

1 April, 2008

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

*Our Reference:* 0069309L01\_DOP FINAL.DOC



Dear Michael,

**RE: DIXON SAND S96(AA) RESPONSE TO SUBMISSIONS (DA 250-9-2001)**

The following responses have been forwarded by the Department of Planning for Dixon Sand's application to modify haulage to and from their Maroota site:

- Department of Environment and Climate Change (Environment Protection and Regulation);
- Baulkham Hills Shire Council; and
- several responses from community groups and members.

This letter responds in detail to each of the authority letters as well as to the issues raised in community responses.

## **1. AUTHORITY SUBMISSIONS**

### **1.1 DEPARTMENT OF ENVIRONMENT AND CLIMATE CHANGE**

#### **1.1.1 *Crown Road Definition***

The noise impact assessment adopted the Crown Access Road as a public road and accordingly applied the ECRTN Criteria. The assessment of noise emissions from this road presented in Table 3.3 of the impact assessment was undertaken as a cross check against the more restrictive criteria of 50 dBA Leq (1-hour). The Crown Access Road is a public road but is generally only used by Dixon Sands and not by other industry. Notwithstanding this, the potential noise increases

from Dixon Sands proposed operations from 30 movements to 40 movements between 06:00 am and 07:00 am would generally result in an increase in noise level of 1.2 dBA.

ERM has confirmed that R1 and the receiver identified from the aerial imagery as having agreements with respect to noise emissions from the quarry and as a consequence were not included in the assessment.

### ***1.1.2 Old Northern Road Definition***

Discussions with RTA project manager Mr Jim Campbell on 26 March 2008 confirm that Old Northern Road is an Arterial Road. Additionally, a Traffic and Transportation Requirements report by Lyle Marshall & Associated Pty Ltd (February 1999) identified that Old Northern Road is classified as a State Arterial main road. Hence, an assessment for a collector road is not warranted, and therefore the hourly assessment period for this road type (collector road) has not been undertaken.

With respect to assessing impacts associated with the 06:00am to 07:00 am period, in the absence of attended monitoring within this period to quantify the contribution of road traffic, noise logging data has been obtained from Heggies Report '10-3138 Hitchcock Road, Maroota Sand Extraction Project Noise Impact Assessment'. Noise logging for the Hitchcock Road Quarry incorporated the 'Pignataro' residence at Lot 2/DP588936 and is representative of existing traffic noise levels for receivers along Old Northern Road.

The logarithmic average of the LAeq parameter for one week of night time data (10:00pm to 07:00 am) for this receiver identified an Leq of 52 dBA and is representative of the existing road traffic noise contribution. An analysis of the shoulder period between 06:00am to 07:00am identified that the logarithmic average of night time LAeq noise levels was 58 dBA, although for conservatism an LAeq night of 52 dBA has been adopted in this assessment.

*Table 1* reproduces previous calculations against the existing measured LAeq traffic noise contributions for night time period.

*Table 1 Comparisons of Noise Levels<sup>1</sup>*

Receiver	Predicted Leq(9hr)		Existing Measured	ECRTN Night Criteria
	Existing	Proposed	Leq(9hr)	Leq(9hr)
<b>R1</b>	48	49		
<b>R2</b>	54	54		
<b>R3</b>	45	45	52 <sup>2</sup>	55
<b>R4</b>	50	51		
<b>R5</b>	50	50		

Notes: 1. All noise levels represented are in dB(A).

2. Taken from Heggies Report.

As shown in *Table 1*, the proposed noise levels do not exceed the ECRTN night time criteria, Leq(9hr), nor do they exceed the existing measured Leq(9hr) by more than 2dBA. Hence, the proposal meets the ECRTN criteria.

### **1.1.3 Premises Assessment**

Modelling of site noise emissions was conducted as part of the original EIS prepared by ERM in August 2001. ENM Noise Model Ranking outputs from this assessment identified that on-site trucks generated significantly lower noise emissions (up to 10 dBA) than that of loading and dozer plant from site.

Therefore, the addition of road vehicles is not expected to increase the overall noise emissions from the site as the additional vehicles will be at idle waiting to be loaded as not all can be loaded in one 15 – minute period.

## 1.2 BAULKHAM HILLS SHIRE COUNCIL

Baulkham Hills Shire Council has requested that the proposed modification be advertised, but we note that this was carried out between 29 January and 14 February.

Council also have requested that Dixon Sand install flashing lights at the 40km/hour school zone on Old Northern Road at Maroota Public School. In response to this, Dixon Sand notes that it is only one of many users of Old Northern Road, with heavy vehicles servicing other quarries and activities in the area also contributing to traffic numbers through the school zone. The Traffic Impact Assessment prepared for the modification reported on typical truck movements associated with the Dixon Sand site, and noted that;

- During the morning School Zone period (7.30 to 9.00AM) there was typically 6 outbound truck movements, and
- During the afternoon School Zone period (2.30 to 4.00PM) there were typically 2 outbound truck movements.

These numbers represent only a small proportion of vehicle movements through the school zone.

Dixon Sand pays section 94 contributions to Council for the maintenance of roads and “community betterment” in the region (BHSC DCP 2007). DA 250-09-01 specifies that the contribution payments are specially identified for Old Northern Road and Wisemans Ferry Roads from the intersection of the Crown Road access and the Baulkham Hills Shire boundary at Cattai Creek, and other projects identified in the Plan of Management for Extractive Industries, adopted by Council. These funds are available for the installation of flashing lights, should Council choose to fund the project.

Council have further requested a change in the definition of truck movements in the consent as follows:

*It is also noted that both conditions refer to total vehicle movements rather than truck movements or laden vehicle movements. In order to ensure the clarity of the conditions of consent it is suggested that the conditions be revised to refer to either total truck movements or laden vehicle movements.*

Dixon Sand accepts that referring to total truck movements would aid clarity and so is agreeable to this change in the proposed modified conditions as follows.

*Modified Condition 3.30*

Traffic and Transport Impacts - Total truck movements at the site, including those provided for in consents 796/00/HE, 250-09-01 and 165-7-2005, shall not exceed a combined total of 180 movements per day.

*Modified Condition 3.31*

Traffic and Transport Impacts - A total number of 40 truck movements are permitted at the subject site between the hours of 6.00am and 7.00am, subject to compliance with EPA noise limits.

## **2. COMMUNITY SUBMISSIONS**

### **2.1 ROAD SAFETY**

#### **2.1.1 Driver Behaviour**

As outlined in the Statement of Environmental Effects supporting the modification application, Dixon Sand does not own any haul trucks, nor employ drivers to haul their products offsite. Trucks entering the site, including those picking up product, servicing equipment and delivering goods, are employees of other businesses. Dixon Sand has measures in place to commit contract drivers to safe driving to and from their quarry, and to make them aware of local road issues such as school zones. These measures include:

- site induction for all drivers entering the property - all personnel entering the Dixon Sand site must undertake the site specific induction which includes special consideration to adjoining land owners and the nearby school;
- a "Three strikes and you're out" Policy for truck drivers in the area. This is an initiative whereby if three complaints are received from any of the neighbouring quarries for a single driver, that driver is no longer permitted to visit the quarries. This policy has been very successful in strengthening and improving Dixon Sand's clients commitment to road safety; and

- reminders on weighbridge window when school holidays are coming to an end.

Dixon Sand also advertises a phone number in local press which community members can use to call the quarry direct with complaints. Community members can use this number for reporting the number plates of trucks displaying unacceptable driver behaviour.

### **2.1.2 *Speed Limits***

Should community members note incidences of trucks or other motorists speeding along Old Northern Road, and most particularly past Maroota School, the most appropriate solution is to speak with the local Police. Campaigning for either flashing lights in the school zone or speed cameras would be most effectively directed towards the Roads and Traffic Authority or local political representatives. Likewise, it is beyond any influence of Dixon Sand to modify speed limits, and such suggestions should be made to the Roads and Traffic Authority and council.

## **2.2 ROAD NOISE**

One submission raised the issue of road noise at Maroota School. This school, like so many in NSW has been built on what has become an increasingly busy road. The suggestion to build a new haul road behind the school may or may not reduce noise received at the school and would require an additional intersection onto Old Northern Road. A likely haul route in this location is not apparent. Old Northern Road is the main arterial route in the area and as such is the most appropriate haulage route.

## **2.3 SUBMISSION BY NEVILLE DIAMOND**

We note Mr Diamond's submission, most of which has no relevance to the changes sought by the proponent, ie the use of more but smaller trucks to facilitate market demands. Mr Diamond raises issues of water use, permitting, groundwater dependent ecosystems and the like, none of which will be affected by or impacted by this proposed modification. In a real sense, the modification only affects loading and transport; there are no changes planned for extraction or processing. The modification does not require additional water use, as dust suppression is already in place and most of the haul route is sealed.

One issue that might potentially be affected by the proposed modification and is raised by Mr Diamond, is dust. Mr Diamond's submission alleges visible sand on the Crown Access Road and provides data from PF Formation that suggests dust deposition levels at Maroota School exceed criteria. Mr Diamond's submission states:

*"The photo Figure 3.1 in the SEE shows significant sand deposits on the tar Access Road. With more trucks there will be more dust impact"*

ERM notes that the aerial photo referred to by Mr Diamond does show sand on the Crown Access Road, but this is because it was taken prior to the sealing of this road.

Given that the Crown Access Road is sealed and therefore not a dust source, and further given that the modification causes no operational changes that increase dust, the data presented by Mr Diamond is irrelevant. Dixon Sand will continue the dust monitoring programme on site, however, which includes a static dust gauge (D1) at the front gate exit. As reported in the 2006-07 Annual Environmental Management Review, this gauge measured an average of 2.3 mg/m<sup>2</sup>/month, which is below the compliance level of 4g/m<sup>2</sup>/month. This shows compliance for the dust gauge closest to the Crown Road.

### 3. CONCLUSION

We hope this letter adequately addresses the issues raised in the submissions to DA 250-09-2001 s96(AA) Application. If there are any further enquiries, please contact the undersigned.

Yours sincerely,

for Environmental Resources Management Australia Pty Ltd



Tanya Phillips  
Environmental Scientist



Mike Shelly  
Partner