

14 May 2010

10-6936 DoP Response 20100514

Centennial Coal Clarence PO Box 92 LIGTHGOW NSW 2790

Attention: Ms Alanna Howard

Dear Alanna

# Response to DoP Submission Clarence Colliery Noise Impact Assessment

#### 1 Introduction

The following has been prepared in response to the request for clarification from the Department of Planning (DoP) in relation to noise impacts following exhibition of the Environmental Assessment (EA) for the Clarence Colliery (the Colliery) proposed Development Consent (DA 504-00) amendment for increased Road Haulage. This document is to be read in conjunction with the Environmental Assessment and Attachment 5, Noise Impact Assessment and the Response to Submissions Report.

Data is presented from a review of proposed operating hours by the Colliery. Clarence is proposing to operate haulage trucks from the Colliery between the hours of 6.00 am and 10.00 pm Monday to Friday and 7.00 am and 12.00 pm Saturday.

## 2 Traffic Noise Impacts

### 2.1 Early Morning Truck Movements Noise Impacts

Item 1 in the DoP's Email.

1. In the EA the road traffic noise assessment is based upon compliance with the 2 dB(A) increment criterion being achieved by the restriction of Clarence trucks to 14 truck movements during Day (7 am to 10 pm) hours and 8 for Night (10 pm to 7 am) hours.

This has not been fully considered in the drafting of conditions for the single hour from 6 am weekdays.

Centennial's Statement of Commitments (22/03/2010) commits to a maximum of 14 truck movement per hour from 6 am weekdays.

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Can you help out with some information on the noise climate for 6 am to 7 am at the nominated Darling Causeway residence? What is the number of trucks that would comply with the criteria at this time? Have background traffic noise levels risen at this time compared to the bulk of the Night period? If so, by how much?

#### Response

As stated in Attachment 5 of the EA, as well as in the subsequent Response to Submissions Report, the noise impact of the Colliery-related road traffic on the respective access roads was conducted via the prediction of the existing and future traffic noise levels on the subject roads.

The US Environment Protection Agency's method was used for the prediction of the LAeq traffic noise levels for the offset distances of the closest residences adjacent to the access roads.

In relation to the existing traffic noise levels, the ECRTN, on page 11, Technical notes and tables, states that "LAeq(1hour) represents the highest tenth percentile hourly A-weighted Leq during the period 7 am to 10 pm or the period 10 pm to 7 am."

The allowable number of additional trucks from the Colliery on the respective access roads was therefore based upon establishing the existing highest 10th percentile traffic noise level (based on the results from the Traffic Count Surveys conducted in May/June 2008) for the period of the day under investigation and determining how many Colliery trucks would be allowed to meet the relevant criterion or, where the criterion is already exceeded, result in a 2 dBA increase in the existing traffic noise level.

The closest residence to any of the Colliery access roads is that situated just inside the 60 km/hr speed zone on the Darling Causeway at Mount Victoria. The facade of this residence, 38 the Darling Causeway, is situated 7 m from the road centre line. The traffic noise calculations for the allowable Colliery truck movements were based on compliance with the traffic noise criteria at this residence.

Based on the measured existing traffic flows and traffic mix (light and heavy vehicles), **Table 1** presents the existing traffic noise level and the maximum allowable number of Colliery truck movements on the Darling Causeway that would restrict the increase in traffic noise to 2 dBA (and therefore comply with the traffic noise criteria) both for the daytime (7.00 am to 10.00 pm) and the morning (6.00 am to 7.00 am) periods.

Table 1 Existing Traffic Noise Level, Traffic Noise Criteria and Allowable Colliery Truck Movements - Offset 7 m from the Darling Causeway

Period	Existing Noise Level LAeq(1hour)	Traffic Noise Criterion LAeq(1hour)	Allowable Truck Movements per Hour
Day			
Monday to Friday (7.00 am to 10.00 pm)	63.1 dBA	65.1 dBA	14 (7 loads)
Saturday Morning (7.00 am to 12 noon)	63.1 dBA	65.1 dBA	14 (7 loads)
Early Morning (Night)			
Monday to Friday (6.00 am to 7.00 am)	63.1dBA	65.1dBA	14 ( 7 loads)

A review of the data presented in **Table 1** indicates that the allowable number of Colliery truck movements/loads are consistent with Commitment 5.2 of the Statement of Commitments.



The response to the question of whether there is an increase in the existing traffic noise level during the 6.00 am to 7.00 am period relative to the bulk of the night-time period is provided by a comparison of the night-time data in **Table 1** with that presented in Table 3 of Attachment 5 of the EA. This indicates that the existing (highest 10th percentile) LAeq(1hour) traffic noise level at this receiver location is 2.2 dBA higher (ie 63.1 dBA minus 60.9 dBA) during the early morning (6.00 am to 7.00 am) period than over the whole night-time (10.00 pm to 7.00 am) period.

Yours sincerely

**DICK GODSON**