LTD
GPO BOX 94
BRISBANE QLD 4001

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 handling capacity
Mining for coal	Mining for coal	> 5000000 T annual production capacity

A2 Premises or plant to which this licence applies

- A2.1 The licence applies to the following premises:

Premises Details
MOUNT PLEASANT OPERATION
1100 WYBONG ROAD
MUSWELLBROOK
NSW 2333
AREA IDENTIFIED AS 'MACH ENERGY AUSTRALIA, MT PLEASANT PROJECT, ENVIRONMENT PROTECTION LICENCE PREMISES MAP' DATED 08/02/2018 AND SHAPE FILES, AS CONTAINED IN EPA REFERENCE DOC18/74684. THIS LICENCE DOES NOT APPLY TO, OR INCLUDE, PUBLIC ROADS.

A3 Other activities

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

Ancillary Activity
Coal Works
Land-based extractive activity
sewage treatment plant

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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.

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.

<i>Air</i>			
EPA identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1	Particulate Monitoring (PM10 network)		Air Quality - TEOM Particulate Monitor located in the South-Eastern of the premises and labelled "A-PF2" on plan titled MACHEnergy - Environment Project Licence Premises Map, dated 08/02/2018 (EPA reference DOC18/74684), Easting 299575, Northing 6428744
2	Particulate Monitoring (PM10 network)		Air Quality - TEOM Particulate Monitor located in the North-Northwest corner of the premises and labelled "A-PF5" on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2016 (DOC16/588131)

- P1.2 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

- P1.3 The following points referred to in the table below are identified in this licence for the purposes of weather and/or noise monitoring and/or setting limits for the emission of noise from the premises.

Noise/Weather

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EPA identification no.	Type of monitoring point	Location description
3	Air blast overpressure & ground vibration peak particle velocity monitoring	Blast Monitor - location labelled "B-VOC" as shown on plan titled MACHEnergy Mount Pleasant Operations, Environmental Sites, provided to the EPA on 8 November 2016 (DOC16/588131)
4	Meteorological Station	Meteorological Monitoring - location labelled "M-WS4" as shown on plan titled MACHEnergy Mount Pleasant Operations, Environmental Sites, provided to the EPA on 8 November 2016 (DOC16/588131)
5	Noise monitoring	Attended noise monitoring - location labelled "N-AT1" on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2016 (DOC16/588131)
6	Noise monitoring	Attended noise monitoring - location labelled "N-AT2" on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2016 (DOC16/588131)
7	Noise monitoring	Attended noise monitoring - location labelled "N-AT3" on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2016 (DOC16/588131)
8	Noise monitoring	Attended noise monitoring - location labelled "N-AT4" on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2016 (DOC16/588131)
9	Noise monitoring	Attended noise monitoring - location labelled "N-AT5" on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2016 (DOC16/588131)
10	Noise monitoring	Attended noise monitoring - location labelled "N-AT6" on plan titled MACHEnergy Mount Pleasant Operations - Environmental Monitoring Sites, provided to the EPA on 8 November 2016 (DOC16/588131)

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11	Meteorological Station	Meteorological Monitoring - location labelled "M-WM2" as shown on plan titled MACHEnergy Mount Pleasant Operations - Air Quality and Meteorological Monitoring Sites, provided to the EPA on 4 January 2019 (Doc19/52412), Easting 299575, Northing 6428744
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3 Limit Conditions

L1 Pollution of waters

- L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Noise limits

- L2.1 Noise generated at the premises must not exceed the noise limits presented in the table below.

Note:

The noise limits in the table below do not apply if the licensee has a written agreement with the relevant landowner to exceed the noise limit and the licensee has advised the EPA in writing of the terms of the agreement.

The noise limits in the table below do not apply to residences owned by the licensee or those residences that are subject to acquisition as Listed in Table 1 of the Development Consent DA 92/97 (MOD1) dated 19 September 2011.

Location	Day - LAeq(15 minute)	Evening - LAeq(15 minute)	Night - LAeq(15 minute)	Night - LA1(1 minute)
NAG 1 - assessment locations 260 and 261	37	37	37	45
NAG 1 - assessment location 258	40	40	40	45
NAG 1 - assessment location 259	39	39	39	45
NAG 1 - All other privately-owned land	35	35	35	45
NAG 2 - assessment location 272	36	36	36	45

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NAG 2 - All other privately-owned land	35	35	35	45
NAG 3 - assessment locations 139, 154 and 240	40	40	40	45
NAG 3 - assessment location 241	39	39	39	45
NAG 3 - All other privately-owned land	35	35	35	45
NAG 4 - assessment location 169	36	36	36	45
NAG 4 - All other privately-owned land	35	35	35	45
NAG 5 - All privately-owned land	41	40	39	45
NAG 6 - assessment location 205	41	41	41	45
NAG 6 - assessment locations 203 and 242	40	40	40	45
NAG 6 - assessment location 202	39	39	39	45
NAG 6 - assessment location 204	38	38	38	45
NAG 6 - All other privately-owned land	37	37	37	45
NAG 7 - assessment locations 68, 74 and 279	43	42	42	45
NAG 7 - assessment locations 86 and 290	42	42	42	45
NAG 7 - assessment location 77	42	41	41	45
NAG 7 - assessment locations 79, 80 and 231	41	41	41	45

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NAG 7 - assessment location 78	41	40	40	45
NAG 7 - All other privately-owned land	40	37	37	45
NAG 8 - assessment location 35	42	41	41	45
NAG 8 - assessment location 289	41	40	40	45
NAG 8 - assessment locations 23 and 84	40	40	40	45
NAG 8 - All other privately-owned land	41	39	39	45
NAG 9 - All other privately-owned land	39	38	37	45
NAG 10 - All other privately-owned land	35	35	35	45
NAG 11 - All other privately-owned land	37	36	35	45
All other privately-owned land	35	35	35	45

L2.2 For the purpose of this licence the following definitions apply.

NAG is to be read as 'Noise Assessment Group'.

The locations of the Noise Assessment Groups are defined in Appendix 6 of the Determination of Development Application for the Mount Pleasant Coal Mine DA92/97, as modified on 19 September 2011.

Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays.

Evening is defined as the period from 6pm to 10pm.

Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.

L2.3 The noise limits set out in this licence apply under all meteorological conditions except for the following:

- Wind speeds greater than 3 metres/second at 10 metres above ground level; or
- Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or

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c) Stability category G temperature inversion conditions.

For the purposes of this condition:

- i) Data recorded by the meteorological station within the licensed premises must be used to determine meteorological conditions; and
- ii) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

L2.4 Determining Compliance

To determine compliance:

a) with the LAeq(15 minute) noise limits in this licence, the noise measurement equipment must be located:

- i) approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
- ii) within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable
- iii) within approximately 50 metres of the boundary of a National Park or a Nature Reserve.

b) with the LA1(1 minute) noise limits in this licence, the noise measurement equipment must be located within 1 metre of a dwelling façade.

c) with the noise limits in this licence, the noise measurement equipment must be located:

- i) at the most affected point at a location where there is no dwelling at the location; or
- ii) at the most affected point within an area at a location prescribed by part (a) or part (b) of this condition.

L2.5 Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy

L2.6 A non-compliance with the noise limits specified in this licence will still occur where noise generated from the premises in excess of the appropriate limit is measured:

- i) at a location other than an area prescribed in part (a) and part (b) of condition L2.4; or
- ii) at a point other than the most affected point at a location.

L2.7 For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

L3 Blasting

L3.1 Offensive blast fume must not be emitted from the premises.

Definition:

Offensive blast fume means post-blast gases from the detonation of explosives at the premises that by reason of their nature, duration, character or quality, or the time at which they are emitted, or any other

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circumstances:

- 1. are harmful to (or likely to be harmful to) a person that is outside the premises from which it is emitted, or*
- 2. interferes unreasonably with (or is likely to interfere unreasonably with) the comfort or repose of a person who is outside the premises from which it is emitted.*

- L3.2 Blasting in or on the premises must only be carried out between 0900 hours and 1700 hours, Monday to Saturday. Blasting in or on the premises must not take place on Sundays or Public Holidays without the prior approval of the EPA.
- L3.3 The airblast overpressure level from blasting operations at the premises must not exceed 120dB (Lin Peak) at any time at any blast monitoring location specified in Condition P1.1.
- L3.4 The airblast overpressure level from blasting operations at the premises must not exceed 115dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period at any blast monitoring location specified in Condition P1.1.
- L3.5 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 5mm/second at any blast monitoring location specified in Condition P1.1 for more than 5% of the total number of blasts during each reporting period.
- L3.6 Ground vibration peak particle velocity from the blasting operations at the premises must not exceed 10mm/second at any time at any blast monitoring location specified in Condition P1.1.
- L3.7 Error margins associated with any equipment used to measure airblast overpressure and/or ground vibration peak particle velocity are not to be taken into account in determining if the airblast overpressure or ground vibration peak particle velocity limits specified in conditions L3.3 to L3.6 inclusive, have been exceeded.
- L3.8 Noise sensitive location includes any residence, hospital, school, childcare centre, theatre, place of worship, other similar building occupied by people, and any land within 30 metres of any afore-mentioned building.

A noise sensitive location excludes:

- a) any of the afore-mentioned buildings or land that is the subject of a private agreement between the owner of the noise sensitive site and the licensee as to an alternative airblast overpressure or ground vibration level; or
- b) any premises owned by the licensee.

L4 Potentially offensive odour

- L4.1 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

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emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

4 Operating Conditions

O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

O3 Dust

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

O3.2 Activities occurring in or on the premises must be carried out in a manner that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.

O3.3 All trafficable areas, coal storage areas and vehicle manoeuvring areas in or on the premises must be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of wind-blown or traffic generated dust.

O3.4 The licensee must cease all dust generating activities during adverse conditions being the occurrence of both the adverse wind conditions set out in Condition O3.5 (b) and the adverse PM₁₀ concentrations set out in Condition O3.5(c).

O3.5 For the purpose of Condition O3.4 the following definitions apply.

(a) 'dust generating activities' means drilling, blasting, earthworks, construction activities, all hauling activities on unsealed haul roads, all overburden and coal extraction operations including loading and dumping activities and grader, loader, dozer and dragline operations.

(b) 'adverse wind conditions' means a rolling 1-hour average wind direction between 250 degrees and 340 degrees (inclusive) measured at the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitor.

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Australian Standard AS3580.14-2014 is to be used to calculate the rolling 1 hour average wind direction.

(c) 'adverse PM₁₀ concentrations' means a rolling 24-hour average PM₁₀ concentration of equal to or greater than 44 micrograms per cubic metre measured at the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station.

(d) Operation of watercarts is permitted at all times.

(e) Activities within the Coal Handling and Preparation Plant and Materials Handling Area, including run-of-mine (ROM) coal, product coal handling (including dozer/loader operations) and train loading operations as identified in blue on plan titled 'Mt Pleasant Coal Mine Materials Handling Area Dust Exclusion Zone General Arrangement' drawing number MP001-0000-GEN-DRG-0026 (EPA ref Doc19/282883) are not included as dust generating activities provided all automated dust suppression spray systems at the ROM hopper, conveyor transfer points and product stockpiles are in use, at least one water cart is in use on the ROM stockpile and an adjustable hood is lowered onto rail wagons loadings.

O3.6 Shutdown of dust generating activities required by Condition O3.4 must be completed within 1 hour of receiving data that triggers action required by Condition O3.4.

O3.7 The licensee may resume dust generating activities at the premises when:

(a) adverse wind conditions as defined in Condition O3.5(b); or

(b) adverse PM₁₀ concentrations as defined in Condition O3.5(c)

are not measured for a minimum time period of 1 hour from the time that cessation of dust generation activities is completed.

O3.8 At any time when there is no access to the meteorological data or PM₁₀ data from the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station, definitions of 'adverse wind conditions' and 'adverse PM₁₀ concentrations' in condition O3.5 are replaced with :

- 'adverse wind conditions' means a rolling 1-hour average wind direction between 245 and 345 degrees (inclusive) measured at Monitoring Point No. 11, identified in condition P1.3

- 'adverse PM₁₀ concentrations' means a 24-hour average PM₁₀ concentration of equal to or greater than 44 micrograms per cubic metre measured at the Monitoring Point No. 1, identified in condition P1.3

Note: If at any time, there is no access to the Muswellbrook NW Upper Hunter Air Quality Monitoring Network monitoring station and to either 1-hour average wind direction data from monitoring point 11 or PM₁₀ data from monitoring point 1 the licensee must cease dust generating activities at the premises.

O3.9 For the purpose of condition O3.5 (e), dust suppression systems must be operated in a manner to ensure that there is no visible dust emissions emitted from the premises.

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O4 Emergency response

O4.1 The licensee must prepare a Pollution Incident Response Management Plan (PIRMP) as per section 153A of the *Protection of the Environment Operations Act 1997*. The PIRMP must:

1. Include the information detailed in section 153A of the *Protection of the Environment Operations Act 1997*, and to be in the form required by clause 98B in the *Protection of the Environment Operations (General) Regulation*.
2. Be kept at the premises to which the licence relates; and
3. Be tested in accordance with clause 98E of the *Protection of the Environment Operations (General) Regulation*.

5 Monitoring and Recording Conditions

M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
- a) in a legible form, or in a form that can readily be reduced to a legible form;
 - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
 - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
- a) the date(s) on which the sample was taken;
 - b) the time(s) at which the sample was collected;
 - c) the point at which the sample was taken; and
 - d) the name of the person who collected the sample.

M2 Requirement to monitor concentration of pollutants discharged

- M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:
- M2.2 Air Monitoring Requirements

POINT 1,2

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Pollutant	Units of measure	Frequency	Sampling Method
PM10	milligrams per cubic metre	Continuous	Special Method 1

Note: Special Method 1 requires the Licensee to undertake the monitoring of PM10 concentrations in strict accordance with the manufacturer's operating manual supplied with the continuous monitoring equipment, or any updated versions as published by the manufacturer.

M2.3 Monitoring of all parameters listed in condition M2.1 must commence prior to earthmoving activities being undertaken at the premises.

M3 Testing methods - concentration limits

- M3.1 Monitoring for the concentration of a pollutant emitted to the air required to be conducted by this licence must be done in accordance with:
- a) any methodology which is required by or under the Act to be used for the testing of the concentration of the pollutant; or
 - b) if no such requirement is imposed by or under the Act, any methodology which a condition of this licence requires to be used for that testing; or
 - c) if no such requirement is imposed by or under the Act or by a condition of this licence, any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.

Note: The *Protection of the Environment Operations (Clean Air) Regulation 2010* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication "Approved Methods for the Sampling and Analysis of Air Pollutants in NSW".

M4 Weather monitoring

- M4.1 At the point(s) identified below, the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1 of the table below, using the corresponding sampling method, units of measure, averaging period and sampling frequency, specified opposite in the Columns 2, 3, 4 and 5 respectively.

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POINT 11

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous
Wind Direction at 10 metres	AM-2 & AM-4	Degrees	10 minutes	Continuous

POINT 4

Parameter	Sampling method	Units of measure	Averaging period	Frequency
Wind Speed at 10 metres	AM-2 & AM-4	metres per second	10 minutes	Continuous
Temperature at 2 metres	AM-4	degrees Celsius	10 minutes	Continuous
Sigma Theta	AM-2 & AM-4	degrees Celsius	10 minutes	Continuous
Rainfall	AM-4	millimetres per hour	1 hour	Continuous
Relative humidity	AM-4	percent	1 hour	Continuous
Siting	AM-1	None	-	-
Temperature at 10 metres	AM-4	degrees Celsius	10 minutes	Continuous
Total Solar Radiation	AM-4	Watts per square metre	10 minutes	Continuous

M4.2 All methods specified in conditions M4.1 are specified in the *Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales ('Approved Methods')* and all monitoring must be conducted strictly in accordance with the requirements outlined the Approved Methods.

M4.3 Monitoring of all parameters listed in M4.1 must commence prior to earthmoving activities being undertaken at the site.

M5 Recording of pollution complaints

M5.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M5.2 The record must include details of the following:

- the date and time of the complaint;
- the method by which the complaint was made;
- any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- the nature of the complaint;
- the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- if no action was taken by the licensee, the reasons why no action was taken.

M5.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

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M5.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M6 Telephone complaints line

- M6.1 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.
- M6.2 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.
- M6.3 The preceding two conditions do not apply until two weeks from the date of the issue of this licence.

M7 Blasting

- M7.1 To determine compliance with conditions L3.3, L3.4, L3.5 and L3.6:
- Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring point 3 for the parameters specified in column 1 of the table below; and
 - The licensee must use the units of measure, sampling method and sample at the frequency specified opposite in the other columns.

EPA identification number	Parameter	Unit of measure	Frequency	Sampling Method
3 (MACH ID B-VOC)	Ground vibration peak particle velocity	millimetres per second	Every blast at the premises	Australian Standard 2187.2-2006 or as amended by Standards Australia
3 (MACH ID B-VOC)	Airblast overpressure	Decibels (Linear Peak)	Every blast at the premises	Australian Standard 2187.2-2006 or as amended by Standards Australia

M8 Other monitoring and recording conditions

- M8.1 The Licensee must record the average PM₁₀ concentration at Monitoring Points 1 and 2 at intervals of 10 minutes. This data must be made available upon request by any authorised officer of the EPA who asks to see them.

M9 Noise monitoring

- M9.1 To assess compliance with the noise limits specified in condition L2.1, the licensee must undertake attended noise monitoring in accordance with condition L2.4 and the following requirements:

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- a) be undertaken during a period that is representative of typical operating conditions and not undertaken during a shutdown period;
- b) be undertaken at each one of the locations or at a location representative of the most-affected locations listed in condition L2.1;
- c) be undertaken monthly in a reporting period; and
- d) be undertaken for a minimum duration of 15 minutes within an assessment period.

Note: Night time noise monitoring is not required to be undertaken until night operations commence at the premises.

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 a copy of the form that must be completed and returned to the EPA.

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

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b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.

R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').

R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.

R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:

- a) the licence holder; or
- b) by a person approved in writing by the EPA to sign on behalf of the licence holder.

R2 Notification of environmental harm

R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.

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.

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

R3 Written report

R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:

- a) where this licence applies to premises, an event has occurred at the premises; or
- b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.

R3.3 The request may require a report which includes any or all of the following information:

- a) the cause, time and duration of the event;
- b) the type, volume and concentration of every pollutant discharged as a result of the event;
- c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
- d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
- e) action taken by the licensee in relation to the event, including any follow-up contact with any

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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 Reporting of Blast Monitoring

The licensee must report any exceedance of the licence blasting limits identified in condition L3.3, L3.4, L3.5 and L3.6 by calling the EPA's Environment Line on 131 555 as soon as practicable after the exceedance becomes known to the licensee or to one of the licensee's employees or agents.

If the exceedance is likely to cause material harm to the environment, the notification requirements of Part 5.7 of the Act apply.

- R4.2 The results of the blast monitoring required by condition M8.1 must be submitted to the EPA at the end of each reporting period.

R4.3 Noise Monitoring Report

A noise compliance assessment report must be submitted to the EPA within 3 months of the commencement of operations, and every 12 months thereafter and be submitted with the Annual Return. The report must:

- a) be prepared by an accredited acoustic consultant and determine compliance with noise limits presented in condition L2.1;
- b) include all routine attended monitoring undertaken throughout the year;
- c) include measurement and reporting of C-weighted noise levels; and
- d) outline of any management actions taken within the monitoring period to address any exceedances of the limits contained in condition L2.1.

- R4.4 The licensee must notify the EPA in writing of any exceedance of the noise criteria in this licence immediately after the licensee becomes aware of the exceedance.

R4.5 Dust Monitoring Report

The licensee must prepare a report containing the following information (as a minimum) for each reporting period:

- a) Details of times, wind speeds and wind direction during 'adverse conditions'.
- b) The date and time when dust generating activities were ceased in accordance with condition O3.4;
- c) Weather conditions monitored at Monitoring Point 4:
 - i. during the period when dust generating activities were ceased;
 - ii. for the 24 hour period immediately prior to dust generating activities being ceased; and
 - iii. for the 24 hour period immediately after dust generating activities resumed.
- d) PM10 monitoring data measured at Monitoring Points 1 and 2:
 - i. during the period when dust generating activities were ceased;
 - ii. for the 24 hour period immediately prior to dust generating activities being ceased; and
 - iii. for the 24 hour period immediately after dust generating activities resumed.

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- e) The date and time dust generating activities were resumed;
- f) A list of days when average 24 hour PM10 at the Muswellbrook Upper Hunter Air Quality Monitoring Network monitor exceeded 50µg/m3.
- g) 10 minute wind speed and direction data at Monitoring Point 4 on days recorded under condition R4.4 f).
- h) 10 minute PM10 data from monitoring points 1 and 2 for days recorded under condition R4.4 f).

Note: This information is necessary for the EPA to review whether conditions O3.4 to O3.8 are achieving the objective of ensuring that activities carried on at the premises do not increase the number of days when average PM10 concentrations in Muswellbrook exceed 50ug/m3. The EPA may review these conditions if this objective is not being achieved.

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 is to inform the EPA of the contact number within 3 months of this condition taking effect.

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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

Mr Michael Howat

Environment Protection Authority

(By Delegation)

Date of this edition: 24-November-2016

End Notes

2	Licence varied by notice	1549577 issued on 21-Feb-2017
3	Licence varied by notice	1551444 issued on 27-Apr-2017
4	Licence varied by notice	1553615 issued on 11-Jul-2017
5	Licence varied by notice	1555281 issued on 18-Aug-2017
6	Licence varied by notice	1560563 issued on 05-Mar-2018
7	Licence varied by notice	1569819 issued on 08-Oct-2018