

Noise Management



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Depending on the circumstances, certain types of event present the potential for environmental noise emissions, which if uncontrolled may result in unreasonable disturbance of neighbouring residences and other noise sensitive receptors. In order to reduce the impact of noise emissions from the event, event organisers are advised to consult with Aberdeen City Council's Environmental Health Service at least 8 weeks prior to the event taking place to establish any noise control requirements.

Licence conditions for music events are typically based on relevant noise standards and noise limits contained within The Code of Practice on Environmental Noise Control at Concerts [here](#). Aberdeen City Council's Environmental Health team will advise on any other noise control requirements depending on the type of event and location.

Sound amplification systems should be designed, installed and used to prevent, as far as is practicable, noise breakout from the site and subsequent disturbance to sensitive receptors near the site. This may include the use of noise mitigation measures, including; noise level reduction, suitably orientated speakers, sound limiting devices and/or suitably designed screening. Any generators, compressors or other machinery and vehicles should be suitably silenced and strategically placed to minimise noise nuisance and such equipment should be shut down in periods of non-use.

As detailed in [Communications, Good Neighbour & Event Control](#) notifying those who may be impacted at an early stage in the planning process is not only courteous but will allow people to plan around the event. This will in turn reduce the impact of the event on them. As well as managing expectations of residents appropriate communication, ensures that the correct information about the event is shared locally and can reduce the number of objections and complaints. Proper and adequate notification, e.g. letter, leaflet distribution, press and radio announcements, should be provided to any resident or business likely to be impacted.

General Guidance

To assist organisers, the points below indicate a typical approach to managing environmental noise control at many music events and may form the basis for licence conditions:

- a) Achieving a music noise level which is compliant with the relevant standards and noise level limits contained within relevant guidance
- b) Music noise monitoring by a competent person with a suitable sound level meter capable of measuring the actual time varying A-weighted music noise levels over predetermined periods to verify compliance with the relevant standard/limits
- c) In addition to monitoring with a suitable sound level meter an appropriate number of subjective assessments by a competent person undertaken at the nearest sensitive receptors OR at an appropriate surrogate location (specified locations which are representative of the noise at the nearest noise sensitive premises). Based on the noise experienced by the assessor, its impact and the likelihood of complaint, corrective action may be required. Corrective action may include; adjustment of the music noise level, adjust any specific character such as bass level, orientation of stage and/or speakers
- d) Establish a suitable Noise Monitoring Scheme for the duration of the event/activity including both objective measurements using a sound level meter and subjective assessments by the assessor as described above

- e) Suitable recording of the monitoring, including time(s) and date(s), exact location, music noise level, specific acoustic characters, impact and likelihood of complaint and any required corrective action
- f) Suitable prior written notification of all the properties near the facility likely to be impacted on by music/PA noise. For example, a letter/flyer advising residential properties of the event, its date, times and duration. This notification must also include the name and contact details of a relevant person who can be contacted in the event of disturbance being experienced

Occupational Noise Control for Employees

The noise created at outdoor events can cause permanent noise-induced hearing damage and as a result, the event organiser is obliged to adhere to The Control of Noise at Work Regulations 2005. The regulations require employers to:

- assess the risks to employees from noise at work
- take action and apply suitable controls to reduce the noise exposure and risks
- provide employees with hearing protection if the noise exposure cannot be reduced enough by using other methods
- make sure the legal limits on noise exposure are not exceeded
- provide employees with information, instruction and training. It is important that employees understand that the Noise Regulations also apply to them
- carry out health surveillance where there is a risk to health

Noise Management Plan

Certain events may require a Noise Management Plan (NMP) as part of an Event Management Plan or be stipulated as a condition of a licence. The NMP must be agreed with Environmental Health prior to the event taking place.

The NMP must provide sufficient information on how environmental noise will be controlled to prevent or reduce likelihood of unreasonable neighbour disturbance. It should include all relevant information on noise sources and control measures. In addition to the Basic Noise Control Requirements previously listed, more detailed relevant procedures or protocol should also be included, for example; complaints procedure, noise monitoring scheme and noise recording forms. These should demonstrate competence of the organisers to adequately control noise related aspects of the event.

It is the responsibility of the operator to produce the NMP and be based on the individual circumstances surrounding an event. As a guide the NMP should include, but not be limited to the following

- a) Statement of Intent and Content
- b) Noise Assessment and Criteria – including relevant standards to be applied
- c) Potential noise sources and proposed controls
- d) Noise monitoring of the event
- e) Public Relations and Complaint Procedure
- f) Communication
- g) Staff Training
- h) Review

A. Statement of Intent and Content

This should indicate, in general terms the purpose of the NMP and key objectives/outcomes which should include reference to the following:

- Minimising impact on local residents and neighbouring properties
- Satisfying the Licensing Authority/Environmental Protection conditions
- A defined programme of noise assessments/measurement to establish noise levels which must be complied with
- The identification of the range of potential noise sources relating to the premises and the acceptable levels of noise arising from all specified events and activities
- A detailed list of steps taken (and matters that will be restricted or prohibited from taking place) to manage noise pollution
- A defined programme of noise monitoring and testing to check that compliance has been achieved
- A robust complaints procedure - including readily discernible details of the responsible person within the organisation to contact, recording of investigation/actions/outcomes and review

B. Noise Assessment and Criteria

This should detail what is proposed and what noise criteria are to be achieved.

- Assessment of the full range of potential noise sources including amplified music (recorded or live) with particular attention to low frequency bass levels, public address system, staging, large screen displays, vehicles, plant and equipment (e.g. chiller units, air conditioning units, extract ventilation, generators, waste disposal etc.). This may involve an objective assessment of a noise using measuring equipment and a subjective assessment by the competent person For example: a person listening to a particular noise source to establish whether or not it is intrusive to noise sensitive premises, or the use of specialised noise equipment.
- Identification of suitable methods for the control of the noise associated with each activity
- Establish threshold levels of amplified music and noise, agreed with the local Environmental Protection Team
- The sound levels for the entertainment areas being set in conjunction with the Environmental Protection Team and readings obtained in a test environment
- Identify and document appropriate noise monitoring locations to enable the responsible person to take readings quickly and easily during activities and busy times. This should include measurement of noise levels at the perimeter of the site and at neighbouring residential premises
- Readings being taken as spot checks and suitably documented to demonstrate compliance
- All event management, entertainment contractors and facility hirers being made aware of 'normal' noise control measures and 'emergency' measures to be taken as detailed in the subsequent complaints procedure section.

C. Potential noise sources and proposed controls

This should state all potential sound sources and the noise control measures to be normally applied to the different activities undertaken. Areas for consideration include:

Plant and Equipment

Noise from plant and equipment, such as generators, fairground rides, chiller units and ventilation plant etc,

at licensed premises can also cause problems. When choosing or installing external plant or equipment, consideration should be given to that which is least noisy.

When installing plant or equipment, a position should be selected as far away as possible from residential premises. Regular maintenance and repair are also important in making sure that the noise from such plant or equipment is kept to a minimum.

Where it is not possible to relocate plant or equipment the air-borne noise can be restricted using silencers and/or acoustic screens or enclosures, which have been specifically designed and installed for the job. Machinery should be mounted on anti-vibration mounts where appropriate. Plant and equipment should also be switched off when not in use, particularly at night. Operation times should be controlled by automatic timers.

Outdoor Areas and stages

These are more likely to cause problems in the summer months and the location in relation to residential properties is important.

Screening by buildings or by the erection of walls or close-boarded fences can help reduce disturbance to neighbours. Management of outdoor areas is important: with regular monitoring and control essential. It may be appropriate to restrict or prohibit public access to a beer garden, terrace, barbecue or children's play area late in the evening and at night, to adequately control noise nuisance.

If planning outdoor events, make sure speakers are pointed away from the most noise sensitive premises and position stages as far away from these premises as possible. Existing non-sensitive buildings, barriers and natural features can provide effective screening and should be used, wherever possible. If such structures are unavailable then an alternative boundary acoustic screen should be provided adjacent to noise sensitive premises.

Deliveries, Collection of Waste, Cleaning and Bottling Out

As a general rule, noisy activities such as deliveries, collection of waste, cleaning, etc should not be carried out at noise sensitive times. Refuse and empty bottle/barrel storage areas should be positioned away from residential properties and preferably screened or enclosed. Deliveries and collections scheduled during the daytime.

Any essential activities early in the morning or late at night close to residential premises should have working methods that minimise noise, e.g. use of padded mats where beer barrels are dropped, careful handling of empty bottles and crates, and careful manoeuvring of empty beer barrels and waste. Wherever possible these activities should be rescheduled for during the day.

Deliveries and site builds should be scheduled at timings so as to reduce impact of noise or nuisance

Patrons

Licensees can be held to account for noise problems arising from patrons both on their premises and in the vicinity of the licensed premises. Controlling the impact of noise from patrons is usually a careful mix of location, design, operation and management of licensed premises. Patron noise tends to be less of a problem for premises that attract a mixed clientele, compared with premises targeted only at young persons.

The use of lobbied doorways can help control noise pollution, as they are directly under the control of the licensee and provide a calming transitional phase between the potentially noisy interior and quieter external environment.

Control of closing times between nearby premises can help prevent patrons cruising from one closed premises to another with later opening hours. This helps a more even distribution pattern of patrons leaving and hence creating noise, rather than a concentration from the last open premises.

Playing calmer-types of music at a lower volume towards closing time can encourage patrons to leave in a less rowdy manner, spread over a longer period so that the peak number leaving, and peak noise, are reduced.

Providing notices at exits requesting the co-operation of patrons can also help to reduce noise. However, in most cases it will be good practice for door supervisors, to manage the coming and going of patrons. In some cases specially trained staff may be also be used to patrol the surrounding area to help control noise from patrons.

The sounding of taxi horns when waiting to collect customers can be discouraged by licensees forming an agreement with local cab firms so the drivers come to the door or into the licensed premises to collect their passengers.

Other Noise Sources to Consider

- marquees and tents
- fairground stalls and games and similar entertainment
- delivery noise and waste collection
- sound checks
- tower lights
- fireworks and pyrotechnics
- impromptu parties - staff and guests
- departing patron noise
- the build and break down phases of the event

Noise monitoring of the event

This section should explain in detail who the competent person is and how all noise sources will be monitored and controlled on the event days, including a chain of command (i.e. who has the authority to reduce noise levels throughout the hours the entertainment will be taking place).

Monitoring systems can be established to demonstrate compliance with noise policies and with any specific noise restrictions imposed by the licence, e.g. an hourly check of music noise levels at the nearest noise sensitive premises or at appropriate surrogate locations (specified locations which are representative of the noise at the nearest noise sensitive premises).

Public Relations and Complaint Procedure

You are encouraged to build and maintain a good working relationship with local people and be proactive about controlling noise from the premises. This can help promote goodwill and assist in ensuring that complaints are not made to the Council and reduce the likelihood of objections to any similar license in the future.

Ensure prior written notification of the event to local residents. Within the notification include reference to a complaint procedure and the named appropriate person and contact details including a telephone number and email address.

You should also include an effective written noise complaint recording and investigation procedure within the NMP including the following:

- the name of the appropriate responsible person(s) and contact details including a 'hotline' telephone number and email address
- establish and maintain the above 'hotline' throughout the duration of the event (including out with operating hours) so that members of the public can contact the organisers
- an explanation of how the public are to obtain contact details of the appropriate responsible person e.g. suitably display or post at readily discernible points throughout the location of the event and on the company website
- a procedure for logging comprehensive details of any noise complaints from local residents
- a suitable complaint log sheet (included in an annex)
- a protocol for responding to noise complaints within an appropriate time limit
- establish a comprehensive range of 'EMERGENCY' remedial actions, in addition to existing 'NORMAL' noise control measures to be applied in a proportional response to likely noise issues. For example; Using a Hierarchy of controls to be applied dependant on circumstances i.e. restricted times of operation for certain activities and/or restricted days of operation for certain activities or cessation of certain activities
- restricted Times of operation for certain activities or cessation of certain activities
- a protocol for providing feedback to complainants after remedial action has been taken
- an easy to follow complaint procedure flow diagram including all relevant contact names and details and reference to relevant sections of the NMP and complaint procedure.
- suitably train all persons tasked in dealing with noise complaints on all aspects of the procedure and implementing remedial action.
- an explanation of how event management, entertainment contractors and facility hirers will be made aware of 'normal' noise control measures, the complaints procedure and the 'emergency' noise control measures contained within

Communication

It is essential that there are adequate communications both on the site and in the surrounding area so that relevant persons can contact one another. You will need to consider mobile phone reception and audibility once there is music playing when it becomes difficult to have telephone conversations, or even to hear the phone ringing. It is recommended that an internal communications procedure is set up for dealing with noise issues and complaints.

Staff Training

Staff should be provided with general advice and training on noise control measures and made aware of internal procedures for assessing and controlling noise and dealing with complaints. Staff involved in noise monitoring must have a good understanding of acoustics, the standards being applied, and the specific noise parameters being measured. They must also be competent in environmental noise monitoring techniques to ensure results are reliable and robust and be able to produce the relevant monitoring records.

Review

It is also advisable that the Noise Management Plan is regularly reviewed and updated as necessary – for example on existing un-assessed noise sources, changes to the event (or a different event altogether), site build or layout, introduction of new equipment or activities, increase in scale, following a complaint or when monitoring procedures identify that controls are inadequate.

Further Reading

The following HSE publications may be of assistance:

'Control of noise at Work in music and Entertainment' HSG260

Myth Busters – Noise and music in Entertainment Sectors

Title in here

Code of Practice on Environmental Noise Control at Concerts 1995

Institute of Acoustics, Good Practice Guide on the Control of Noise from Pubs and Clubs, March 2003