Proceedings of the Institute of Acoustics

PLANNING, ENVIRONMENTAL ASSESSMENT AND NOISE

C. M. Wood

Department of Planning and Landscape, University of Manchester

1. INTRODUCTION

This paper provides an overview of the use of land use planning powers in controlling noise pollution. The long established view that prevention is better than curing noise pollution received official sanction in the celebrated circular 'Planning and Noise'[1] in 1973. Much of that advice was confirmed in 1985 when an updated circular on the use of town and country planning conditions[2] was issued containing many model conditions relating to noise abatement. The need to improve the consideration of the environment prior to the authorisation of new developments led the European Commission to promulgate its directive on environmental impact assessment[3] in 1985. This, in turn, resulted in the various 1988 UK environmental assessment regulations, of which those relating to the planning system[4,5] are best known. While these make no specific reference to noise, adherence to them should enhance the anticipatory consideration of noise pollution in planning decisions and hence encourage better practice in 'planning pollution prevention'.

The paper commences with an evaluation of the legitimacy and appropriateness of the use of planning controls to reduce potential noise pollution. It It then proceeds to discussions of, in turn, planning controls and industrial development, 'planning controls' and other noise sources, planning controls and noise-sensitive development, and development plans and noise abatement zones. There follows a presentation on the UK environmental assessment requirements and their utility in preventing or mitigating noise pollution. Finally, conclusions are drawn.

2. LEGITIMACY OF PLANNING POWERS

The prevention and minimization of noise, perhaps more than any other form of environmental pollution control, is widely recognized as a legitimate and appropriate objective of land use planning. Planning powers have afforded effective means of imposing control over noise sources and over sensitive development in areas where noise nuisance prevails. Collaboration between planning and environmental health officers over planning matters with implications is now a routine procedure in the vast majority of local authorities, as is the use of planning refusal and planning conditions.[6] In addition, noise is unique among the various forms of pollution in that a central government circular has been devoted solely and specifically to offering advice on the role which planning can play in its control.[1]

Although The Control of Pollution Act, 1974, contains powers over noise nuisance: 'Where a local authority is satisfied that noise amounting to a nuisance exists, or is likely to occur or recur ... [it] shall serve a notice ... requiring the abatement of the nuisance',[7] it is a sufficient defence to prove that the 'best practicable means' were used to prevent noise arising from business or trade activities. Considerable difficulties are also encountered in seeking a more effective remedy by taking proceedings in the High Court where this defence will not apply.

For these reasons, the existence of statutory controls over noise nuisance (as well as the right to take action in private or public nuisance) has not made redundant the application of planning powers to ensure anticipatory control. Planning intervention can be justified at a noise level far below that which could occasion nuisance. By forbidding significant additions to ambient noise levels, planning powers can be employed to preserve a satisfactory noise climate. Further, they can also be utilised to prevent, or determine the nature of, sensitive development in areas experiencing high noise levels.

Ankers[8] has summarised the advantages of noise control using planning powers as follows:

"1. Controls may relate to the 'risk' of noise nuisance.
2. Restrictions on types of activity may be imposed.
3. Controls may restrict noise sensitive development.
4. Construction and layout of development may be controlled.
5. 'Personalised' consents may be granted.
6. The applicant is made 'noise-aware' at an early stage."

Needless to say, it must not be assumed that all sources of noise or vibration can be effectively regulated by the application of planning powers. Several limitations are inherent in the nature of planning control. These have been summarised as follows:

"1. Only developments requiring planning permission are subject to control.
2. Enforcement procedures under the Planning Acts for breach of consent or conditions are long and uncertain.
3. The "Use Classes Order" and "General Development Order" permit certain developments automatically.
4. Conditions (in general) can only relate to the application site.
5. Detailed conditions may require substantial monitoring to ensure or maintain compliance.
6. Little account is taken of intensification of use.
7. Conditions are valid for all time."[8]

These limitations on the efficacy of the various types of planning controls mean they can replace neither technical controls on sources or receptors nor the retrospective and prospective legal powers available under other

legislation. Nevertheless, they provide an invaluable adjunct to other means of control over noise pollution, particularly in anticipating and mitigating problems at the design stage of new developments.

3. PLANNING CONTROLS AND INDUSTRIAL DEVELOPMENT

The Department of the Environment's circular on planning and noise has been a seminal influence in the development of planning authorities' awareness of their responsibilities in regard to noise, and in particular, of the need to separate noise sources and noise sensitive land uses. Where a proposed industrial development is known to be a noise source, permission should be given only for immediately anticipated needs and must, according to the circular, incorporate requirements on sound insulation. Moreover, the circular argues that while quantitative conditions limiting boundary noise levels are appropriate:

> "when there appears to be no other way of ensuring that noise does not build up to unacceptable levels, conditions directed to the physical characteristics of the development, the type and intensity of activity to be carried on there, and hours of operation are preferable."[1]

The circular takes pains to emphasize that any quoted figure should be seen as a guideline and not as a rigid standard. It calls for a pragmatic attitude to the planning control of noise. The extent to which the Department of the Environment itself observes an ad hoc approach and judges each issue on its individual merits may be inferred from ministerial decisions over planning applications with noise implications, which have generally supported the advice in the circular. In one appeal, the Secretary of State held, contrary to his inspector's recommendations, that a condition requiring internal sound-proofing was superfluous given the imposition of a stringent condition on noise levels at the site boundary.

In another case, the courts supported the use of planning conditions to reduce potential noise pollution from the site as a whole. Planning conditions similar to those described above were again the subject of an appeal under the 1971 Act. On this occasion, the local planning authority, dissatisfied with the Secretary of State's reason for replacing the original conditions by others considered to be less stringent, applied to the High Court to have the Minister's decision quashed. Planning approval was granted for an extension to a factory which would allow the existing building to be intensively used. Conditions were imposed on this approval relating not just to the extension, but to the site as a whole; these conditions were the subject of the appeal. The inspector felt that a noise condition was not open to objection 'since the overall noise level must take account of the effects of extending the factory'.

On the general validity of the planning authority's conditions, the Secretary of State held that conditions imposed 'for the purpose of remedying existing

defects or improving what was on the site already', were ultra vires. Accordingly, conditions referring only to the extension were imposed by the Minister.

In its submission to the High Court, the planning authority held that, during the local inquiry, its contention that an intensification of the use of the existing building (and hence increased noise) would result from the operations in the proposed extension had not been contradicted. Thus, it could not be argued that conditions relating to the site as a whole were not reasonably related to the development permitted. In consequence, the planning authority had not been acting ultra vires. The Minister's decision was quashed, allowing the local planning authority's conditions to be reconsidered.

The principle that planning conditions intended to reduce the risk of noise nuisance, either by boundary limits or by restricted hours of operation may be applied to industrial buildings, has been confirmed in appeal decisions. The High Court ruling offers yet another affirmation of a planning authority's right to apply conditions (which may relate to pollution control) on the use of any land in the developer's control, provided they are reasonably related to the development for which planning approval is given. This is fortunate, since it is apparent that planning control over industrial development is by no means unusual, conditions normally being applied after collaboration between planning and environmental health departments.[6]

4. 'PLANNING CONTROLS' AND OTHER NOISE SOURCES

Many new non-industrial sources of noise do not constitute 'development' and consequently do not require planning permission. Most football grounds predate planning legislation and have thus escaped planning controls. Further, intensification of use (and hence, increases in noise emissions) by, for instance, two matches per week instead of one would probably not amount to a material change of use. Many noise-intensive motor sports (e.g., scrambling, stock car racing) constitute permitted development; but the withdrawal of permitted development rights would offer inadequate control over temporary, but nevertheless noisy, activities such as pop festivals and fun fairs.[9] Whilst planning consent might be refused for a new public house, dance hall or other licensed premises in an inappropriate location, restricting opening hours by planning conditions, in an effort to reduce noise nuisance, could be considered as a duplication of powers under the licensing laws.

Noise and vibration from road traffic constitutes a further area where planning control is of secondary importance, though control over noise-sensitive development in the vicinity of roads is possible. Although the district authorities do not normally enjoy direct powers of planning control over roads the statutes require that the district councils should be consulted before they are given approval, whereupon the environmental health departments may make representations concerning any deterioration in the noise climate

which might result from major highway proposals. Under the Land Compensation Act 1973, claims may be made for the cost of sound insulation, for dwellings and buildings used for residential purposes, where the L_{10} noise level is greater than 68 dB(A).

The Secretary of State for the Environment may specify requirements on noise limitation procedures to be observed by airline operators at certain airports. Elsewhere, the Minister has allowed the local authorities to impose their own controls over aircraft noise. The circular on planning and noise advises that: "It is not considered appropriate to impose conditions purporting to control the movements of or noise emitted by aircraft in flight, since planning is concerned only with development of land."[1]. The circular concedes that, where a planning authority does have jurisdiction over development involving aircraft (e.g. when land is taken out of agricultural use and acquired by a flying-club), then conditions limiting the number of movements per day or restricting take-offs and landing to daylight hours may be applied.

5. PLANNING CONTROLS AND NOISE-SENSITIVE DEVELOPMENT

While formal planning powers are of limited application in respect of noise from non-industrial sources, the right, if not the duty, of planning authorities to intervene in the regulation of sensitive land uses in the vicinity of any noise source is well established. Such regulation may consist of requiring developers of housing to provide double glazing and other noise insulation. Alternatively, sound attenuation can be achieved by demanding such measures as fencing or earthworks between housing and adjacent highways. Where existing noise levels are such that nuisance is inevitable then the sanction of planning refusal should, according to the circular on planning and noise, be employed.

> "There should be a strong presumption against permitting residential development in areas which are or are expected to become subject to excessive noise ... Where it is proposed to grant permission for residential development in areas of high noise level planning conditions should be imposed to ensure that as far as practicable the effects of noise are mitigated and that, in any event, the internal sound levels in the dwelling should conform to the criteria recommended."[1]

The circular suggests levels of noise which might justify the refusal of planning consent: for instance, where road traffic generates noise levels in excess of 70 dB(A), no residential or similarly vulnerable development should be permitted. In areas where annoyance from aircraft exceeds 50 NNI it is recommended that consent for housing should be withheld; planning conditions designed to mitigate nuisance (e.g., requiring double glazing) are thought appropriate in areas prone to 40-50 NNI. Similar recommendations relating to development close to industrial noise sources are made.[1]

One local planning authority, on the advice of environmental health officers, refused planning consent for the building of four bungalows on a site considered likely to suffer noise nuisance from nearby industrial premises. The developers appealed and, in their evidence, they argued that, under existing legislation (by implication, the Control of Pollution Act, 1974) the local authority possessed adequate powers to control noise nuisance from the adjacent factory. The planning authority cited the planning and noise circular in support of their decision to forbid housing on the appeal site. The factory, which was situated on land with a long-established right of use for general industry, had been the cause of occasional complaints to occupants of housing some 50m away. The appeal site, being as near as 15m, was clearly unsuited for additional housing. The appeal was dismissed.

The Secretary of State has generally been ready to uphold refusals of planning permission on the grounds that new noise-sensitive development, particularly housing, should not be permitted in areas where noise levels were unacceptably high. The advice in the circular on planning and noise has therefore been supported by the Minister on appeal, though examples of new dwellings being constructed, with or without adequate design and insulation, in very noisy areas are regrettably common. [6]

6. DEVELOPMENT PLANS AND NOISE ABATEMENT ZONES

The circular on planning and noise states that: "Noise will often be a factor in the evaluation of alternatives, both in considering the major issues in structure plans and in working out more detailed proposals in local plans."[1] A general presumption against allowing noise sources in residential areas or permitting sensitive development in areas already subject to noise has formed the basis of policies in a number of development plans. Some structure plans contain policies relating to noise.

Greater Manchester's draft structure plan contained four policies relating to noise: one mentioned the standard of 68d B(A) L_{10} (18 hr) for external ambient levels affecting residential development near to motorways; one dealt with other major roads; one with noisy development; and one with the types of development to be permitted within certain noise contours around Manchester Airport. However, the first three policies were all deleted as being "too detailed or ... otherwise not of structural importance" by the Secretary of State for the Environment. While several district councils have included noise policies in local plans, many have not.

The fact that noise is essentially a localized phenomenon has been advanced by some planning and environmental health officers in support of their contention that strategic policies on noise are inappropriate and that noise control is best formulated by an ad hoc examination of individual planning applications. This perhaps explains why a relatively small number of development plans contain noise control policies.

Of the many new forms of noise control contained in Part III of the Control of Pollution Act, 1974, it is the power of local authorities to establish 'noise abatement zones' which is most closely related to land use planning. The noise abatement zone procedure has an obvious advantage over planning intervention: it applies to established as well as to new development. In addition, it offers a remedy to one notorious shortcoming in planning control: within a zone it would be an offence to allow noise levels to exceed the registered figure as a result of either a change or an intensification of use (e.g., the addition of machinery within a building.) Under the planning legislation, certain changes of use may constitute 'permitted development', and may therefore be undertaken without the need to secure planning approval even though they entail a rise in the emitted noise level.

A further advantage is apparent from a Department of the Environment circular in which a list of classes of premises which might be usefully included within a noise abatement order includes bingo halls, discotheques, stadia, railway stations and other premises[10] which, by virtue of being either 'permitted development' or premises of 'statutory undertakers', would normally escape control by local planning authorities. Finally, the enforcement of noise abatement powers is generally held to be more effective than that of planning controls.

Despite the apparent superiority of the noise abatement zone procedure, however, environmental health officers, no less than planning officers, remain convinced of the valuable role of planning powers in controlling fixed sources of noise. The experience and time involved in the complex operation of designating an area as a noise abatement zone has meant that few zones have been instituted. It is apparent that most planners and environmental health officers regard the judicious application of planning controls, including the appropriate use of planning agreements, as helping to minimise the need for resort to any of the noise control powers available under the Control of Pollution Act, 1974[6].

7. ENVIRONMENTAL ASSESSMENT

The Commission of the European Communities has long expressed the principle that prevention is better than cure in environmental protection and this interest eventually resulted in the European directive on environmental impact assessment (EIA) which came into force in July 1988.[3] EIA refers to the assessment of the environmental effects likely to arise from a major project (or other type of action) significantly affecting the environment. EIA is intended to form an integral part of the process of formulating, evaluating and reaching a decision upon a proposed action which may then be modified or even abandoned to mitigate the forecast environmental impacts. EIA should therefore be seen as an environmental management tool.

There is nothing new about the prior consideration of the environmental impact of proposed major projects. However, the formalisation of the process by

which this is undertaken stems mainly from the US National Environmental Policy Act 1969 and subsequent legal rulings and practice. This requires, inter alia, the proponents of an action to demonstrate that they have carried out an assessment by publishing an environmental impact statement describing in detail the environmental effects likely to arise from its implementation.

There is widespread agreement that the four main tasks involved in the EIA process are: identifying impacts; determining the magnitude of impacts; deciding upon the importance or significance of impacts; and communicating the results of these findings for consultation and decision-making purposes.

The Directive contains 14 articles and three annexes. Annex I lists the types of new project which must be subjected to an EIA. These include large power stations, motorways, and toxic waste disposal facilities. These may be described as 'mandatory' projects: member states (subject only to minor exceptions) must apply the provision of the Directive to all such projects.

Annex II of the Directive contains a much longer list of projects than Annex I which "shall be made subject to an assessment where Member States consider that their characteristics so require"[3]. These are grouped under 12 broad headings and may be described as 'discretionary' projects: member states may use their discretion in determining which projects should be subjected to the EIA process and the circumstances under which they can be excluded. Like several Annex I projects, some of these lie outside the town and country planning system, and almost 20 separate regulations have been made relating both to these projects and to those controlled under the UK planning legislation[11].

Articles 3 and 5 of the Director specify the minimum information which must be provided by the developer. Article 5 also indicates that the developer should furnish all the information listed in Annex III where it is relevant and reasonable to do so. This information includes an estimate of noise emissions resulting from the operation of the proposed project and a description of their likely significant effects on the environment[3]. Article 6 of the directive states that appropriate measures must be taken to ensure effective consultation and Article 8 requires that the results of this exercise, together with the developers' statement, must be taken into account in taking the decision on the project. The compromises made in the gestation of the directive are very evident in its final 'minimax' form. At its minimum, it requires that a limited list of projects be subjected to a limited form of EIA. At its maximum, it recommends that a much longer list of projects be subjected to a more universally recognised form of EIA. The Commission is no doubt hoping that practice in member states, including the UK, will prove to be well above the minimum required.

The regulations integrating EIA, or environmental assessment (EA), into the planning system[4] faithfully translate the provisions of the directive into British planning practice. The three annexes to the Directive become

Schedules 1, 2 and 3. Schedule 3 contains a list of the mandatory information requirements (para 2 defines 'specified information') together with a list of the desirable information set down in Annex III of the directive (paras 3 and 4), which includes its only direct reference to noise. An 'environmental statement' is defined by reference to Schedule 3 and 'environmental information' consists of this statement, together with the representation of consultees and members of the public about the impacts of the development[4].

While the circular explaining the regulations[5] never deviates from advising compliance only with the minimum requirements of the Directive, it is made clear that compliance should be meaningful. The circular contains, perhaps, the most thorough-going endorsement of the relevance of pollution in planning decisions and of the value of anticipating pollution and mitigating it since the 1973 planning and noise circular. "The Regulations will ... strengthen the need for appropriate consultations at the planning applications stage, e.g. with H.M. Inspectorate of Pollution and with the local environmental health department. ... The preparation of an environmental statement in consultation with the relevant authorities may be helpful in ensuring that the planning authority has expert analysis and full information on the likely effects of the development before any decision is taken on the planning application. ... The preparation of an environmental statement may also help to identify action which could be taken to mitigate environmental effects at a stage when plans can be adapted without serious difficulty or delay"[5].

This positive approach to the anticipatory control of noise and other forms of pollution extends to the draft advisory booklet produced for consultation by the Department of the Environment. This included noise emissions and 'levels and effects of noise from the development'[12] in its checklist of matters to be considered in an environmental statement. Both the Department of Transport 'Manual of Environmental Appraisal[13] and the now somewhat dated EIA manual commissioned by the Department of Transport[14] contain lengthy sections on noise impacts. It is apparent that environmental assessment should be a powerful tool in anticipatory noise control.

8. CONCLUSIONS

The 1973 planning and noise circular marked the high point of the last great surge of environmental interest in the United Kingdom. Since then the UK has witnessed a backlash of anti-regulatory reform in which the need for development, and for industrial development in particular, has been stressed. It has seen the abolition of the metropolitan counties, with their environmental expertise, the introduction of urban development corporations, of enterprise zones and of simplified planning zones, all with considerable potential for the generation of unanticipated noise problems. There have also been successive circulars effectively reducing the importance of environmental factors in planning decisions. For example:

> "Where there are planning objections [such as noise] it will often be possible to meet them to a sufficient degree by attaching conditions to the permission or by the use of agreements under Section 52 of the Town and Country Planning Act, 1971, rather than refusing the application."[15]

The 1973 circular became anachronistic.

If the refusal of planning permission on noise grounds has been discouraged, the validity of the use of noise conditions has never been questioned. This validity was confirmed in 1985, when the latest circular on the use of planning conditions specified model conditions relating to the limitation of certain activities to particular buildings, to the attenuation of noise emissions, to site boundary noise limits, to the limitation on duration of activity, to the noise insulation of specified plant, to receptor noise attenuation and to limitation on aircraft movements.[2]

Similarly, there is evidence that the professionalism of planning and environmental health officers, and the 'high-tech' image of many enterprise zones has ensured that noise controls have been achieved through various quasi-planning measures.[16] The same may not be true of simplified planning zones, but the evidence on which to form a judgement is not yet available. Overall, by no means all the gains made possible by the dissemination of the 1973 circular have been lost.

The introduction of environmental assessment has been one of only two increases in planning regulation by the Conservative administration (the other related to hazardous substances control) and is a direct response to the highly significant and increasing European pressure for tighter environmental controls. It is a timely measure, as it is specifically designed to increase the consideration of environmental impacts, including noise, prior to the decision whether or not to grant planning permission. As such, it is very much in keeping with current 'green' concerns and provides an opportunity for environmental health and planning officers to ensure better mitigation of noise impacts and to refuse development likely to result in unacceptable noise climates. The discretionary nature of the planning system means that such refusals, with or without the information furnished by environmental assessments, can become more commonplace at the behest of the Secretary of State of the Environment. It is too early to state whether environmental assessment is indeed having a favourable effect on the consideration of noise impacts by developers. It would be expected, at any event, that early practice would be very variable, and that the learning curve would only be surmounted slowly.

The introduction of environmental assessment may thus mark a new beginning in planning and noise control, or at least a renaissance. There remain, of course, many steps to take to make significantly improved control a reality.[17]

The Use Classes Order and the General Development Order require amendment respectively to limit permitted changes of use leading to noise pollution and to render consultation of environmental health departments mandatory. Enforcement of planning controls needs to be strengthened. Diffusion of best practice, better training of both planners and environmental health officers, better guidance and further research are all required.[17] Adherence to the spirit, and not just to the letter, of the European directive on environmental assessment is needed.[11] The challenge to integrate planning noise controls must be accepted by the environmental professions: only then will they achieve the goal of planning pollution prevention.

9. REFERENCES

[1] DEPARTMENT OF THE ENVIRONMENT, Planning and Noise Circular 10/73, HMSO, London, 1973.

[2] DEPARTMENT OF THE ENVIRONMENT, The Use of Conditions in Planning Permissions Circular 1/85, HMSO, London, 1985.

[3] COMMISSION OF THE EUROPEAN COMMUNITIES, 'Council Directive of 27 June 1988 on the Assessment of the Effects of Certain Public and Private Projects on the Environment' Official J Europ. Comm, L175 40-48 (1985).

[4] Town and Country Planning (Assessment of Environmental Effects) Regulations 1988, SI No. 1199.

[5] DEPARTMENT OF THE ENVIRONMENT, Environmental Assessment Circular 15/88, HMSO, London, 1988.

[6] C. E. MILLER & C. M. WOOD, Planning and Pollution Oxford University Press, Oxford, 1983.

[7] Control of Pollution Act, 1974, S.58(1)

[8] M. S. ANKERS, 'The Control of Noise by Planning' 49th Annual Conference of the National Society for Clean Air, Llandudno, NSCA, Brighton, 1982.

[9] NOISE ADVISORY COUNCIL, Noise in Public Places HMSO, London, 1974.

[10] DEPARTMENT OF THE ENVIRONMENT, Control of Pollution Act, 1974: Implementation of Part III - Noise Circular 2/76, HMSO, London, 1976.

[11] C. M. WOOD 7 & G. McDONIC, 'Environmental assessment: challenge and opportunity' The Planner 75(11) 12-18 1989.

[12] DEPARTMENT OF THE ENVIRONMENT, The Planning System: The Environmental Assessment of Major Projects in England and Wales Draft Advisory Booklet, DOE, London, 1986.

[13] DEPARTMENT OF TRANSPORT, Manual of Environmental Appraisal, DOT, London, 1983.

[14] B. D. CLARK, K. CHAPMAN, R. BISSET, P. WATHERN & M. BARRETT, A Manual for the Assessment of Major Development Proposals Department of the Environment, HMSO, London, 1981.

[15] DEPARTMENT OF THE ENVIRONMENT, Development Control: Policy and Practice Circular 22/80, HMSO, London, 1980.

[16] C. M. WOOD & P. HOOPER, 'The effects of the relaxation of planning controls in enterprise zones on industrial pollution' Environment and Planning A, forthcoming.

[17] C. M. WOOD Planning Pollution Prevention Heinemann Newnes, Oxford, 1989.