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Department of Planning and Environment GPO BOX 39 SYDNEY NSW 2001

Attention: Hamish.aiken@planning.nsw.gov.au

Dear Mr Aiken

# MP06\_0311 Mannering Colliery Modification 3 Recommended Conditions of Approval

I refer to the Department of Planning and Environment's ("DPE") email dated 15 July 2015 seeking recommended conditions of approval for a modification to MP06\_0311 for Lakecoal Pty Limited's ("Lakecoal") Mannering Colliery. I also refer to the Environmental Assessment ("EA") titled 'Mannering Colliery – Modification 3 Environmental Assessment Section 75W Modification to MP06-0311' prepared for Lakecoal by EMGA Mitchell McLennan ("the EA").

The Environment Protection Authority ("EPA") understands that the modification involves:

- an increase in the maximum rate of Run of Mine coal handling and transport at Mannering Colliery from 1.1 Mega tonnes per annum (Mtpa) to 1.3 Mtpa; and
- extension of the project approval period from 31 March 2018 to 30 June 2022.

The EPA understands that coal will be transferred underground from Chain Valley Colliery for handling and preparation at Mannering Colliery before being transported by conveyors to Vales Point Power Station ("VPPS").

The EPA also understands that the current approval allows extraction of coal from the Fassifern Seam up to 1.1 Mtpa by first workings.

#### **Recommended Conditions of Approval**

Detailed discussion regarding the EPA's review of the EA and recommended conditions of approval are provided at **Attachment 1**.

If DPE grant consent for the development these recommended conditions of approval should be incorporated in the modified approval. The conditions provided relate only to the development as proposed in the EA. In the event that the development is modified either by the applicant prior to the granting of consent, or as a result of a condition proposed to be attached to the consent, it will be necessary to consult with the EPA about the changes before consent is issued. This will enable the EPA to determine whether a recommended condition of approval needs to be modified in the light of the changes.

PO Box 488G Newcastle NSW 2300 Email: hunter.region@epa.nsw.gov.au 117 Bull Street, Newcastle West NSW 2302 Tel: (02) 4908 6800 Fax: (02) 4908 6810 ABN 43 692 285 758 www.epa.nsw.gov.au If you wish to discuss this matter further please contact Natasha Ryan on 02 49086833.

Yours sincerely

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KAREN MARLER Head Regional Operations Unit – Hunter Environment Protection Authority

Encl: Attachment 1: Review of EA and recommended conditions of approval

## **ATTACHMENT 1**

### ENVIRONMENT PROTECTION AUTHORITY – REVIEW OF ENVIRONMENTAL ASSESSMENT AND RECOMMENDED CONDITIONS OF APPROVAL MP06-0311 MODIFICATION 3 LAKECOAL MANNERING COLLIERY

The Environment Protection Authority ("EPA") has undertaken an assessment of the document titled *Mannering Colliery – Modification 3 Environmental Assessment Section 75W Modification to MP06-0311*' ("the EA") prepared for Lakecoal by EMGA Mitchell McLennan.

The proponent will be required to apply for a variation to the existing Environment Protection Licence (No. 1770) ("the Licence") in relation to conditions for the handling and transport of ROM coal and for the inclusion of noise limits.

The following comments are provided to DPE following the EPA's review of the EA:

### **Noise Impacts**

The EPA reviewed the Noise Impact Assessment ("NIA") provided with the EA and agrees with the project specific noise levels ("PSNL") derived for the project.

The noise modelling identified that the L<sub>Aeq(15min)</sub> predicted operational noise was likely to exceed the PSNLs at most times at Location 8 and at night at Locations 4,5,6 and 7 during source to receiver wind directions.

The EPA recommends that the proponent identify all feasible and reasonable mitigation measures that could be implemented in order to reduce noise levels to, or even below the PSNLs, particularly at Location 8 (Macquarie Shores). The proponent should also provide revised modelling with the identified mitigation measures included, to the EPA to support a variation to the Licence to increase the existing noise limits specified in the Licence if an required. Identified mitigation measures should also be included in the statement of commitments. It is likely that there will be numerous exceedances of the PSNL in the absence of mitigation.

## **Air Quality Impacts**

The proponent is not proposing to increase the quantity of ROM coal handled on the premises at any one time and as a result has not updated the air quality impact assessment ("AQIA"). As there is unlikely to be any change in air quality impacts, the EPA is of the opinion that the current conditions of consent are appropriate to manage air quality impacts from this project.

The EPA does however recommend that conditions of approval include a requirement for the continuous monitoring of PM<sub>10</sub>. The EPA is of the opinion that the current TEOM located between Chain Valley Colliery and Mannering Colliery would be sufficient to monitor air quality for both Chain Valley Colliery and Mannering Colliery.

#### Water Quality Impacts

Mannering Colliery has recently had a number exceedances of the Licence water quality discharge limits. These have occurred during the 'care and maintenance' period. The EA has not addressed water management issues as these were addressed in previous development applications and the proponent is not proposing to increase the quantity of ROM coal handled on the premises.

The EPA recommends that the proponent upgrade the water management system at the premises to ensure compliance with the Licence and to prevent the pollution of waters. This includes upgrading the clean water diversions to ensure that all clean (ie water that has not been in contact with coal or disturbed

areas) run-on water is diverted around the premises. The upgrade must ensure that water discharged from the premises meets the Licence water quality and discharge volume limits.

In addition to managing surface water to meet licence requriements, the proponent must also be able to manage the volume of groundwater that is dewatered for discharge. At present, the proponent can pump groundwater to surface water management devices which reduces the available retention volume during storm events. Surface water management devise at Mannering Colliery are currently designed for the 90<sup>th</sup> percentile design storm event five day period. This has been shown to be inadequate to achieve compliance with the Licence.

The EPA is also finalising a pollution reduction program ("PRP") at the Mannering Colliery which involved the collection of metals and other water quality data over a two year period. This data, along with data from other Lake Macquarie collieries, will be reviewed and the EPA may make impose requirements for further monitoring and licence concentration limits for metals in discharges. Further PRP's may be required to be issued to Mannering Colliery to require water treatment if pollutant concentrations may result in non-trival impact to the environment.

### **RECOMMENDED CONDITIONS OF APPROVAL**

The EPA recommends the following conditions of approval for the Modification in addition to the current consent conditions.

#### Noise

Location	Period	LAeq (15min)	LA1(1min)
4,5,6	Day	47	
	Evening	47	
	Night	39	49
7, 8	Day	39	
	Evening	39	
	Night	37	47
9,11, 18 & 20	Day	43	
	Evening	43	
	Night	43	53
9,11,18,20	Night	39 LAeq (period)*	

L5.1 Noise generated at the premises must not exceed the noise levels in the table below.

The Noise Locations are as described in the EA.

**L5.2** For the purpose of condition L5.1:

(a) Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sunday and Public holidays;

(b) Evening is defined as the period 6pm to 10pm; and

(c) Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sunday and Public holidays.

**L5.3** The noise limits set out in condition L5.1 apply under all meteorological conditions except for any one of the following:

(a) Wind speeds greater than 3 metres/second at 10 metres above ground level; or

(b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second

at 10 metres above ground level; or

(c) Stability category G temperature inversion conditions.

**L5.4** For the purpose of condition L5.3:

(a) the meteorological data to be used for determining meteorological conditions is the data recorded at the meteorological station at the premises; and

(b) Stability category temperature inversion conditions are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the *NSW industrial Noise Policy* (EPA 2000).

Note: A weather station must be designed, commissioned and operated in a manner to obtain the necessary parameters required under the above condition.

**L5.5** For the purpose of determining the noise generated at the premises, the proponent must use a Class 1 or Class 2 noise monitoring device as defined by AS IEC61672.1 and AS IEC61672.2-2004, or other noise monitoring equipment accepted by the EPA in writing.

**L5.6** To determine compliance:

1. With the L<sub>Aeq(15 min)</sub> noise limits in condition L5.1, the proponent must locate noise monitoring equipment:

(a) within 30 metres of a dwelling facade (but not closer than 3 metres) where any dwelling on the property is situated more then 30 metres from the property boundary that is closest to the premises;

(b) approximately on the boundary where any dwelling is situated 30 metres or less from the property boundary that is closest to the premises, or, where applicable;

(c) within approximately 50 metres if the boundary of a national park or nature reserve.

2. With the  $L_{A1(1 \text{ minute})}$  noise limits in condition L5.1, the noise monitoring equipment must be located within 1 metre of a dwelling facade.

3. With the noise limits in condition L5.1, the noise monitoring equipment must be located:

- (a) at the most affected point at a location where there is no dwelling at the location; or
- (b) at the most affected point within an area at a location prescribed by conditions L5.6 1(a) or L5.6 1(b).

**L5.7** A non-compliance of condition L5.1 or condition L5.2 will still occur where noise generated from the premises is in excess of the appropriate limit if measured:

a) at a location other than an area prescribed by conditions L5.6 1(a) and L5.6 1(b); and /or b) at a point other than the most affected point at a location.

**L5.8** 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.

### **Noise Monitoring Requirements**

**M4.1** To determine compliance with condition L5.1, attended noise monitoring must be undertaken in accordance with conditions L5.7 and L5.8, and:

- a) at each one of the locations listed in condition L5.1;
- b) occur quarterly within the reporting period of the Environment Protection Licence with at least 2 months between monitoring events;
- c) occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 15 minutes for at least three of the quarterly monitoring events during the reporting period;
- d) the night time 15-minute attended monitoring in accordance with c) must be undertaken between the hours of 1am and 4am;
- e) the night time L<sub>A1(1min)</sub> attended monitoring in accordance with c) must be undertaken between the hours of 1am and 4am;
- f) one quarterly monitoring event during the reporting period must occur during each day, evening and night period as defined in the NSW Industrial Noise Policy (EPA 2000) for a minimum of 1.5 hours during the day, 30 minutes during the evening, and 1 hour during the night; and
- g) each quarterly monitoring event must be undertaken on a different day(s) of the week not including Saturdays, Sundays and public holidays.

Note: The intention of this condition is that quarterly noise monitoring be undertaken at each sensitive receiver location. Monitoring at each sensitive receiver should be undertaken over a range of different days excluding weekends and public holidays during the reporting period so as to be representative of operating hours. Night time 15-minute attended monitoring and the  $L_{A1(1min)}$  monitoring for three of the quarterly monitoring events should be undertaken during worst case conditions (being the most stable atmospheric conditions and when noise would be most intrusive to sleep). All of the sensitive receivers do not have to be monitored on the same day, evening and night for sub condition f).

## **Reporting Condition**

**R4.1** The proponent must submit to the EPA a noise compliance assessment report at the end of each reporting period. The report must be submitted with the Licence Annual Return. The report must be prepared by a suitably qualified and experienced acoustical consultant and which:

- a) details the noise monitoring undertaken in accordance with condition M4;
- b) assesses compliance with noise limits presented in condition L5.1; and
- c) outlines any management actions taken within the monitoring period to address any exceedances of limits specified in condition L5.1.

## Air

## Air Monitoring Requirements

P1.1 The following points referred to in the table below are identified for the purpose of monitoring

Monitoring Point		Type of Di	ischarge Locati	on Description
Air monitoring point TEOM	PM10	Ambient ai	것 또는 것 물건물건건가 물 🚩 시작권이 가 중에서 가지 않는다. 또 그는	lentified as RTD001 re 5.1 of the EA

**M2.2** The proponent must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in column 1. The proponent must use the sampling method, units of measure, and sample at the frequency, specified in the other columns;

Pollutant Unit of Measure Frequency	Sampling Method
Particulate matter Micrograms per cubic metre continuous PM10	AM-22

M3.1 Monitoring for the concentration of a pollutant emitted to the air must be done in accordance with:

a) any methodology which is required under the *Protection of the Environment Operations Act* 1997 to be used for the testing of the concentration of the pollutant.

## Reporting condition

**R5.1** The proponent must submit to the EPA an air quality monitoring report at the end of each reporting period. The report must be submitted with the Licence Annual Return. The report must be prepared by a suitably qualified and experienced acoustical consultant which:

- a) details the air quality monitoring undertaken in accordance with M2.2;
- b) assesses compliance with ambient air quality monitoring guidelines and standards;
- c) includes assessment of the meteorological conditions; and
- d) if ambient guidelines or standards are exceeded, details actions to mitigate dust generated from the premises in an effort to improve local ambient air quality.

#### Water Management

**U1.1** The proponent must upgrade the water management system at the premises to ensure that:

- a) All clean surface water (that is surface water which has not come into contact with coal or disturbed areas) is diverted around the premises. The design and implementation of works must be undertaken by an appropriately qualified and experienced person.
- b) Water quality limits and volumetric discharge limits as specified in the Licence are met at all times.

Environment Protection Authority 12 August 2015