

29 May, 2008

Michael Young  
NSW Department of Planning  
GPO Box 39  
SYDNEY NSW 2001



*Our Reference:* 0069309L02\_DOP\_NOISERESPONSE.DOC

Dear Michael,

**RE: DIXON SAND S96(AA) RESPONSE TO NOISE ASSESSMENT**

The following is a response to additional questions raised by the Department of Planning (DOP) as per conversation with the Department's Mr Michael Young on 27 May 2008. The issues raised were concerning results presented in Table 3.2 and Table 3.3 of the original Section 96 Statement of Environmental Effects (ERM, August 2007).

This letter reproduces the table including existing background noise levels for the area and quantifies quarry traffic noise contributions from the Old Northern Road and the Crown Access Road to potentially sensitive residences.

**1.1 TRUCK MOVEMENTS - OLD NORTHERN ROAD  
(ARTERIAL ROAD ASSESSMENT)**

Old Northern Road has been adopted as an Arterial Road (as previously demonstrated).

Road traffic associated with early morning quarry operations will occur between 06:00 am and 07:00 am, therefore rather than adopting the night criteria for this assessment, Section 3.5 of the Environmental Criteria for Road Traffic Noise (ECRTN) recommends varying standard day and night time periods to *'better reflect the actual temporal changes in noise for that location'* and that *'In these situations, appropriate noise levels targets for the 'shoulder periods may be negotiated with the determining or regulatory authority.'*

Therefore, this assessment has adopted a 'shoulder period' criteria for 06:00 am to 07:00 am for vehicle movements for the Dixon site. The 'shoulder period' has been adopted as the mid-point between the day and the night criteria for Arterial Roads.

The previous noise assessment completed by ERM as provided in the Section 96 Statement of Environmental Effects, adopted a CORTN traffic assessment with assumed heavy vehicle percentage and traffic volumes to establish 'worst-case' vehicle noise emissions. Recently, on-site noise monitoring data has been sourced for the area and as a result the United States Environment Protection Agency's traffic calculation method was used.

Table 1 presents the results of the noise assessment including all truck movements that occur within a one hour period along Old Northern Road. Figure 1 presents the noise receiver locations for this assessment.

Table 1 Dixon Truck Movements - Old Northern Road (*Leq*(1hr))

Receiver	Existing Measured Traffic Noise (Morning Shoulder)	Predicted Maximum Traffic noise Contribution (Quarry)	Predicted Existing + Quarry Traffic Noise Contribution	ECRTN Criteria (Morning Shoulder)
R1	58	53.3	59.3	58
R2	58	55.5	59.9	
R3	58	51.3	58.8	
R4	58	52.6	59.1	
R5	58	52.0	59.0	

The predicted traffic noise from 40 proposed truck movements is expected to remain below the relevant 'morning shoulder' noise criteria and will not increase the existing noise levels by more than 2 dBA.

## 1.2 TRUCK MOVEMENTS - CROWN ACCESS ROAD (LOCAL ROAD ASSESSMENT)

The DOP have also requested the assessment of potential noise impacts on the residence situated to the north of the Crown Access Road. This residence was not previously assessed as there is a current agreement in place between this resident and the Quarry.

This residence is identified on the locality map (*Figure 1*) as receiver location 6.

*Table 2 Dixon Truck Movements – Crown Access Road (Leq(1hr))*

Receiver	Existing Measured Traffic Noise (Morning Shoulder)	Predicted Maximum Traffic noise Contribution (Quarry)	Predicted Existing + Quarry Traffic Noise Contribution	ECRTN Criteria (Morning Shoulder for Local Road)
<b>R2</b>	58	45.0	58.2	53
<b>R6</b>	58	48.3	58.4	

Note: the morning shoulder criteria has been adopted as the mid point between the day and night criteria for a local road


The predicted traffic noise from the 40 proposed truck movements is expected to remain below the relevant ‘morning shoulder’ noise criteria for a local road and will not increase the existing noise levels by more than 2 dBA.

We hope this letter adequately addresses the issues raised in the submissions to the outstanding noise issues relating to this application. If there are any further enquiries, please contact one of the undersigned.

Yours sincerely,  
for Environmental Resources Management Australia Pty Ltd



Oliver Muller  
Senior Acoustic Scientist



Mike Shelly  
Partner

