1. INTRODUCTION
The aims of the Licensing Act 2003 include encouraging a flourishing and varied licensed sector, whilst providing safeguards to protect neighbourhoods from subsequent harm and disturbance. To achieve this, the Act requires that four licensing objectives are promoted. One of these objectives is the Prevention of Public Nuisance, which provides the focus of this paper.

This paper examines the legal concept of public nuisance in the context of the Licensing Act 2003, reports the results of a “straw poll” of Environmental Health Practitioners and acoustic consultant’s preferences for assessment methods and criteria for patron noise, and presents case studies into patron noise.

2. PUBLIC NUISANCE
The Licensing Act 2003 came into force on 24 November 2005. The Act establishes a single integrated scheme for licensing premises which are used:

• for the supply of alcohol, or
• to provide regulated entertainment, or
• to provide late night refreshment.

The Act balances freedoms to trade with safeguards against harm and disturbance by promoting the prevention of public nuisance by a minority and gives the responsible majority more freedom and choice about how they spend their leisure time.

PUBLIC NUISANCE AND THE LICENSING ACT 2003
The 2003 Act is accompanied by Guidance that has been approved by both Houses of Parliament to assist LA’s in carrying out their functions. The guidance advises that although the term public nuisance is defined at common law and other statutes, it is however not narrowly defined in the 2003 Act, and the guidance goes on to suggest it should retain its broader common law meaning. In spite of this, the guidance goes on to advise that:

“the prevention of public nuisance could therefore include low-level nuisance affecting a few people locally as well as major disturbance affecting the whole community. It may also include, in appropriate circumstances the reduction of the living and working amenity and environment of interested parties in the vicinity of licensed premises”.

The meaning of common law nuisance was considered in Attorney General v PYA Quarries (1957), where Romer Lord Justice commented:

“Any nuisance is ‘public’ which materially affects the comfort and convenience of life of a class of Her Majesty’s subjects. The sphere of nuisance may be described generally as the ‘neighbourhood’, but the question whether the local community within that sphere comprises a sufficient number of persons to constitute a class of the public is a question of fact in every case”.

Dani Flumicelli BSc Hons, MSc, MCIEH, MIoA
Technical Director Environmental Noise and Vibration - Faber Maunsell
As to what constitutes ‘a class of her Majesty’s subjects’ Denning Lord Justice remarked:

“I decline to answer the question how many people are necessary to make up Her Majesty’s subjects generally. I prefer to look at the reason of the thing and to say that a public nuisance is a nuisance so widespread in its range or so indiscriminate in its effect that it would be unreasonable to expect one person to take proceedings on his own responsibility to put a stop to it, but that it should be taken on the responsibility of the community at large.”

When considering this ruling leading licensing lawyers, Manchester, Poppleston & Allen⁴ suggest that a significant number of persons will need to be affected for a nuisance to be considered public, and argue that the Guidance to the 2003 Act is being optimistic when it suggests that “low level nuisance affecting a small number of people” would be covered. The rationale being that the meaning of the term “public nuisance” is long established by senior judges at common law and by parliament in statute, and that it does not cover such circumstances. Additionally, because the Guidance to the Act is only intended to influence Local Authorities in carrying out their licensing duties, it therefore does not bind the Courts; and although the Guidance to the Act is approved by both Houses of Parliament it may not have sufficient status to have changed in the law whereby the definition of public nuisance is extended to include small groups of people or individual households or of a “low level” nature.

3. SURVEY OF PATRON NOISE ASSESSMENT METHODS AND CRITERIA

All members of the CIEH London Pollution Study Group, the UK Core Cities, and a random selection of contacts on the author’s E-mail contacts list were invited to participate in a survey questionnaire. It was not the intention that the survey should be used to establish definitive methodologies or criteria for assessing patron noise. Instead the aim of this survey was to try and establish a snapshot of how patron noise problems can be assessed and the criteria used, to share this information and highlight where further research and guidance might be useful. A copy of the questionnaire is appended to this paper.

PATRON NOISE - A DEFINITION

For the purpose of this survey, patron noise is defined as “unwanted sound from members of the public at, or going to or from, premises licensed under the Licensing Act 2003”. It is intended to
encompass the un-amplified sound of persons and can include voices, talking, shouting, laughing, singing, and persons using mobile phones etc.

All the local Authorities reported that within the last 12 months they had dealt with a minimum of 50 representations against patron noise as part of their licensing duties and some reported dealing with more than 250 such representations.

There was a total of 26 responses to the survey, 19 from local authorities and 7 from consultants.

The following series of tables provide an overview of the responses to the survey.

### Have you noticed an increase in patron noise complaints since the smoking ban?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

**Chart 1: Patron Noise Complaints since the smoking ban**

### First Preference for patron noise assessment method type

<table>
<thead>
<tr>
<th>Method Type</th>
<th>No respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective</td>
<td>2</td>
</tr>
<tr>
<td>Objective</td>
<td>14</td>
</tr>
<tr>
<td>Mixture</td>
<td>12</td>
</tr>
</tbody>
</table>

**Chart 2: First preference for patron noise assessment method type**

### 1st Preference for location of measurement of patron noise

<table>
<thead>
<tr>
<th>Location</th>
<th>No respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>At boundary of Licensed Premises</td>
<td>2</td>
</tr>
<tr>
<td>At boundary of Noise Sensitive Premises</td>
<td>4</td>
</tr>
<tr>
<td>1 m from Façade of Noise Sensitive Premises</td>
<td>8</td>
</tr>
<tr>
<td>Within Noise Sensitive Premises</td>
<td>16</td>
</tr>
</tbody>
</table>

**Chart 3: 1st preference for location of measurement of patron noise**
**Most useful times to assess impacts of patron noise**

- Throughout the operation of a particular licensed premises
- Around the closing time of a particular licensed premises only
- From an hour before the close of the licensed premises until an hour after the close of the latest opening licensed premises in the vicinity.

*Chart 4: Most useful time to assess impacts of patron noise*

**1st Preference noise index for assessment of patron noise**

- LAeq,t
- LA10,t
- LA90,t
- LAmax, t
- LAmin, t

*Chart 5: 1st preference noise index for assessment of patron noise*

**1st Preference for time period for measurement of patron noise**

- 1 hour
- 15 min
- 10 min
- 5 min
- 1 min

*Chart 6: 1st preference for time period for measurement of patron noise*
Do the acoustic characteristics of patron noise make it more discernible than ambient noise?

Chart 7: Do the acoustic characteristics of patron noise make it more discernible than ambient noise?

What Penalty should apply to patron noise?

Chart 8: What Penalty should apply to patron noise?

1st preference of type of noise assessment

Chart 9: 1st Preference of type of noise measurement
Licensing Act 2003: Patron noise and public nuisance - assessment criteria and case studies

External fixed limit values - No of 1st preferences

Chart 10: External fixed limit values - No of first preferences

Internal fixed limit values - No of 1st preferences

Chart 11: Internal fixed limit values - No of first preferences

Value of relative differences between noise indices - No of 1st preferences

Chart 12: Value of relative differences between noise indices

Value of change in noise level - No of 1st choices

Chart 13: Value of the change in noise level - No of 1st choices
Many of the respondents to the survey commented that they had only answered the questions in regard to a specific set of circumstances and that in other situations they envisaged that they would answer differently. Many respondents also commented that their choice of assessment method and criteria for patron noise was variable and dependent on factors such as the type of noise, the nature and character of the locality, and the frequency of occurrence and duration of the noise. Several respondents also commented that often a combination of different techniques and criteria was appropriate to assessment of patron noise, although the combination and priority of each method could vary dependent on the circumstances.

Notwithstanding the respondents qualification of their responses (which in truth was a primarily a function of the limited scope of the survey) the following broad trends can be identified from the returns.

- Complaints about patron noise have increased since introduction of the smoking ban.
- The majority of respondents preferred a subjective assessment of patron noise. Several respondents commented that this was primarily because of the ease of such assessments, but also because there is a lack of recognised guidance on how to objectively assess patron noise.
- The majority of respondents preferred to assess the impacts of patron noise within noise sensitive premises.
- For noise from patrons coming and going from licensed premises, the majority of respondents preferred an assessment duration from an hour before closing until an hour after the latest opening premises in the locality had shut.
- For noise from patrons at licensed premises, the majority of respondents preferred to assess the noise impacts throughout the operation of the premises.
- The majority of respondents preferred the $L_{Aeq}$ noise index for assessing patron noise, closely followed by the $L_{Amax}$ as a first preference for a significant minority, or second preference over all.
- For the majority of respondents the preferred time period for assessing patron noise was 1 minute, reasonably closely following by 5 minutes $L_{Aeq}$ for a significant minority, or second preference over all.
- A moderate majority of respondents considered patron noise to possess acoustic characteristics that make it more noticeable than the typical ambient noise soundscape, i.e. traffic noise, and that a suitable penalty to account for this was the addition of 3.1 to 4.9 dBA.
- A majority of respondents preferred to assess the impacts of patron noise using techniques that compared the relative difference between noise indices with and without the patron noise present (e.g. BS 7445/BS 4142 based approaches), and that an appropriate difference was 3 to 5.9 dBA.
- A significant minority of respondents preferred to assess the impacts of patron noise using techniques that compared the patron noise with a fixed or absolute level of noise; and an appropriate value for external assessments was 60 to 72 dBA, and for internal assessments 40 to 49.9 dBA (the author has assumed the respondents intended the use of the $L_{Amax}$ index and that equivalent $L_{Aeq}$ values would be at approximately 10 dBA lower).
- Only a small minority of respondents preferred to assess the impacts of patron noise by considering the change in noise level due to introduction of the patron noise.
4. CASE STUDIES

CASE 1

Following implementation of the Licensing Act 2003 an exotic dancing establishment in central London wished to extend the time until which alcohol could be served from 0300 until 0500 hrs.

Directly opposite the entrance to the basement club was the rear façade of a building containing bedrooms of a private members club, and approximately 75 metres distant from the club was the entrance to a gated mews residential development. The management of the private members club and residents of the Mews claimed they were regularly disturbed by noise from persons in the street and from vehicles travelling along the road they shared with the licensed premises, and blamed the club for the majority of these problems.

The local authority refused to extend the hours for provisions of alcohol and gave as a reason public nuisance from patrons and vehicles causing noise in the street as they travelled to and from the premises.

The owner of the club appealed the decision to refuse an extension. In order to support the appeal the club owner commissioned a licensing consultant to undertake observations when the premises was operating, and the author to carry out noise surveys to establish how noisy the existing environment was, and the contribution made by patrons of his premises.

The location can be described as predominantly commercial, interspersed with a minority of residential type premises e.g. a hotel and the private member’s Club; with the commercial element made up of retail, offices, restaurant, bar, take away, and club type uses. The section of road where the club is located is a relatively busy connecting route between main traffic routes in the West End, with traffic and pedestrians flowing persistently through the day and night. Whilst the location is not at the heart of the busy central main West End commercial and entertainment zone, it is closer in proximity to the central main West End commercial and entertainment zone, than it is to the more residential areas north of this area, and the locality is not particularly quiet or deserted late at night.

Observations were carried out on nearly 30 nights, and noise measurements on 4 nights. The application was to vary the club’s licensing arrangements so that alcohol can be sold for consumption on the premises until 05:00 hrs. Consequently, the noise impact assessment concentrated on the potential impacts of customer noise after 01:30 until 05:30 hrs.

During each survey noise level measurements were made with the microphone fixed at a height of approximately 1.25 metres to railings at the rear of the private member’s club, directly opposite the entrance to the appellant’s premises. During the noise surveys the dominant source of noise was road traffic on the road where the appellant’s club and objectors premises were sited. Other less prominent noise sources include traffic on the local road network, and local air conditioning and ventilation plant. A measurement period (T) of 1 minutes was selected, as this would allow correlation of measured noise levels with specific activities observed in the locality, without the recorded noise level values underestimating the potential of impact of the noise event by averaging the noise level over a longer period.

Table 1 below show a summary of the noise levels measured during the noise surveys.

The noise survey was interpreted as follows:

- The existing operation of the appellant’s club until 04:00 hrs had
no significant impact on noise levels in the locality.

- Noise levels associated with activity related to the appellant’s club were not different from typical noise levels in the locality without activity associated with the club.
- Noise levels in the locality were found to be primarily a function of activities not associated with the appellant’s club, i.e., other noise sources were louder more often than patrons of the club.
- The highest noise levels in the locality were not associated with activities related to the operation of the appellant’s club. For example, the noisiest events were refuse collection (by the local authority), and deliveries of line, food supplies and collection of waste to and from the private member’s club and the drive-by of black cabs past the monitoring point.
- Noise impacts from activities associated with the appellant’s club were at worst no greater than those from other activities in the area, and were most likely less adverse than from other activities in the area.

At the appeal hearing the district judge concluded that “the essence of the acoustic evidence appeared to be that such is the general noise level that the appellant’s premises add nothing and can not be said to be a nuisance of any kind” and allowed the appeal in full.

CASE 2

Following implementation of the Licensing Act 2003 an established small basement club in west London wished to extend the time until which alcohol could be served from 0100 until 0300 hrs, Thursday and Saturday. The local authority refused to extend the hours for provision of alcohol and gave as a reason public nuisance from patrons causing noise in the street as they travelled to and from the premises.

The section of road where the club is located is a busy arterial route between west London and the West End and other central locations, with traffic and pedestrians flowing persistently through the day and night, and is not particularly quiet or deserted late at night. However, to the North and South of the main road are a series of exclusively residential streets where a number of residents raised allegations of anti-social behaviour, although none of the objections identified patrons of the particular premises applying for a licence extension as the source of these alleged problems. Figure 1 below shows a map of the locality.

There were residential flats at first floor immediately above and to the side of the club, so attended noise measurements were carried out by placing a microphone at a height of approximately 2.5 metres and 3.5 metres from the façade of the club premises. Noise measurements were made on one night when the club closed at its normal time of 0100 hrs, and repeated on another night (one of several) when the club used a Temporary Event Notice (TENs) to extend its opening until 0300 hrs. The results of the noise survey are shown in the charts below.

Table 1: Summary of mean noise levels recorded opposite the appellant’s club, outside the rear of the private member’s Club, between 01:30 hrs and 05:30 hrs

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Mean</th>
<th>Standard</th>
<th>Mean</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1:30 to 05:30 hrs</td>
<td>59.6</td>
<td>3.8</td>
<td>69.7</td>
<td>5.8</td>
</tr>
<tr>
<td>Overall (All Periods)</td>
<td>59.9</td>
<td>4.3</td>
<td>70.2</td>
<td>6.4</td>
</tr>
<tr>
<td>Periods With No Club Associated Activity</td>
<td>60.0</td>
<td>4.5</td>
<td>70.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Periods With Club Associated Activity</td>
<td>59.6</td>
<td>3.8</td>
<td>69.7</td>
<td>5.8</td>
</tr>
</tbody>
</table>
Figure 1: Location of appellant’s premises and objectors homes.

Emergency services sirens

Licensing Act 2003: Patron noise and public nuisance - assessment criteria and case studies
The noise surveys indicate that the immediate environment of the club is noisy, and that there was no significant change in the $L_{\text{Aeq},1 \text{min}}$ or $L_{\text{Amax},1 \text{min}}$ noise levels between 23:00 hrs and 03:30 hrs on either night i.e. no sharp decline in ambient noise levels as the night progresses and no short-term increases in noise levels around closing time; and no significant difference in noise levels between the night when the club closed at 0100 hrs (3rd Nov) compared to the night when it closed at 0300 hrs (6th Oct). Therefore, there was unlikely to be a significant increase in customer noise impacts to residents on the main road due to the premises opening until 03:00 hrs instead of closing at 01:00, due to such impacts being made worse by lower ambient noise levels at 03:00 hrs compared to 01:00 hrs or any short-term increase in noise levels around closing time due to noise from patrons.

Consequently, the focus of the appeal shifted from the impacts of patron noise on the closest residential dwellings on the noisy main road, to the potential impacts on the quieter residential streets further away. In particular, it was alleged that impacts from patron noise on the residential street to the rear of the club would be unacceptable. In order to characterise the noise climate in this location the local authority relied on a brief single noise measurement at this location and the $L_{A90}$ noise index. Whereas the author undertook 12 measurements over two nights and preferred the $L_{\text{Aeq}}$ noise index. Using either approach it was clear that the street was very much quieter than the main road where the club was located, and that patron noise had the potential to have greater impacts in this location.

A retired police inspector gave evidence of observations in multiple nights when he had noted that none or very few of the club patrons had travelled to or from the premises via the quieter side streets, and that none had behaved in an anti-social manner. The author gave evidence from his time spent measuring noise on the quieter side streets that he had not seen any anti-social behaviour, and that the noisiest activities he had witnessed were all due to residents of these streets returning to their homes in various states of refreshment after spending leisure time, presumably including visiting licensed premises, elsewhere.

Despite their staff undertaking observations on several nights, and being aware of when the TENs extensions to opening would be used,
the local authority could not offer any
evidence of patron noise problems
either on the busy main road or the
quieter side streets.

Instead the local authority put
forward a number of local residents who
typically listed a range of alleged noisy
activities occurring on non-specific
dates such as shouting, open and closing
of car doors, car engine start ups etc.
One resident admitted to making
similar noises himself in the early hours
of the morning when loading his vehicle
to take his family to the airport, and no
evidence was provided that indicated
patrons of the appellant's premises were
a source of any of the alleged problems
in the locality.

However, the magistrates declined
to allow the appeal and gave as a reason
for their decision concerns regarding
noise from patrons of the premises
affecting residents of the quieter side
streets beyond the immediate environs
of the premises.

5. CONCLUSIONS
The legal concept of public nuisance
pre-dates the Licensing Act 2003 and
there is a significant body of opinion
that its established definition has not
been altered by the Act or the associated
guidance.

The survey and case studies
reported in this paper indicate that
there is considerable divergence in the
approaches to the prediction,
assessment and management of patron
noise between different local authorities
and consultants.

There are probably several reasons
for this apparently inconsistent
approach. These include the variability
of the nature and character of the
problems encountered and the districts
in which they arise, and fluctuating
resources committed to the issue. In
reality the wide range of assessment
methods and criteria used in regard to
patron noise reflect the need to address
these variables, but the breadth of this
range could also be over extended by
each local authority or consultant
having to develop their own assessment
methods and criteria in a vacuum
created by the absence of any recognised
substantive guidance or advice based on
validated research. The absence of such
guidance means that the inevitable
tensions and conflicts between the
aspirations of the licensing industry,
Government policy in regard to
licensing, local authority policies and
procedures, and resident's expectations
are more likely to arise. As each party
can, in their own view, legitimately use
different methods and criteria to arrive
at polarised assessments of the same
problem, none of which may be the
most appropriate.

This apparent inconsistency also
raises concerns for business. The
Hampton Review on reducing
administrative burdens: *Effective
inspection and enforcement 2005*, revealed
that businesses are very concerned
about the cumulative burden of
regulation. In particular businesses talk
of inconsistent practice and decision-
making between regulators (www.hm-
treasury.gov.uk/hampton). This
Hampton Review also quotes findings
from a DTI report: *Extending
Competitive Markets: Empowered
Consumers, Successful Businesses
Department of Trade and Industry*, which
found at local authority level, there is
wide variation in standards of service to
businesses and the public.

Although it is unlikely that a single
methodology and criterion would be
suitable for the assessment or prediction
of patron noise impacts in all
circumstances, further structured
research would extend the pool of
knowledge about the issue and facilitate
a better understanding of the problem
of patron noise and how it might be
more effectively assessed, mitigated and
managed. Probably to the point where it
will be feasible to derive an ordered
framework or hierarchy of methods and criteria that would contribute usefully to encouraging a more consistent approach to dealing with these issues; or at least confirm whether the wide range of divergent methods and criteria that are currently used are warranted.

6. ACKNOWLEDGEMENTS

The author wishes to acknowledge the generous contribution from Ilir Hyseni, who kindly allowed extracts from his dissertation “To establish and compare the approach of Local Authorities, in dealing with public nuisance under Licensing Act 2003” to be used in this paper.

The author also wishes to thank all the Environmental Health Practitioners and consultants who responded to the questionnaire.

7. REFERENCES


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NEW ZEALAND ROAD POLICING

Over 130 drivers were netted for excessive vehicle noise after a nation-wide police operation in New Zealand. Operations manager for road policing support at Police National Headquarters Inspector Carey Griffiths said the operation was extremely successful. Despite poor weather across the country keeping many inside this operation also resulted in over 60 vehicles being ordered off the road for a variety of faults including cut down suspension, highly tinted windows, worn tyres and other faults affecting the safety and driveability of the car he said. Upper Hutt police even reported stopping one vehicle with no exhaust system at all. Police supported in some areas by vehicle inspectors from Land Transport New Zealand and bailiffs from the Department for Courts Collection Unit had focused on obviously noisy vehicles. In conjunction with police, court bailiffs seized at least eight vehicles for unpaid fines and in Whangarei entered into arrangements with 10 fines defaulters with fines totalling over $100,000. The highest level of offences detected on was in Christchurch where 39 drivers face prosecution for excessive noise. Christchurch police advise that they are seeing a steady reduction in noise offences detected after a recent three-week crackdown on anti-social driving saw 74 cars impounded and over 1000 drivers facing prosecution for a range of anti-social driving-related offences Mr Griffiths said. He said the nationwide focus was a result of recent changes to the law which meant that exhaust noise had to be less than or similar to a standard vehicle. The recent law change has meant that operating a vehicle in a noisy manner now carries 25 demerit points and a reduced fine from $250 to $50. Vehicles will also have to comply with noise tests, or be ordered to undergo objective noise testing. Mr Griffiths said police welcomed the change. “There is a high level of public annoyance at excessive noise particularly when repeated night after night,” he said. “Continued offending will mean a loss of licence rather than high levels of accumulated fines which means we get these drivers off the road before they amass fines they cannot or will not pay.”
CHURCH VS COUNCIL

A bishop and three church trustees in Croydon are being taken to court in a bid to stop them praying. The church officials have been ordered to stop holding services at their headquarters, because neighbours have complained about the noise from services and the disruption from cars. The officials claim their human rights are being breached and say closing the church would leave their 160-strong congregation with nowhere to worship, spelling the end of their community outreach work. Emmanuel Inspirational Church of God runs youth projects and a senior citizens club as well as holding two lively Sunday services and a Tuesday night prayer meeting. Bishop-elect Mark Nicholson, elder Devon Hobbs, preacher Andria Doyle and minister Lloyd Hall are all due to face Bromley magistrates in Kent on 23 July over an offence of breaching an enforcement order. The order was issued by Croydon council when services continued despite the congregation being refused permission to worship in 2003. They had bought the three-storey building in west Croydon, Surrey, after being granted temporary permission in 2001, but all further applications have been refused. The council says the church in Union road is in an area allocated for employment, not worship. Mr Hobbs said: “They are trying to stop us praying. Neighbours have complained about the noise but we find it ridiculous because we do a lot of community initiatives, some of which are funded by the council. Why would the council want to close down a church that’s inspiring young people and helping them to turn their lives around?” A council spokesman said: “Croydon has one of the strongest black church movements in the country, and many black churches have already been successfully accommodated within the borough. However, even though they meet a worthy cause in the community, they are not immune from planning rules.”

CCTV CAMERA RESPONDS TO SOUNDS

Researchers at the University of Portsmouth are developing artificial intelligence CCTV cameras which will respond to noise. When the cameras ‘hear’ sounds likely to indicate that an incident is taking place, glass breaking or screaming for example, they will turn towards the sound and start recording. They could also alert a CCTV operator or the police, saving valuable time and helping to secure a conviction.

LUCKNOW ROAD TRAFFIC

Pressure horns used in VIP vehicles and other heavy motor vehicles are the biggest contributors to the increasing noise pollution in Lucknow, India, which can lead to cardiac, cardiovascular, stress and various other diseases. This was revealed in the report of the Indian Institute of Toxicology Research (IITR), Lucknow, released on the occasion of the Word Environment Day. According to the report, noise levels in residential areas during day and night were recorded between 63.4 and 75.3 decibels (dB) and 54.1 and 61.0 dB respectively, higher than the permissible limit of 55 and 45 dB for day and night respectively. In commercial areas noise levels were recorded between 67.1 to 75.3 during the day and 59.5 to 71.2 dB during the night, which was above the permissible limit of 65 and 55 dB for these areas during day and night respectively. In industrial areas Amausi and Talkastora, the day and night time noise levels was recorded between 70.4 and 78.5 and 62.8 and 88.9 dB respectively. “There is a sharp increase in the noise pollution because of more vehicles in the city. In the last three months, there is an increase of 7.8 per cent in the number of vehicles. Pressure horns used in the VIP vehicles and poor traffic management have worsened the situation. Such equipment should be avoided,” said A H Khan, a scientist at IITR. Khan also said that the level of noise pollution in the last three months has increased more than air pollution.