

The Editor  
Hills Shire Times

15 September 2009

Dear Sir

I refer to the article "Applicant Defends Report" (Hills Shire Times, 15 September 2009, p.4). I would like to take issue with several statements about the Noise Assessment Report prepared for Go Ape.

Michael Ledzion is quoted as saying, "The analysis was done on the basis of 15 people screaming at the tops of their voices". In fact, screaming is not mentioned at any stage in the report.

Section 5.1.1 of the [Noise Assessment Report](#) refers only to shouting: "Generally, it is anticipated that the noise generated from the activities within the adventure facilities is from shouting and loud conversations between patrons utilizing the facility".

No other noise from participants is considered. The noise characteristics of screaming are different from those of shouting.

Mr Ledzion further states, "The report considers everything that needs to be considered to provide a worst case scenario demonstrating that residents are truly not affected." However, the report misidentifies the location of the course. Consequently, it also misidentifies the nearest affected residents, who are on the eastern side of the valley, only 100m from the landing zone of the east-west zip line.

Figure 1 on page 4 of the report purports to show the location of the proposed course:

Figure 1 Site and Surrounds at Ted Horwood Reserve and Bidjigal Reserve, Baulkham Hills



Image courtesy of Google Earth

The nearest affected neighbouring residences are the residences along Mcgee Place and George Muir.

However, page 7 of the applicant's [Statement of Environmental Effects](#) illustrates the course location (in green) and reception facilities location (in yellow) somewhat differently:



Superimposing the red-hatched 'course location' from the noise report gives an idea of the extent to which it has misrepresented the true location of the proposed course:



The closest residences affected by noise from the course are clearly in Larra Crescent, on the eastern side. Mr Ledzion has stated they are approximately 100m from the eastern extremity of the course, which is a landing zone and take-off point for a zip lines across Darling Mills Creek.

*The report also completely fails to identify Bidjigal Reserve itself as a noise-sensitive location. Users of the Murri-yanna Track and the tracks at the northern end of the course should have been taken into account.*

Section 4.1 (page 8) of the Noise Assessment Report states that “The NSW Department of Environment and Climate Change’s (DECC) [Industrial Noise Policy](#) (INP) has been adopted for this project.”

Table 3.1 (page 23) of the INP states the monitoring location should be at the “Most or potentially most affected noise-sensitive location/s”.

Page 24 of the INP contains the following definitions:

**Noise-sensitive location(s)**—residential premises, schools, hospitals, places of worship, parks and wilderness areas.

**Most affected location(s)**—locations that are most affected (or that will be most affected) by noise from the source under consideration as per Note 2 in *Section 2.2.1* ... Often several locations will be affected by noise from the development. In these cases, locations that can be considered representative of the various affected areas should be monitored.

Further, Note 2 in Section 2.2.1 says:

In assessing noise levels at residences, the noise level is to be assessed at the most affected point on or within the residential property boundary or, if this is more than 30 m from the residence, at the most-affected point within 30 m of the residence.

And Note 5 states:

In assessing noise levels at passive and active recreational areas, the noise level is to be assessed at the most-affected point within 50 m of the area boundary

Bidjigal Reserve itself clearly falls within these definitions. The boundary is along the proposed lease area inside the Reserve, and the noise level should have been assessed within 50m of that boundary.

In addition, the noise level should have been assessed “at the most affected point on or within the residential property boundary” of the most affected residents in Larra Crescent (hundreds of metres away from the actual location of the logger).

*RSA Acoustics principal, Rodney Stevens says, according to the article, that “noise impact devices were installed at a number of sites”. Page 6 of the Report states “The logger (Serial Number 87049) was located at Ted Horwood Reserve”. If there was more than one logger, why does the report show, and give the data from, only one location? Why is that logger in the middle of three actively used sporting fields, next to a car park, near Renown Road, and hundreds of metres away from the “most or potentially most affected noise-sensitive location/s”?*

Figure 1 from the Noise Assessment Report (above) clearly shows a single noise logger in Ted Horwood Reserve. Section 3.1 on page 6 of the report states:

### **3.1 Ambient Noise Survey**

In order to characterise the existing noise environment of the area, ambient noise monitoring was conducted at a location which would provide a representation of noise exposure experienced over the site and by the surrounding receivers.

The monitoring location is shown in Figure 1, and the following are the details of the noise logger:

- The logger (Serial Number 87049) was located at Ted Horwood Reserve. The noise logging data will be used to derive limiting criteria for noise emission from the proposed facility.
- The noise logger location was selected to reflect the existing ambient noise environment at the nearest residence (see Figure 1).
- The measurements were carried out using ARL Environmental Noise Loggers Type 1 – NGARA S-Pack between Friday 08 July and Thursday 15 July 2009. The noise loggers continuously sampled levels over the entire measurement duration, and calculated relevant statistical indices for each 15 minute period.

Only one logger is mentioned specifically, although the final point refers to “loggers” (plural). Figure 1 clearly shows a single location in the middle of three actively used sporting fields, next to a car park, near to Renown road, and nowhere near any noise-affected area. A noise logger in that location can in no way be representative of noise levels at the walking tracks along Darling Mills Creek and the northern extremity of the course. Nor can it possibly be representative of noise levels at the nearest affected residences in Larra Crescent.

*Further, Mr Stevens is quoted as saying “You are allowed to make noise five decibels above the existing background level.” The report considers only the bare five decibel “intrusiveness” criterion. At no stage are the character of the noise and “modifying factor” adjustments even mentioned.*

Section 4.1 of the INP states:

Where a noise source contains certain characteristics, such as tonality, impulsiveness, intermittency, irregularity or dominant low-frequency content, there is evidence to suggest that it can cause greater annoyance than other noise at the same noise level.

Further, the [NSW State of the Environment Report 2006](#) (Section 2.7 Amenity) notes that:

The level of annoyance or discomfort depends on the type, timing, duration and frequency of noise or if the disturbance is out of the ordinary, that is, where it differs from the 'background' noise.

The noise which the proposed development will generate (the noise of the zip line in use and shouts/screams of participants) are significantly different in character from the background noise (identified on page 7 of the Noise Assessment Report as “...*dominated by distant road noise along the M2 Motorway and Renown Road and natural sounds e.g. birds chirping and leaves rustling*”).

Applying the modification factors recommended in Section 4 of the INP could add as much as 20-25 dB to the predicted sound levels from the proposed development *at the receptor* and would thus significantly exceed the proposed intrusiveness criteria.

*The intrusiveness criterion used depends on a reliable measurement of the existing background noise level. Given the location of the noise logger, the report completely fails to provide any measurement of the existing level at the most noise-sensitive locations.*

As has been demonstrated, the report mentions only one noise logger, which was in entirely the wrong location. Without a reliable measurement of existing background noise at the most noise-sensitive locations, the entire report is meaningless.

*The report also fails to comply with the NSW Industrial Noise Policy on other counts. For example, there is no record of periods of affected data (due to adverse weather and extraneous noise), nor any statement indicating the need for any re-monitoring.*

Section 3.4 of the INP states:

Noise monitoring should not be conducted (or the data should be excluded) when average wind speeds (over 15minute periods or shorter) at microphone height are greater than 5 m/s, or when rainfall occurs.

And

Wind blowing through leaves can raise the environmental noise levels, even at speeds less than 5 m/s. To avoid this effect, take care to select monitoring locations that are as far away as possible from vegetation while still being representative of the subject site.

Further, [Appendix B – Applying the background noise policy](#) says:

A weather monitor that continuously monitors wind and rainfall data should be positioned within 5 m of the data logging equipment – ideally, in a place that is not shielded from the wind. ... the height of the monitor should correspond to that of the noise logging equipment. Where multiple monitoring sites are required for a particular project, it is best to have simultaneous weather monitoring at each noise logger location.

Figure 1 in the report indicates that the noise monitor was placed in a treed area, contrary to the recommendation in Section 3.4

The report contains no mention of a weather monitor having been used, or of data having been excluded. Yet, the [Bureau of Meteorology](#) web site indicates that rain fell in the region on five days of the monitoring period (8 – 15 July 2009). In the absence of weather monitoring information, it is impossible to tell whether rain fell at the monitoring site, or whether wind speeds were within the recommended limit.

Many of the reporting requirements specified in Appendix B of the INP were also not adhered to:

- No calibration date for the equipment used is given.
- There is no statement justifying the choice of a monitoring site in the middle of three actively used playing fields, near an actively used car park, close to Renown Road, and hundreds of metres away from *any* noise-sensitive location, let alone the most affected locations.
- There is no description of land uses in surrounding areas; no description of the hordes walking past the monitoring equipment on their way to play football.
- There is no brief description of where the equipment was positioned.
- The description of the dominant and background noise sources fails to mention the noise associated with Saturday football matches right next to the noise logger; nor is there mention of the fact that much of the subject site, particularly at the northern end, is much further away from the M2 and Renown Road than the site chosen for the noise logger.
- There is no record of periods of affected data (due to adverse weather and extraneous noise), nor any statement indicating the need for any re-monitoring.

*Yours faithfully*  
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