New noise management guide for environmental problems

The Guide, currently open for consultation, and available on www.cieh.org, provides advice on how a Local Authority may fulfill its statutory functions in the field of neighbour and neighbourhood noise. It is intended to be used as a tool to assist decisions on future policies across the whole range of local authority noise functions, giving practical and accessible advice to all users and in particular to:

- encourage local authorities to develop their noise policies and practices in order to meet their statutory obligations;
- assist in the development and implementation of effective noise management strategies;
- provide examples of 'good practice' in terms of enforcement, drawn from a wide range of local authorities across the country, as an aid to greater consistency;
- encourage local authorities to critically review their services, including the allocation of resources to this function, within the framework of Best Value, having due regard to the particular needs and circumstances of their areas.

Primarily aimed at managers of local authority environmental health services throughout England, Wales and Northern Ireland, who are responsible for enforcing statutory controls with regard to neighbour and neighbourhood noise, the Guide has

wider geographical application as an example of structured approaches and good practice, providing a broad framework with which to address noise problems. The scope of the Guide is intended to encompass all facets of local authorities neighbour and neighbourhood noise control services including:

- neighbour noise (including street noise);
- commercial and industrial noise, including construction noise;
- public entertainment noise; and
- recreation and leisure noise.

Whilst this document is not strictly an 'approved' code, it does provide authoritative advice on what constitutes good practice in discharging the statutory duties imposed upon local authorities in the field of neighbour and neighbourhood noise. Noise affects most of us at some time, but there are also significant variations in the way that individuals react to noise; some people may be more annoyed than others for any given level of noise. Noise may become annoying if it intrudes into people's lives and is heard against their wishes or where it is perceived as offering no benefits. Noise can disrupt people's activities and rest by interfering with speech, study leisure or sleep. Just as importantly, expectations as to what a local authority noise service can and should deliver are also on the increase, sometimes placing unrealistic demands on the Local Authority. Other

The UK Department of the Environment (Defra), together with the Chartered Institute of Environmental Health (CIEH), has published "Guidance on the Creation and Maintenance of Effective Noise Management Policies and Practice for Local Authorities and their Officers". This document updates and extends the advice in the original Noise Management Guide, published by the CIEH in 1997 and replaces the original document in its entirety.

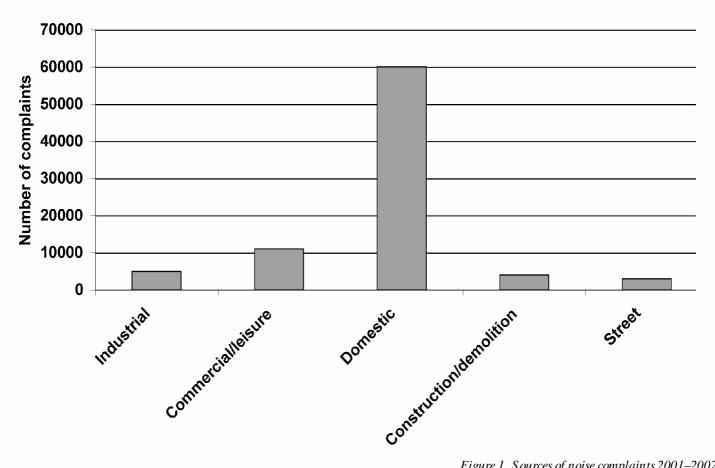


Figure 1. Sources of noise complaints 2001–2002

difficulties perceived by local authorities in delivering a service are funding, resources (personnel) and inadequate statutory powers to address specific problems. Poor relationships with other local authority departments, police and outside agencies is a further obstacle in some instances.

The problem of neighbourhood noise continues to present Local Authorities with one of their most exacting and demanding challenges. The latest UK National Noise Attitude Survey1 indicated that 69% of respondents were generally satisfied with noise levels in their environment, but about 8% said their home life was spoilt either 'quite a lot' or 'totally' by noise.

The scale of the problem, as reflected, by the annual statistics on public complaints collected by the CIEH, remains fairly static. Fig 1 shows the complaints for 2001-2002 and, although the problem does not seem to have worsened in recent years, ealier years saw a sustained rise in complaints, thought largely due to growing public awareness and intolerance. Noise of all kinds now brings more complaints to local authorities than any other topic. While overall numbers and relative proportions of the total attributable to different sources remain fairly steady, domestic noise is consistently the cause of the majority of complaints. The factors behind this include:

- the public's increased awareness of Local Authority powers to control community noise
- the greater availability and use of powerful sound systems
- changing social attitudes and lifestyles
- deficiencies in the residual sound insulation properties of buildings.

The factors that lead an individual to make a complaint about noise are varied and complex. It is evident that it is not simply the level of noise itself that triggers adverse reactions: a host of individual, cultural, attitudinal, lifestyle, demographic and situational factors are also likely to influence how a person reacts to a given noise exposure and what, if any, health effects they may suffer. Research undertaken by the Building Research Establishment2 has identified the following factors, which cause the greatest disturbance,

- the volume (perceived loudness) of the noise
- the duration of the noise
- the time of day that the noise occurs
- the inability of the complainant to control the noise
- the sporadic or unpredictable nature of the noise
- the tone of the noise, including low frequency components.

Neighbour noise, in the guise of music, parties, televisions, raised voices, dogs barking etc, remains the largest single category of noise complaint made to local authorities. The CIEH has, for some time, observed that a 'gap' may be opening up between the public's expectations of peace and quiet and local authorities' abilities to resolve noise problems through the statutory process of nuisance abatement. The wide variation in the profile of complaints received by local authorities highlights the necessity of a flexible approach to the design and delivery of effective services with the expectation that local needs can be addressed in a sustainable way.

All these matters are explored in the Noise Management Guide, which consists of two parts. Part 1 contains 85 pages. Part 2, the Appendices, contains 161 pages.

Defra invites comments on the Guide, with deadline of 30 September 2003.

References

- 1999/2000 National Survey of Attitudes to Environmental noise. BRE 2002
- 2. BRE Report CR 153/97
 "Investigation of Domestic Noise
 Complaints"

When regulation becomes taxation

Construction companies with projects in Reno and Washoe County may soon need to obtain permits to work at night, but the permits will give them more leeway than existing ordinances, according to county officials. A permit to build downtown, for example, would allow more noise than one granted for construction closer to a residential area. And certain types of construction-related work, such as dust control, or city provided services like street cleaning and snow removal, would be exempt. The Industry, however, is not impressed. Of necessity, some work is done at night or very early morning – roofing, for example has to be begun very early before the heat of the day sets in. It argues that construction is anyway heavily regulated and that there's no need for specific construction noise licences, Industry spokesmen suggest that more than anything else, such licences are just another City Hall revenue raiser.

Who can we trust?

Are Massport (operators of Boston's Logan airport) fibbing? Or at least bending data that does not help its case for a new runway? Ralph Dormitzer, runway opponent thinks so. Referring to data from one noise monitor over a two month period last summer, he says the same Massport official gave him three different versions of the continuous average noise level: 60 decibels, then 58 decibels, then 53 decibels. Dormitzer does not know what to believe. But he strongly suspects that Logan is manipulating flight path use to get the kind of noise environment it wants in certain areas, to help its own case. An FAA-funded study by the Mitre Corporation found that delays at Logan airport had been exaggerated by as much as ten times by the airport itself, in stressing its need for a new runway.

Doing my head in

Noisy classrooms and tough academic subjects can literally be a real headache for kids, Swedish researchers have found. Working on the assumption that children probably have insights into what triggers their own headaches, Dr. Birgitta Hovelius and colleagues took the novel approach of actually asking a group of 10- to 14-year-olds. The children consistently linked their headaches with conditions in school, the researchers report in the March issue of the British Journal of General Practice. Headaches were tied "specifically with more theoretically-oriented subjects (maths or Swedish), a noisy and disorderly school environment, and insecure relations with classmates. The biomedically-oriented health care services and the healthcare information to which the children had access scarcely provided them with any real help in dealing with their headaches." Say the researchers. "The results of our study elucidate why physicians will fail to make sense of children's headaches if they approach them from a purely biomedical perspective," Hovelius said.

Rulers over-reuled

Noise control officers were called to a VIP party at the home of New Zealand's Governor-General that was attended by 1000 people including Prime Minister Helen Clark. Neighbours had complained about the loud music coming from Government House in Auckland, residence of Governor-General Dame Silvia Cartwright, early morning.

Air boats

Supervisor Hank Gudith is seeking legislation to regulate noise produced by air boats after Michigan State Attorney General Mike Cox issued an opinion saying the noise doesn't fall under current statutes. The current statue says a motorboat may not produce sound levels exceeding 90 decibels. When at idle, air boats fall under this statute. Once the boats begin using the propellers, the statue no longer applies.

Barriers to house values

In Ridgefield Park, New Jersey, residents on Arthur Street have learned to live with cars and trucks zooming by all times of night just a few feet from their homes. The four-block street is next to Route 80 east and Tanker Turn, an accident-prone ramp that connects northbound Route 95 with westbound Route 80. The noise generated at the infamous interchange has been a subject of debate for years. Now barriers are being proposed. But many residents along Arthur Street object to the plan, saying that placing the walls next to their homes would diminish property values. "The highway is noisy, but to have the side of our houses blocked by a 20-foot wall, there's no way that's going to increase the value of my home" said one.

residents headaches and insomnia by keeping music blaring all night well above the allowed level the court said in the northern city of Valencia. Garcia's neighbours had complained for years. He had been fined several times and police temporarily closed the discotheque, all to no avail. International studies show Spanish cities have one of the highest noise levels in the world, and the authorities often get complaints about loud bars or discotheques. However, noise is hard to fight in a country where people like to go out at night and bars remain open until the early hours of the morning. "Politicians do not want to touch this subject, because they could lose votes," said a representative of FARSU, an association campaigning against noise in Valencia.

Pricing quiet

Lately there's been an uproar in North Shore, New Zealand, about road surfacing 0 the road seal policy in fact. People seemed to be against the noisy chip seal surface: noisy to drive on, very noisy and messy in the laying down of the surface. So, ask the people the, politicians said. Interestingly, 36% wanted to change to smoother and quieter hot mix, accepting that \$48(NZ) would be added to their rates bill, and 22% wanted the \$22-\$27 option, a reduced use of chip seal.

Two-years jail for making noise

A Spanish discotheque owner has been sentenced to two years and three months in prison for playing loud music, a first in the country with one of the world's highest noise levels. Jose Garcia de Juan had caused local

Opencast

Mining giant UK Coal is facing renewed action by Northumberland County Council aimed at avoiding further breaches of noise limits at the 1,500-acre Stobswood site near Morpeth. UK Coal was served with a breach of condition notice by the county council last year following complaints. In January it was revealed the notice had been withdrawn after UK Coal threatened to seek a High Court judicial review of the move. The company questioned whether all of the noise nuisance was being generated from the opencast site.

Custom or contemporary attitudes?

A Juneau construction company that has been ordered to seek a permit to continue noisy activities, says it has engaged in them since 1989. The Juneau Planning Commission has upheld a compliance order issued to Duran Construction Co. last summer. The company came under fire when residents of two nearby trailer courts

complained of incessant industrial noise, vibrations and noxious fumes coming from the facility. The seasonal company primarily builds homes, develops subdivisions, and sells topsoil and rock. Neighbors said vibration and noise from boulders "the size of Volkswagens" dropped from cranes shook their homes. Robert Spitzfaden, the attorney for company owners Josette and Marciano Duran, said his clients had operated their facility since 1989 without a permit. Since 1999 they've been under the impression those activities had been "grandfathered" in by the city, he said. "When I first moved to Alaska and I met the old-timers, their word was their bond and a deal was a deal," Spitzfaden told the commission. "But you folks are saying, 'A deal's not a deal unless we say it's a deal.' "You can't reopen something every time someone complaints about something."

Pitching into noise

Two neighbors were treated for injuries after a noise dispute escalated into a fight with a pitchfork, say police in Cocoa, Florida. Police responded at 7:45 a.m. to a residence on the 200 block of Washington Street. The two men, who lived in the same building, one above the other, had a longrunning dispute over noise, said Barbara Matthews, a spokeswoman with the Cocoa Police Department. Police said an argument spilled out into the street, where one of the men struck the other with a pitchfork. After a struggle, the second man, who was cut on the shoulder, grabbed the pitchfork from the first man and stabbed him in the stomach with it, Matthews said. Police did not identify the men, who were believed to be in their 30s, because they declined to press charges against each other. Matthews said police were considering

filing charges against the man who first armed himself with the pitchfork.

Propeller research

Ships could become more fuel efficient and comfortable for passengers with research being undertaken by Chalmers University of Technology for Rolls-Royce. Researchers at the Swedish university, led by Professor Lars Larsson, are using computational fluid dynamics to predict the pressure around ship's propellers, which in turn affects the fuel efficiency of the ship itself, by altering the pressure around the hull. Pressure around the propellers also produces noise and vibration that is felt by passengers on board the ship. So better propeller design could lead to more comfortable journeys, said Kron. 'Ship design is often a compromise between fuel efficiency and the noise and vibration levels on board. With this prediction tool we can improve both.' The team also plans to extend the project to include cavitation, where rapid pressure changes in the water create bubbles. When the bubbles implode the produce shockwaves in the water which can have a highly damaging effect on a ship's components.

R.I. noise ordinance is sound

A federal judge has ruled that Rock Island's noise ordinance is constitutional, and the city has the right to impound cars when people play their stereo systems too loudly. Judge Joe B. McDade issued the ruling in a lawsuit filed against the city two years ago in U.S. District Court, Rock Island, by three men who allegedly violated the ordinance on different occasions in 2000. David Lowery, Spender Holliday and Barry Smith each had a car impounded by the city. The three plaintiffs in the suit argued it wasn't constitutional for the city to impound their cars because they played

their music too loud. According to the ordinance, an operator is in violation if music coming from the vehicle can be heard from more than 75 feet away. The men claimed the ordinance violated their rights to free speech and failed to provide due process during impoundment procedures. Judge McDade ruled that the ordinance isn't restricted to certain kinds of music or noise and doesn't violate defendants' constitutional rights to free speech. He also ruled that the ordinance provides due process, even without the immediate-bond provision and a prompt hearing. Rock Island attorney Stuart R. Lefstein, who represented the city, said Rock Island has changed its ordinance since the lawsuit was filed, allowing people to pay a \$195 bond to get their car out immediately and giving them a prompt hearing. The previous ordinance did not provide a prompt hearing, meaning it could take weeks for the case to get to court, and several more days for a violator to get the car back. Mr. Lefstein said the judge's ruling is on the old ordinance, but the revised ordinance also is constitutional. Mr. Lowry argued that the ordinance is used for racial profiling. All three defendants are black.