acousticworks

29 November 2014
Reference: *2014227 L01 Review of Splendour 2014 noise monitoring report.doc*

Yelgun Progress Association Inc.
129 Yelgun Rd
Yelgun NSW 2483

RE: Splendour In the Grass 2014 – Review of noise monitoring acoustic report

Acoustic Works have been commissioned to provide an acoustic review of the noise monitoring report for Splendour In The Grass 2014 prepared by Air Noise Environment dated 13 November 2014 (ref: *3734 ImpactReport 01.doc*).

Air Noise Environment - Noise Monitoring Report Ref: 3734 ImpactReport 01.doc

In relation to the noise monitoring report (Ref: *3734 ImpactReport 01.doc*) dated 13 November 2014, we provide the following comments;

1. Noise limits

Section 1.3.1 Table 1.3
In accordance with NSW policy, standard time periods should be;

- Day 7am to 6pm (except Sundays which is 8am to 6pm)
- Evening 6pm to 10pm
- Night 10pm to 7am (except Saturday night/Sunday morning which is 10pm to 8am)

Therefore the RBL's and corresponding event noise limits should refer to the following periods;

- Day RBL and limit: 11am to 6pm
- Evening RBL and limit: 6pm to 10pm
- Night 1 RBL and limit : 10pm to 12 midnight
- Night 2 RBL and limit : 12 midnight to 2am

In general terms the Event Noise Limits presented in Table 1.3 appear to be consistent with the noise limits determined by Acoustic Works for SITG 2014.

1.3.2 Low frequency noise
The aspirational noise limits shown in Table 1.4 appear to have been selected with a view to 'fit' the noise levels measured during the SITG 2013 event, rather than determining a more appropriate noise limit and requiring the festival to take steps to reduce low frequency

emissions. In simple terms, the aspirational noise levels appear to make it relatively easy for low frequency compliance.

2. Section 2 AMP

2.2 Site layout and speaker design
ANE have noted that trucks were used in some cases as acoustic screens and that the effectiveness of such screens is compromised by the large gaps between ground and tray. We agree that shipping containers should be used in order to form a continuous barrier.

3. Measured noise levels

Section 2.3 Measured noise levels
The measured noise levels are not clearly presented and/or summarised in the report, particularly in relation to the noise limits. Instead the measured levels have been assessed relative to the number of complaints received and the wind direction at the time. While the presented information may be very useful in determining methods to reduce potential noise complaints for future events, it is difficult to understand for the layman and does not provide a clear analysis of the measured noise levels compared to the noise criteria.

With regard to low frequency noise (Page 21) the text demonstrates that reductions in complaints can be achieved with a reduction in low frequency sound emissions. The recommendation states that additional noise limits should be incorporated intended to control noise emissions in the 63Hz octave band. The inclusion of a more specific low frequency noise criterion is supported, however the 63Hz octave band does not cover the entire range of problem frequencies (as presented in the Acoustic Works noise monitoring reports for SITG 2013 and 2014). The preferred frequencies of interest are 31.5Hz to 125Hz 1/3 octave bands.

4. Compliance

Section 2.6 Suitability of existing noise limits
The ANE report does not provide a summary of measured noise levels versus the criteria. Section 2.6 makes general statements regarding the noise emissions relative to each of the three main noise criteria. In this regard, the report makes general statements that noise levels breached the criteria for the majority of the event. The report does not clearly quantify the degree to which the criteria were exceeded.

Following from this the report makes the following statement;

> *"Based on the above it is evident that the background plus 10 dB and background plus 5 dB noise limits imposed on the venue by the conditions of approval can not be achieved by events*"

This statement is incorrect. The PA systems all have volume controls and consequently the volume and frequency characteristics can easily by reduced in order for noise emissions to comply.

With regard to the following statement;

> "Attended noise monitoring data collected by ANE personnel throughout the event (more than 100 attended noise measurements) indicated that, for a large number of the complaints, noise from the event was either characterised as dominated by low frequency noise or barely audible to inaudible."

In responding to complaints, it is unclear as to the length of time between the time of complaint (assuming the noise was occurring at the time) and the time at which ANE arrived to assess the noise. In many cases it is likely that, due to the time lag between complaint and monitoring times, changes in song/act/stage may cause significant differences in the noise impacts.

5. Alternative noise limits

Section 2.7 Alternative noise limits
The report lists a range of alternative noise limits from other events/localities and provides comments as to whether complaints were received for these events.

A total of 11 other events are presented, with a total of 24 complaints described in the table.

By contrast the SITG 2014 event registered 139 complaints alone, which in itself indicates the sensitivity of the noise issue for this locality.

It is noted that many of the tabled events are located in highly urbanised environments, which is contrary to the North Byron Parklands.

Section 2.7.4 Recommended alternative noise limits
The report proposes the following noise limits for future events at the site;

> *Between 11am and midnight, noise levels at sensitive receivers must not exceed:*
> - *LAeq,10-minute 65 dB(A); and*
> - *75 dB(C) in the 63 hertz 1/1 octave band.*
>
> *Between midnight and 2am, noise levels at sensitive receivers must not exceed:*
> - *LAeq,10-minute 55 dB(A); and*
> - *75 dB(C) in the 63 hertz 1/1 octave band.*
>
> *During periods of adverse meteorological conditions (including periods of strong winds or temperature inversion) an additional 5 dB allowance is added to the above noise limits. In these circumstances, the event is required to implement all reasonable and feasible acoustic controls to limit the potential impacts associated with event noise emissions.*

The proposed noise limits are not clearly defined, in particular there is no descriptor or duration for the low frequency noise limits.

Of greater concern, **the proposed noise limits would allow a significant increase in noise at the receiver locations compared to SITG 2013 and 2014 events**. This is unacceptable for this locality, particularly given the number of complaints already received based on the current noise limits.

The proposed low frequency limits may not (depending on the descriptor chosen) provide any reduction in low frequency impacts at the receiver locations compared to SITG 2013 and 2014.

The proposed additional allowance of 5dB under conditions favourable for sound propagation is ridiculous. It may be arguable by the event acoustic consultants that at some time, for some direction, some form of these conditions may be satisfied and therefore an extra 5dB increase would be justified. This proposed condition is the opposite of what should occur in practice. It is not the fault of the receivers that the wind is blowing towards their property. The responsibility should be on the event organiser to reduce the PA system volume under these conditions, not get a bonus 5dB allowance.

6. Conclusions

Section 3 Conclusions
The report conclusion is completely contradictory to the proposed alternative noise limits. The conclusion describes general methods and recommendations to reduce noise impacts at the receivers, for example;

> *"Therefore, provision of additional controls to further mitigate noise impacts on these locations, where practicable, are worthy of further investigation."*

and

> *"provide additional acoustic barriers at the rear of the Mix Up stage to minimise potential impacts on Receptors R12 and R13"*

However, the proposed alternative noise limits would allow a substantial increase in noise to receivers. With the additional allowance for certain weather conditions, this would make the situation worse for residents.

The report states that the SITG 2104 event breached the existing noise criteria for the majority of the time and received a large number of complaints, yet proposes to significantly increase the noise criteria.

Therefore the intent of the proposal is severely at odds with some of the statements and recommendations contained in the report.

Should you have any queries please do not hesitate to contact AcousticWorks.

Yours faithfully,

MARK ENERSEN B.Sc MAAS
Director

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