

Royal Botanic Gardens and Domain Trust



Noise Management Plan

CONTENTS

1.0	INTRODUCTION.....	2
2.0	NOISE MANAGEMENT OBJECTIVES.....	2
2.1	Responsibility for Noise Plan	2
2.2	Event Approval and Development Process.....	3
2.3	Risk Assessment	4
3.0	VENUE OR SITE STRUCTURE AND LAYOUT	5
3.1	The Phillip Precinct.....	5
3.2	The Crescent Precinct.....	6
3.3	Fleet Steps.....	6
3.4	Tarpeian Precinct and Bennelong Lawn	6
3.5	Event Area Location Map	6
4.0	IDENTIFICATION OF NOISE SENSITIVE RECEIVERS	8
4.1	Institutions.....	8
4.2	Residences.....	9
4.3	Other Trust Hirers	9
5.0	MONITORING PROGRAM.....	10
5.1	Monitoring Locations.....	10
5.2	Monitoring Methods	11
5.3	Monitoring Reports	11
6.0	VENUE NOISE LIMITS.....	12
6.1	The Phillip & Crescent Precincts.....	12
6.2	Fleet Steps.....	13
6.3	Tarpeian Precinct and Bennelong Lawn	13
6.4	Other	13
7.0	ASSESSMENT AND PREDICTION OF EVENT NOISE	13
8.0	STAKEHOLDER NOTIFICATION PROCEDURE.....	14
8.1	Neighbours & Stakeholders.....	15
8.2	DECC.....	15
8.3	Other Trust Hirers	16
9.0	COMPLAINTS HANDLING PROCEDURE.....	16
9.1	Pre Event	16
9.2	During Event.....	16
9.3	Post Event and Consultation.....	17
10.0	NOISE MANAGEMENT ISSUES IDENTIFICATION.....	17
11.0	NOISE REDUCING STRATEGIES.....	19
11.1	For <10,000 Person Events	19
11.2	For >10,000 Person Events	19
11.3	Early Warning Alerts.....	19
11.4	Speaker Positioning	20
12.0	NOISE PLAN EFFECTIVENESS	20
12.1	REPORTING.....	20
12.2	REVIEW PROCESS	20
	Attachment 1 – Sample Sound report	21
	Attachment 2 – Example Stakeholder notification	26
	Attachment 3 – Noise Complaint Location Map.....	29

1. INTRODUCTION

The Royal Botanic Gardens and Domain Trust will be 200 years old in 2016 and as such is Australia's oldest scientific institution. It has stewardship of approximately 64 hectares of land in central Sydney. The primary use of the Royal Botanic Gardens is for horticulture, science, education and to conserve plants. Active and noisy recreation is discouraged within its boundaries whereas the primary role of the Domain has been and continues to be one of recreation and celebration. As such it is Sydney's oldest event site and it continues to be a premier event site for the City.

This Noise Management Plan (NMP) has been developed at the request of the Department of Environment and Climate Change (DECC) in compliance with the Variation of Prevention Notice 1006659.

The NMP applies to concerts, music festivals, cinematic screenings, theatrical performances and any other outdoor events with sound amplification held at venues managed by the Royal Botanic Gardens and Domain Trust (Trust or Botanic Gardens Trust). The venues used are various sites within the Domain.

2. NOISE MANAGEMENT OBJECTIVES

The Trust's objective in creating a Noise Management Plan for the Sydney estate is to minimise sound impacts outside of event sites. It aims to do this by:

- ◆ Ensuring its event licensees meet the noise limits and time constraints set out in the Noise Management Plan
- ◆ Working with its noise monitoring company and event organisers to develop and implement sound management plans as required by Trust event licence agreements which outline procedures to reduce noise impacts on the local community
- ◆ Monitoring and reporting on the effectiveness of event sound plans and their compliance with the Noise Management Plan at the end of each event
- ◆ Reviewing the Noise Management Plan and implementing additional or alternative strategies if necessary to ensure it remains effective.

2.1 Responsibility for Noise Plan

The Botanic Gardens Trust is an agency within the Department of Environment and Climate Change (DECC) portfolio. It is managed by an Executive Director who reports to a Board of Trustees and the Director General of DECC.

There are three estates under the auspices of the Trust which include the Royal Botanic Gardens and Domain, Mt Annan Botanic Gardens and Mt Tomah Botanic Gardens. This Noise Plan covers the operation of the first and largest of these estates.

The Event Manager is responsible for the overall management of events, functions and other booked activities on Trust land and as such is responsible for the implementation of the Noise Plan, its maintenance, and any reviews of it which will take place in the future. This draft will be reviewed at end of the 2009–10 event season. The Event Manager works closely with several Venue Coordinators to whom bookings are delegated.

Venue coordinators work closely with event organisers who hire Trust sites and their suppliers such as sound companies and monitor all stages of the planning of an event. They examine sound plans in detail and input to the management of such plans in order to ensure the plan is effective for purpose.

Venue coordinators provide information to and arrange the sound monitoring for an event, as required; provide notification for an event and report after an event to DECC. They work on site during an event as the main contact for sound issues including complaints. They are responsible for following up on complaints after the event and implementing any actions required as a result.

2.2 Event Approval and Development Process

Until recently the Trust was its own consent authority for approving events on its land. Since changes to legislation governing temporary structures for events in 2008, the Trust works under a generic or wholistic development application (DA) from the City of Sydney. This provided for local community and other stakeholders to comment on impacts of events including the noise impacts.

The noise conditions placed on the Trust by the DA are transferred by licence conditions from the Trust to the event organiser. No other consents or agreements for sound issues associated with an event are required.

The following provides a step by step outline of Event Approval and Development Process conducted by the Trust.

1. Enquiry from Event Activity Organiser
 - 1.1. Staff provide advice on the suitability of the event or activity, availability of venue and necessary paperwork.
 - 1.2. Staff request detailed written proposal (provide event proposal guideline and other relevant information such as Introduction to the Domain).
2. Receive written Proposal
 - 2.1. Advise sender of receipt of proposal and request more information if required.
 - 2.2. If proposal is for a regular event held on Trust land and there are no problems associated with it going ahead, check date and venue availability and create Licence Agreement for the event/activity.
 - 2.3. If the event has not previously been done on Trust land, event staff write an 'overview' file note with any additional relevant information to add to proposal for assessment and forward to the Event Assessment Committee (Event Manager, Public Relations Manager, Curator with final sign off by Director Domain & Royal Botanic Gardens using the assessment guidelines. If there are potential issues associated with the event, its approval may be discussed with the Director).

- 2.4. If the event has city wide implications, the proposal is referred to Office of Protocol and Special Events in Premiers Department.
 - 2.5. This takes up to 3 weeks and proposals generally need to be submitted at least 6 months prior to event date.
3. Request more information if Event Assessment Committee requires it and repeat process till accepted or rejected.
 4. Advise Event Organiser, Trust Licensees (if necessary) and Trust staff of approval of the event and establish in the Booking Management System.
 5. Complete Licence Agreement, send to organiser and ensure it is returned with signature of organiser and witness, bond and public liability certificate. Other documentation and plans should be submitted according to Licence Agreement.
 - 5.1. the licence has strict conditions governing effects of sound.
 6. Planning meetings with organiser are held and if required their contractors, suppliers and other authorities to discuss all aspects for the event prior to plan submission.
 7. Thirteen Management Plans, one of which is a sound management plan, to be submitted by Event Organisers 21 working days in advance;
 - 7.1. event staff to review plans and provide feedback to client, monitor and ensure delivery of those plans at the event;
 - 7.2. approximately 2 weeks prior to an event, notification of the event is provided to neighbours and stakeholders (see section 8)
 8. Prior to the event site being open to the public, site safety sign-off via the Occupation and Fire Safety Assessment Certificate is required.
 9. Hold debrief of the event with organiser and as many contractors and other authorities as are available to monitor and review and document results of the Event.

2.3 Risk Assessment

The Trust has many years of data from complaints, which it uses as a guide for suitability of event types to locations. Risk assessments on bookings begin as clients request sites at the initial phase of enquiry. Trust officers determine the suitability of events to sites for a range of issues including sound impacts at that stage and provide feedback to clients. For example, the Trust does not allow events with loud music such as dance parties to take place at Bennelong Lawn which is above the Opera House and adjacent to the Grand Quay Apartments (commonly known as the "Toaster") and Government House and steers clients to a more suitable site where the impacts are less.

Later during the assessment for approval, issues such as sound are considered and further recommendations or conditions made to the client if they want the event to proceed. These conditions are noted in licence agreements.

Formal risk assessments for sound of each site on Trust land are not made by the Trust.

There are too many event and sound layout configurations for the effects to be determined in advance. However, once an event organiser begins planning an event, it is their responsibility within the context of their preferred site configuration to do a risk assessment for the location and determine the impact of sound on the surrounds. They are given data from previous events and previous years to assist with such an assessment.

In addition, the Trust contracts a sound monitoring company which has monitored all events on Trust land for the last seven years. The company has a wealth of data and expertise that can be made available to event organisers.

3. VENUE OR SITE STRUCTURE AND LAYOUT

The Domain is a large open outdoor space which completely surrounds the Royal Botanic Gardens, from the Opera House in the north-west to Mrs Macquaries Point in the north-east and Woolloomooloo in the east. It contains very little infrastructure and no areas have permanent amplification equipment. All equipment, including that for sound, has to be brought in on a temporary basis. It has several commonly used areas for events, which are outlined below. The sites are versatile and can be used for a variety of event types.

Trust sites, being historic outdoor parks and garden settings have no equipment as part of their venue hire. Different events at different sites will necessarily require different event equipment. This document does not anticipate what equipment might be used at an event. However, each event is required to deliver a sound plan which outlines what equipment is to be used and how it, along with planning, will be configured to ensure that minimal sound escapes the site.

3.1. *The Phillip Precinct*

The Phillip Precinct area is commonly referred to as the Domain and is a large space of approximately seven hectares. It can hold around 35,000–40,000 people. It is used most commonly for free public concert events, music festivals, sporting events, lunchtime field games and rallies.

It has some infrastructure such as gates, pathways, power and communication boards at the southern end which encourages the set up of stages at that end of the site with sound being pushed out the north. The Cahill Expressway, then the Royal Botanic Gardens lies in the area immediately to the north, beyond which is Sydney Harbour. This greatly ameliorates the capacity for sound to impact residents to the north. Sydney Hospital, Parliament House and the State Library back onto the Precinct in the west and the Land Titles Office and St Mary's Cathedral are adjacent and back on to it in the south. There has not been a sound complaint from those neighbours of the Phillip Precinct in the last seven years of sound monitoring or complaint recording. Immediately to the east there is some recently (compared with the lifetime of the Domain) built apartment blocks most of which are below the ridge on which Art Gallery Road is built and further a field, approximately a kilometre away on a high ridge, there are the Potts

Point apartments and houses. This is the neighbouring location which is most sensitive to sound from the Phillip Precinct.

3.2. *The Crescent Precinct*

The Crescent Precinct is commonly referred to as the Domain Car Park roof. It is a large space similar in size to the Phillip Precinct and half of which is completely flat. The area is adjacent to Sir John Young Crescent across from which are several apartment blocks. The area slopes upward in the west towards Art Gallery Road. It has few pathways or facilities for events but is an ideal location for sports fields which is its main use. The Trust discourages its use as an event site because of the difficulty in setting up the site for event purposes and also because of the sound issues for nearby residents associated with its use. However, in the past it has hosted events such as Les Art Saux – a circus in a inflatable marquee, Tropfest Junior – a short film festival; small community events such as the Scottish Festival and memorial events.

3.3. *Fleet Steps*

The Fleet Steps area is a flat piece of land at the bottom of historic Fleet steps on the western side of the Mrs Macquaries Road ridge. It faces the Opera House and Government House and is mostly commonly used for private events which are held inside marquees and for the internationally known Open Air Cinema. It is also used for two dance parties a year (the Trust limits the number to two dance parties a year despite requests for more) and for sporting events. There are sound issues at this site being as it is, adjacent to the water of Sydney Harbour and ever increasing numbers of residences being located on the Harbour. The Macquarie Street apartments are those most affected.

3.4. *Tarpeian Precinct and Bennelong Lawn*

Tarpeian Precinct and Bennelong Lawn are the areas south of and approximately 30 metres above the Opera House; immediately west and adjacent to Government House and fifty metres across the roadway of Macquarie Street to the east of the 'Toaster' residential building. It is an area of land which slopes gradually to the west until the edge of the cliff dropping to Macquarie Street 20 metres below. It has few event facilities and with such sensitive neighbours the Trust is particular about what kinds of events and activities it allows there. Primarily it is used for viewing the NYE fireworks, the start or end of city wide sporting events and picnics. It was however used for several years for the Night Noodle Markets which was a food market with some amplified sound.

3.5. *Event Area Location Map*



4. IDENTIFICATION OF NOISE SENSITIVE RECEIVERS

Neighbours of Domain include a significant number of institutions which fortuitously are often not in working mode or are in reduced operations on days that events are usually held. There are two schools and residential properties within the sound impact zone.

In recognition of the 'quiet enjoyment' of their surrounds, the Trust does not allow music at events held outside of buildings or marquees other than sporting events, such as triathlons, walks and runs, to take place before 10 am or after 11 pm. It also limits the numbers of particular styles of events such as dance parties which may cause sound impacts.

The Trust has seven years of event noise complaint data which informs its management of sound operations. This data has been used to identify noise sensitive receivers and alert event operators and their sound companies on where the main noise issues lie. It has also allowed the Trust to develop a data base of contacts for residences, institutions and public services such as the City of Sydney and Police who may be contacted about such impacts and provide them with prior notice of events and the contact number to call should they be affected by sound or receive sound complaints. This has been an effective method of identifying noise sensitive receivers.

Event Operators are required to design their sound plans in such a way as to reduce impacts on identified sensitive receivers. The Trust reviews these plans and requires changes to be made should the plan be deemed to be ineffective. Should there be issues arising from the plan that are difficult to resolve, the Trust also involves an independent sound monitoring company for expert advice.

There has been a significant decrease in complaints the last couple of years which indicates that access to such data has been a useful tool to address the problems.

4.1. *Institutions*

While the Trust has some important and sensitive institutional neighbours there has only been one complaint in the last seven years from this group. This was from Government House and in relation to Open Air Cinema and was from an unusual combination of a particularly loud film, prevailing breezes and Government House's own staging of an evening of un-amplified readings.

The Sydney Hospital is immediately adjacent to the Phillip Precinct. Although it is only 50 metres from the Phillip Precinct, it is protected from the full impacts of sound because it is at the west of the site and speakers are necessarily angled in a north-south direction. This prevents sound impacting on the hospital.

St Mary's Cathedral has an attached school which is approximately one hundred meters to the south of the Phillip Precinct. The fact that there has not been a complaint received from it is due to it being protected by the botanical plantings

and other buildings, as well as the situation that most events are held on weekends or school holidays.

The Conservatorium School of Music is purpose built and well sound proofed. Its geographical location also protects it from all the event sites via a combination of slopes and botanical plantings. In addition there are few activities at the school during event times.

4.2. Residences

Residential properties are the most sensitive receivers in regards to noise emanating at all sites. The Trust hosts up to 40 public events and 20 smaller private events each year but the number of complaints per year is less than 10.

Specifically, residents on the Potts Point ridge can be affected by music festivals at the Phillip Precinct where sound is emitted from speakers that face in an easterly direction or if there is a westerly wind blowing. Victoria, Wilde and Brougham Streets are the most affected being on the westerly side of the ridge facing the Precinct. Occasionally they are also affected by dance parties at Fleet Steps, when prevailing winds from the west carry sound to the east.

One event held on the Crescent Precinct, the Spiegel Tent, caused sound complaints to arise from the Crown Apartments residences at the northern end of Crown Street. The Trust now discourages use of that area for events.

Occasionally there is a complaint from the Woolloomooloo Wharf apartments. However, for the most part, those residents are protected from the sound by the ridge below which their apartment block sits.

Residents at the northern end of Macquarie Street are the most affected by events. They can be affected by sound from the Phillip Precinct and Fleet Steps, depending on prevailing winds, cloud cover and by which type of event is being held. Through the complaints process it is known those buildings which are most affected are the Park Regis, Grand Quay and Macquarie Apartments on the corner of Bent and Macquarie Streets. The Trust has had extensive discussion with those residents in order to record the issues and manage them better.

In 2003 there were several complaints from the Kirribilli area in the Pitt and Upper Peel Street location from Open Air Cinema. This area has not been the cause for complaint for some time. Nor have dance party events at Fleet Steps been an issue. The Trust received a complaint from Neutral Bay about Carols in the Domain in 2005 but there have been no complaints from the northern side of the Harbour since then.

4.3. Other Trust Hirers

The Trust has over a thousand bookings a year on its land including many weddings. On weekends it may have up to a dozen bookings on any one day. Management of this many bookings is a complex situation and paramount to the operations of the Trust. If there is any possibility of sound impacting a client the situation is discussed at the time of booking before it is confirmed.

5. MONITORING PROGRAM

The basis of the monitoring program is outlined in the Prevention Notice 1006659 (Attachment 5). Many of the Trust's events have been annual events for over 25 years. This is recognised in the Prevention Notice through its specific naming of several events and provision of different levels of sound level allowances of those events. Where large events such as Symphony and Jazz at the Domain have caused no sound complaints over the years, they have been able to operate at louder levels. Events such as Homebake and Field Day operate under attenuated levels, in particular reduced dB (C) levels in order to reduce the impacts on surrounds.

The Notice, which was created in consultation with the EPA (now DECC) and took into account the body of baseline sound data that was available at the time, has been a useful one. It provides the Trust with flexibility for its monitoring and managing sound procedures and to impose conditions where it sees fit. Due to the longevity of many of the events as well as the long relationship of ARUP Acoustics with the venue, the considerable amount of accumulated data provides indications for types and levels of noise that can be expected at sensitive receivers. This can be extrapolated to other new events, when they occur.

Each event for at least the last seven years, which falls under the guidelines of the Preventative Notice, has been monitored and reports obtained. Sound reports for each event are kept with event records (sample report is provided at Attachment 1). These are available on request. Records of complaints are made by the Trust officer in charge of the event after talking to the complainant and a summary of all complaints is kept for reference and review on an annual basis.

The Trust works with event organisers to minimise sound impacts through pre-event planning and, on the day, monitoring, measuring and recording the results and change practices as required during the event itself. Due to the system of warnings provided to event sound operators from monitoring locations as the sound approaches limits, there have been very few exceedances of sound levels over the last few years.

Audience size provides an indication of the likely amplification required to provide an enjoyable experience for the crowd. The size of the events are categorised as category 1 (200 to 2,000 persons), category 2 (2,000 to 10,000 persons) or category 3 (more than 10,000). Only the Phillip or Crescent Precincts are large enough for category 3 events. For the purposes of monitoring events, events of a particular size have been required to monitor sound at particular locations. However, increasingly the Trust requires additional sound monitoring to be carried out at locations of its designation where complaints have been previously recorded or where a complaint is received during an event.

5.1. *Monitoring Locations*

For category 1 events and category 2 events, where the event is held on or near the foreshore of Trust land, the starting monitoring location is:

- i) Beulah Street Wharf (off Waruda Street), Kirribilli.

For category 3 events:

- ii) a point within one (1) metre of the Sydney Hospital and Sydney Eye Hospital boundary nearest to the Domain at Hospital Road, Sydney;

And as required at:

- iii) the top of the Woolloomooloo Bay apartments in Lincoln Avenue
- iv) the Crescent Precinct adjacent to the Crown Apartments
- v) Victoria Street Potts Point
- vi) Other locations of complaint

5.2. Monitoring Methods

Noise measurements must be taken using a Type 1 Sound Level Meter set to 'fast' time response, 'A' and/or 'C' weighting network as specified. The L_Amax and L_Cmax must be measured:

- i) in the absence of any influential sound, that is audibly distinguishable and extraneous to the sound from the amplification equipment; and
- ii) with the sound level meter microphone placed between 1.5 and 1.6 metres above the ground. However, where this position may create a higher than normal ambient level due to its proximity to noise generating environments such as lapping water or traffic, the noise generating source should be identified and the monitoring equipment re-located to a nearby but less affected location.

5.3. Monitoring Reports

Within five working days following the completion of the event the Trust will provide a written report to DECC if there has been:

- i) non-compliance with the permitted hours in this Notice Prevention Notice for the relevant event category and the reasons for any non-compliance;
- ii) any exceedances of the noise level limits in this Notice for the relevant event category, times and details of why the exceedances occurred and what measures were implemented to ensure that the exceedances did not reoccur; and
- iii) a summary of the number, location and times of any complaints recorded by the Trust.

The Trust will ensure that a full and detailed acoustic report for all events requiring monitoring will be prepared by a qualified acoustic consultant and submitted not later than twenty one days after the completion of the event to DECC. The report will contain:

- i) the name address and telephone number of the person who prepared the report;
- ii) the relevant date(s) and the commencement and completion times of the event on each day held;

- iii) the times and location including a site plan, at which the noise measurements were taken;
- iv) details of the equipment and methods used to take measurements;
- v) a statement of any time(s) at which the noise level limits for the relevant event category were exceeded and why, including the level(s) and duration of any exceedances(s); and,
- vi) any other information relevant to the consideration of the noise impact from the event on residents or other sensitive receivers.
- vii) the estimated total number of people that were anticipated to attend the category 2 event or category 3 event on each day and the estimated number who actually attended;
- viii) if any exceedances occurred or any complaints were received, details of corrective or preventative action intended by the Trust for incorporation into any future events; and
- ix) any other information relevant to the consideration of the noise impact from the event on residents or other sensitive receivers.

6. VENUE NOISE LIMITS

The Trust sound limits for its various sites are set out below. In recognition of different impacts of some events from others, it will also enforce differential limits for some events and take into account the history of a particular events' impact. For example when events such as Sydney Festival concerts have no complaints, the emissions will be allowed at a higher level than for other events.

6.1. *The Phillip & Crescent Precincts*

The Phillip and Crescent Precincts are the only areas of Trust land large enough to carry crowds of people larger than 10,000 persons with a common viewing point. The Prevention Notice recognises that a greater decibel limit is required to provide a large number of event patrons with a reasonable event experience where they can comfortably hear and enjoy the entertainment.

6.1.1. Events with > 10,000 PAX

Both dB (A) and dB(C) limits are specified for concerts. This gives recognition to the particular impacts of bass sound on receivers which is the dB (C) measurement.

The measurements at Sydney Hospital and Sydney Eye Hospital which are the closest receivers, must not exceed L_{Amax} 80 dB(A) and L_{Cmax} 100dB(C) except for Carols and Sydney Festival Concerts which are permitted to L_{Amax} 85 dB(A).

For other monitoring locations outlined in 4.1 which are a substantial distance further than the Hospital, the levels must not exceed L_{Amax} 70 dB(A) and L_{Cmax} 90 dB(C)

6.1.2. Events with < 10,000 PAX

The noise levels from any sound amplification equipment measured at the relevant monitoring locations in 4.1 must not exceed L_{Amax} 55dB (A) and L_{Cmax} 70dB(C)

6.2. Fleet Steps

Crowds at Fleet Steps are necessarily smaller than 10,000 persons because of the size of the site.

The noise levels from any sound amplification equipment measured at the relevant monitoring locations specified in 4.1 must not exceed L_{Amax} 55dB (A) and L_{Cmax} 70dB(C)

6.3. Tarpeian Precinct and Bennelong Lawn

Tarpeian Precinct and Bennelong Lawn, like Fleet Steps, are smaller sites catering to less than 10,000 people.

The noise levels from any sound amplification equipment measured at the relevant monitoring locations specified in 4.1 must not exceed L_{Amax} 55dB (A) and L_{Cmax} 70dB(C)

6.4. Other

Where there are no other guidelines, the general limits to be applied at specified locations or other monitoring locations of the Trust choice are:

- (i) L_{Amax} 55dB(A); or L_{Amax} that exceeds the background noise level (L_{A90}) by no more than 5dB(A).

7. ASSESSMENT AND PREDICTION OF EVENT NOISE

All Events requiring amplification which operate on Trust land are required to develop and implement a Noise or Sound Plan. The Sound Plan includes the arrangements for controlling sound at and to the Site and compliance with requirements of the Noise Prevention Notice and other conditions in the Event licence. For all events which fall within the guidelines there are monitoring reports dating back to 2002.

Consequently there is considerable historic noise data for a range of different styles and set-ups of events to assist with profiling key hotspots. This provides a reasonable indication of the types and level of noise that can be expected at sensitive receivers from future events. Section 10 of this plan outlines the summary of data which provides information for prediction of issues.

Noise levels at any location can be affected by a range of factors the most unpredictable of which is the weather. For the most part, Trust managed lands are affected by north easterly breezes which push sound to the south and

slightly west. Traditionally complainants about Fleet Steps events live in this direction from the site whereas, a westerly in the afternoon of an event effectively protects the residents of that area from sound 'spill'. Conversely a westerly across the Phillip Precinct during an event afternoon can push sound across to Rushcutters Bay. Most complaints cease after nightfall when the wind also drops and stops assisting the "spill" of sound from the site.

Other factors which can be predicted to cause complaints arise from music events of a long duration and music events such as dance parties which have a heavy emphasis on bass sound, both aspects of which give a perceived if not actual perception of loudness.

The following steps will be followed in order to predict noise impacts at public events:

- i) examine historic data for similar events at the same site including the layout of the site and of the audio set up for stages and for sensitive receivers in the past;
- ii) compare proposed sound layout with proposed site layout,
- iii) identify all sound generating equipment at the site. This may be concert sound systems, generators or equipment such as rides and side show alley entertainments;
- iv) examine the heights and likelihood of those sources to throw sound beyond the site and design sound limiting measures into their operation;
- v) quantify the numbers of people on site (human bodies absorb a great deal of sound). This is predicable in the case of ticketed events but less predicable at free events;
- vi) use the rehearsals and sound checks as advisory sessions between acoustic monitor and sound desk to alert what volume settings are possible before alert levels are reached. The data gained at these sessions, such as L_{Amax} and L_{Cmax} at both the sound desk and residences and under what weather conditions will give valuable information as to how the sound will be received at the actual event;
- vii) verify weather conditions on the event day. Wind direction and speed needs to be particularly noted.

8. STAKEHOLDER NOTIFICATION PROCEDURE

Most of the larger events that require amplification are widely publicised in the media through festival programs; brochures and websites including the Trust's own; radio and television. In addition the Trust requires that for large events signage is erected in visible locations to inform regular users of Trust land of the impending event. Specifically however, neighbours and other stakeholders are informed of the event via email contacts.

8.1. Neighbours & Stakeholders

The Trust has a rolling annual event calendar which is used as a tool for both planning and notification. It is updated monthly and emailed to all businesses on Trust land and the Trust's neighbours and stakeholder's database. This allows all those contacts to receive notification of events up to a year in advance. Such advanced notification allows those likely to be affected to plan around the event impacts. The notification outlines the name of the event, the date and times it will be held, sound impacts including the event noise such as rehearsals and sound checks and road closures among other information.

Ten to fourteen days prior to an event, a stakeholder event notice is sent to all those on the contact database to provide a reminder about the event and further detail. It details the above information again and provides the contact details of both the Trust staff member responsible and the event organisers' contact details. It specifically notes the hotline number to be used for sound complaints to speak directly with a Trust staff member who is able to address any noise issues arising from the event.

The contact database of neighbours and stakeholders to whom the above notifications are sent is regularly updated. Residents and/or the contact details for concierges of buildings are taken and added to the database to allow the Trust to notify them of events if and when complaints are made. Other private citizens not associated with apartment blocks are also on the database. In addition, other authorities who may be contacted by the general public on event impacts are on the list so that they can either pass on Trust contact details and hot line number to complainants or notify the Trust to allow Trust staff to follow up on the complaint. This includes contact details for Kings Cross, Rocks and North Sydney Police as well as the City of Sydney and DECC staff.

8.2. DECC

At least twenty-one (21) days prior to the commencement date of any category 2 events or category 3 events, the Trust informs DECC:

- i) the times and dates of the proposed event;
- ii) the name and contact details of the Trust officer for the purposes of communication with the EPA in connection with the event;
- iii) the name of a person appointed as the Trust's representative specifically for the duration of the event and the hot line number;
- iv) proposed noise monitoring locations;
- v) the proposed measures for notification of residents and sensitive receivers about the event; and
- vi) a plan for addressing complaints from members of the public and managing the emission of noise from the event.

It is also notified of any changes to the details outlined above, at least seven (7) days prior to the commencement date(s) of an event where noise is required to be monitored.

DECC is notified of an event and its sound impacts by two different methods. The first is via a letter outlining all the above. Secondly this is followed 10–14 days from the event with a stakeholder notice, which is the notice sent to all stakeholders including neighbours, businesses, government services and noise sensitive receivers who wish to be notified.

8.3. Other Trust Hirers

To ensure the needs of other Trust clients are not impacted upon by the noise of larger events the Trust has a booking system on which event impacts and warnings can be entered to alert Trust officers to ensure that clients are not booked into sites at those times. If there is any possibility of sound impacting a client the situation will be discussed at the time of booking before it is confirmed.

9. COMPLAINTS HANDLING PROCEDURE

The Trust has had a complaints handling procedure for many years and has data on complaints dating back to 2002. The Trust provides the information regarding history of relevant noise complaints to event organisers to consider when planning and managing events.

9.1. Pre Event

All event organisers who require amplified sound at their event are required by their licence agreement to produce a Sound Plan which must address among other issues, the complaint trend data and how to minimise noise emissions from their site in order to prevent complaints.

Trust officers responsible for events are trained in the complaints handling procedure and are responsible for following up on and recording all data related to complaints as outlined in the Prevention Notice.

9.2. During Event

The data is recorded on a standard template which records the following:

- i) the date and time of the complaint;
- ii) the method by which the complaint was made;
- iii) any personal details of the complainant which were provided by the complainant, in particular their location or, if no such details were provided, a note to that effect;
- iv) the nature of the complaint;
- v) the action taken by the Trust in relation to the complaint, including any follow-up contact with the complainant; and
- vi) if no action was taken by the Trust, the reasons why no action was taken.

For each event, rehearsal and sound test, noise levels will be continuously monitored by an acoustic consultant. The consultant will be in contact with the Trust employee who is present at the event both of whom are in close communication with the sound desk via phone and or/radio or in some instances, electronic messages, in order to exercise ultimate control of the noise levels from amplification equipment.

If a breach has not occurred, consultation will take place to determine if anything can be done to alleviate the complaint conditions within the operating guidelines.

If a complaint is received during the event, the Trust officer in charge will contact the acoustic consultant to investigate whether a breach has occurred and take measures to act accordingly. These measures are outlined in the Trust's licence agreement with the Event organiser and provide for a system of warnings every two minutes after a breach has occurred. Should the breach occur three times within six minutes, a fine will be imposed or for extreme cases the event be closed. The Trust requires a substantial bond to be lodged prior to the event so that if payment of fines are not made the bond will be retained.

9.3. Post Event and Consultation

Some complaints are received by email or phone call after the event. The Trust contact officer will contact all complainants to investigate the issues. They will also consult other authorities such as the Council and DECC in order to obtain other complaint information.

Once all data from the event, plus the initial report from the acoustic monitoring team is received, the data will be analysed to review the sound management process. Breaches will be dealt with as outlined in the licence agreement including where relevant, fines imposed. This information will be advised to complainants. Where breaches have not occurred, the data will be analysed in order to investigate why the complaints were received and whether improvements can be made to the event sound plan.

In addition to complaints being reviewed during and post event, the data gathered throughout the year will be reviewed annually on a wholistic basis to monitor the effectiveness of the Plan.

10. NOISE MANAGEMENT ISSUES IDENTIFICATION

Information supplied by records of complaints and data collection via phone calls and on site visits by complainants to event sites or Trust representatives to problem locations has facilitated identification of the Noise Management issues.

Since the summer of 2002, 34 complaints have been received and recorded in relation to events on Trust land. There have been over 200 public events hosted during that time, many of which have had amplification.

Overwhelmingly the complainants who have issues are from the same locations, have issues with the same events and the issues are generally as a result of the

length, loudness and bass sounds emanating from the events. However, after a high point in the summer of 2005-06, there has been a large reduction in sound complaints after the Trust worked more intensively with event organisers to ensure the impacts lessened. The data is outlined in the following tables.

Year	No of Complaints	Event	Event Site
2002-03	5	Sunset Party x 1 Field Day x 1	Fleet Steps Phillip Precinct
2003-04	3	Azure Party x 3 Spiegel Tent x 2 Field Day x 1	Fleet Steps Crescent Precinct Phillip Precinct
2004-05	1	Night Noodle Market	Tarpeian Precinct
2005-06	19	Harbourlife x 4 Homebake x 12 Field Day x 2	Fleet Steps Phillip Precinct Phillip Precinct
2006-07	5	Carols at the Domain x 1 Sydney Running Festival x 1 Field Day x 3	Phillip Precinct Tarpeian Precinct Phillip Precinct
2007 - 08	1	Homebake x 1	Phillip Precinct

Year	Location of Complaint	Times Location was impacted
2002-03	Macquarie St Sydney No street given, Potts Point Corner Pitt and Upper Peel Street Kirribilli	3 1 1
2003-04	Crown Gardens, William St, Woolloomooloo	1
2004-05	Macquarie St Sydney	1
2005-06	Bourke St, Darlinghurst William St, Darlinghurst Brougham St, Potts Point Macquarie St, Sydney The Finger Wharf, Woolloomooloo Wilde St Potts Point Victoria St, Potts Point Kings Cross Rd, Rushcutters Bay No street given, Neutral Bay	2 1 3 3 3 1 3 2 1
2006-07	Macquarie St Sydney No street given, Kirribilli Victoria St, Potts Point	2 1 1
2007 - 08	No street given, Potts Point	1

Type of Complaint	Times Type Was Identified As Issue
Length of event	5
Bass frequency /vibration	12
General Loudness of noise	13
Audience noise	2
Complaint Process	1
Non receipt of notification	1

N.B. It should be noted that some complainants raised more than one type of issue as a problem.

11. NOISE REDUCING STRATEGIES

In order to reduce the sound impacts on the neighbouring environment, the Trust places a number of restrictions on the program of events it presents to the public. Such restrictions affect the Trust's ability to raise revenue via commercial events, thereby limiting other services it is able to offer. However, the public amenity is regarded as an important aspect of the Trust's management of its lands and therefore searching for a balance of all Trust goals and objectives is continual. The following four points indicate the main methods by which reductions are achieved.

11.1. For <10,000 Person Events

The following strategies are in place to lessen impacts on neighbours while still allowing the Trust's objectives of providing access to its land for a wide variety of cultural and recreational experiences for all sections of the community to be met.

- i) restricting the number of dance parties held each year at Fleet Steps to two;
- ii) public events, other than sporting events, must not commence prior to 1000 hours or finish after 2300 hours on any day;
- iii) the total length of an event must not be greater than eight hours;

11.2. For >10,000 Person Events

- i) no more than twelve (12) such concert/festival style events may be held on Trust Lands per calendar year.
- ii) three (3) events (Tropfest, Homebake and Field Day) must not be greater than twelve (12) hours in duration, and each event held of this duration shall be separated by at least ten (10) days;
- iii) nine (9) events must not be greater than four (4) hours in duration, and shall not be held on more than four (4) consecutive days;
- iv) the maximum duration of each individual rehearsal associated with any such events, with the use of the main speaker system, must not exceed two (2) hours. The total duration of rehearsals that are audible beyond the land administered by the Trust must be kept to an absolute minimum;
- v) the maximum duration of individual sound tests associated with any category 3 events, must not exceed one (1) hour. The total duration of sound tests that are audible beyond the land administered by the Trust must be kept to an absolute minimum.

11.3. Early Warning Alerts

It is standard practice for the acoustic monitoring team to issue warnings to sound operators at events as sound levels approach limits. This is a form of early warning alert. The sound operator is warned to reduce the level of sound during the event wherever the L_{Amax} or L_{Cmax} exceeds a level of 5d (B) less than the noise level limit. This results in better noise management, a reduction in breaches and lowers levels at residences.

11.4. *Speaker Positioning*

Sound systems are required to be positioned to minimise the noise impact on residential premises and other sensitive receivers through consideration of numbers, location and angling of the speakers and system.

12. NOISE PLAN EFFECTIVENESS

12.1. *REPORTING*

The Trust will continue to provide individual event acoustic reports to DECC as well as event organisers, in the timeframes outlined in Clause 4.3 of this Noise Plan. Reports can also be made available to other interested parties.

As part of the Trust's strategic annual review process, it will report to neighbours and stakeholders on the effectiveness of the Noise Management Plan after the annual review of the Plan. The draft review will be published on the website and the database of neighbours and stakeholders will be contacted and invited to review and comment on it prior to its finalisation.

12.2. *REVIEW PROCESS*

The Trust will review the Plan's effectiveness on an annual basis. This will take place by the end of August of each year. The timing is consistent with having a full range of data from the annual cycle of events held. Data will be analysed with the input of the acoustic consultants to implement changes prior to the next event season.

It will do this by:

1. reviewing any noise consultation or complaint information received that is associated with events. This will include information gathered as a result of input from the community prior to, during and after an event;
2. examining compliance with conditions outlined in this plan, the Prevention Notice and Licence conditions and through an analysis of the acoustic consultant's reports on events;
3. assessment of the problems, with the acoustic consultant to examine a better layout of the event site and sound to reduce impacts away from the event location;
4. consultation with DECC

Attachment 1 – Sample Sound Report

ARUP

Level 10 201 Kent Street
Sydney NSW 2000
www.arup.com

Tel +61 2 9320 9320
Fax +61 2 9320 9321
Direct Tel +61 2 9320 9462
leo.tsui@arup.com.au

To	Annie Heath, RBG	annie.heath@rbgsyd.nsw.gov.au	Date	7 January 2008
Copies			Job No/Ref	81668/38/LST
From	Leo Tsui		File Ref	
Subject	Botanic Gardens Event Noise Monitoring Field Day 08 Event Noise Monitoring Report		Page 1 of 5	

The information contained in this fax message is confidential and intended only for the addressee(s).
If you are not an intended recipient please notify us and destroy this document. Thank you.

1 Introduction

Arup Acoustics was retained by the Botanic Gardens Trust (BGT) to conduct environmental noise monitoring for "Field Day" 2008. Monitoring was performed as part of the concert licence conditions during the sound check on 31 December 2007 and during the main event on 1 January 2008.

"Field Day" is a music festival event held in the Domain, Phillip Precinct consisting mainly of DJs and a few live bands performing on three separate stages. This was a dance music event and the music can be characterised as bass and rhythm dominated with a small dynamic range.

Approximately 20,000 people attended this year's event. The sound check took place between 16:00 hours and 17:00 hours on Monday 31 December 2007 and the main event was between 11:00 hours and 23:00 hours on Tuesday 1 January 2008.

The monitoring was undertaken in accordance with the NSW Environmental Protection Authority's *Notice of Preventative Action* for open-air entertainment events at the Royal Botanic Gardens, Notice No. 1006659, dated 24 June 2003. 'Field Day' is classified as a 'Category 3' event for the attendance of greater than 10,000 people.

Arup Acoustics contacted Joshua Chapman, the sound and lighting production manager in advance to confirm the criteria for the event and confirm his overall control of sound system levels at the various stages. Tegan, Joshua's assistant, was the point of contact during the event for noise criteria alerts or exceedances. Arup Acoustics liaised with Joshua during the sound check. Arup Acoustics liaised with Tegan via two-way radio throughout the main event with the information relayed to Joshua and various stages.

2 Criteria

Arup Acoustics used the following criteria for monitoring noise at the relevant monitoring locations.

In accordance with condition 15 (a) and (b) of the EPA Notice, the following noise level limits were adopted.

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08\0002\FAXREPORT_FIELD_DAY_08_LST.DOC

..1/2
Arup
Arup Pty Ltd ABN 18 000 966 165

- (a) During any category 3 event, the noise levels from any sound amplification equipment, measured at the relevant monitoring locations nominated from time to time by the EPA or Trust which are the subject of complaint or may, in the opinion of the EPA or Trust, experience noise levels that exceed the relevant noise level limits in this Notice (excluding the Sydney Hospital and Sydney Eye Hospital, must not exceed L_{Amax} 70 dB(A) and L_{Cmax} 90 dB(C).
- (b) During any category 3 events, the noise levels from any sound amplification equipment, measured at the Sydney Hospital and Sydney Eye Hospital, must not exceed L_{Amax} 80 dB(A) and L_{Cmax} 100 dB(C).

Therefore, at the Sydney Hospital monitoring location, the following noise monitoring criteria were applied:

- 'Do Not Exceed' limits: Maximum sound pressure levels of 80 dB(A) and 100 dB(C)

All maximum sound pressure levels quoted herein are instantaneous event maximum sound levels, in compliance with definitions A(f) and (g) of the Notice.

Alert levels of 75 dB(A) and 95 dB(C) at the Sydney Hospital monitoring location were applied to alert sound operators that noise levels are approaching the 'Do Not Exceed' limits.

'C' weighted criteria have been included in the EPA criteria in addition to the A-weighted criteria as it places greater emphasis on low-frequency sounds. This weighting is more sensitive to bass noise spill, and is designed to help indicate annoyance from loud low frequency sounds, which can be a problem for outdoor events that have substantial bass components.

3 Measurement Methodology

'A' and 'C' weighted maximum sound pressure level measurements were undertaken by Leo Tsui and Leanne Laughton of Arup Acoustics, using a Brüel & Kjær 2250 Precision Sound Level Meter (S/N 2449851) and a Brüel & Kjær 2236 Precision Sound Level Meter (S/N 1778333). The meters were calibrated before and after each monitoring session using Brüel & Kjær 4231 Sound Level Calibrators, with no significant drift occurring. The meters were mounted on a tripod at approximately 1.5 m above ground level, and set to fast time response. All equipment setup and calibration was performed generally in compliance with Australian Standard 1055:1997 "Acoustics: description and measurement of environmental noise".

The primary measurement location was at the eastern boundary of the Sydney Hospital, on the verge of Hospital Rd that forms the western border of the Phillip Precinct of the Domain. The monitoring position was approximately 20 m from the boundary of parliament house, and approximately 1.5 m from the boundary of Sydney hospital. The noise level was monitored at the Hospital throughout the sound check and the main event. The loudspeakers from each stage were set up to point away from the Hospital and other noise sensitive receivers as far as possible.

4 Measurement Results

4.1 Sound Check – Sydney Hospital, 16:00 – 17:00 hrs, 31 December 2007

Start Time:	16:00
Typical Maximum SPL at Hospital:	71 - 73 dB(A) 93 - 95 dB(C)
Maximum SPL at Hospital:	75 dB(A) 99 dB(C)
Exceedances of <i>Alert</i> Level 75 dB(A):	0
Exceedances of <i>Alert</i> Level 95 dB(C):	Three times
Exceedances of <i>Do Not Exceed</i> Level 80 dB(A):	0
Exceedances of <i>Do Not Exceed</i> Level 100 dB(C):	0
End Time:	17:00

Comments:

During the sound check, noise from the event was clearly audible. Noise from the Main Stage and the Break Stage was dominant. Due to the style of music, low frequency content was dominant throughout the sound check. No exceedance of the *Alert* level of 75 dB(A) was recorded and the *Alert* level of 95 dB(C) was exceeded on three occasions. Joshua was contacted on each occasion and alerted when approaching the dB(C) criterion.

No exceedance of the *Do Not Exceed* levels was recorded during the sound check monitoring session.

4.2 Main Event – Sydney Hospital, 11:00 – 23:00 hrs, 8 December 2007

Start Time:	11:00
Typical Maximum SPL at Hospital:	70 - 75 dB(A) 88 - 96 dB(C)
Maximum SPL at Hospital:	83 dB(A) 102 dB(C)
Exceedances of <i>Alert</i> Level 75 dB(A):	Frequent
Exceedances of <i>Alert</i> Level 95 dB(C):	Frequent
Exceedances of <i>Do Not Exceed</i> Level 80 dB(A):	1
Exceedances of <i>Do Not Exceed</i> Level 100 dB(C):	1
End Time:	23:00

Comments:

Noise monitoring was conducted at the Sydney Hospital eastern boundary during the monitoring period between 11:00 hours and 23:00 hours on Tuesday 1 January 2008. During the monitoring period, one exceedance of the *Do Not Exceed* limit of 80 dB(A) was recorded and one exceedance of the *Do Not Exceed* limit of 100 dB(C) occurred. Both exceedances were less than five seconds in duration.

The recorded times and levels of exceedances are provided in the table below.

Time of Exceedance	Measured Noise Levels
20:05 hrs	83 dB(A)
22:37 hrs	102 dB(C)

Joshua informed that the exceedance of the *Do Not Exceed* limit of 80 dB(A) at 20:05 hrs was due to the DJ's performance technique to deliberately scream into the headphone which was connected to the input chain of the on-stage equipment and bypassed the main sound desk limiter. As a result, Joshua was unable to control the noise level on this occasion. However, this was the only incident during the monitoring session.

Joshua and Tegan were contacted and were informed on both occasions of exceedances. Recommendations were provided to reduce the noise levels on all exceedances from the various stages and prompt actions were taken by Joshua.

The *Alert* levels of 75 dB(A) and 95 dB(C) were exceeded frequently, particularly in the evening period. The typical A-weighted maximum sound pressure levels from the event were marginally below the *Alert* level of 75 dB(A). The typical C-weighted maximum sound pressure levels were between the *Alert* levels of 95 dB(C) and the *Do Not Exceed* limit of 100 dB(C). Joshua and Tegan were alerted frequently to ensure that the noise levels were maintained below the *Do Not Exceed* limits yet providing a reasonable noise levels to ensure the enjoyment of the occupants.

5 Conclusion

Arup Acoustics undertook noise monitoring of the "Field Day 2008" event and its associated sound check. The monitoring was conducted at the eastern boundary of the Sydney Hospital during the sound check and main event.

Noise levels during the sound check did not exceed the Do Not Exceed levels of 80 dB(A) and 100 dB(C).

Noise levels measured at the Sydney Hospital monitoring location during the main event exceeded the dB(A) *Do Not Exceed* noise limit on one occasion and the dB(C) *Do Not Exceed* noise limit on one occasion. All exceedances were instantaneous peaks due to the music and vocal performances from the event. Tegan and Joshua were contacted immediately on all occasions and were advised to reduce the sound system levels. The messages were relayed to the sound desk controllers who responded promptly to reduce the noise level from the sound system and rectified the situations.

The *Alert* levels of 75 dB(A) and 95 dB(C) were frequently exceeded, particularly during the evening period. Tegan and Joshua were alerted frequently to ensure that the noise levels were maintained below the *Do Not Exceed* limits yet providing a reasonable noise levels to ensure the enjoyment of the occupants.

Please call me should you have any queries or require any clarifications regarding this report.

Regards,



Leo Tsui
Arup Acoustics

EVENT BRIEFING SHEET
HOMEBAKE 2008

1. Date:	Saturday 6 December 2008
2. Time:	11am to 11pm
3. Venue / Location:	Phillip Precinct, Domain
4. Entry Fees	Ticketed event. SOLD OUT
5. Food / Beverage Sales:	Alcohol/beverages and a variety of food will be on sale.
6. Description of Event:	Australian music festival for 20,000 with 4 stages, rides, market and food stalls, cinema. 18 yrs and over. For more information, visit www.homebake.com.au
7. Road Closures and Designated Parking:	<ul style="list-style-type: none"> • Traffic Delays can be expected on Art Gallery Road and Mrs Macquaries Road on Saturday 6 December 2008 • There are no road closures for this event. • The following parking spaces have been allocated to the event from 6am until 12midnight on Saturday 6 Dec 2008: <ul style="list-style-type: none"> ○ All parking spaces in front of Art Gallery of NSW ○ All parking spaces on Hospital Rd ○ 6 parking spaces Mrs Macquaries Rd SE
8. Sound Impacts:	<p>Friday 5 December 3pm to 4pm System Testing - not full amplification 4pm to 6pm Sound rehearsal - full amplification</p> <p>Saturday 6 December 10am to 11am System checks - not full amplification 11am to 11pm Event Sound, full amplification</p>

CONTACT NUMBERS:

Event Organiser:

Domestic Music Concepts 9699 1611 or 8006 5703
(production office)

Information Line:

www.homebake.com.au

RBG Venue Coordinator:

Ruth Friedmann (02) 9231 8309 or **0408 497 205** (business hours)

Sound Issues Contact:

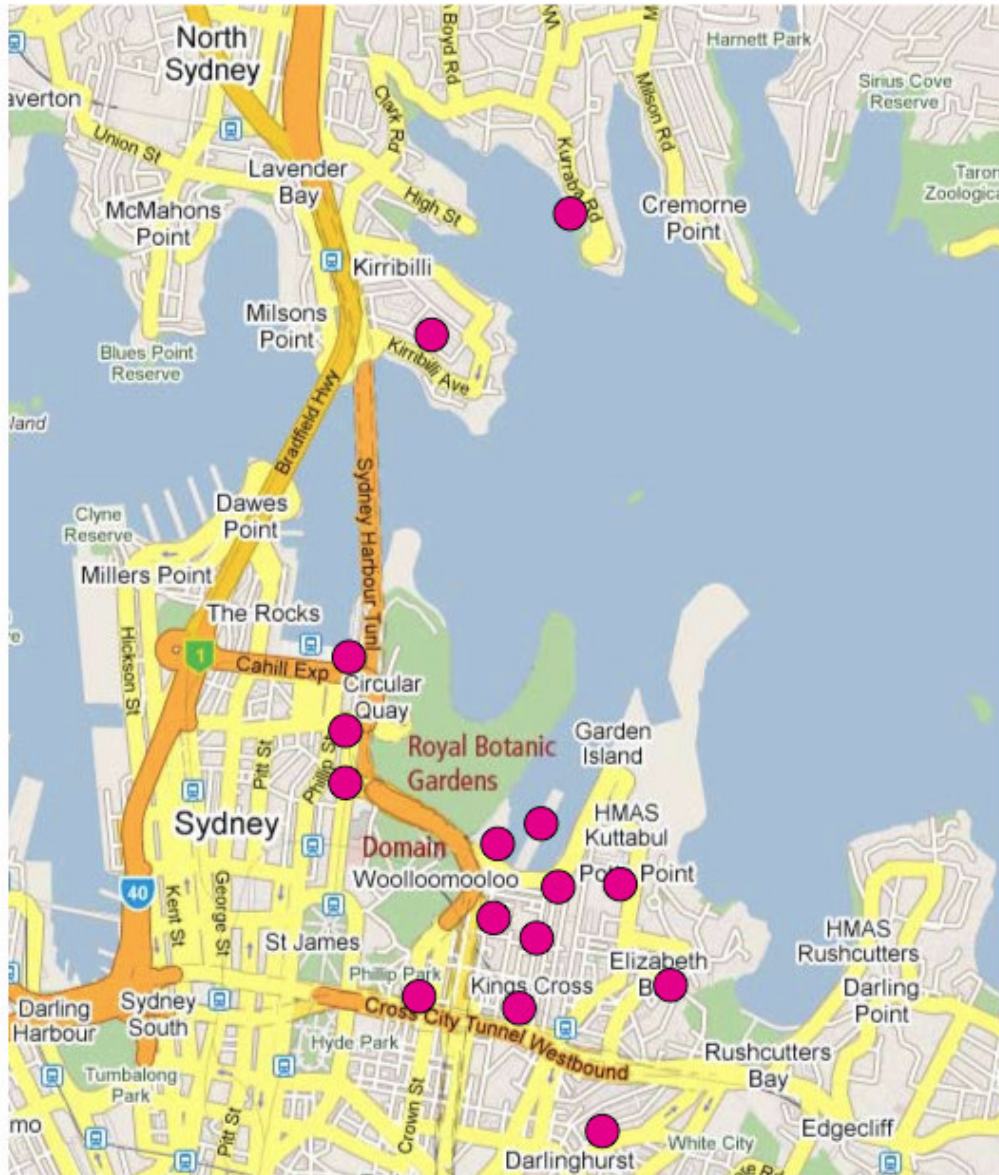
Ruth Friedmann(02) 9231 8309 or **0408 497 205 (9am to 4pm, event day)**
Sharlene Chin (02) 9231 8301 or **0438 007 169 (4pm to 12midnight, event day)**

Ranger on Duty:

0419 270 279

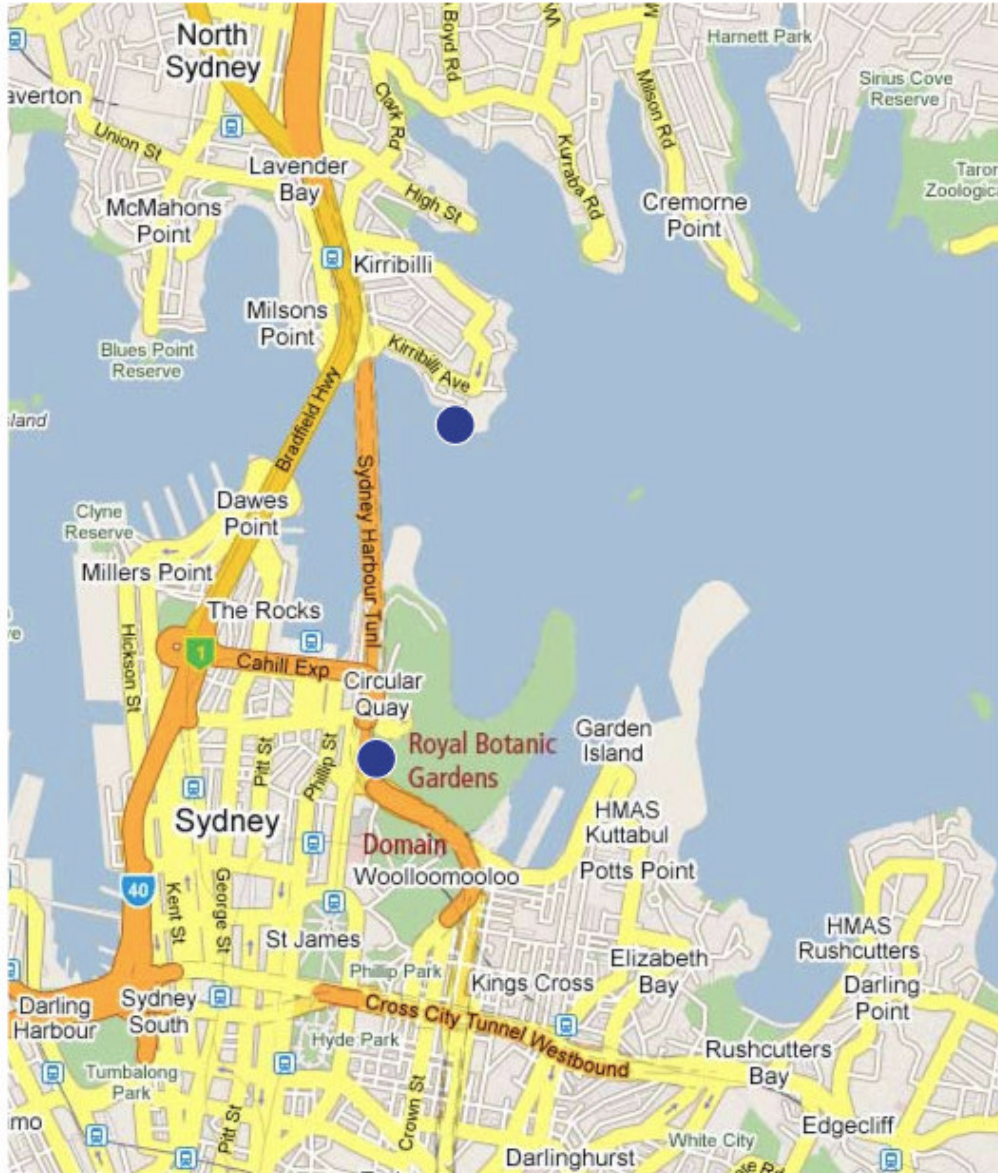
Attachment 3.

● Position of noise complaint



Attachment 4.

● Sound Monitors



Attachment 5.



Section 96 of the Protection of the Environment Operations Act 1997

INFORMATION ABOUT THIS PREVENTION NOTICE

Details provided in this notice will be available on the EPA's Public Register in accordance with section 308 of the Protection of the Environment Operations Act 1997.

Penalty for not complying with this notice

- The maximum penalty for a corporation is \$250,000 and a further \$120,000 for each day the offence continues. The maximum penalty for an individual is \$120,000 and a further \$60,000 for each day the offence continues.

Appeals against this notice

- You can appeal to the Land and Environment Court against this notice. The deadline for lodging your appeal is 21 days after you were served with the notice.

When this notice begins to operate

- This notice does not operate:
 - (a) until the 21 day appeal period has expired without you lodging an appeal or
 - (b) if you do lodge an appeal, until the Land and Environment Court confirms the notice or you withdraw the appeal,whichever happens first.

Deadline for paying fee

- The fee must be paid by **no later than 30 days after the date of this notice unless you appeal** to a court against the notice. If you do appeal the fee does not have to be paid unless and until the court confirms the notice.

How to pay fee

- Please send your cheque for the fee to:

Environment Protection Authority
Finance Branch
PO Box A290
Sydney South NSW 1232
- Please include the payment slip from the attached invoice/statement with your payment.

How to apply for extension of time to pay/waiver of fee



Section 96 of the Protection of the Environment Operations Act 1997

ROYAL BOTANIC GARDENS AND DOMAIN TRUST
ABN 22 988 772 206
MRS MACQUARIES ROAD
SYDNEY NSW 2000
REGISTERED POST

Attention: Mr Frank Howarth, Director and Chief Executive

Notice number: 1006659
File number: SR124/02

Date: 24-Jun-2003

NOTICE OF PREVENTIVE ACTION

Section 96 Protection of the Environment Operations Act 1997

BACKGROUND

(A) In this Notice:

- (a) **"Accredited Acoustical Consultant"** means an acoustical consultant who is a member of one or more of the following organisations: The Association of Australian Acoustical Consultants; The Australian Acoustical Society; or the Institution of Engineers Australia;
- (b) **"Category 1 Event"** means any cinematic outdoor entertainment activity involving the showing of feature films, and with a crowd capacity of greater than 200 and up to 2,000 people;
- (c) **"Category 2 Event"** means any commercial outdoor entertainment activity with a crowd capacity of greater than 2,000 people and up to 10,000 people, including any associated sound test or rehearsal;
- (d) **"Category 3 Event"** means any outdoor entertainment activity with a crowd capacity greater than 10,000 people including any associated sound test or rehearsal;
- (e) **"Console Operator"** means the person at the sound mixing console (or sound desk), who is in control of the volume of noise emanating from the speakers installed at an event;



Section 96 of the Protection of the Environment Operations Act 1997

- (f) “**L_{Amax}**” means A – weighted maximum Root Mean Square (RMS) sound pressure level measured at any time during an event;
- (g) “**L_{Cmax}**” means C - weighted maximum RMS sound pressure level measured at any time during an event;
- (h) “**Outdoor Entertainment Activity**” means any concert, festival, cinematic, theatrical and/or sporting event being carried on outdoors or carried on under or within a tent, marquee or similar structure, and sound amplification equipment is used as part of the activity;
- (i) “**Sensitive Receiver**” means places such as nursing homes, hospitals and schools;
- (j) “**Trust**” means the Royal Botanic Gardens and Domain Trust;
- (k) “**Trust lands**” has the meaning given to it in the *Royal Botanic Gardens and Domain Trust Act 1980*;
- (B) The Environment Protection Authority (EPA) has received many complaints in the past from local residents regarding loud or excessive or offensive noise from outdoor entertainment activities such as concerts and music festivals at the Royal Botanic Gardens Sydney and the Domain.
- (C) The EPA is the appropriate regulatory authority for outdoor entertainment activities carried on within the Trust lands as defined in the *Protection of the Environment Operations (General) Regulation 1998*.
- (D) The Trust has the care, control and management of the Trust lands as set out in the *Royal Botanic Gardens and Domain Trust Act 1980*, including the Royal Botanic Gardens Sydney and the Domain.
- (E) The EPA believes that the Trust should take preventive action to prevent, control or minimise the emission of noise from outdoor entertainment activities carried on at the Royal Botanic Gardens Sydney and the Domain to ensure those specified activities are carried on in an environmentally satisfactory manner.

DIRECTION TO TAKE PREVENTIVE ACTION

The Environment Protection Authority (“EPA”) directs THE ROYAL BOTANIC GARDENS AND DOMAIN TRUST to take the following actions:

GENERAL CONDITIONS

Section 96 of the Protection of the Environment Operations Act 1997

(1) Scope

This Notice applies to noise from outdoor entertainment activities involving 200 or more people, where sound amplification equipment is used as part of that activity and the activity takes place on Trust lands.

(2) Minimising Noise Impacts

- (a) Any sound amplification equipment used at any time must be installed in such a way as to minimise the noise impact on residential premises or sensitive receivers.
- (b) The sound amplification equipment must be maintained in a proper and efficient condition so as to minimise the noise impact on residential premises or sensitive receivers.
- (c) The sound amplification equipment must be operated in a proper and efficient manner so as to minimise the noise impact on residential premises or sensitive receivers.

(3) Complaint Management

- (a) The Trust must keep a legible record of all complaints made to it or any employee or agent of the Trust, in relation to noise arising from any activity to which this Notice applies.
- (b) The record must include details of the following:
 - i) the date and time of the complaint;
 - ii) the method by which the complaint was made;
 - iii) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - iv) the nature of the complaint;
 - v) the action taken by the Trust in relation to the complaint, including any follow-up contact with the complainant; and
 - vi) if no action was taken by the Trust, the reasons why no action was taken.
- (c) The record of a complaint must be kept for at least two (2) years after the complaint was made.
- (d) The Trust must consider any relevant complaints when planning and managing events.

Section 96 of the Protection of the Environment Operations Act 1997

(4) Trust Retain Ultimate Control

The Trust must at all times retain ultimate control of the noise level caused by any sound amplification equipment.

(5) Monitoring Locations

- (a) Where this Notice requires noise measurements, the monitoring locations must be as set out below.
- i) For category 1 events and category 2 events, where the event is held on or near the foreshore of Trust lands:
 - At Beulah Street Wharf (off Waruda Street), Kirribilli.
 - ii) For category 3 events:
 - At a point within one (1) metre of the Sydney Hospital and Sydney Eye Hospital boundary nearest to the Domain at Hospital Road, Sydney.
 - iii) For category 1, 2 and 3 events:
 - At other locations nominated from time to time by the EPA or Trust which are the subject of complaint or may, in the opinion of the EPA or Trust, experience noise levels that exceed the relevant noise level limits in this Notice.

(6) Monitoring Methods

- (a) Noise measurements must be taken using a Type 1 Sound Level Meter set to "fast" time response, 'A' and/or 'C' weighting network as specified.
- (b) The L_{Amax} and L_{Cmax} must be measured:
- i) in the absence of any influential sound, that is audibly distinguishable and extraneous to the sound from the amplification equipment; and
 - ii) with the sound level meter microphone placed between 1.5 and 1.6 metres above the ground.

CATEGORY 1 EVENTS [General Conditions also apply]

(7) Location and Timing of Events

Section 96 of the Protection of the Environment Operations Act 1997

Category 1 events must be held at the Fleet Steps, Domain Lawn, and must only be held during the months of January and February.

(8) Hours for Events

Category 1 events must not commence prior to 1900 hours or finish after 2400 hours on any day.

(9) Noise Level Limit

(a) When measured at the relevant monitoring location(s) specified in, or nominated under, condition 5 of this Notice, the L_{Amax} of noise emanating from any sound amplification equipment must not exceed the lesser of the following limits:

- (i) L_{Amax} 55dB(A); or
- (ii) L_{Amax} that exceeds the background noise level (L_{A90}) by no more than 5dB(A).

(10) Monitoring and Reporting

- (a) At least once each calendar year, noise levels must be continuously monitored in real time by an accredited acoustical consultant throughout an entire category 1 event.
- (b) The category 1 event monitored must be representative of the various category 1 events held on Trust lands.
- (c) A report of the category 1 event monitored under sub-condition 10(a) of this Notice must be prepared by the accredited acoustic consultant detailing:
 - i) the date and times the monitoring occurred;
 - ii) the activities that were occurring on land administered by the Trust during the monitoring;
 - iii) the sound pressure levels recorded, including any exceedences of the noise level limits specified in condition 9 of this Notice;
 - iv) if any exceedences did occur, what measures were implemented to ensure they did not re-occur during the event;
 - v) the details of any complaints made during the event, including the details required by condition 3 of this Notice; and
 - vi) any other information relevant to the consideration of the noise impact on residents or other sensitive receivers.
- (d) A copy of the report prepared in accordance with sub-condition 10(c) must be provided to the EPA Manager Sydney Local Government by no later than twenty-one (21) days after the noise monitoring is carried out.

Section 96 of the Protection of the Environment Operations Act 1997

CATEGORY 2 EVENTS [General conditions also apply]

(11) Hours for Events

- (a) Category 2 events (excluding sporting events) must not commence prior to 1000 hours or finish after 2300 hours on any day.
- (b) The total length of a category 2 event must not be greater than eight (8) hours.
- (c) Any exceptions to the above limits must receive the prior written approval of the EPA Manager Sydney Local Government. That approval may be subject to conditions.

(12) Noise Level Limits

During a category 2 event, the noise levels from any sound amplification equipment measured at the relevant monitoring location(s) specified in, or nominated under, condition 5 of this Notice must not exceed L_{Amax} 55dB(A) and L_{Cmax} 70dB(C).

CATEGORY 3 EVENTS [General conditions also apply]

(13) Number of Events and Duration

- (a) No more than twelve (12) category 3 events (excluding associated sound tests and rehearsals) may be held on Trust Lands per calendar year. Of these:
 - (i) three (3) events must not be greater than twelve (12) hours in duration, and each event held of this duration shall be separated by at least ten (10) days; and
 - (ii) nine (9) events must not be greater than four (4) hours in duration, and shall not be held on more than four (4) consecutive days.
- (b) The maximum duration of each individual rehearsal associated with any category 3 events, with the use of the main speaker system, must not exceed two (2) hours. The total duration of rehearsals that are audible beyond the land administered by the Trust must be kept to an absolute minimum.
- (c) The maximum duration of individual sound tests associated with any category 3 events, must not exceed one (1) hour. The total duration of sound tests that are audible beyond the land administered by the Trust must be kept to an absolute minimum.
- (d) Any exceptions to the above limits must receive the prior written approval of the EPA Manager Sydney Local Government. That approval may be subject to conditions.

Section 96 of the Protection of the Environment Operations Act 1997

(14) Hours for Events, Rehearsals and Sound Tests

- (a) For the following activities, the following limits apply:
- i) Category 3 events (excluding associated rehearsals and sound tests) must not commence prior to 1000 hours or finish after 2300 hours on any day.
 - ii) Rehearsals and sound tests associated with a category 3 event must not commence prior to 1000 hours or finish after 2300 hours.
- (b) Any exceptions to the above limits must receive the prior written approval of the EPA Manager Sydney Local Government. That approval may be subject to conditions.

(15) Noise Level Limits

- (a) During any category 3 event, the noise levels from any sound amplification equipment, measured at the relevant monitoring locations specified in, or nominated under, condition 5 of this Notice (excluding the Sydney Hospital and Sydney Eye Hospital), must not exceed L_{Amax} 70 dB(A) and L_{Cmax} 90 dB(C).
- (b) During any category 3 events, the noise levels from any sound amplification equipment, measured at the Sydney Hospital and Sydney Eye Hospital, must not exceed L_{Amax} 80 dB(A) and L_{Cmax} 100dB(C).
- (c) During Carols in the Domain and Sydney Festival concerts carried on at the Domain, the noise levels from any sound amplification equipment, measured at the Sydney Hospital and Sydney Eye Hospital, must not exceed L_{Amax} 85 dB(A) and L_{Cmax} 100 dB(C). However, should any noise complaints be received, the Trust must immediately reduce the sound levels to comply with the limit set in sub-condition 15(b) of this Notice.

CATEGORY 2 EVENTS and CATEGORY 3 EVENTS [General and specific conditions also apply]

(16) Notifying the EPA of Forthcoming Events

- (a) At least twenty-one (21) days prior to the commencement date of any category 2 event or category 3 event, the Trust must inform the EPA Manager Sydney Local Government of:
- i) the times and dates of the proposed event;



Section 96 of the Protection of the Environment Operations Act 1997

- ii) the name and contact details of a general liaison person for the purposes of communication with the EPA in connection with the event;
 - iii) the name and contact details of a person appointed as the Trust's representative specifically for the duration of the event;
 - iv) other proposed noise monitoring locations nominated by the Trust in accordance with condition 5(iii) of this Notice;
 - v) the proposed measures for notification of residents and sensitive receivers about the event; and
 - vi) a plan for addressing complaints from members of the public and managing the emission of noise from the event.
- (b) The EPA should be notified of any changes to the details provided in accordance with condition 16(a) of this Notice at least seven (7) days prior to the commencement date(s) of the category 2 event(s) or category 3 event(s).

(17) Notifying Residents and Sensitive Receivers of Forthcoming Events

- (a) The Trust must make all reasonable efforts to ensure that residents and sensitive receivers, likely to be significantly impacted upon by noise from a category 2 event or category 3 event, are given adequate (at least 7 days) prior written notification of the event.
- (b) The notification in sub-condition 17(a) of this Notice must include the telephone number of a telephone complaints line operated by the Trust.
- (c) The Trust must operate during any category 2 event or category 3 event, a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to the event. This must be staffed by a person who is able to address any noise issues arising from the event.

(18) Monitoring Points and Accredited Acoustical Consultant

- (a) For each category 2 event (excluding sporting events) or category 3 event, noise levels must be continuously monitored in real time by an accredited acoustical consultant throughout the entire event as L_{Amax} and L_{Cmax} .
- (b) The noise levels in sub-condition 18(a) of this Notice must be monitored at the locations specified in, or nominated under, condition 5 of this Notice.
- (c) During each entire category 2 event or category 3 event, the Trust must ensure that the accredited acoustic consultant implementing sub-condition 18(a) of this Notice, is directed to inform (via two way radio or mobile telephone), the Trust employee or agent authorised to



Section 96 of the Protection of the Environment Operations Act 1997

reduce the level of sound during the event wherever the L_{Amax} or L_{Cmax} exceeds a level of 5dB less than the noise level limit specified by this Notice. This employee or agent must direct the console operator to ensure the noise level limit in the Notice is not exceeded.

(19) Initial Compliance Report to the EPA

- (a) Within five (5) working days following the completion of each separate category 2 event (excluding sporting events) or category 3 event, or series of these events, the Trust must provide a report in writing to the EPA Manager Sydney Local Government on the following issues:
- i) Whether or not there has been compliance or non-compliance with the permitted hours in this Notice for the relevant event category, including the reasons for any non-compliance(s);
 - ii) The times and details of any exceedence(s) of the noise level limits in this Notice for the relevant event category, why the exceedence(s) occurred and what measures were implemented to ensure that the exceedence(s) did not reoccur; and
 - iii) a summary of the number, location and times of any complaints recorded by the Trust in accordance with condition 3 of this Notice.

(20) Final Compliance Report to the EPA

- (a) By not later than twenty-one (21) days after the completion of a category 2 event (excluding sporting events) or category 3 event, or series of these events, the Trust must provide a report in writing to the EPA Manager Sydney Local Government.
- (b) An accredited acoustical consultant must prepare the written report referred to in sub-condition 20(a) of this Notice.
- (c) The report required by sub-condition 20(a) of this Notice must contain the following:
- i) the name address and telephone number of the person who prepared the report;
 - ii) the relevant date(s) and the commencement and completion times of the category 2 event or category 3 event on each day held;
 - iii) the times and location(s), including a site plan, at which the noise measurements were taken;
 - iv) details of the equipment and methods used to take measurements;

Section 96 of the Protection of the Environment Operations Act 1997

- v) a statement of any time(s) at which the noise level limits for the relevant event category were exceeded and why, including the level(s) and duration of any exceedance(s); and,
 - vi) any other information relevant to the consideration of the noise impact from the event on residents or other sensitive receivers.
- (d) In the same written report, the Trust must provide the following information:
- i) the estimated total number of people that were anticipated to attend the category 2 event or category 3 event on each day and the estimated number who actually attended;
 - ii) if any exceedences occurred or any complaints were received, details of corrective or preventative action intended by the Trust for incorporation into any future events; and
 - iii) any other information relevant to the consideration of the noise impact from the event on residents or other sensitive receivers.

OTHER OUTDOOR EVENTS WITH SOUND AMPLIFICATION [General conditions also apply]

(21) Noise Level Limit

Where not otherwise specified in this Notice, the L_{Amax} of noise from any sound amplification equipment must not exceed the noise level limits set out in condition 9 of this Notice at any of the locations specified in, or nominated under condition 5 of this Notice.

ADMINISTRATION OF THIS NOTICE

1. This notice is issued under section 96 of the Protection of the Environment Operations Act 1997.
2. It is an offence against the Act not to comply with this notice. However this notice does not begin to operate immediately and you can appeal against the notice.
3. At the end of this notice there is information about when the notice begins to operate, the penalty for not complying with it and about how you can appeal against it.

FEE TO BE PAID



Section 96 of the Protection of the Environment Operations Act 1997

4. You are required by law to pay a fee of \$320 for the administrative costs of issuing this notice.

5. It is an offence not to pay this fee. However you can apply for an extension of time to pay the fee or for the fee to be waived. At the end of this notice there is information about how and when to pay the fee and how to apply for an extension or a waiver of the fee.

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Mr David Featherston
Acting Manager
Sydney Local Government
(by Delegation)