



7 July 2011

email: camden_macrae@rta.nsw.gov.au

Camden MacRae
Roads and Traffic Authority
Level 1, Suite C,
99 Phillip Street
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Dear Camden,

**Re: M5 East Motorway Kingsgrove Road Compound, Kingsgrove, NSW -
Response to OEH Review of Noise Impact Assessment (6 July 2011)**

This letter provides responses and clarifications to the issues raised in the OEH letter
Reference Number: 11/09772-1.

OEH Comment

It is not clear to OEH why the location of logger 2 has been selected as 185 Kingsgrove Road, rather than in the backyard of residences on Forrester Street and Karingal Street, which back onto the reserve surrounding the proposed compound site.

PAEHolmes Response

The reasoning behind the logger locations is discussed in Section 4.1, paragraph 2 on page 8 of the report.

Noise logging at Logger Position 1 was undertaken to quantify representative noise levels at the closest residential properties. Measurements at Logger Position 2 was undertaken to quantify the existing road traffic noise on Kingsgrove Road for the purpose of assessing traffic noise impact.

The location of Logger 1 was selected closest to the potentially most affected location near the site compound. The position of Logger 2 was selected in order to provide data to assess the potential road traffic impacts associated with the compound.

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OEH Comment

The night time Rating Background Levels (RBLs) noted in Table 4-1 are up to 5 dB(A) higher than the LA90 levels recorded at the attended measurement locations which are closer to the residences. OEH therefore considers that the RBLs used to derive the criteria could be higher than might be experienced at the residences.

PAEHolmes Response

The main purpose of the operator attended noise measurement was to assist in identifying the noise environment and prevailing noise sources.

At the potentially most affected residential location closest to the site (Forrester Street, to the north), the operator attended noise measurements were only 2dB different from the RBL. This is well within an acceptable range of tolerance for noise measurements. A 2dB difference in noise level is barely audible to the human ear. Complying with criteria at this location will ensure compliance at any other location, including Karginal Street, to the west. Assessment was only undertaken at the further location, Karingal Street, for completeness. Furthermore, at this additional location, the RBL was conservatively adjusted downward by 3dB corresponding to the difference found in the operator noise levels between the two locations.

OEH Comment

The predicted noise levels, with a 2.1m fence in place, exceed the intrusive criteria by up to 3 dB(A). Whilst this could be considered marginal, there is potential for greater exceedances if the RBLs were lower (as in the above comment).

PAEHolmes Response

Table 7-1 presents the calculated intrusive noise levels with a 2.1m fence in place. Scenario 3 is included in this table just to demonstrate the degree of non-compliance that would occur with scenario 3, as was in fact clearly stated on page 19 of the report.

Scenario 3 has only been included in order to demonstrate the potential non-compliance that would occur with the fence in place, should the truck mounted crane be used in the storage area at the western end of the site instead of behind the site buildings as is recommended.

A recommendation of the report is that unloading is not carried out in the manner described in Scenario 3. Scenario 4 presents the case when unloading is carried out where the site buildings provide shielding to the nearest residences, as recommended in the report. In this case predicted noise levels are comfortably within the night time criteria.

OEH Comment

It is not clear to OEH whether the site layout has been optimised to reduce noise propagation. For example, having only forward movement of vehicles to reduce reversing noise, and may be greater noise reduction from the proposed site if the buildings were aligned along the northern boundary.

PAEHolmes Response

It is our understanding from discussions with the RTA that the design of the site is configured such that reversing of vehicles is minimised. The configuration, with separate entry and exit, encourages vehicles to enter and leave the site in a forward manner.

The layout of the site in Figure 7-1 was provided by the RTA and was optimised to provide shielding to residences from the main area of operations, to the east of the site. In addition, note our recommendations on page 18 as follows:

- *Buildings should be constructed similarly to the site layout shown in Figure 2-2 with doorways preferably facing into the centre rather than away from the residences.*
- *At night, truck mounted crane use, if required, should be restricted to the area shielded by the site buildings (i.e. the area surrounded by the buildings) and not the possible storage area at the western end of the site. If necessary, any temporarily stored equipment can be relocated to the western area during the daytime*

OEH Comment

OEH has concerns regarding the private parking of vehicles and staff movements at 5am in the morning in close proximity to residential receivers. In contrast to site vehicles, private vehicles may have modified exhaust or engine systems that create higher than normal noise. It is important that departing staff and vehicles are quiet in leaving the site to prevent excessive noise from impacting on the residents.

PAEHolmes Response

A number of measures are recommended on page 20 for mitigating potential noise impacts from private vehicle movements which include the following:

- *Personnel should be made aware of the sensitivity of the neighbouring community and the need to minimise noise on site, particularly at night. This may be via site induction procedure, signage and any other means.*
- *Vehicle engines to be turned off when not in use.*
- *Where feasible, reversing alarms should be replaced with broadband "quacker" type alarms. Where this is not possible, reversing should be kept to a minimum by, for example, positioning vehicles so that no reversing is necessary.*
- *Care should be taken when closing vehicle and building doors to prevent banging.*
- *Personnel on site should arrive and depart in an orderly manner and as quickly as possible without lingering in the car park.*
- *Personnel should gather indoors during the night rather than outside in the car park area*

Yours sincerely

A handwritten signature in black ink, appearing to read 'Chris Marsh'.

Chris Marsh
Engineer
PAEHolmes