

Proceedings of The Institute of Acoustics

NUISANCE CAUSED BY INDUSTRIAL NOISE.

M.S. ANKERS, M.E.H.A., M.I.O.A.

PRINCIPAL ENVIRONMENTAL HEALTH OFFICER (NOISE)
CITY OF MANCHESTER.

Planning aims to keep incompatible land uses separate from one another. Industries are not compatible with housing if they cannot avoid making noise or emitting smoke, fumes, grit or dust to the detriment of their neighbours. Although such uses have been allowed to grow up side by side in the past, and this could only be put right now by moving the industries or the houses, it can be prevented for the future.

"Planning Permission - A Guide for Industry"
National Building Agency : 1978 (1)

Local authorities have considerable powers granted to them for the express purpose of controlling pollution of all descriptions from most types of industry. One pollutant which is common to every industrial undertaking is that of noise. Controls are available to restrict noise emissions over the whole life of an industrial site from the construction of the facility through its operating life and even during its demolition.

These controls may be broadly grouped under the two main headings of advance planning and remedial control. In general planning considerations are within the purview of the local planning authority and remedial controls are exercisable by the environmental health department. There is usually a broad overlap of functions, both departments often being involved at the same stage of control.

Advance Planning.

It is probably true to say that the majority of planning authorities are by now fully aware of the consequences of neglecting noise aspects of development. It has become fashionable to criticise 'planners' for permitting industrial and residential development to become at best uneasy bedfellows. Often, however, the specific situation predates effective planning controls, or technological change has proceeded beyond the vision of the legislators.

There is still no statutory duty for a local planning authority to consult with the environmental health department or indeed beyond broad requirements, for noise to be considered at all. Most, and ultimately it is hoped, all local authorities will however engage in inter departmental consultation, as advised in Circular 10/73 issued by the Department of the Environment.(2)

NUISANCE CAUSED BY INDUSTRIAL NOISE.

It is not possible to refer to planning law in detail, but it is generally true to say that in the case of new development, or where a substantial change of use occurs, planning permission is required. Such permission may be granted subject to conditions which must be fair, reasonable and certain.

Model conditions relating to noise are contained in Circular 10/73 and it is necessary to establish precisely the activities to be conducted within the development site. Unfortunately it is often the case that basic data is, or is alleged to be, unobtainable and it is then extremely difficult to frame appropriate and mutually satisfactory planning conditions. Even given the ideal situation with full consultation, the best information available it is a sad fact that in many instances unacceptably high levels of noise are emitted and consideration must be given to alternative methods of control.

Remedial Control.

A word which gives rise to a great deal of misunderstanding is 'nuisance'. Nuisance of many types has long been actionable at common law but it was not until 1960 (3) that national legislation brought noise within the scope of matters which could be controlled by the local authority. It is important that the statistically investigable term 'annoyance' is not used synonymously with 'nuisance', the latter word has been defined over centuries of case law which now forms legal precedent. A noise may be annoying but might not be a nuisance, a noise nuisance is almost invariably annoying.

There is no such thing as a 'statutory noise nuisance' i.e. there is no defined set of conditions which mark the boundary, the term has been used as verbal shorthand to describe the situation where a noise which is a nuisance is capable of remedy by way of statute i.e. legislation. To those of scientific background, this demarcation appears ludicrous but it is an important feature of English Law and, E.E.C. permitting, will continue to be so.

Thus, noise which is a nuisance is actionable through the Magistrates' Court by way of the Control of Pollution Act, 1974 (4). Alternative action, which is less likely, would be by way of injunction and damages in the County or High Courts. Under the act, certain defences are available (5) which include 'best practicable means', i.e. that although there may be a noise caused in the course of abusiness or trade, if the best practicable means have been taken for reducing or preventing

Proceedings of The Institute of Acoustics

NUISANCE CAUSED BY INDUSTRIAL NOISE.

the noise, action under the Act would cease on successful appeal against a notice served by the local authority. Such a defence is not directly admissible under the alternative, common law procedures.

"What noise annoys?" has been a question which has been researched for years and the only firm conclusion so far is that the individual's response varies. Guidance (6) is available which indicates that broadly an increase of 10 dB(A) on a steady background for more than about 10% of the time is likely to give rise to complaints from a large proportion of an exposed population, although it is recognised that complaints would be possible with smaller increases. Note that in general it is relative differences which appear to matter in the case of industrial noise, rather than absolute values, hence the value of before and after monitoring which will be illustrated.

Noise abatement zones.

A novel concept and one which is unique to the U.K. the establishment of noise abatement zones under the Act of 1974 may be seen as a logical extension to the controls available to the local authority. Such a zone permits special control within a defined area which contains prescribed premises, the initial purpose being to record (7) existing levels emanating from those premises and to prevent, so far as is practicable, future increases in those registered levels. There is no intention to define a single overall level to which all industry or commerce must aim, reductions can only be required if fulfilling certain criteria. The use of such powers does not preclude normal procedures for the reducing of noise nuisance, indeed it is almost a presupposition that the question of nuisances would be resolved before the establishment of any noise abatement zone.

Summary.

There are several levels of control available to local authorities enabling the restriction of noise from industrial sources. Such controls may form a legitimate part of the planning process, indeed where permission for development is sought, noise should be one of the first of the several potentially harmful environmental effects to be considered.

Proceedings of The Institute of Acoustics

NUISANCE CAUSED BY INDUSTRIAL NOISE.

References.

1. NATIONAL BUILDING AGENCY, DEPARTMENT OF THE ENVIRONMENT, CENTRAL OFFICE OF INFORMATION, 1978, Planning Permission - A Guide for Industry. H.M.S.O.
2. DEPARTMENT OF THE ENVIRONMENT, 1973, Planning and Noise - Circular 10/73 (DoE) Circular 16/73 (Welsh Office). H.M.S.O.
3. NOISE ABATEMENT ACT, 1960 (8 and 9 Eliz.2 c.68) London H.M.S.O.
4. CONTROL OF POLLUTION ACT, 1974 (1974, c 40) London H.M.S.O.
5. Statutory Instrument 1975 No. CONTROL OF NOISE APPEALS REGULATIONS. London H.M.S.O. 1975
6. BRITISH STANDARD 4142 : 1967 (Amended 1975), Method of rating Industrial Noise Affecting Mixed Residential and Industrial Areas. B.S.I. (London)
7. Statutory Instrument 1976 No: 37. CONTROL OF NOISE (MEASUREMENT AND REGISTERS) REGULATIONS, 1976. LONDON H.M.S.O.