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NOISE MANAGEMENT PLAN

FUTURE MUSIC FESTIVAL 2013

SAT 9 MARCH 2013

**RANDWICK RACECOURSE** 

COMMISIONED BY

## FUTURE EVENTS PTY LTD

## 222 YORK STREET, SOUTH MELBOURNE 3205

Prepared by:

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## Summary

Noise Consulting & Management Pty Ltd has been engaged to analyse and prepare recommendations and controls regarding the control of music noise from the proposed Future Music Festival to be held at Randwick Racecourse on Sat 9 March 2013.

This noise management plan contains the abatement measures that will ensure Future Music Festival adheres to the applicable noise limits and causes minimal disturbance in residential areas.

It should be noted that stage music levels will be have to be controlled at approximately Leq 95 dB(A) and Leq 110 dB(A).

There were a number of noise related issues at the 2011 event. Additional measures that were adopted successfully for the 2012 event, including an improved complaints hotline, remote sound level loggers and sophisticated music limiters, have been recommended to help address noise related problems.

There are no further practicable engineered noise controls that can be applied to an event this size at this venue, so management controls that effectively limit the music level must be relied upon to ensure the noise limit is adhered to.

## **General Information**

#### **Event Details**

The proposed festival will be held on Saturday 9 March 2013 between noon and 10:00pm. It is estimated that up to 55,000 people will attend. There may be brief rehearsals or line checks intermittently between 10:00am and noon on the day of the event.

The stage layout of the infield will be similar to 2012 and utilise the infield for the three main stages. Two of these stages will face north, the other stage faces west and is in a marquee. The main Future stage will have a delayed speaker system. There will be an additional marquee stage north of the infield walkway.

Smaller stages will be located at the northeast and southwest end of the grandstand facing southeast on the infield walkway facing northeast (x2) and in the infield at the end of the marquee stage.

There will also be sponsors stages with low-level music and a small sound system.

The stage layout is shown on the map in Appendix A.

The nearest residences to the outdoor stages are in:

- Doncaster Avenue 330m west of the main stages and 80m west of smaller stage 5
- Kings Street 210m north of the small Grandstand stage
- Alison Road 330m north of the main marquee stages and
- Wansey Road 380m east of main marquee stage.

#### Applicable Regulations and Proposed Noise Limits

For open-air concert venues with EPA prevention notices, a limit of LAmax 70 dB(A) and Lmax 90 dB(C) applies for concerts over 5,000 people, except for Centennial Park, which has a limit of LAmax 65 dB(A) and Lmax 85 dB(C).

It is proposed that an achievable limit of LAmax 70 dB(A) and Lmax 90 dB(C) is adopted, when measured with the meter set to fast response over any 15-minute period during the festival or sound test. An exceedance of no more than 5 dB during a 5 minute period in the first 15 minutes of each new act is also proposed. This is the same as last year. The event complied with these noise limits in 2012.

To minimise the impact of noise on nearby residences during the event, stringent noise abatement measures will be applied. These are explained in further detail within this report.

### Prediction of the Noise Expected from the Proposed Festival

Music will play at levels upto Leq 110 dB(A) if uncontrolled when measured 5m from the speakers. Controlled levels of Leq 95-100 dB(A) have been found to be adequate for patrons.

Levels at the 2012 event were limited to no more than 97 dB(A) on the main stages.

Compression and limiting will be required at all times on all sound systems to avoid uncontrolled high maximum levels.

#### Main Infield Stage – Future Stage 1

This outdoor stage is in a similar location as last year and will play predominantly music mixed by DJ's and a few band acts. The stage will operate from 12 noon until 10:00pm. Three high shipping containers will be required to the south, west and east.

The stage will face north at the south end of the racecourse with a small delay speaker stack (or series of delays) behind the sound desk. Distance to the northern residents (Alison Road & King St) and shipping containers to the east (Wansey Rd) and west (Doncaster Ave) provide adequate noise reduction in residential areas.

The top of the speaker arrays should be hung below the height of the top of the shipping containers.

Music at this stage will be able to play at approximately 95 dB(A), 111 dB(C) and still achieve the proposed limits.

#### Main Infield Stage – The Likes of You Stage 3

This outdoor stage is inside a marquee. Music mixed by DJ's will play from 12 noon until 10:00pm.

It is recommended that the speakers be faced towards the northwest, pointing at the grandstand. This will avoid facing speakers directly at the closest residents to the north or west and the Grandstand will provide shielding to the closest residents to the northwest (Doncaster Ave).

It is recommended the main array speakers be set as low as possible and a small delay speaker stack (or series of delays) behind the sound desk.

Music at this stage will be able to play at approximately 95 dB(A) , 111 dB(C) and still achieve the proposed limits.

#### Main Infield Stage – Stage 2

This outdoor stage is in a similar location as last year. Music mixed by DJ's will play from 12 noon until 10:00pm.

It is recommended that the speakers be faced towards the northwest, pointing at the grandstand. This will avoid facing speakers directly at the closest residents to the north or west and the Grandstand will provide shielding to the closest residents to the northwest (Doncaster Ave). Three high shipping containers will be required to the south, west and east. The top of the speakers must be below the top of the shipping containers.

Music at this stage will be able to play at approximately 95 dB(A), 110 dB(C) and still achieve proposed limits. This is a lower music level than the other stages.

#### North Walkway Marquee Stage –Stage 4

This marquee stage is in a new position on the northern infield walkway, 230m and facing away from the northern King Street dwellings. Tent walls on the rear and halfway down each side will be installed on the marquee.

Music at this stage may be able to play at approximately 95 dB(A), 110 dB(C) and achieve proposed limits.

#### North Walkway Stage – Stage 7

This outdoor stage is a small foam pit stage with a low power sound system. Music at this stage may be able to play at approximately 93 dB(A), 107 dB(C) and achieve proposed limits.

#### South Walkway Stage – Stage 6

This outdoor stage is in the same location as last year, facing away from and using buildings to protect the nearest residents. Music at this stage may be able to play at approximately 95 dB(A), 110 dB(C) and achieve proposed limits.

#### North Grandstand Stage – Stage 8

This small outdoor stage faces southwest, away from the nearest residents. Music at this stage may be able to play at approximately 95 dB(A), 110 dB(C) and achieve proposed limits.

#### South Grandstand Stage – Stage 5

This outdoor stage faces southeast, away from the Doncaster Road residents, 80m to the west. Three high shipping containers will be required behind and to the southwest side of this stage. Music at this stage may be able to play at approximately 90 dB(A), 105 dB(C) and achieve proposed limits.

#### **Noise Levels**

Based on last year's measurements and combining the contribution of music from all the 2013 stage positions at the stated level, the noise levels predicted are:

- Doncaster Ave (rear of Ascot Street) residences of LAmax 67 dB(A) and Lmax 87 dB(C)
- Doncaster Ave (rear of Darling Street) of LAmax 66 dB(A) and Lmax 86 dB(C)
- Alison Road and King Street of LAmax 70 dB(A) and Lmax 90 dB(C)
- Wansey Road residences of LAmax 64dB(A) and Lmax 84 dB(C)

The recommended music levels will provide just acceptable music levels for patrons at the festival at most areas, while maintaining complying noise levels for residents. These predictions are for neutral or calm noise propagating conditions. Under certain light to moderate wind conditions, it is possible that these levels may increase by 3 dB for the closer Doncaster Avenue and Alison Road residents and 6 dB for the residents further away. In this case, the music levels will need to be reduced correspondingly.

As the sound system will be capable of producing levels far higher than this (and the music from the 2011 event was louder than the above levels), the following '**Noise Abatement Measures**' should be adhered to in order to ensure that the noise limits are achieved and to minimise the impact of noise on nearby residences.

#### **Noise Abatement Measures**

The following measures will be implemented:

- Contractual arrangements with artists and sound system suppliers advising them of the predicted music levels on their stage and imposing significant financial penalties if the limit is breeched. This is vital as the levels were exceeded last year and this is a control that relies on effective management.
- A formal warning system/method to ensure that penalties will apply to acts if a noise breech warning is not acted upon within the specified time.
- The promoter will provide a dedicated member of staff to control the music levels on the stages. This staff member will have the automatic authority and technical ability to reduce the music levels at the desk for all acts where required.
- The noise limit at affected residences will be LAmax 70 dB(A) and Lmax 90 dB(C), when measured with the meter set to fast response over any 15 minute period during the concert or sound test. All music will cease at 10:00pm
- A central complaints hotline will be established for the duration of the event. Complaints on the Racecourse number should be diverted to the event hotline. A 1800 number was used effectively last year. The following procedure will be adopted by hotline staff:

# PROCEDURE FOR RECORDING AND ACTIONING NOISE COMPLAINTS

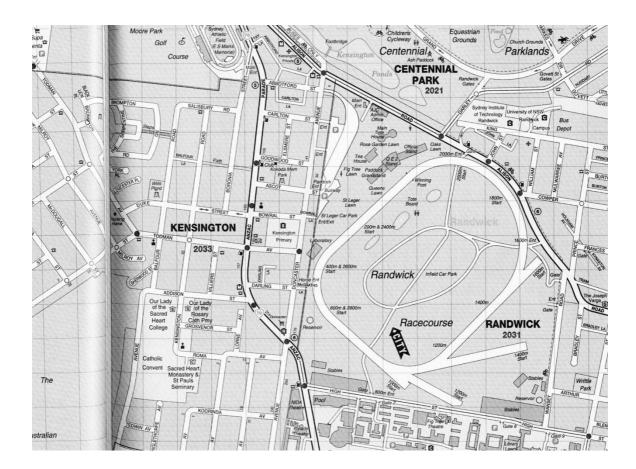
- 1. Hotline will record name, address, number and nature of complaint
- 2. Complaint details will forwarded by phone call or radio to noise monitoring staff
- 3. At the property, the monitoring person will record measurements, and discuss levels with resident if requested
- 4. Noise monitoring staff will radio the Production Manager to reduce sound level as appropriate

- 5. Noise monitoring staff will radio Hotline with the monitoring results and actions taken
- 6. Hotline will record results and actions against complaint
- A notice informing nearby residents/apartment body corporates of the event and the hotline number will be sent out at least 4 days prior to the event. A copy of the notice will be forwarded to Council. The area to be letter dropped has been increased since 2010 and is shown in Appendix A. This includes the areas that the music is likely to be the dominant noise source and additional areas in Kensington based on previous complaints.
- The speakers of the outdoor stages will be set up as outlined above.
- A sound check will be performed prior to the event. During the sound check, appropriate music levels will be set on compressors at each of the stages to ensure they are started at appropriate levels.
- It is recommended that the APEX noise limiters and 10EaZy remote display loggers be used on all main stages. Sound level meters indicating the actual and allowed music levels will be displayed at each stage and sound system engineers will be required to monitor and maintain advised music levels. The sound system suppliers will be advised in writing of this requirement prior to the event.
- All sound systems will include a level limiter (or compressor) so music levels can be locked down. Artists and sound engineers will be advised that music limiting will be used and settings are not to be tampered with. The sound system suppliers will be advised in writing of this requirement prior to the event.
- Noise Consulting & Management Pty Ltd will continuously monitor throughout the entire event, the pre-determined noise sensitive locations and any additional locations that may become necessary based on the conditions and any complaints encountered. Two acoustic consultants will be required to provide effective monitoring and complaint investigation.
- The acoustic consultants will be in two way radio and mobile phone contact with the sound desk staff, production manager, sound engineers, event organiser, and hotline staff throughout the event.
- The production manager and sound engineers will be briefed on the importance of reducing music levels as requested by the acoustic consultant.
- Procedures will be implemented to allow for a quick reduction of the music levels of all stages if required. The production manager will ensure that sound engineers reduce music levels when instructed. The

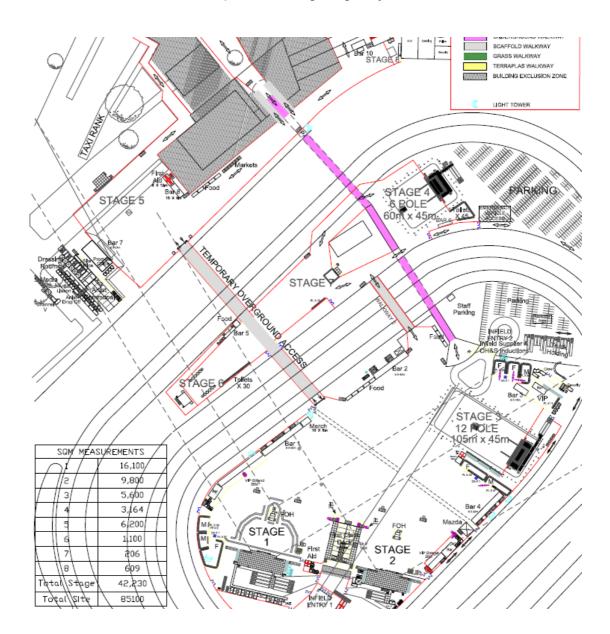
main stage sound desk will be manned by staff under the direct supervision of the acoustical consultant.

- A report containing the results of the monitoring, any complaints and the noise control measures will be presented to Council within 30 days of the event.
- Security guards will assist patrons in leaving quietly and avoiding passing through the nearby residential areas where possible. Security guards will be stationed in the residential areas to ensure noise is kept to a minimum.

To ensure the event is operated in a responsible manner, Future Music Festival has made a commitment to abide by this Noise Management Plan.



Appendix A Map of area showing letter drop area



Site plan showing stage layout.