

Guidance to accompany the Statutory Nuisance Provisions of the Public Health etc (Scotland) Act 2008



The Scottish
Government

Guidance to accompany the Statutory Nuisance Provisions of the Public Health etc (Scotland) Act 2008

© Crown copyright 2009

ISBN: 078-0-7559-5970-9

This document is also available on the Scottish Government website:
www.scotland.gov.uk

RR Donnelley B59073 01/09

Further copies are available from:

Duncan McNab
Air Noise & Nuisance Team
Scottish Government
Area 1G North
Victoria Quay
Edinburgh
EH6 6QQ

Tel: 0131 244 0393

Executive Summary

This document is provided to assist in the application of the new Statutory Nuisance provisions contained in the Public Health etc (Scotland) Act 2008. It should be read in conjunction with the Environmental Protection Act 1990 and Part 9 of the Public Health etc (Scotland) Act 2008.

The new provisions in Part 9 of the Public Health etc (Scotland) Act 2008 are:

- Include insect nuisance, artificial light pollution and nuisance associated with water as statutory nuisances in line with legislation in England and Wales;**
- Introduce a regulation-making power to amend the statutory nuisance regime in the future;**
- Introduce a new fixed penalty regime for non-compliance with an abatement notice served under s80 of the Environmental Protection Act 1990;**
- Amend the Water Services etc. (Scotland) Act 2005 in relation to sewerage nuisance**

This document is primarily procedural advice for the attention of the Environmental Health Officers and other local authority officials who investigate Statutory Nuisance complaints.

It provides procedural advice on the provisions of Part 9 of the Public Health etc (Scotland) Act 2008, which are scheduled for commencement on 26th January 2009.

It also provides procedural guidance on existing Statutory Nuisance provisions within the Environmental Protection Act 1990 and on other matters which raise similar issues to statutory nuisances but which are dealt with by other existing legislation.

This document also includes examples of case law that are for illustrative purposes only and should not be construed as legal advice. Application of the legal provisions should be on a case-by-case basis and local authorities are advised to consult their own legal advisors.

Acknowledgements

The Scottish Government would like to thank the following organisations for use of their material.

The Institution of Lighting Engineers (ILE)

The International Commission on Illumination (CIE)

Department of Environment, Food and Rural Affairs (DEFRA)

CONTENTS

1.0	INTRODUCTION	1
2.0	OVERVIEW OF EXISTING STATUTORY NUISANCE REGIME	3
3.0	GUIDANCE ON EXISTING STATUTORY NUISANCE PROVISIONS	5
4.0	REASONS FOR NEW STATUTORY NUISANCE PROVISIONS AND PUBLIC HEALTH BILL CONSULTATION REPOSSES	21
5.0	INSECT NUISANCE PROVISIONS	25
6.0	LIGHT NUISANCE PROVISIONS	30
7.0	WATER NUISANCE PROVISIONS	33
8.0	FIXED PENALTY NOTICE PROVISIONS	36
9.0	MISCELLANEOUS AMENDMENTS	47
10.0	ADDITIONAL GUIDANCE ON NUISANCES ALREADY COVERED BY THE ENVIRONMENTAL PROTECTION ACT 1990	50
ANNEX 1	EXTRACT OF PART 9 OF THE PUBLIC HEALTH ETC (SCOTLAND) ACT 2008	54
ANNEX 2	UNOFFICIAL CONSOLIDATED VERSION OF PART III OF THE ENVIRONMENTAL PROTECTION ACT 1990	60
ANNEX 3	UNOFFICIAL CONSOLIDATED VERSION OF THE STATUTORY NUISANCE (APPEALS) (SCOTLAND) REGULATIONS 1996	78
	APPENDIX 1 – TECHNICAL GUIDANCE ON INSECT NUISANCE	82
	APPENDIX 2 – TECHNICAL GUIDANCE ON LIGHT NUISANCE	108

1.0 – INTRODUCTION

- 1.1 This guidance is provided to assist with application of the new and amended statutory nuisance provisions of the Environmental Protection Act 1990 (the 1990 Act) introduced by the Public Health etc (Scotland) Act 2008 (the 2008 Act). This guidance includes a brief overview of the statutory nuisance regime and detailed procedural and technical guidance on the new provisions relating to statutory nuisance contained in the 2008 Act. It also provides additional guidance on the application of existing powers.
- 1.2 The provisions of the 2008 Act are very wide ranging and include:-
 - a) amendment to the law on public health,
 - b) provisions about mortuaries and the disposal of bodies,
 - c) provisions to enable the Scottish Ministers to implement their obligations under the International Health Regulations,
 - d) powers to enable provision to be made in relation to the provision of information to users on the effects on health of sunbeds
 - e) amendments to the law on statutory nuisances
 - f) minor and consequential amendments to the sewerage nuisance provisions of the Water Services etc. (Scotland) Act 2005.
- 1.3 The 2008 Act includes a number of new and amended provisions relating to statutory nuisance as follows:-
 - a) to include insect nuisance, artificial light pollution and nuisance associated with water in the statutory nuisance regime of the 1990 Act,
 - b) to introduce a new regulation-making power to amend the statutory nuisance regime in the future,
 - c) to introduce a new fixed penalty regime for non-compliance with an abatement notice served under section 80 of the 1990 Act,
 - d) to amend the Water Services etc (Scotland) Act 2005 in relation to sewerage nuisance.
- 1.4 The provisions relating to statutory nuisance are found in Part III of the 1990 Act and the changes to them are introduced by Part 9 of the 2008 Act. Schedule 2 of the 2008 Act includes some minor and consequential amendments. The relevant sections of the 2008 Act are reproduced in Annex 1 of this guidance.
- 1.5 To assist in analysis of the changes implemented by the 2008 Act, Annex 2 contains a consolidated version of Part III of the 1990 Act and Annex 3 contains a consolidated version of the Statutory Nuisance (Appeals)(Scotland) Regulations 1996. The versions included in Annexes 2 and 3 are unofficial versions provided to assist in understanding the impact of the changes on the statutory nuisance regime.

- 1.6 The Scottish Government and previous administrations recognised for some time that the statutory nuisance provisions in the 1990 Act required updating, not least in response to evolving societal and climatic changes.
- 1.7 In view of other legislation introduced in the interim, including EC Directives, and for example the Antisocial Behaviour etc (Scotland) Act 2004, careful consideration has been given to avoid double regulation.
- 1.8 The Clean Neighbourhoods and Environment Act 2005 (CNE Act) introduced new statutory nuisances in England and Wales relating to insect nuisance and artificial light pollution. The 2008 Act presented the opportunity to include these same nuisances into the Scottish regime to bring parity of approach for local authorities across the UK.

2.0 – OVERVIEW OF EXISTING STATUTORY NUISANCE REGIME

- 2.1 There are two ways of addressing a problem of nuisance in Scotland: either through the common law (i.e. law made by the Courts in successive judgements) or, if applicable, through the statutory provisions in the 1990 Act. (i.e. laws passed by Parliament). Nuisance generally entails some form of damage to, or intolerable interference with a person's use or enjoyment of property. There is consequently any number of situations that a court may consider to be a nuisance under common law. Under the 1990 Act however, only certain matters may constitute a statutory nuisance. The various matters that may constitute a statutory nuisance are set down in section 79 of the 1990 Act. In each case, the matter must either be a nuisance in its own right or be prejudicial to health in order to be a statutory nuisance.
- 2.2 Part III of the 1990 Act contains the main provisions on statutory nuisance. It enables local authorities and individuals to take action to secure the abatement of a statutory nuisance. Local authorities have a duty to inspect their areas to detect whether a nuisance exists or is likely to occur or recur. An authority must also take such steps as are reasonably practicable to investigate any complaint of statutory nuisance from a person living in its area. Where the local authority is satisfied that a statutory nuisance exists, or is likely to occur or recur, it must serve an abatement notice on the person responsible. The notice should impose all or any of the following requirements:
- a. the abatement of the nuisance or prohibition or restriction of its occurrence or reoccurrence;
 - b. the carrying out of such works and other steps necessary for the any of those purposes.
- 2.3 The person on whom the notice is served may appeal to the sheriff within 21 days of date on which he is served with the notice. The detail of the appeal procedure is included in Schedule 3 of the 1990 Act and the regulations made under the Schedule: the Statutory Nuisance (Appeals)(Scotland) Regulations 1996.
- 2.4 Failure to comply with the terms of an abatement notice without reasonable excuse may result in prosecution in the Sheriff Court. On summary conviction a person may be liable to a fine not exceeding level five on the standard scale (presently £5000) plus an additional daily fine of an amount equal to one tenth of that level (i.e. £500) for each day on which the offence continues after conviction. Where the conviction is for an offence on industrial, trade or business premises, the maximum fine on summary conviction is £40,000.

- 2.5 It is a defence against liability for the failure to comply with (or contravention of) an abatement notice to prove that the best practicable means were used to prevent or counteract the effects of the nuisance. However this defence is not available in the case of certain nuisances and these are listed in section 80 of the 1990 Act.
- 2.6 If an abatement notice is not complied with, the local authority may take the necessary steps to abate the nuisance itself (including in the case of noise nuisance, seizure of the equipment causing the noise) and may recover the costs that were reasonably incurred in doing this from the responsible person.
- 2.7 The 1990 Act also makes provision for any person aggrieved by the existence of a statutory nuisance to make an application to the Sheriff who, if satisfied a nuisance exists, shall make an order requiring the abatement of the nuisance and/or the prevention of it's occurrence or recurrence.
- 2.8 Statistics provided by the Royal Environmental Health Institute for Scotland (REHIS) for nuisance demonstrate that only a tiny percentage of complaints result in successful prosecutions (for 44,940 complaints in 2006 there were 1,500 notices served and 65 prosecutions secured). The Antisocial Behaviour Noise Scheme statistics show a similar trend with 38,524 complaints in 2007 resulting in 2,645 warning notices but a higher number of fixed penalty notices (187). These figures suggest that the fixed penalty notice route may make enforcement and abatement of nuisances more effective, if only through providing an additional deterrent.
- 2.9 The nuisance statistics quoted do not illustrate however what proportion of complaints were not established as a statutory nuisance, resolved by informal intervention or through compliance with abatement notices.

3.0 – GUIDANCE ON EXISTING STATUTORY NUISANCE PROVISIONS

Introduction

- 3.1 The statutory nuisance regime has its roots in 19th century public health protection legislation. During the 19th century legislation was implemented to address the growing concerns around communicable infectious diseases such as cholera and typhoid. The 1875 Public Health Act enacted in England was the result of a cholera pandemic between 1863 and 1875. The improved sanitary conditions that ensued lead to a change of focus, with nuisance provisions being used to deal with conditions that posed a risk to human health or harm to the amenities of a neighbourhood.
- 3.2 Prior to the amendments set out in the 2008 Act, section 79(1) of the 1990 Act established that the matter which could constitute a statutory nuisance were as follows:-
- i) the state of premises
 - ii) smoke emitted from premises
 - iii) fumes or gases emitted from premises
 - iv) dust, steam, smell or other effluvia from industrial, trade or business premises
 - v) accumulations or deposits
 - vi) animals
 - vii) noise from premises
 - viii) noise from vehicles or equipment in a road
 - ix) any other matter declared to be a statutory nuisance by an enactment.

As noted in paragraph 2.1 above, in every case, the matter must be either a 'prejudice to health' or a 'nuisance' to be a statutory nuisance under the 1990 Act.

- 3.3 As the principle of statutory nuisance has been in existence for more than 100 years there has been a significant amount of case law relating to specific interpretation of the legislation. Whilst a lot of this case law is based on English law it serves as a guide to previous interpretation of the law and should be considered when reviewing possible statutory nuisance conditions in Scotland. There is significant weight put on the meaning of nuisance in common law when interpreting the term statutory nuisance. However, the examples of case law included in the following paragraphs are for illustrative purposes only. Ultimately determination of these issues is for the Scottish Courts alone. Local authorities should approach statutory nuisances on a case-by-case basis and take advice from their own legal advisors.

Prejudicial to Health

- 3.4 The term 'prejudicial to health' is defined in section 79(7) of the 1990 Act as 'injurious, or likely to cause injury, to health'. However determination of what in fact are conditions prejudicial to health is more a judgement based upon a balance of common sense and the experience of public health professionals. The use of the term 'injury to health' is central to this consideration – it has been held (*Coventry City Council v Cartwright 1975*) that it is not sufficient that there is the risk of personal injury or accident (such as from broken glass) but there must be an underlying threat to health from disease. However it has been held that the impact on health may be indirect (such as sleeplessness – *Lewisham v Fenner 1995*).
- 3.5 The determination of likelihood of injury to health does not require evidence from medical experts (*London Borough of Southwark v. Simpson 1999*) and indeed the expertise of environmental health officers and building surveyors in evaluating likelihood of injury to health has been recognised. Also the risk of injury to health does not relate to the risk to a particular person in particular circumstances but to the potential impact on health (*Cunningham v Birmingham City Council 1998*).

Nuisance

- 3.6 Nuisance is not defined in the 1990 Act but can be regarded as interference that ordinary decent people would consider unreasonable with the personal comfort or enjoyment or amenity of neighbours or the community. This concept was further considered in a recent case (*Baxter v London Borough of Camden 2000*) when it was equated to the principle of reciprocity – a person must show the same consideration to his neighbours as he would expect them to show for him. This case went further as it established that the normal, everyday residential use of premises would not constitute a common law nuisance and therefore could not constitute a statutory nuisance.
- 3.7 However this does not address the issue that what is normal and everyday for one person may not be for another because of the differing lifestyles of neighbours. A recent case (*Robb v Dundee City Council 2002*) held that the word "nuisance" in section 79 refers to a set of physical circumstances that are more than can be reasonably tolerated.
- 3.8 The distinction recognised in England between public and private nuisance is not a classification used in Scots law. In England a private nuisance is some unlawful interference with a person's use or enjoyment of land or some right over or in connection with it, and the measure of damages is the reduction in land value. In Scotland, the liable party must be at (legal) fault, and the behaviour more than can be reasonably tolerated.

3.9 There are three significant differences between common law nuisance and statutory nuisance:-

a) for a statutory nuisance to occur there must be a common law nuisance; however not all common law nuisances would amount to a statutory nuisance (*NCB v Thorne 1976*).

b) the statutory nuisance regime, unlike common law nuisance does not deal with harm to property; a statutory nuisance must interfere with personal comfort in a manner that affects their wellbeing for example dust affecting cars would not be nuisance but the same dust in a persons eyes or hair would interfere with personal comfort even if there were no adverse health impact (*Wivenhoe Port Ltd v Colchester Borough Council 1985*).

c) there is no requirement for a person to have any property rights as for a common law private nuisance – a statutory nuisance protects people not property (*Hunter v Canary Wharf Ltd 1997*).

What Constitutes a Nuisance?

3.10 There is no clear objective definition as to what constitutes a nuisance. It has been said that there is a scale between mildly irritating and intolerable and in each case the determination of whether a nuisance exists is a matter of judgement (*Budd v Colchester BC 1997*). In addition, the determination is based upon an objective test of reasonableness. In cases that have been considered, courts have not taken regard of the particular sensitivities of an individual (*Heath v Brighton Corporation 1908*). Indeed the concept was clearly stated in 1872 in respect of noise:-

'...a nervous, or anxious, or prepossessed listener hears sounds which would otherwise have passed unnoticed, and magnifies and exaggerates into some new significance, originating within himself, sounds which at other times would have been passively heard and not regarded' (*Gaunt v Fynney 1872*).

3.11 Therefore a person with a particularly sensitive olfactory or auditory response is not given any higher standard of protection than a person with 'normal' response. However, although there are powers under section 82 of the 1990 Act for an individual to take action, the primary enforcement method relies on the local authority taking action. The local authority must be of the opinion that either substantial personal discomfort or a health effect must exist. There are eight key issues to consider when evaluating whether a nuisance exists:-

- i. **IMPACT** – this is a measure of the impact of the alleged nuisance on the receptor. In some cases assessment of the impact can be supported by objective measurements (such as noise) but in many cases it will be the subjective view of the local authority as

- to the degree of health risk or interference. In addition to the impact on individuals the authority should consider the extent of the impact (how many persons, how far from the source etc.)
- ii. **LOCALITY** – the potential for amenity interference is largely related to the character of the neighbourhood. It was famously summarised as ‘what would be a nuisance in Belgrave Square would not necessarily be so in Bermondsey (*Sturges v Bridgman 1879*). Many odour and noise nuisances are due to the proximity of the receptor to a source that is generally out of character with the area (for example a factory or a waste water treatment works adjacent to a housing estate). The number of persons affected and the degree of intrusion will depend upon the proximity of the source and receptor and the sensitivity of the receptors.
 - iii. **TIME** – many nuisances have a significant impact because of the time at which the nuisance occurs and the degree of impact changes depending upon the time of occurrence. For example noise from an entertainment facility would be less acceptable after 23.00 hours. Also odours are often subjectively more annoying during periods when members of the public are outdoors (for example daytime periods during summer months).
 - iv. **FREQUENCY** – nuisances that occur frequently or continuously are more likely to be determined to be a nuisance (depending to some degree on the impact). For example dust emissions from a quarry once per month would be regarded very differently to emissions four days per week for 6 weeks a year. Restriction of the frequency of an activity may be method of abatement (a farm was limited to spreading manure for 15 days per year – *Wealden DC v Hollings 1992*). However, in some circumstances odours that are released periodically can be more intrusive and in this case the odour frequency is often assessed in conjunction with the odour's persistence in the environment.
 - v. **DURATION** – in general short-term events would be regarded differently to longer period or continuous impact. For example a person practicing a musical instrument for one hour would be assessed differently to a four-hour practice session. However the duration would have to be considered alongside the time and frequency – practice for one-hour at 23.00 hours or every day may constitute a nuisance. Similarly a fixed period temporary noise source (such as construction works) may not constitute a nuisance (*Gosnell v Aerated Bread Co Ltd 1894*).
 - vi. **CONVENTION** – convention is important when determining what a reasonable person would find objectionable. For example whilst some persons may find the noise of garden equipment on a Sunday morning objectionable – however such practice is widespread and accepted and would be unlikely to be held as a nuisance. Therefore the existence of a widespread practice or common usage in an area is an important factor (*Leeman v Montagu 1936*).
 - vii. **IMPORTANCE** – the importance of an activity in respect of the community is a key consideration. For example major road

improvements that will improve the air quality and noise environment for many may cause some disturbance to a few persons – this is a balance that should be considered. However, there is a point when even a socially beneficial activity creates such an effect that it becomes unacceptable and hence a nuisance (*Dennis v Ministry of Defence 2003*). This needs to also be considered along with the avoidability of the impact and also the principle of best practicable means.

- viii. **AVOIDABILITY** – even though an activity may have social importance there should be a balance as to whether reasonable steps have been taken to minimise the impact. For example it would be difficult to control noise from a children’s playground during the day but there are many methods available to reduce the impact of dust from the extraction equipment at a woodworking factory.

- 3.12 The standard cannot be defined precisely and much will depend on the view taken by the court of the seriousness of the harm, the health impact and a balance of the key issues outlined above.

Categories of Statutory Nuisance – Section 79(1)

- 3.13 **Any premises in such a state as to be prejudicial to health or a nuisance** – This category of nuisance was developed to largely deal with conditions at dwellings but because premises is defined in section 79(7) it also includes land and vessels. It covers industrial, trade and business premises but in this case there is a statutory defence that the ‘best practicable means’ have been used (see 3.35). It is important to note that it is the condition of the premises as a whole not individual defects that confer a nuisance but a premises may be a statutory nuisance as a result of the cumulative impact of a number of minor defects or one major defect. In addition it is the physical condition of the premises and not the way the premises are being or have been used that is relevant (*Birmingham DC v Kelly 1985*). The design or layout of a premises alone cannot render the premises a nuisance (*Birmingham CC v Oakley 1998*). Also the presence of inadequate sound insulation that permits external noise to penetrate has been held not to be a nuisance under this limb (*Vella v Lambeth 2005*). Finally it has been held in an English case that a nuisance existed where a landslip occurred affecting adjacent houses (*Leakey v National Trust*) – therefore the natural condition of land may itself constitute a nuisance.

- 3.14 **Smoke emitted from premises so as to be prejudicial to health or a nuisance** – This provision sits alongside many other legislative controls over smoke. Smoke is defined in section 79(7) as including soot, ash, grit and gritty particles emitted in smoke and has been held to include the smell of smoke (*Griffiths v Pembrookshire CC 2000*). There are a number of exemptions from this provision as they are covered by other legislation. These are premises occupied on behalf of

the Crown or a visiting force for naval, military or air force purposes or for the purposes of the department of the Secretary of State having responsibility for defence and:-

- (i) smoke emitted from a chimney of a private dwelling within a smoke control area,
- (ii) dark smoke emitted from a chimney of a building or a chimney serving the furnace of a boiler or industrial plant attached to a building or for the time being fixed to or installed on any land,
- (iii) smoke emitted from a railway locomotive steam engine, or
- (iv) dark smoke emitted otherwise than as mentioned above from industrial or trade premises.

The term 'industrial or trade premises' occurs at several points in the nuisance provisions and is defined in section 79(7) as :-

premises used for any industrial, trade or business purposes or premises not so used on which matter is burnt in connection with any industrial, trade or business process, and premises are used for industrial purposes where they are used for the purposes of any treatment or process as well as where they are used for the purposes of manufacturing.

In effect this section mainly covers smoke from domestic premises (other than from chimneys in a smoke control area) and smoke other than dark smoke from industrial and trade premises. The smoke could either be such that it threatens or injures health or is a nuisance due to interference with enjoyment of property or quality of life. There is another restriction under this section that a local authority cannot take action without Government consent where action could be taken under regulations made under section 2 of the Pollution Prevention and Control Act 1999. There is a statutory defence that the 'best practicable means' have been used (see 3.35) where smoke is emitted from a chimney.

3.15 Fumes or gases emitted from premises so as to be prejudicial to health or a nuisance – This section only applies to private dwellings. Fumes and gases are defined in section 79(7) as:-

*“fumes” means any airborne solid matter smaller than dust; and
“gas” includes vapour and moisture precipitated from vapour.*

The definition of fumes includes solids that are smaller than dust (dust can be taken as solids suspended in air with a particle size between 1 and 76 microns) and in the definition of gas, a vapour includes liquid suspended in air. Perhaps the most common use of this section would be to deal with exhaust fumes from heating equipment affecting a neighbouring property, it could also be used to control somebody respraying cars at home causing nuisance from vapour carry-over. There is also the consideration that although smells are not specifically included, smell is caused by either liquid or solid droplets carried in air and hence fall within this description. Whilst there is specific provision for odour in section 79(1)(d) this only applies to industrial and trade

premises. The provisions for fumes and gases could therefore be used to deal with odours produced from private dwellings such as cooking smells. The nuisance provisions provide a number of methods for dealing with smell from domestic premises – under section 79(1)(a) caused by the state of the premises, section 79(1)(b) when associated with smoke, section 79(1)(e) when associated with accumulations or deposits and finally under section 79(1)(c) as fumes or gases.

- 3.16 **any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance** – This section only applies to industrial and trade premises (see 3.14) but interestingly is not restricted to emissions from, but to arisings on the premises and hence could be used where health of persons at the premises is affected. Dust does not include dust from a chimney as an ingredient of smoke and also by virtue of section 79(5) does not apply to steam emitted from a railway locomotive engine. Whilst the majority of the terms used are self-explanatory the term effluvia is not in common usage. In earlier legislation this term had been held to include smell (*Malton Board of Health v Malton Manure Co 1879*) but the term is wider than this. Effluvia suggest something being emitted and a common dictionary definition is *a slight or invisible exhalation or vapour, especially one that is disagreeable or noxious*. There is a statutory defence that the ‘best practicable means’ have been used (see 3.35). Again a local authority cannot take action without Government consent where action could be taken under regulations made under section 2 of the Pollution Prevention and Control Act 1999.
- 3.17 **any accumulation or deposit which is prejudicial to health or a nuisance** – The terms used in this section are not defined but deposit suggests an individual instance whereas accumulation suggests the result of a number of deposits. This section can be used where health of persons at the premises where the accumulation or deposit occurs is affected. It is a wide-ranging provision and has been subject to much previous case law. The accumulation of inert materials cannot be prejudicial to health because of the risk of physical injury (*Coventry City Council v Cartwright 1975*) but there must be an underlying threat to health from disease. However in this case had the accumulation been a nuisance action could still have been taken. Action under section 82 can be taken by a member of the public where the land is owned by a local authority (*R v Epping (Waltham Abbey) 1947*) and can also be used even if the accumulation is not permanent and where the person on whom the notice is served was not the first cause. The fact that an accumulation has existed for a period of time does not give a right for it to continue (*Flight v Thomas 1839*). It has been held that an accumulation of soil against the wall of a house causing dampness in an adjacent house is a nuisance (*Hardman v North Eastern Ry 1878*). There is a statutory defence that the ‘best practicable means’ have been used where the accumulation or deposit occurs on industrial or trade premises (see 3.35). Again a local authority cannot take action

without Government consent where action could be taken under regulations made under section 2 of the Pollution Prevention and Control Act 1999.

- 3.18 **any animal kept in such a place or manner as to be prejudicial to health or a nuisance** – In this section the term animal has a wide meaning – it has been held to include poultry (*R v Brown 1889*). The term ‘kept’ is also important – it is likely that this implies a positive action whereby there is intent for the animal to be present rather than just animals gaining access to a place (such as feral pigeons entering buildings – however see section 10 for a discussion on feral birds). The animals do not have to be permanently at a premises (*Steers v Manton 1893*) but may be there for a short time. In this section the reference is to a ‘place’ which is a wide term and could include any type of premises or public place and it has been held that sheep droppings in a market are a nuisance (*Draper v Sperring 1861*). There is uncertainty in previous cases as to whether this section can be used for noise from animals but it is recommended that for noisy animals the provisions of section 79(1)(g) are more appropriate. There is a key issue in respect of this section as to the extent that this section applies where the animals are away from the immediate control of their keeper. It has been held that where a premises were such that cats strayed from it and caused nuisance to neighbours, it was a nuisance falling within this section (*R v Walden-Jones ex parte Coton 1963*). There is a statutory defence that the ‘best practicable means’ have been used where the nuisance occurs on industrial or trade premises (see 3.35).
- 3.19 **noise emitted from premises so as to be prejudicial to health or a nuisance and noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street or in Scotland, road** – This section relates to noise which is one of the most common causes for nuisance complaint. The definition of noise includes vibration but does not apply to noise caused by aircraft other than model aircraft. The provisions relating to noise in a road does not apply to noise by traffic, by any naval, military or air force of the Crown or by a visiting force or by a political demonstration or a demonstration supporting or opposing a cause or campaign. This section includes the term ‘emitted from premises’ and hence must affect premises other than those at which the noise is generated. However it has been held that noise is emitted from premises even if it passes through them having been produced elsewhere (*Network Housing Association v Westminster CC 1995*). There is a statutory defence that the ‘best practicable means’ have been used where the noise occurs on industrial or trade premises (see 3.35). Again a local authority cannot take action without Government consent where action could be taken under regulations made under section 2 of the Pollution Prevention and Control Act 1999. The Scottish Government has produced detailed guidance on noise and this should be referred to for more information (Guidance on the Creation and Maintenance of Effective Noise Management Policies and Practice for Local

- 3.20 **any other matter declared by any enactment to be a statutory nuisance** – This section primarily incorporates into the nuisance provisions a number of instances where nuisances were conferred through other statutory provisions. The majority of these were found in the Public Health Act 1936 and do not therefore apply in Scotland. There is however one category provided under section 151 of the Mines and Quarries Act 1954 that applies in Scotland. This Act places a duty on the owner (the person entitled to work the mine) of every abandoned mine (and mines that have not been worked for twelve months) to secure that the surface entrance to every shaft or outlet thereof is provided with a properly maintained and efficient enclosure, barrier, plug or other device so designed and constructed as to prevent any person from accidentally falling down the shaft or from accidentally entering the outlet. This provision does not apply to mines which have not been worked since 1872 unless they are mines for coal, stratified ironstone, shale or fireclay.

This section makes the following statutory nuisances:-

- a) the surface entry of any shaft or outlet of any abandoned mine or one which has not been used for 12 months which is not provided with a properly maintained enclosure, barrier, plug or other device to prevent any person from accidentally falling down the shaft or accidentally entering the outlet,
- b) the surface entrance of any shaft or outlet of a mine which is not provided with a properly maintained enclosure, barrier, plug or other device to prevent any person from accidentally falling down the shaft or accidentally entering the outlet and by reason of accessibility from a road or place of public resort constitutes a danger to members of the public,
- c) a quarry (whether in course of being worked or not) which is not provided with an efficient and properly maintained barrier to prevent any person from accidentally falling into the quarry and by reason of accessibility from a road or place of public resort constitutes a danger to members of the public.

Section 151(3) of the Mines and Quarries Act 1954 provides for the recovery of costs from the owner of the mine or quarry if any other person has to carry out works to abate or prevent the nuisance. It has been held that the duty under c) above applies to places where the public may go even if they do not have a right to resort there (*Kitson v Ashe 1899*). This section therefore also places a duty on local authorities to survey their area for such nuisances. It has been determined that the authority would not be liable to manslaughter charges if somebody was killed due to a fall into an unfenced quarry (*R v Clerk of Assize of Oxford Circuit 1807*) but the authority may be in

breach of its statutory duty and the government may declare the local authority in default under the provisions of Schedule 3 of the 1990 Act.

- 3.21 There is one general exemption under Part III of the 1990 Act and that is that a matter cannot constitute a statutory nuisance if it consists of, or is caused by, any land being in a contaminated state (that is land where significant harm is being caused or there is a significant possibility of such harm being caused or significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused). Such cases are covered by Part 2A of the EPA.

Abatement Notices

- 3.22 If a local authority is satisfied that a statutory nuisance exists, or is likely to occur or recur, they must serve an abatement notice. This notice can require:-

- prevention or restriction of the occurrence of a nuisance
- abatement of a nuisance
- prevention or restriction of the recurrence of a nuisance
- abatement and prevention or restriction of the recurrence of a nuisance

and may also specify works or other steps to meet this objective. The notice must specify the time by which the requirements are to be complied with and also a statement giving details of the right of appeal to the sheriff (Schedule 3 paragraph 6) and it may include a statement to prevent suspension on appeal (see 3.26).

- 3.23 There are a number of issues for a local authority to consider in formulating a notice. The requirements of an abatement notice should be carefully drafted to make it clear what is required to comply with the notice but should not be so prescriptive as to leave the recipient with no discretion as to how to comply. There is significant precedent in relation to whether a notice should specify exact works or merely require that the nuisance be remedied. It was held (*Kirklees MBC v Field 1998*) that where works are required as a matter of fact and where there would be any doubt as to what is required they should be specified. However, the Court of Appeal held that a notice need not specify the works but leave the choice of means of abatement to the person on whom the notice is served (*R v Falmouth and Truro Port Health Authority ex parte South West Water Services 2000*). If the abatement notice simply requires the recipient to, 'take steps' to abate the nuisance in question, the requisite steps need not be specified since the notice could be complied with by taking passive action – for example by avoiding the activity causing the nuisance (*Sevenoaks DC v Brands Hatch 2001*). Where specific works are required by the terms of the abatement notice, it must be both precise and practicable in its terms and avoid any uncertainty as to what is required (*Strathclyde Regional Council v Tudhope 1983*). In some respect the most effective method of formulation is to require the

person responsible for the nuisance simply to abate it or prohibit its recurrence unless there is some good reason why further measures should be specified. However it should be considered that it might be easier to demonstrate non-compliance where the requirements of the notice are more specific.

- 3.24 The notice need not specify whether the adverse state of affairs which is the subject matter of the notice is either prejudicial to health or a nuisance. It suffices that the conditions that constitute the nuisance are sufficiently specified to the extent that the person who is served with the notice knows what is required to abate the nuisance.
- 3.25 The abatement notice shall be served on the person responsible for the nuisance (the person to whose act, default or sufferance the nuisance is attributable). 'Act' is straightforward as this is a deliberate action, 'default' is the failure to perform a reasonable duty and 'sufferance' is where either permission is granted leading to a nuisance or a nuisance is allowed to continue where the occupier or owner had, or should have had knowledge of it's existence (*Sedleigh- Denfield v O'Callaghan 1940*). However in the case of a nuisance arising from any defect of a structural character it shall be served on the owner of the premises and where either the person responsible cannot be found or the nuisance has not yet occurred it should be served on the owner or occupier of the premises. More than one person can be responsible for the nuisance, so more than one person can be served with the notice.

Appeals

- 3.26 The Act provides that a person served with an abatement notice may appeal against the notice to the sheriff within the period of twenty-one days beginning with the date on which he was served with the notice. The sheriff may quash or vary the notice or dismiss the appeal. The grounds for appealing the notice need to be specified and are set down in the Statutory Nuisance (Appeals)(Scotland) Regulations 1996. The local authority should consider the possibility of an appeal against any abatement notice it serves in respect of both content and timescales of the notice and the grounds for making an appeal should always be kept in mind. The local authority will also have to consider whether the abatement notice should be suspended whilst an appeal is pending. More than one person can be responsible for the nuisance, so more than one person can be served with the notice. In such a case, unless separate notices are served on each person responsible, then an appeal by one will have the effect of suspending the notice against all, until the appeal is resolved.
- 3.27 The grounds for appeal can be summarised as follows:-
- (a) that the abatement notice is not justified,

(b) that there has been some informality, defect or error with the abatement notice

(c) that the authority has refused unreasonably to accept compliance with alternative requirements, or that the requirements of the abatement notice are unnecessary or otherwise unreasonable in character or extent,

(d) that the time specified for compliance is not reasonably sufficient,

(e) where the nuisance to which the notice relates falls within the definitions of section 80(7) that the best practicable means were used to prevent or to counteract the effects of the nuisance,

(f) for noise emitted from premises that the requirements of the abatement notice are more onerous than the requirements of any notice, consent or determination under sections 60 – 67 of the Control of Pollution Act 1974,

(g) for noise emitted from or caused by vehicles, machinery or equipment that the requirements of the abatement notice are more onerous than a consent given under paragraph 1 of Schedule 2 to the 1993 Act (loudspeakers in streets or roads);

(h) that the abatement notice should have been served on some other person either instead of or in addition to the appellant.

3.28 Where a notice is subject to appeal and either compliance would involve expenditure before the hearing of the appeal or it relates to noise caused by the performance of a duty imposed by law, the notice is suspended until the appeal has been determined. However the notice is not suspended if the nuisance is injurious to health or of a limited duration and suspension of the notice would render it of no practical effect or the expenditure incurred would not be disproportionate to the public benefit from compliance and the notice includes a statement to that effect.

Enforcement

3.29 There are a number of methods of enforcement options for the breach of, or non-compliance with an abatement notice. The local authority can refer the matter to the Procurator Fiscal for prosecution as a criminal offence, seek an interdict from the competent court or carry out the works required in default and recover the costs. The decision to prosecute is discretionary. The 2008 Act also introduces the new option of the service of a Fixed Penalty Notice as an alternative to prosecution.

- 3.30 If a person without reasonable excuse contravenes or fails to comply with a notice they are guilty of an offence and are liable on summary conviction to a fine not exceeding level 5 on the standard scale together with a further fine of an amount equal to one-tenth of that level for each day on which the offence continues after the conviction. If the offence relates to industrial, trade or business premises the fine shall not exceed £40,000.
- 3.31 There are effectively two main defences available in proceedings for non-compliance with an abatement notice. The first is the existence of a reasonable excuse and the second that the best practicable means has been used. The concept of best practicable means is outlined in section 3.35 below. The concept of reasonable excuse is not defined in the legislation. It may be that reasonable excuse could be proved where contravention occurred in an emergency or in circumstances beyond the control of the defender but where there was deliberate and intentional breach or even an argument that loud music formed part of a person's culture would not be reasonable excuse (*Wellingborough BC v Gordon 1990*). It has been held that inability to meet the costs for works did not constitute a reasonable excuse (*Saddleworth UDC v Aggregate and Sand Ltd 1970*) although the sheriff may take account of financial difficulties in mitigation (*Wellingborough BC v Gordon 1993*). Also breach of a defender's rights under the Human Rights Act 1998 could be raised as reasonable excuse. Where a defender relies on a statutory defence, the burden of proof lies with the defender (*O'Brien v Hertsmere BC 1998*).
- 3.32 Where an abatement notice has not been complied with, the local authority may abate the nuisance and do whatever may be necessary in execution of the abatement notice including to seize and remove any equipment which it appears to the authority is being or has been used in the emission of noise. Any expenses reasonably incurred by a local authority in carrying out works in default may be recovered by them from the person by whose act or default the nuisance was caused and the sheriff may apportion the expenses between persons by whose acts or defaults the nuisance is caused in such manner as the sheriff considers fair and reasonable.
- 3.33 Section 82 permits any person aggrieved by the existence of a nuisance to seek an order from the sheriff after giving the person against whom the order is sought 21 days notice. This order can require the person to abate the nuisance or to prohibit a recurrence of the nuisance. In cases of premises in such a state as to be unfit for human habitation the sheriff may prohibit the use of the premises until rendered fit. Contravention of an order of the sheriff is an offence and liable on summary conviction to a fine not exceeding level 5 on the standard scale together with a further fine of an amount equal to one-tenth of that level for each day on which the offence continues after the conviction. The sheriff may also direct the authority to do anything

which the person convicted was required to do by the order and may also order the defender to pay to the aggrieved person compensation.

3.34 Where the local authority is of the opinion that criminal proceedings under section 80(4) would afford an inadequate remedy they may apply to a court of competent jurisdiction for an interdict against the person responsible for the statutory nuisance. The inconvenience of the abatement notice procedure would not in itself be sufficient grounds for making an application. The local authority must satisfy itself that without the availability of an interdict the statutory nuisance would continue, be repeated, or would occur in the first place. The likely consequences of the nuisance, were it to occur, should also be serious. Examples of grounds appropriate for an interdict include:

- urgency, e.g. holding a 'rave' party in the very near future;
- where there has been a deliberate and flagrant flouting of the law, e.g. where previous proceedings have been tried but without effect;
- evidence that the nuisance offender intends to carry on with the conduct complained of, come what may.

Recent case law (*Barns v Newcastle upon Tyne CC 2005*) has suggested that in order to proceed with such action the local authority must have first served an abatement notice or that there must have already occurred a 'deliberate and flagrant breach of the law'. If an abatement notice had already been served but summary action in respect of its breach not proceeded with, the local authority could still seek an Interdict. A local authority is not usually required to give undertakings in damages before an Interdict is granted. If an Interdict is granted any breach is regarded as contempt of court and penalties include a prison sentence of up to two years and/ or an unlimited fine.

Best Practicable Means Defence

3.35 The defence that best practicable means (bpm) were used to prevent or counteract the effects of a nuisance were originally available for prosecutions involving a breach of an abatement notice for certain types of nuisance involving:-

1. smoke from a chimneys,
2. premises, dust, steam, smell, effluvia, accumulations, deposits, animals or noise from industrial, trade or business premises.

The types of nuisance to which the best practicable means defence have now been extended include insect and light nuisance. The term is defined in section 80(7) and can be summarised as:-

- a) reasonably practicable having regard to local conditions and circumstances, the current state of technical knowledge and to the financial implications;

- (b) the means to be employed include the design, installation, maintenance and operation of plant and machinery, and the design, construction and maintenance of buildings and structures;
- (c) the test is to apply only so far as compatible with any duty imposed by law and safe working conditions, and with the exigencies of any emergency or unforeseeable circumstances.

- 3.36 The means to be used are the best available not only those currently accepted in the business concerned (*Scholefield v Schmunck 1855*). The costs of compliance are an important but not over-ruling principle. The lack of finance available to the person served with the notice is not the only factor in cost assessment (*Saddleworth UDC v Aggregate and Sand Ltd 1970*) nor is the increased cost and impact on profitability (*Wivenhoe Port v Colchetser BC 1985*). The location of a nuisance is also of importance as it has been held that the test should be applied to the existing location of an activity and cannot require the relocation to another site as this was too onerous (*Manley v New Forest DC 2000*). In this case it was accepted that a nuisance existed but also that bpm was being used.
- 3.37 The key issue when determining bpm usually relates to the interpretation of 'practicable'. It should be noted that the list in section 79(9) of matters that should be taken into consideration when determining whether something is reasonably practicable is not exhaustive. The factors listed are those that among other things should be taken into account but there may be other relevant factors. One of the listed considerations is cost but it is not necessarily the decisive factor. It is ultimately a matter for the Courts to determine whether in a particular instance the controls adopted are reasonable or the costs are excessive taking account of local conditions and characteristics of the nuisance. Finally, it is important to note that it is for the person relying on the defence to establish that bpm has been used.
- 3.38 There is a somewhat complex relationship between the duty of a local authority to serve a notice where a nuisance exists and the defence (and ground of appeal) that bpm is being used. Even where a local authority considers that a nuisance exists but bpm has been used, there is still the duty to serve an abatement notice. Should the local authority serve a notice where they feel bpm is being used they may be exposed to extensive costs should a case go to appeal or the sheriff for non-compliance. If the authority are of the view that bpm were being used it is likely that the authority would not seek a prosecution for non-compliance with the notice. However this would need to be balanced against the impact of the nuisance and the rights of those affected it.

Miscellaneous Issues

- 3.39 Where a statutory nuisance exists or has occurred within the area of a local authority and is caused by some act or default outside the area,

the local authority may serve notice as if the act or default were within their area. In this case any appeal shall be heard by the sheriff having jurisdiction where the act or default is alleged to have taken place (section 81(2) of the 1990 Act).

- 3.40 **Powers of entry** - Any person authorised by a local authority may enter any premises at any reasonable time to ascertain whether a statutory nuisance exists or for taking any action or executing any work, authorised or required by Part III. In the case of residential premises 24-hours notice of the intended entry is required. The local authority can seek a warrant from the sheriff for entry where it has been refused, the premises are unoccupied or in the case of an emergency. The power of entry also allows an authorised person to take with him other persons or equipment, carry out inspections, measurements and tests and take away such samples or articles as necessary. Obstruction of an authorised officer is an offence attracting a fine not exceeding level 3 on the standard scale.
- 3.41 **Statutory authority** - This can provide a defence for activities that would otherwise be a nuisance where the public benefit is great and the nuisance comparatively small. The precise scope of the defence depends on the statute that provides the statutory authority. Where a specific activity is authorised by parliament there is usually conferred an implicit authorisation of what may be a common law nuisance provided that it is necessary to the activity (subject to operators exercising reasonable diligence in avoiding nuisance). Where a nuisance is incidentally committed whilst carrying out an authorised act and the nuisance was a necessary consequence of the act, then the courts have been prepared to find that a statutory authority defence will apply. It has been commented that the defence to common law nuisance provided could not apply to the prejudice to health limb in section 79 (*Camden LBC v London Underground Ltd 2000*). It was held that when proving that a nuisance is an inevitable consequence of an activity account should be taken of the state of scientific knowledge at the time and the practical feasibility of limiting the nuisance (*Manchester Corporation v Farnworth 1930*).

4.0 – REASONS FOR NEW STATUTORY NUISANCE PROVISIONS AND PUBLIC HEALTH BILL CONSULTATION RESPONSES

- 4.1 The original consultation on the proposed Public Health Bill outlined a number of provisions related to statutory nuisance.
- 4.2 The relevant statutory nuisance provisions in the Act were intended to:
- Introduce insect nuisance, artificial light nuisance and nuisance associated with water as statutory nuisances in line with legislation in England and Wales;
 - Introduce a regulation-making power to allow where necessary amendment of the statutory nuisance regime in the future;
 - Introduce a new fixed penalty regime for non-compliance with an abatement notice served under section 80 of the 1990 Act;
 - Amend the Water Services etc. (Scotland) Act 2005 in relation to sewerage nuisance to clarify the inter-relationship with the statutory nuisance regime.
- 4.3 Insects – The inclusion of insect nuisance is partially linked to changing climatic conditions, resulting in higher levels of risk at places like waste water treatment works. It is intended that Scottish Ministers will utilise the powers within the Water Services etc (Scotland) Act 2005 to produce new codes for insect control and odour control within pumping stations and will augment the existing Code for odour control from waste water treatment works.
- 4.4 Light – Artificial light from premises or a stationary object is included and almost all premises are caught (with the exception of lighthouses and certain Crown defence and military premises) but there is also a universal defence of best practicable means ensuring the test of reasonableness is considered. These provisions are not aimed at dealing with night-glow but primarily nuisance caused to persons in their home from intrusive artificial light.
- 4.5 Water – The addition of water as a medium for nuisance stems from provisions in the Public Health Act 1936 not being extended to Scotland. Nuisances will now include water that is deemed foul, stagnant or poses a risk to health due to the presence of bacteria or other material in the water. The provisions will complement the arrangements for dealing with chemical pollution enforced by the Scottish Environment Protection Agency.

- 4.6 Regulation-making powers have been introduced essentially to ‘future-proof’ the legislation as nuisance is an evolving area especially in relation to societal and climate change. There has been delay in updating the current statutory nuisance regime because of the lack of suitable primary legislation within which to make the necessary amendments and this regulation-making power should allow a more effective mechanism for future updating.
- 4.7 Fixed penalty scheme – this was introduced to allow an alternate method of enforcement for local authorities to avoid potentially lengthy and costly cases in court. The level of fine has been set (£150 for domestic premises and £400 for commercial premises) based upon the assumption that this procedure is most likely to be used for low level nuisance offences, where there is no significant risk to health. They are not set so high as to have offenders prefer the alternative option of prosecution. The key is offering an expedient route to resolution. It is intended that the availability of fixed penalties will assist in ensuring compliance with abatement notices, and will provide an effective deterrent to non-compliance. There are provisions to allow the level of fine to be varied in the future if required.
- 4.8 Water Services etc (Scotland) Act 2005 amendment - this is a technical amendment to clarify the inter-relationship between statutory nuisance and sewerage nuisance.

Consultation Responses

- 4.9 The responses to the public consultation were favourable in regards to updating and enhancing the Statutory Nuisance provisions stated. There were also proposals from agencies such as the Society of Chief Environmental Health Officers (SCEHO) and the Royal Environmental Health Institute of Scotland (REHIS) to move the Statutory Nuisance provisions entirely from the 1990 Act into the 2008 Act, as their officers are mainly concerned with protecting public health as opposed to the environment. The two responsibilities are inextricably linked as impacts to the environment will have a logical impact on human beings, but the proposal was rejected not least for practical scope reasons, but as Part III of 1990 Act deals with the regulation and enforcement of environmental matters which are prejudicial to health OR a nuisance and so go beyond public health alone.
- 4.10 Responses to the consultation did confirm that there were gaps in the statutory nuisance regime of the 1990 Act that needed to be plugged so that threats to public health from the environment could be more effectively managed at local level. There were a number of specific comments on matters that should be considered as statutory nuisance. These were reviewed and the actions taken are outlined below.
- 4.11 Feral birds - comments were received suggesting that birds should be included as a statutory nuisance. There is provision in existing

legislation for the control of birds both under the nuisance provisions in the 1990 Act and the Wildlife and Countryside Act 1981. Further guidance is included in section 10.0.

- 4.12 Overgrown gardens and high hedges - comments were received suggesting that overgrown gardens and high hedges should be included as statutory nuisances. There is currently no legislation in place in Scotland specifically governing the height of hedges and trees. However section 179 of the Town and Country Planning (Scotland) Act 1997 (that makes provision for land affecting the amenity of a neighbourhood) may be appropriate for overgrown gardens. Also where a Housing Renewal Area exists under section 2 of the Housing (Scotland) Act 2006, a local authority can issue a Maintenance Order under section 42 or a Works Order under section 30 requiring works to a garden by virtue of the wide definition of 'house' in the Act. Controls were implemented in England and Wales through the Antisocial Behaviour Act 2003. It gives local authorities power to deal with complaints where high hedges are having an adverse effect on a neighbour's enjoyment of his domestic property. The procedure only applies after the complainant has attempted to resolve the matter informally with their neighbour. The complainant must submit a fee to the local authority for the service. The main complaints with hedges generally are:
- Reduction in light;
 - Blocking views;
 - Damage to drains and nearby structures.
- 4.13 The issue is being considered as part of the current review of the Antisocial Behaviour legislation in Scotland. The final policy position will be agreed by Ministers in due course and this guidance will be amended to reflect the position.
- 4.14 Domestic Odour - there was some comment that the nuisance regime should be extended to include odour from domestic premises. It is considered that there are already sufficient powers under the existing statutory nuisance regime to deal with the cause of most domestic odours (waste materials, animal excrement etc). The odour provisions of the regime only apply to commercial and industrial sites for this reason. The only likely odour source from domestic premises that is less clear is cooking odour - it may be possible to take action for premises in such a state under the existing regime where the odour is due to a building defect or under the fumes and gases provisions (see 3.15).
- 4.15 Overflow discharge – it is considered that there are already sufficient powers under the existing statutory nuisance regime to deal with this where premises are in such a state as to be prejudicial to health or a nuisance.

- 4.16 Nuisance due to deficiencies in sound insulation between properties - noise is already covered in the nuisance regime and domestic noise is also dealt with under the Antisocial Behaviour etc (Scotland) Act 2004. However current case law suggests that the inadequacy of noise insulation between properties cannot be regarded as a statutory nuisance where the property was built or converted in accordance with the building standards at the time. However, action may be appropriate where the insulation provided has significantly deteriorated or been altered or where wholly unreasonable behaviour is causing a nuisance. There has been significant research in the UK on this issue. No further provision has been made at this time but there are proposals to amend building control legislation.
- 4.17 Traffic noise – there was a suggestion that the regime should be extended to include ‘traffic’ in section 79 and that the noise in roads provision in section 79(1)(ga) should be extended to ‘land’. The nuisance system is not appropriate to regulate traffic noise. There are other controls exercised through the planning regime and also the EC Environmental Noise Directive that more appropriately regulate and control noise from traffic. Section 79(1)(ga) specifically covers noise emitted from or caused by a vehicle, machinery or equipment in a road. This section allows action to be taken against the owner of, or person in control of the vehicle or machinery. However section 79(1)(g) already covers noise from premises (which includes land) and this would adequately cover noise from a vehicle, machinery or equipment on land other than a road.

5.0 – INSECT NUISANCE PROVISIONS

Introduction

- 5.1 The new provisions for insect nuisance are included in section 109 of the 2008 Act. These controls are implemented by amendment of the 1990 Act. The provisions are as follows:-

109 Insect nuisance

(1) Section 79 (statutory nuisances and inspections) of the Environmental Protection Act 1990 (c.43) (the “1990 Act”) is amended as follows.

*(2) In subsection (1), after paragraph (fa), insert—
“(faa) any insects emanating from premises and being prejudicial to health or a nuisance;”.*

*(3) After subsection (5A), insert—
“(5AA) Subsection (1)(faa) above does not apply to insects that are wild animals included in Schedule 5 to the Wildlife and Countryside Act 1981 (c.69).*

(5AB) For the purposes of subsection (1)(faa) above, “premises” does not include—

- (a) a site of special scientific interest (within the meaning of section 3(6) of the Nature Conservation (Scotland) Act 2004 (asp 6));*
- (b) such other place (or type of place) as may be prescribed in regulations made by the Scottish Ministers.*

(5AC) Before making regulations under subsection (5AB)(b) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (5AD) below.

(5AD) Those persons are—

- (a) such associations of local authorities; and*
- (b) such other persons,*

as the Scottish Ministers consider appropriate”.

(4) In subsection (7), in the definition of “premises”, after “land” insert “(subject to subsection (5AB) above)”.

- 5.2 The purpose of this amendment is to allow nuisance action to be taken against any insect (other than those protected under the Wildlife and Countryside Act 1981) emanating from any premises (including land). A list of the species within Schedule 5 of the Wildlife and Countryside Act 1981 is contained within Appendix 1¹. It is unlikely that any of the

¹ The Joint Nature Conservancy Committee website includes the current updated list of protected species at <http://www.jncc.gov.uk/page-1815>

insects included in the Schedule would occur in such locations and circumstances that would constitute a nuisance. The 2008 Act also excludes any site of special scientific interest² (within the meaning of section 3(6) of the Nature Conservation (Scotland) Act 2004) from these controls and makes provision for Scottish Ministers to exclude other premises by regulation.

- 5.3 By virtue of schedule 1 of the Interpretation Act 1978 (c.30), the term land includes land covered with water.
- 5.4 This provision is intended to provide local authorities with a remedy to nuisances from insects (whether naturally occurring or caused by human activities) it may be used where insects are prejudicial to the health of the occupiers of the premises but it is not meant to be used against most naturally occurring concentrations of insects on open land or in ways that would adversely affect biodiversity. The majority of insect species do not cause a nuisance, but are essential components of biodiversity and maintain ecosystems through pollination, soil maintenance and other functions.

Extent of Controls

- 5.5 What is an insect in terms of the 2008 Act? There is no formal definition in the Act. In the common use of the term 'insect', insects belong to the phylum Arthropoda that is divided into a number of classes. These include the:
- Crustacea (crabs, crayfish, prawns)
 - Arachnida (spiders, mites, scorpions)
 - Myriapoda (millipedes & centipedes)
 - Insecta (insects)

Modern insect classification divides the Insecta into some 30 orders and some of the more common orders are:

- Dictyoptera - cockroaches
- Isoptera - termites
- Siphonaptera - fleas
- Diptera - flies and mosquitoes
- Coleoptera - beetles
- Hymenoptera - wasps, bees, ants, sawflies.

- 5.6 The provisions apply to all premises (both commercial and residential) but in proceedings for an offence relating to the breach of an abatement notice, it is a defence to prove that the best practicable means are being used to prevent or counteract the effects of the

² Further information on SSSIs is available on the Scottish Natural Heritage webpage at <http://www.snh.org.uk/about/ab-pa01.asp>.

nuisance. The conditions that could be considered when evaluating whether best practicable means have been used are further discussed in Appendix 1.

Assessing Nuisance Complaints

- 5.7 One of the key issues in dealing with the new insect nuisance is identification of the person responsible for the nuisance on whom any abatement notice should be served. Section 80(2) of the 1990 Act provides that the abatement notice shall be served on the the person responsible for the nuisance, unless:
- (a) the nuisance is the result of a structural defect in which case it should be served on the owner of the premises: or
 - (b) the person responsible for the nuisance cannot be found or the nuisance has not yet occurred, in which case it should be served on the owner or occupier of the premises.
- 5.8 In the case of insects this raises a number of procedural problems. Ascertaining the source of insect nuisance can often be a difficult and lengthy process as flying insects can travel considerable distances. It may also be the case that premises that have high levels of insect infestation are not actually the source of the nuisance itself. Once the 'premises' has been identified, the local authority will have to give consideration as to whether or not a person responsible for the nuisance can also be identified.
- 5.9 However it should be remembered that the 1990 Act provides for the service of a notice in circumstances where a nuisance may not currently exist (or cannot be proved) but the conditions at a location indicate that a nuisance is likely to occur.
- 5.10 There are a number of insect species that can cause nuisance seasonally or when present in sufficient numbers. Some of the insects concerned may pose a public health risk due to the fact that they can carry infectious disease (ie vectors) but others may just present a nuisance. Examples of both include mosquitoes (*Culicidae*), house flies (*Musca domestica*), lesser house flies (*Fannia canicularis*), fruit flies (*Drosophila* spp), cockroaches (*Periplaneta Americana*, *Blattella germanica*, *Blatta orientalis*), moth flies or sewage filter flies (*Psychoda* spp and *Tinearia alternata*) and biting midges (*Culicoides impunctatus*).
- 5.11 The Scottish Government recommends that local authorities visit a potentially affected area as soon as possible after receiving a complaint of insect nuisance and suggests that this should be done at least within 5 working days of the complaint in order to establish the extent and degree of the alleged nuisance. There are five key steps in the assessment of an insect nuisance complaint as outlined in Figure 5.0 below.

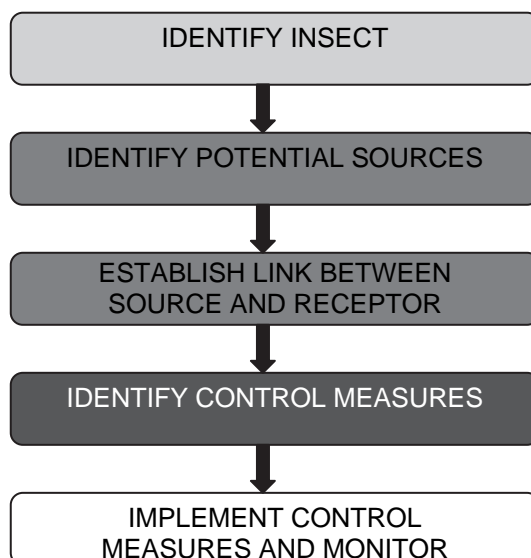


FIGURE 5.0 – INVESTIGATION OF INSECT COMPLAINTS

- 5.12 The type of insect and the specific characteristics of the case will have a significant impact on how the statutory nuisance is determined – for example a complaint of insects that carry disease and pose a threat to public health may require to be assessed against a different threshold to a complaint based on nuisance alone. Nuisance controls were first introduced into the 1990 Act in England and Wales by the CNE Act. The guidance supporting the insect nuisance provisions introduced by the CNE Act includes some numerical guidance on fly nuisance and extracts have been included in the Technical Guidance in Appendix 1.
- 5.13 Proper management and treatment programmes should be able to minimize most insect nuisance cases that arise. Identification of infestations in their early stages and management of the habitats and conditions in which insects proliferate are important control measures. It should *not* be assumed that killing insects is necessarily the most appropriate way to prevent or abate a nuisance. Environmental consequences (indirect as well as cumulative) of remedial action must be considered, such as the effects of insecticides if used, on the environment, nature, bodies of water, etc. Insecticides should therefore be chosen with care and regard for the Defra Code of Practice for using Plant Protection Products (available at www.pesticides.gov.uk).
- 5.14 Appendix 1 to this guidance included further technical information on applicable controls and good practice for insect management.
- 5.15 There are a number of overlaps between the insect provisions and other legislative provisions of the 1990 Act or other regimes that should also be considered when dealing with insect nuisance:-

- a) Part 5 of the 2008 Act (when implemented) will allow local authorities to serve notice where any premises is infested, infected or contaminated and it is necessary to carry out steps to prevent spread of disease or contamination.
- b) Poultry houses / animal husbandry units – this could be covered by the Pollution Prevention and Control (Scotland) regulations 2000 (PPC) if the farm is big enough. Alternatively section 79 (1)(a) (premises in such a state as to be prejudicial to health or a nuisance) or section 79 (1)(f) any animal kept in such a condition as to be prejudicial to health or a nuisance) may apply.
- c) Sewage treatment works – it is proposed to develop a new Sewerage Nuisance Code under the Water Services (Scotland) etc Act 2005.
- d) Manure / slurry storage areas - this could be covered by PPC if the farm is big enough otherwise section 79 (1)(a) or section 79 (1)(e) (any accumulation or deposit which is prejudicial to health or a nuisance) may apply.
- e) Animal housing - this could be covered by PPC if the farm is big enough otherwise section 79 (1)(a) or section 79 (1)(f) (any animal kept in such a condition as to be prejudicial to health or a nuisance) may apply.
- f) Stagnant ditches and drains (i.e. containing putrid and anoxic water) – the new water nuisance provisions may be applicable.
- g) Landfill sites / refuse tips – these should be covered either by PPC or by the waste management licensing provisions of Part II of the 1990 Act otherwise section 79 (1)(e) might have application.
- h) Waste transfer premises - these should be covered either by PPC or by the waste management licensing provisions of Part II of the 1990 Act otherwise section 79 (1)(e) might have application.
- i) Trade or business premises (e.g. contaminated goods, kitchen areas) – section 79 (1)(a) may apply otherwise health and safety or food safety legislation might have application.
- j) Slaughterhouses – section 79 (1)(a), health and safety or food safety legislation (including specific slaughterhouse hygiene requirements) may apply.
- k) Used car tyre recycling businesses – section 79 (1)(a), health and safety legislation or the waste management licensing provisions of Part II of the 1990 Act might have application.

6.0 – LIGHT NUISANCE PROVISIONS

- 6.1 The new provisions for light nuisance are included in section 110 of the 2008 Act. These controls are implemented by amendment of the 1990 Act. The provisions are as follows:-

110 Artificial light nuisance

(1) Section 79 of the 1990 Act is further amended as follows.

(2) In subsection (1), after paragraph (fb), insert—

“(fba) artificial light emitted from—

(i) premises;

(ii) any stationary object,

so as to be prejudicial to health or a nuisance”.

(3) In subsection (2)—

(a) after “(1)(b)” insert “, (fba)”;

(b) after “premises” insert “(or, in respect of paragraph (fba)(ii) above, a stationary object located on premises)”.

(4) After subsection (5B), insert—

“(5BA) Subsection (1)(fba) above does not apply to artificial light emitted from a lighthouse (within the meaning of Part 8 of the Merchant Shipping Act 1995 (c.21)).”.

- 6.2 It is important to note that these provisions only apply to artificial light and cannot be used in respect of direct or reflected sunlight or moonlight. The intention is to ensure that artificial light from sources such as streetlighting, domestic and commercial security lighting, advertising lighting, car parks, sports stadia, domestic decorative lighting, exterior lighting of buildings, laser shows, sky beams and even temporary works such as roadworks are included where the light is causing nuisance. It is not anticipated that ordinary Christmas lights would engage this provision but they are not specifically excluded. Accordingly, if Christmas lights were substantial enough to cause nuisance, they would be covered by this provision.

- 6.3 The artificial light pollution provisions go further than those implemented in England and Wales as the provision introduced by the 2008 Act will capture all fixed light installations and stationary objects (other than lighthouses and certain defence and military premises) which cause a nuisance. The regime extends the best practicable means defence to all cases of light nuisance in order to simplify the provisions. Appendix 2 provides additional guidance on the circumstances and controls that should be considered when evaluating best practicable means.

- 6.4 There is a specific exemption within the light nuisance for lighthouses and further exemptions for premises (or stationary objects on premises) which are occupied on behalf of the Crown or a visiting force for naval, military or air force purposes or for the purposes of the department of the Secretary of State having responsibility for defence.
- 6.5 Although the question of whether or not a nuisance exists is a matter for the local authority investigating the complaint, the Scottish Government considers that particular regard should be had as to whether or not the light is adversely impacting a person's reasonable use or enjoyment of their property (e.g. light shining directly into their bedroom preventing sleep) rather than the brightness of the light alone.
- 6.6 As the provisions are new there is little case law on the subject of light nuisance. There was a case where interference by artificial light from a tennis club disturbing the fish in an adjacent river affecting the night-time fishing was determined to be a nuisance in law and the Sheriff granted an interdict against the club (*Stonehaven and District Angling Association v Stonehaven Recreation Ground Trustees 1997*).
- 6.7 There was a further case where the council had erected powerful security lights that shone onto a neighbouring property. Complaints to the council were ignored so a claim was brought in the County Court for nuisance. The council was ordered to extinguish the lights until they had been repositioned in such a way that they did not affect the adjacent property as well as being ordered to pay costs and damages (*Bonwick v Brighton and Hove Council 2000*).
- 6.8 There are two key factors which a Sheriff is likely to take into account when determining if particular circumstances constitute a nuisance:
- Social utility of Defendant's conduct - The more socially useful the Defendant's conduct the less likely it will rank as a nuisance in law. It is probably true to say that light from factories is less likely to rank as a nuisance than, say, light from advertisements.
 - Motive of Defendant - If the defender acts out of spite the court will incline to the view that the state of affairs ranks as a nuisance (*Christie v Davie 1893*).
- 6.9 Artificial light nuisance is not necessarily the same as the term light pollution. Light pollution is often defined as any form of artificial light which shines outside the area it needs to illuminate, including light that is directed above the horizontal into the night sky creating sky glow or which creates a danger by glare. It is quite possible that some instances of light pollution would not be prejudicial to health nor cause a nuisance (as the term is used in the 1990 Act). As light nuisance requires one or both of these factors to be present, the terms are not interchangeable.

- 6.10 Appendix 2 includes a discussion of some of the key terms used in lighting. It is likely that the majority of nuisance complaints will either be due to excessive levels of illuminance or glare. This is often a result of bad design, operation and installation and is often associated with ineffective and inefficient lighting systems (often involving a significant waste of energy). Efficient and effective lighting installations are essential to help people to see where they are going and bring both personal and property security.
- 6.11 Lighting installations are capable of design so as to produce minimal impact on the environment. In most cases it is envisaged that simple solutions such as redirection, changing lighting levels or screening will be sufficient to alleviate the nuisance.
- 6.12 In assessing whether a particular artificial light source is a nuisance it will be necessary to consider the relevant circumstances. It may also be helpful to consider what a reasonable person would find acceptable in those circumstances. For example, many light nuisances could be mitigated by the use of ordinary curtains or blinds. A reasonable person may be content to close their curtains to mitigate artificial light during the hours of darkness. It is unlikely however that a reasonable person would find it acceptable to have to install blackout curtains if this was required to mitigate the effects of the artificial light. It is possible in these circumstances that the light would constitute a nuisance under the 1990 Act. It is important that each case is assessed on its own facts and circumstances.
- 6.13 There is guidance on parameters for obtrusive lighting formulated by the International Commission on Illumination (CIE) and Institution of Lighting Engineers (ILE). This guidance is based on research into individual sensitivity to light that may be of some assistance as a guide to the sensitivity of the 'average person'. These parameters vary depending on whether the installation is in a town or country location and there is a suggested curfew time of 23.00 after which lighting levels should be further restricted. This guidance is detailed in Appendix 2 but it is important to stress that there are no prescribed levels at which artificial light does or does not constitute a statutory nuisance.
- 6.14 It is sensible for abatement notices to be 'simple', requiring abatement and non-recurrence within a specified timescale. If the abatement notice is too detailed, it could be that alternate methods of compliance are denied and possibly even if the terms of the notice are met, the nuisance may remain unabated.

7.0 – WATER NUISANCE PROVISIONS

- 7.1 The new provisions for water nuisance are included in section 111 of the 2008 Act. These controls are implemented by amendment of the 1990 Act. The provisions are as follows:-

111 Statutory nuisance: land covered with water

(1) Section 79 of the 1990 Act is further amended as follows.

*(2) In subsection (1), after paragraph (e), insert—
“(ea) any water covering land or land covered with water which is in such a state as to be prejudicial to health or a nuisance;”.*

(3) After subsection (5), insert—

“(5ZA) For the purposes of subsection (1)(ea) above, “land”—

(a) includes structures (other than buildings) in, on or over land;

(b) does not include—

(i) mains or other pipes used for carrying a water supply;

(ii) any part of the public sewerage system;

(iii) any other sewers, drains or other pipes used for carrying sewage;

(iv) the foreshore, that is to say, the land between the high and low water marks of ordinary spring tides;

(v) the seabed.

(5ZB) In subsection (5ZA) above—

“drain”, “sewage” and “sewer” have the meanings given by section 59 of the Sewerage (Scotland) Act 1968 (c.47);

“main” has the meaning given by section 109(1) of the Water (Scotland) Act 1980 (c.45);

“pipe” includes a service pipe within the meaning of that section of that Act;

“public sewerage system” has the meaning given by section 29 of the Water Services etc. (Scotland) Act 2005 (asp 3).”.

- 7.2 The introduction of the water nuisance provision is to plug a perceived gap in the statutory nuisance provisions in Scotland. Under section 79(1)(h) of the 1990 Act, matters other than those listed in section 79 may constitute a statutory nuisance to the extent that they are declared as such by any enactment. A number of matters were declared to be statutory nuisances in the Public Health Act 1936, but these provisions did not extend to Scotland. These provisions related to wells, tanks and cisterns use for domestic water (section 141), ponds and watercourses (section 259) and moveable dwellings (section 268).

- 7.3 On review it was determined that the provisions relating to tanks, wells and cisterns were adequately covered by drinking water legislation and although the definition of a house in the Housing (Scotland) Act 2006

excludes moveable dwellings they were covered generally under the definition of premises and the current controls appear adequate.

7.4 However the equivalent provisions covering ponds, pools, ditches and watercourses were felt to be missing from the legislative regime. The new statutory nuisance of water covering land (or land covered with water) was introduced to address this. It is recognised that SEPA are the main enforcement body in relation to the water environment in Scotland, but evidence suggests that there can be nuisances caused by pond and ditches and other bodies of water which are not related to issues of pollution or water quality and which could therefore (if included in the 1990 Act definition) fall under local authority nuisance jurisdiction.

7.5 The majority of water legislation is based on either drinking water quality or bathing water quality and has the aim of :

(a) preventing further deterioration of, and protecting and enhancing, the status of aquatic ecosystems and terrestrial ecosystems and wetlands directly depending on those aquatic ecosystems,

(b) promoting sustainable water use based on the long-term protection of available water resources,

(c) enhancing protection and improvement of the aquatic environment through, amongst other things, specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing out of discharges, emissions and losses of the priority hazardous substances,

(d) ensuring the progressive reduction of pollution of groundwater and preventing further pollution of it,

(e) contributing to mitigating the effects of floods and droughts,

(f) protecting bathing waters

(g) protection of drinking water quality.

The principle behind section 79(1)(ea) is to regulate nuisance and risk to health but not that arising from chemical characteristics of water, or by regulating discharges, drinking water or water quality standards.

7.6 The section relates to any water covering land or land covered with water in such a state as to be prejudicial to health or a nuisance. The new provision is further clarified by stating that for this nuisance 'land' includes structures other than buildings (such as swimming pools, tanks etc) but does not include water supply pipes, sewerage pipework (including the public sewerage system), the foreshore or the seabed. The interpretation of drain", "sewage" and "sewer" is as given by section 59 of the Sewerage (Scotland) Act 1968, "main" has the meaning given by section 109(1) of the Water (Scotland) Act 1980, "pipe" includes a

service pipe within the meaning of that section of that Act and “public sewerage system” has the meaning given by section 29 of the Water Services etc. (Scotland) Act 2005.

7.7 To understand the new nuisance provision it may be useful to consider the application of section 259 of the Public Health Act 1936 which includes as a statutory nuisance:-

- a) any pond, pool, ditch or watercourse which is so foul or in such a state as to be prejudicial to health or a nuisance,
- b) any part of a watercourse which is so choked or silted up as to obstruct or impede the proper flow of water and thereby to cause a nuisance or give rise to conditions prejudicial to health.

7.8 The first limb of the nuisance would cover for example fetid, stagnant water such as slurry pools or industrial waste ponds. The second limb refers more specifically to impeding the flow of watercourses but does not apply to watercourses navigable by vessels carrying goods. In general a landowner has no duty to clear obstructions occurring naturally on a watercourse (for example where natural silting occurs and restricts the flow there was no liability – *Neath RDC v Williams 1951*)).

7.9 The drafting of the new section 79(1)(ea) takes a much broader but complementary view and has modernised the concept. The extent of coverage firstly (subject to the specific exemptions) covers all water covering land and the land beneath the water. This is a very broad definition and given that land includes structures covers not only moving water such as rivers, lochs, canals, but also static water in ponds, reservoirs, pools, open tanks and ditches whether natural or man made. However it does not cover the sea or water supplies or the public sewerage system (the latter because the provisions of the Water Services etc. (Scotland) Act 2005 allow statutory sewerage code to be developed for such locations).

7.10 Issues that could fall within this new nuisance might include water that is foul, obstructed or in any other condition creating a nuisance, perhaps because of something in or on the water (such as algae and bacteria) and anything emanating from the land covered by water (such as gases). It can also be used in conjunction with the new section 79(1)(fa) to control conditions that may result in proliferation of insects such as mosquitoes.

7.11 It is not anticipated that this provision will apply to the impacts of flooding (such controls already lie with SEPA) but rather the state of any pond, pool, ditch or watercourse or obstruction of a watercourse.

8.0 – FIXED PENALTY NOTICE PROVISIONS

- 8.1 The new provisions for the issue of fixed penalty notices are included in section 113 of the 2008 Act. These controls are implemented by amendment of the 1990 Act. The provisions are as follows:-

113 Enforcement of statutory nuisances: fixed penalty notice

(1) *The 1990 Act is further amended as follows.*

(2) *In section 80 (summary proceedings for statutory nuisances), after subsection (4), insert—*

“(4A) Where a local authority have reason to believe that a person has committed an offence under subsection (4) above, the local authority may give that person a notice (a “fixed penalty notice”) in accordance with section 80ZA offering the person the opportunity of discharging any liability to conviction for that offence by payment of a fixed penalty.”.

(3) *After that section, insert—*

“80ZA Fixed penalty notice: supplemental

(1) *This section applies to a fixed penalty notice given under section 80(4A).*

(2) *A fixed penalty notice must give reasonable particulars of the circumstances alleged to constitute the offence.*

(3) *A fixed penalty notice must also state—*

- (a) the amount of the fixed penalty;*
- (b) the period within which it may be paid;*
- (c) the—*
 - (i) person to whom; and*
 - (ii) address at which, payment may be made;*
- (d) the method or methods by which payment may be made;*
- (e) the consequences of not making a payment within the period for payment.*

(4) *The amount of the fixed penalty under section 80(4A) is—*

- (a) in the case of a nuisance relating to industrial, trade or business premises, £400;*
- (b) in any other case, £150.*

(5) *The period for payment of the fixed penalty is 14 days beginning with the day after the day on which the notice is given.*

(6) *The local authority may extend the period for paying the fixed penalty in any particular case if they consider it appropriate to do so by sending notice to the person to whom the fixed penalty notice was given.*

(7) No proceedings for an offence under section 80(4) may be commenced before the end of the period for payment of the fixed penalty.

(8) In proceedings for an offence under section 80(4), a certificate which—

- (a) purports to be signed by or on behalf of a person having responsibility for the financial affairs of the local authority; and*
- (b) states that payment of the amount specified in the fixed penalty notice was or was not received by the expiry of the period within which that fixed penalty may be paid,*

is sufficient evidence of the facts stated.

(9) Where proceedings for an offence in respect of which a fixed penalty notice has been given are commenced, the notice is to be treated as withdrawn.

(10) Any sum received by a local authority under section 80(4A) accrues to that authority.

(11) The Scottish Ministers may, by regulations—

- (a) provide that fixed penalty notices may not be given in such circumstances as may be prescribed;*
- (b) provide for the form of a fixed penalty notice;*
- (c) provide for the method or methods by which fixed penalties may be paid;*
- (d) modify subsection (4)(a) or (b) above so as to substitute a different amount (not exceeding level 2 on the standard scale) for the amount for the time being specified there;*
- (e) provide for the amount of the fixed penalty to be different in different cases or descriptions of case;*
- (f) modify subsection (5) above so as to substitute a different period for the period for the time being specified there;*
- (g) provide for the keeping of accounts, and the preparation and publication of statements of account relating to fixed penalties under section 80(4A).*

(12) Before making regulations under subsection (11) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (13) below.

(13) Those persons are—

- (a) such associations of local authorities; and*
- (b) such other persons,*

as the Scottish Ministers consider appropriate.”

(4) In section 81 (supplementary provisions), for subsection (3), substitute—

“(3) Where an abatement notice has not been complied with, the local authority may, whether or not—

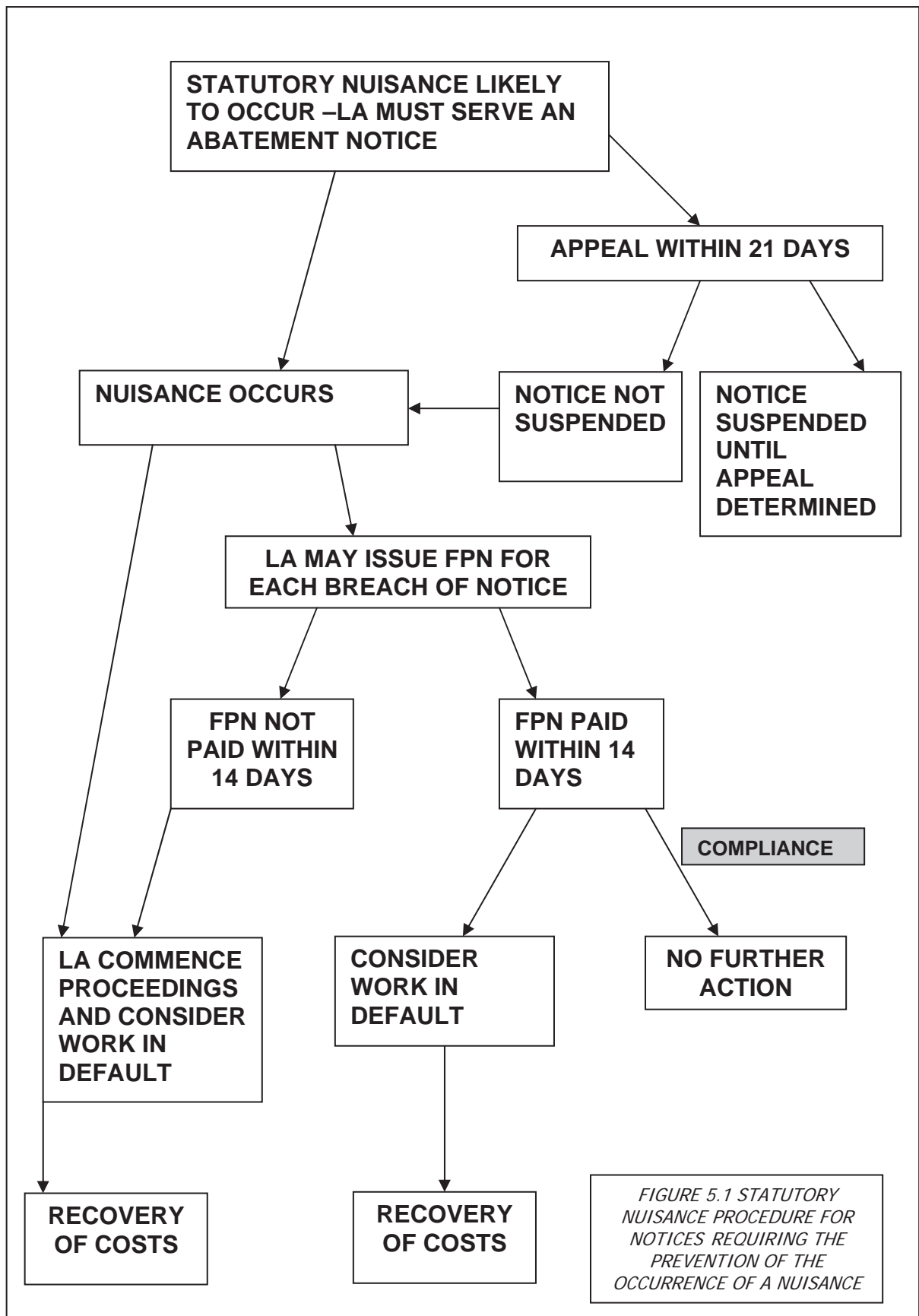
- (a) proceedings have been taken for an offence under section 80(4); or*

(b) a fixed penalty notice has been given under section 80(4A) in respect of that offence (regardless of whether the fixed penalty notice is accepted),

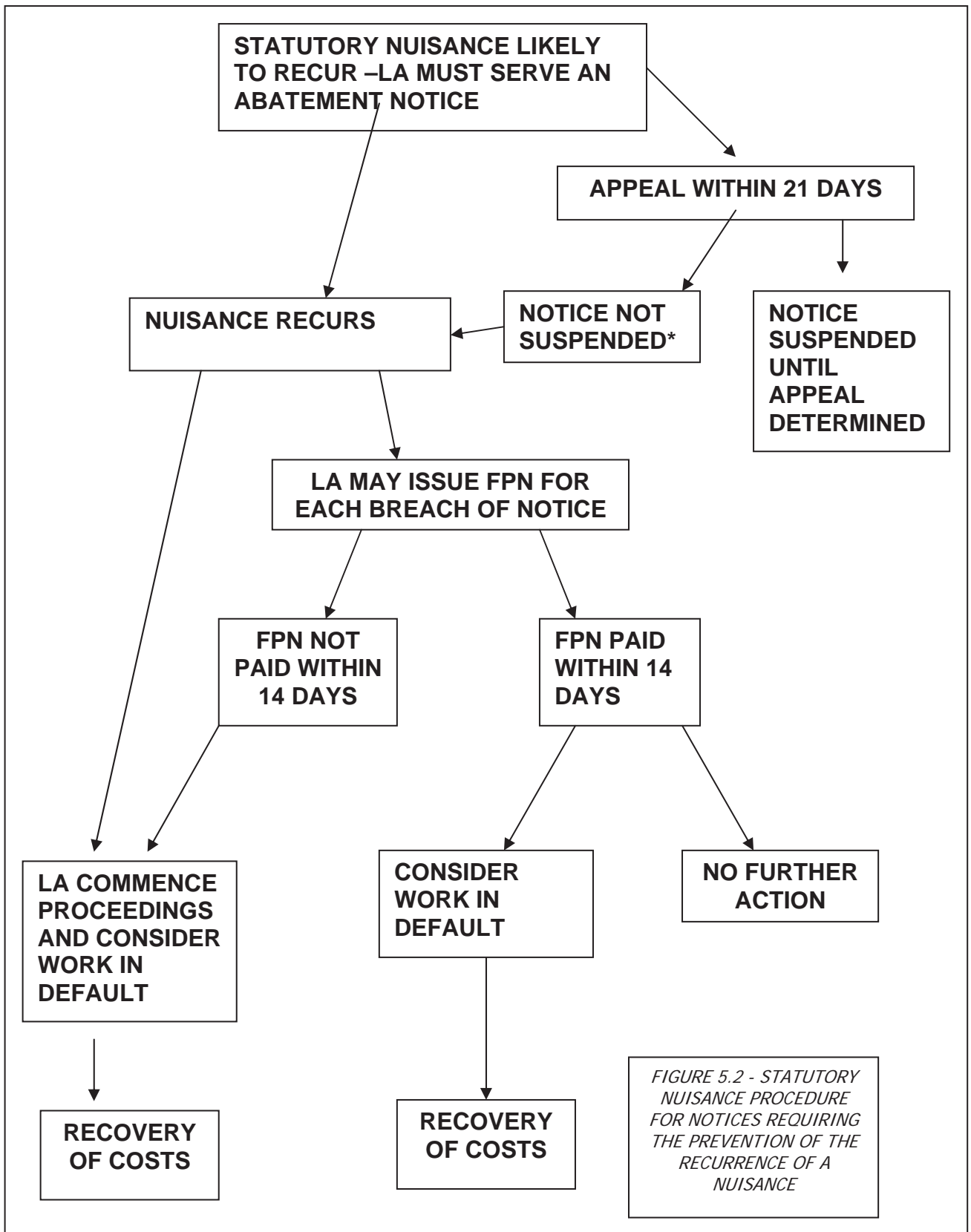
abate the nuisance and do whatever may be necessary in execution of the abatement notice.”.

- 8.2 It was clear from comments received during consultation on the Public Health Bill that the relatively complex and time consuming enforcement procedures under Part III of the 1990 Act for nuisance cases was not wholly effective and that there were relatively few cases dealt with by the criminal justice system. There was a perception among local authorities that the system did not provide an adequate deterrent against offending. The creation of a fixed penalty notice for lower level offences seems an appropriate method for resolving many statutory nuisance cases.
- 8.3 The fixed penalty regime follows a similar procedure to other fixed penalty schemes used for environmental offences. It will assist in minimising resource-intensive litigation in a number of cases by providing a fast, flexible deterrent. The fixed penalty is a voluntary system of enforcement.
- 8.4 Fixed penalty notices do not alter the requirement for local authorities to serve an abatement notice. It is a statutory requirement for local authorities to specify in abatement notices an indication of the consequences of non-compliance with the requirements of an abatement notice. The new provisions similarly require that a fixed penalty notice indicate to the recipient the consequences if they fail to pay the fixed penalty within the specified time period.
- 8.5 The use of a fixed penalty will not be suitable in every instance and therefore it is a matter for the local authority to determine where the fixed penalty will be used.
- 8.6 There will be circumstances in which the local authority will wish to seek a prosecution under the 1990 Act. However, it is anticipated that in the vast majority of cases, local authorities will in the first instance offer a fixed penalty for non-compliance with the requirements of an abatement notice and that recourse to the existing enforcement proceedings will be the exception to the rule, reserved for exceptional or persistent cases of non-compliance.
- 8.7 The offence under section 80(4) of the 1990 Act is failure to comply with or to contravene the abatement notice (rather than causing the statutory nuisance itself). A fixed penalty notice may be offered by the local authority in respect of the particular offence and should (amongst other things) give reasonable particulars of the circumstances of the alleged offence. If the fixed penalty is not paid within the specified time, the local authority may seek prosecution for the original offence of breaching the abatement notice.

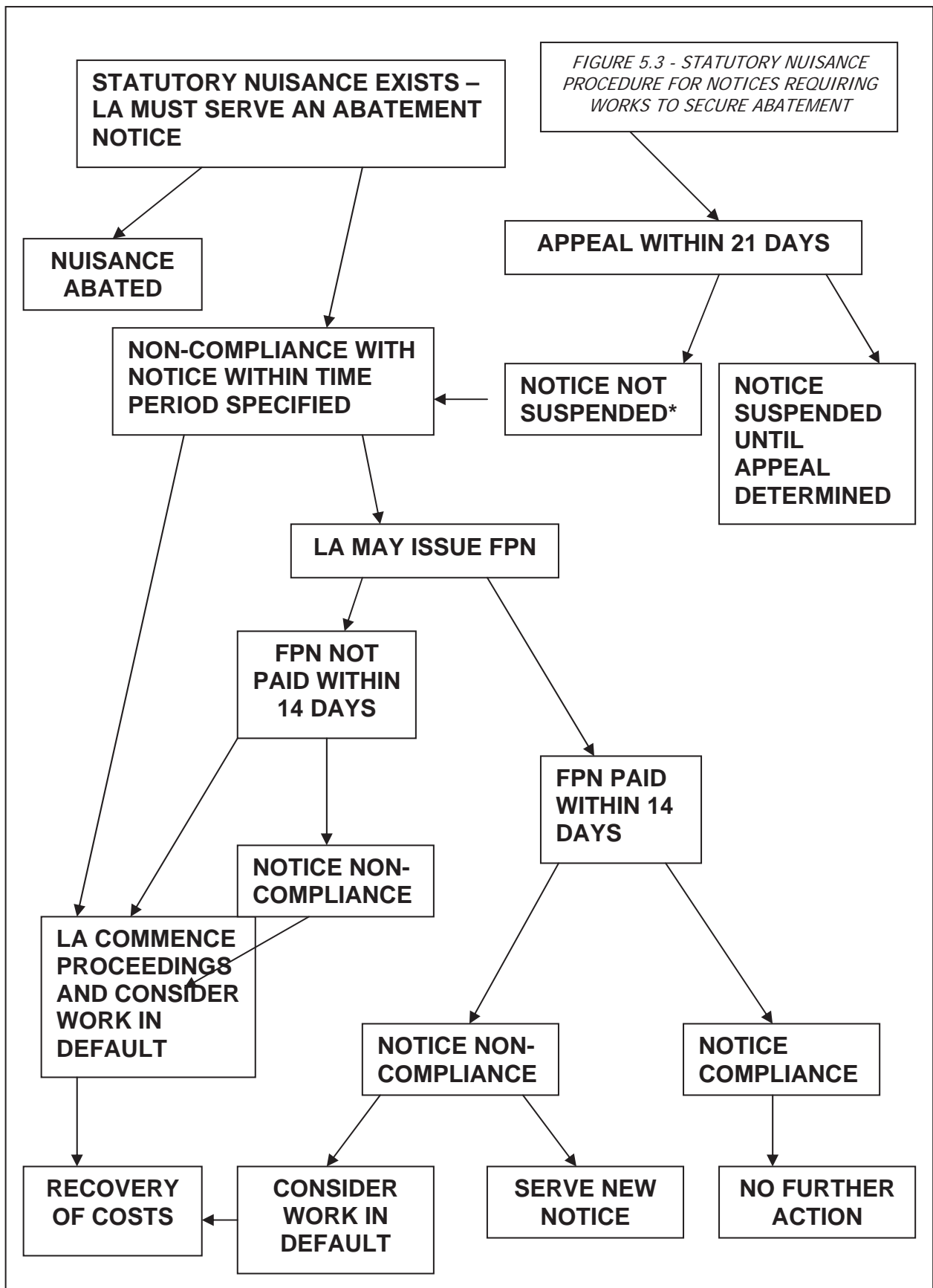
- 8.8 Once the fixed penalty notice is issued, enforcement proceedings cannot be commenced until the 14-day period has expired without payment of the penalty. If the fixed penalty is paid within the 14-day period then liability for that particular offence (that particular breach of the abatement notice) has been discharged and the local authority cannot seek prosecution in respect of that offence even if the nuisance is not subsequently abated.
- 8.9 If the fixed penalty notice is paid but the nuisance remains unabated the local authority may take action as outlined in paragraph 8.12 below to abate the outstanding nuisance. However, depending on the terms of the original abatement notice, it may be necessary for the local authority to issue a new abatement notice to ensure that further enforcement action is possible.
- 8.10 It is also possible that a nuisance could recur after payment of a fixed penalty. Depending on the terms of the original abatement notice, it may not be possible to take further enforcement action under the same abatement notice. It may be necessary for the local authority to issue a subsequent abatement notice to ensure that further enforcement action is possible.
- 8.11 If a subsequent abatement notice is served and then breached, the local authority has the option of offering a fixed penalty notice in respect of that offence (although the local authority may wish to question whether a second fixed penalty notice is likely to prove more effective than the first at securing compliance with the abatement notice). As with the first abatement notice, an alternative to the fixed penalty notice would be prosecution.
- 8.12 Where a breach of an abatement notice has occurred, the local authority may take action to abate the outstanding nuisance and recover the costs of doing so from the person whose act or default caused the nuisance. This power applies irrespective of whether a fixed penalty has been paid (or indeed whether or not proceedings have been taken in respect of an offence).
- 8.13 The circumstances that may occur and the process flow sheets for dealing with each case are:-
- a) A notice is served requiring the prevention of an occurrence of a nuisance (see Figure 5.1)
 - b) A notice is served requiring the prevention of the recurrence of a nuisance (see Figure 5.2)
 - c) A notice is served requiring works to abate the nuisance (see Figure 5.3)
 - d) A notice is served requiring works to abate the nuisance and prevent the recurrence of the nuisance (effectively follow Figure 5.3 to secure abatement and subsequently Figure 5.2 to ensure recurrence is prevented).



**where the nuisance is either injurious to health, where suspension would make the notice of no effect or where the benefits outweigh the costs of compliance*



**where the nuisance is either injurious to health, where suspension would make the notice of no effect or where the benefits outweigh the costs of compliance*



**where the nuisance is either injurious to health, where suspension would make the notice of no effect or where the benefits outweigh the costs of compliance*

- 8.14 At present the fixed penalties are £400 in respect of industrial, trade or business premises and £150 for all other cases. There are regulation-making powers available to Scottish Ministers to review these penalties in light of experience.
- 8.15 Where an abatement notice is served on more than one person, a fixed penalty may be offered to one or more of those persons. Where any person does not accept an offer of a fixed penalty or fails to pay within the time allotted, the local authority may take seek a prosecution further to section 80(4) of the 1990 Act.
- 8.16 Any fixed penalty notice must contain-
- (a) reasonable particulars of the circumstances alleged to constitute the offence;
 - (b) the period within which the payment must be made;
 - (c) the amount of the fixed penalty;
 - (d) the person to whom and the address at which the fixed penalty may be paid (ie, the local authority which issued the abatement notice)
 - (e) the methods by which the payment may be made;
 - (f) the consequence of not making the payment within the period for payment.
- 8.17 The local authority can extend the period for payment of the fixed penalty (it is set at 14 days by section 80ZA(5) of the 1990 Act) and it is suggested that this may only be appropriate where there are special circumstances (and in any case only after discussion with the person responsible). The time period should not be extended as a matter of routine but likewise, extension should be unreasonably withheld where there are extenuating circumstances.
- 8.18 The following are some issues to be considered by local authorities in respect of the use of fixed penalty notices:-
- a) The fixed penalty route may be a particularly useful alternative to prosecution where there are discrete events of recurring nuisances such as noisy parties as (depending on the terms of the abatement notice) a fixed penalty may be issued for each breach of the abatement notice.
 - b) In any case where a number of fixed penalty notices have been issued there should be a review to determine whether additional action may be necessary.
 - c) Where eventual compliance is likely but there are delays in securing compliance action the fixed penalty route may be applicable.
 - d) The fixed penalty route is particularly suitable for lower level offences such as small accumulations of waste.
 - e) It is anticipated that the fixed penalty route would not be used where a statutory nuisance exists due to a prejudice to health as in this case there may be unacceptable health consequences inherent in any delay caused by payment of the penalty but no abatement of the nuisance.

- f) The fixed penalty may be appropriate for notices requiring prevention of nuisance such as noise from commercial premises
- g) It should be remembered that there are no defences in connection with a fixed penalty notice as they are voluntary measures.

8.19 The local authority is able to keep any income from fixed penalty fines to enable it to reinvest in their area, similar to the anti-social behaviour noise fixed penalty scheme. However, in line with the new financial arrangements that came into force in April 2008, it is for local authorities to decide whether the income will be retained in the service area responsible for nuisance or be used for other purposes.

8.20 The following is an example of a statutory nuisance fixed penalty notice.

**ANYWHERE COUNCIL
ENVIRONMENT SERVICES**

NOTICE REF: 090101FPN

**STATUTORY NUISANCE OFFENCE
NOTICE OF OPPORTUNITY TO PAY FIXED PENALTY
ENVIRONMENTAL PROTECTION ACT 1990 AS AMENDED BY PUBLIC HEALTH
ETC (SCOTLAND) ACT 2008**

Alleged Offender-Name:

Billy Nuisance.

Address:

47 High Street, Anywhere, AX4 8XA

I, Philip Inspector an authorised Officer of Anywhere Council hereby give you notice, in terms of Section 80(4A) of the above Act that at 47 High Street, Anywhere, AX4 8XA, a statutory nuisance, as defined in Section 79(1)(e) of the said Act, exists and is likely to recur, arising from accumulation of waste animal faeces in the rear yard at 14.30 hours on 10 February 2009 in contravention of the Abatement Notice Reference 090101 dated 10 January 2009

This notice offers you the opportunity of discharging any liability to conviction for the offence by paying a fixed penalty of £150 no later than 24 February 2009. Payment should be made to The Director of Finance, Anywhere Council, Civic Offices, Main Street, Anywhere, AX8 4XA and payment can be made by cash, cheque or debit card in person at the above address or you can send a cheque or postal order (payable to "Anywhere Council") together with a contact telephone number, a note of your name and address and either the completed Fixed Penalty Notice return below or the Fixed Penalty Notice number.

Failure to pay the fixed penalty fee by 24 February 2009 will result in the case being referred to the Procurator Fiscal seeking prosecution. Failure to comply with an abatement notice is an offence under Section 80(4) of the Act and liable on summary conviction to a fine not exceeding level 5 of the standard scale of fines to in Section 289G of the Criminal Procedure (Scotland) Act 1975, together with a further fine of one tenth of that level for each day on which the offence continues after conviction.

Failure to abate the nuisance will result in either the local authority carrying out the necessary works in accordance with section 81(3) and recovering all reasonably incurred expenses in accordance with section 81(4) or the service of a further abatement notice.

If you are not sure of your rights or the implications of this Notice, you may want to seek legal advice.

Signed:

Date of Issue: 10 February 2009

Anywhere Council, Civic Offices, Main Street, Anywhere, AX8 4XA

TO BE COMPLETED BY RECIPENT OF FIXED PENALTY NOTICE

**ANYWHERE COUNCIL
ENVIRONMENT SERVICES**

NOTICE REF: 090101FPN

**STATUTORY NUISANCE OFFENCE
NOTICE OF OPPORTUNITY TO PAY FIXED PENALTY
ENVIRONMENTAL PROTECTION ACT 1990 AS AMENDED BY PUBLIC HEALTH
ETC (SCOTLAND) ACT 2008**

Name

Address

I enclose payment of the appropriate fixed penalty

Signed: **Date:**

How to Pay

Payment should be made to The Director of Finance, Anywhere Council, Civic Offices, Main Street, Anywhere, AX8 4XA and payment can be made by cash, cheque or debit card in person at the above address or you can send a cheque or postal order (payable to "Anywhere Council") together with a contact telephone number, a note of your name and address and either the completed Fixed Penalty Notice return below or the Fixed Penalty Notice number.

9.0 – MISCELLANEOUS AMENDMENTS

- 9.1 There are a number of additional new provisions included in the 2008 Act. The majority of these provisions are to ensure future-proofing of the statutory nuisance regime by allowing a relatively rapid and simple system for the amendment of the regime.
- 9.2 Section 112 of the 2008 Act allows Scottish Ministers to make regulations to vary existing or add new matters that constitute statutory nuisances and also amend any other provisions of the statutory nuisance regime as may be appropriate. Any regulations made by the Scottish Ministers must be approved by resolution of the Scottish Parliament. Sections 112 and 114 are reproduced below.

112 Power to make further provision regarding statutory nuisances

(1) The 1990 Act is further amended as follows.

(2) In section 79—

- (a) in subsection (1), for “(1A)” substitute “(1ZA)”;* and
(b) after subsection (1), insert—

“(1ZA)The Scottish Ministers may by regulations—

(a) amend this section so as to—

- (i) prescribe additional matters which constitute statutory nuisances for the purposes of this Part;*
(ii) vary the description of any matter which constitutes a statutory nuisance;
(b) in relation to an amendment under paragraph (a), amend this Act and any other enactment to make such incidental, supplementary, consequential, transitory, transitional or saving provision as the Scottish Ministers consider appropriate.

(1ZB) Before making regulations under subsection (1ZA) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (1ZC) below.

(1ZC) Those persons are—

- (a) such associations of local authorities; and*
(b) such other persons,

as the Scottish Ministers consider appropriate.”

114 Procedure for regulations

(1) Section 161 (regulations, orders and directions) of the 1990 Act is amended as follows.

(2) In subsection (2), at the beginning insert “Subject to subsection (2B) below,”

(3) After subsection (2A), insert—

“(2B) No statutory instrument containing regulations made under section 79(1ZA) or 80ZA(11) above may be made unless a draft of it has been laid before, and approved by resolution of, the Scottish Parliament.”.

- 9.3 Section 115 of the Act makes amendment of the sewerage nuisance provisions of the Water Services etc. (Scotland) Act 2005. The changes made are aimed at clarifying two issues, namely powers of entry and the apparent disapplication of 1990 Act Part III powers under certain circumstances.
- 9.4 Section 115 amends section 26 of the Water Services etc. (Scotland) Act 2005 by clearly stating that subsection 10 (which disapplies the powers of Part III of the 1990 Act where the nuisance constitutes a sewerage nuisance) is only disapplied when a sewerage nuisance exists for which a sewerage code exists. There is currently only one sewerage code relating to odour from waste water treatment works and hence the Part III powers apply to any odour nuisance from a waste water treatment works except those for which a sewerage code is in force.
- 9.5 Secondly section 115 applies the provisions of Schedule 3 of the 1990 Act relating to power of entry to sewerage nuisance. This provides the right of entry to residential premises with 24-hours notice and where entry is refused or is likely to be refused the local authority can seek a warrant for entry by force if necessary. Section 115 is outlined below:-

115 Sewerage nuisance: local authority powers

(1) Section 26 of the Water Services etc. (Scotland) Act 2005 (asp 3) is amended as follows.

(2) In subsection (10), for the words from “nuisance” in the second place where it appears to the end, substitute “nuisance—

*(a) which constitutes a sewerage nuisance; and
(b) in respect of which a sewerage code applies.”.*

(3) After that subsection, insert—

“(10A) Paragraphs 2, 3 and 5 of Schedule 3 to the Environmental Protection Act 1990 (c.43) apply to the exercise of functions by a local authority under this section as they apply to the exercise of functions under Part III of that Act, with the following modifications—

(a) in paragraph 2(1)(a), for “statutory nuisance” substitute “sewerage nuisance”;

(b) in paragraph 2(1)(b) and (4)(b), for “Part III” substitute “section 26 of the Water Services etc. (Scotland) Act 2005 (asp 3)”;

(c) in paragraph 3(1), for the words from “, on summary conviction” to the end substitute—

“(a) on summary conviction, to a fine not exceeding the statutory maximum;

(b) on conviction on indictment, to a fine.”;
(d) in paragraph 3(2), for the words from “, on summary conviction” to the end substitute—
“(a) on summary conviction, to a fine not exceeding the statutory maximum;
(b) on conviction on indictment, to a fine.”;
(e) in paragraph 5—
(i) for the words “executing Part III” substitute “exercising functions under section 26 of the Water Services etc. (Scotland) Act 2005”;
(ii) the words from “other” to the end are to be disregarded.”.

- 9.6 Section 125 of the Act implements Schedule 2 of the Act that makes amendment to the Statutory Nuisance (Appeals) (Scotland) Regulations 1996 (S.I. 1996/1076). These regulations outline the appeal provisions against abatement notices served under Part III of the 1990 Act. Schedule 2 provides that where a nuisance falls within sections 79(1)(ea), (faa) or (fba) (that is nuisance from land covered with water, insects and light) at any premises, both commercial and residential, it is a defence to prove that the best practicable means as defined in section 79(9) of the 1990 Act have been used to prevent the nuisance or counteract the effects of the nuisance.
- 9.7 An unofficial consolidated version of the Statutory Nuisance (Appeals) (Scotland) Regulations 1996 (S.I. 1996/1076) is included as Annex 3 to this guide.

10.0 – ADDITIONAL GUIDANCE ON NUISANCES ALREADY COVERED BY THE ENVIRONMENTAL PROTECTION ACT 1990 OR OTHER LEGISLATION

10.1 This section deals with a number of areas where there were comments made at the consultation stage suggesting that the nuisance regime should be extended but where there are already adequate provisions under the 1990 Act or other legislation to deal with the issue.

Feral Birds

10.2 There were comments made at the consultation stage suggesting that the nuisance regime should be extended to include feral or wild birds.

10.3 The majority of the public health problems caused by wild birds are associated with feral pigeons, gulls, blackbirds, starlings and house sparrows. There are both nuisance and health implications with over 800 reported transmissions of a pathogen (mostly *C. psittaci*) from feral pigeons to people. Similarly, there have been reports of hundreds of cases of histoplasmosis in people acquired via the airborne route during work on communal roosts of birds in urban areas. It should be noted that many wild birds are protected under the Wildlife and Countryside Act 1981 (see paragraph 10.9).

10.4 Beside the harm some wild urban bird species (mostly feral pigeons) cause to buildings by their activity and droppings, their nesting sites can be the source of abundant ectoparasites (such as argasid ticks, mites, bugs and fleas) that produce allergic reactions in people. Also, certain microorganisms pathogenic to people have been found to be associated with wild urban birds:

- some arboviruses (the agent of diseases such as St. Louis encephalitis virus and West Nile virus);
- Chlamydophila psittaci* (the etiological agent of ornithosis);
- Borrelia burgdorferi* sensu lato (the agent of Lyme disease);
- Campylobacter jejuni* (the agent of campylobacteriosis);
- Salmonella enterica* serovars Enteritidis and Typhimurium (the agents of salmonellosis);
- Histoplasma capsulatum* (the agent of histoplasmosis); and
- Cryptococcus neoformans* (the agent of cryptococcosis).

10.5 Cases of human disease acquired directly from urban birds or from their habitats have been reported for ornithosis, histoplasmosis, salmonellosis, campylobacteriosis, mycobacteriosis, cryptococcosis, and toxoplasmosis.

10.6 Section 79(1)(e) of the 1990 Act provides powers to deal with deposits or accumulations of wild bird droppings where the deposit or

accumulation of droppings comprises a nuisance or is prejudicial to health. This section has the benefit of not being linked to premises - thus any deposit or accumulation wherever situated is capable of being a nuisance, and there is considerable flexibility to enable local authorities to respond to a wide variety of situations. The outline above confirms the health risk from droppings as well as the nuisance value. Case law supports the use of this provision for equivalent nuisance/threats. In *Coventry City Council v Cartwright (1975)*, the Divisional Court held that section 79(1)(e) of the 1990 Act had the underlying conception of “an accumulation or something which produces a threat to health in the sense of a threat of disease, vermin and the like”. In *R v Carrick District Council, ex parte Shelley (1996)*, the use of section 79(1)(e) was applied to sewage-related waste on a beach.

- 10.7 In addition local authorities have powers under section 201 of the Local Government (Scotland) Act 1973 to make byelaws for the good rule and government and prevention and suppression of nuisance for the whole or any part of or area within their local authority area and could use this to control feral bird nuisance.
- 10.8 Additionally section 79(1)(a) of the 1990 Act could be used to abate nuisance caused by premises covered with bird droppings where those premises are in such a state so as to be prejudicial to health or a nuisance and require preventive measures, such as bird-proofing of the building and erection of “don’t feed the birds” notices. Roosting birds on the roof of a building whose droppings fall onto balconies below, or a derelict building (which may not in itself comprise a risk but because of the extent of the droppings within it could give rise to prejudice to health), are both situations capable of attracting the section 79(1)(a) provisions.
- 10.9 Part I of the Wildlife and Countryside Act 1981 creates a number of offences in relation to wild birds. Any measures specified in the abatement notice would have to be in accordance with the law. In particular, an abatement notice should not require anything which would be an offence in terms of the Wildlife and Countryside Act 1981 would have to be considered. Certain offences are not committed where carried out under the authority of a licence granted under section 16 of that Act.
- 10.10 The control measures that may be appropriate to feral birds depending on the particular circumstances include:
 - a) restricting feeding at public places;
 - b) inhibiting breeding on buildings, by mechanically blocking the loft orifices and perching sites in, on and below the roofs, using netting, spikes, repellent gels and electroshock deterrent systems;
 - c) collecting and inactivating avian (pigeon) eggs;
 - d) controlling scavenging birds, such as gulls and corvids, on landfill sites;

- e) controlling seagulls at harbours and airports (if their numbers create hygiene and/or safety problems);
- f) controlling and sanitizing large communal roosts of birds in city parks – for example, effective decontamination of the soil under communal roosts infected with sapronotic fungi (*H. capsulatum*) is possible by repeated (3–4 times) use of 3% formaldehyde;
- g) reducing the number of nest boxes available for starlings;
- h) trapping birds (in nets or various bird traps) and euthanizing the captured birds, where permitted;
- i) sterilizing birds chemically, with a treated grain bait, where permitted;
- j) dispersal of birds by the use of tape strips ; strobe lights and flashlights ; fireworks, rockets and shell crackers ; shooting, pistols, explosives and screamers; tape-recorded distress or scary calls of birds (such as those of owls); falcons and other trained raptors; water-mist sprayers; plastic netting; and habitat modification, by thinning, clearing or even eliminating the vegetation (such as reeds, brush and trees) on communal roosts.

10.11 It is noted that Dumfries & Galloway Council are undertaking a pilot exercise on bird control by destroying nests following their National bird Summit- " *Gulls: Friend or Foe*" in June 2008. This will involve all local enforcement agencies including the police working together using existing legislative controls. The Scottish Government will monitor the outcome of this exercise and consider reviewing this guidance to share best practice if required.

Bell Chimes

10.12 The incidence of bell chimes from churches and clock towers has been subject to complaints mainly due to hourly chimes throughout the night. Where a local authority is satisfied that the bell chimes are a statutory nuisance, the 1990 Act requires the local authority to issue an abatement notice. The notice may require abatement, prohibition, or restriction on the occurrence or recurrence of the nuisance. The key is that the local authority may (and should) pursue a proportionate response in each case. Where there is conflict within the local community as to whether a nuisance exists, there is always compromise through mediation. The European Union Network for the Implementation and Enforcement of Environmental Law has produced a report on its "informal resolution of environmental conflicts by neighbourhood dialogue" project, which maybe helpful. This can be downloaded at :

http://ec.europa.eu/environment/impel/pdf/neighbourhood_dialogue_final_report.pdf

High Hedges

10.13 See paragraphs 4.12 – 4.14.

Noise

10.14 Noise is a far-reaching issue, although no longer regarded as the forgotten pollutant, as WHO guidance now indicates in its direct connection to potential adverse mental and physical health. Guidance on dealing with noise issues is covered elsewhere. These are :

Guidance on the Creation and Maintenance of Effective Noise Management Policies and Practice for Local Authorities and their Officers in Scotland at :

<http://www.scotland.gov.uk/Publications/2005/10/2192231/22317>

Guidance on Noise Nuisance (Antisocial Behaviour etc. (Scotland) Act 2004 at : <http://www.scotland.gov.uk/Resource/Doc/1052/0034507.pdf>

Dog Barking

10.15 One example of a common noise complaint is dog barking. There is guidance within the two documents referenced above, and some local authorities have advised they have successfully used the Antisocial Behaviour legislation to either issue a FPN or even seize a dog as noise making equipment! If a local authority is unable to obtain a noise measurement which breaches the stated levels in the schedule to The Antisocial Behaviour (Noise Control) (Scotland) Regulations 2005, it will not be able to issue a FPN under that legislation. However if Statutory Nuisance is established an abatement notice must be issued, which if not complied with can be dealt with using the FPN procedure described in this guidance.

ANNEX 1 – EXTRACT OF PART 9 OF THE PUBLIC HEALTH ETC (SCOTLAND) ACT 2008

STATUTORY NUISANCES

109 Insect nuisance

(1) Section 79 (statutory nuisances and inspections) of the Environmental Protection Act 1990 (c.43) (the “1990 Act”) is amended as follows.

(2) In subsection (1), after paragraph (fa), insert—
“(faa) any insects emanating from premises and being prejudicial to health or a nuisance;”.

(3) After subsection (5A), insert—
“(5AA) Subsection (1)(faa) above does not apply to insects that are wild animals included in Schedule 5 to the Wildlife and Countryside Act 1981 (c.69).

(5AB) For the purposes of subsection (1)(faa) above, “premises” does not include—

- (a) a site of special scientific interest (within the meaning of section 3(6) of the Nature Conservation (Scotland) Act 2004 (asp 6));
- (b) such other place (or type of place) as may be prescribed in regulations made by the Scottish Ministers.

(5AC) Before making regulations under subsection (5AB)(b) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (5AD) below.

(5AD) Those persons are—

- (a) such associations of local authorities; and
- (b) such other persons,

as the Scottish Ministers consider appropriate.”.

(4) In subsection (7), in the definition of “premises”, after “land” insert “(subject to subsection (5AB) above)”.

110 Artificial light nuisance

(1) Section 79 of the 1990 Act is further amended as follows.

(2) In subsection (1), after paragraph (fb), insert—

“(fba) artificial light emitted from—
(i) premises;
(ii) any stationary object,
so as to be prejudicial to health or a nuisance;”.

(3) In subsection (2)—

(a) after “(1)(b)” insert “, (fba)”;

(b) after “premises” insert “(or, in respect of paragraph (fba)(ii) above, a stationary object located on premises)”.

(4) After subsection (5B), insert—

“(5BA) Subsection (1)(fba) above does not apply to artificial light emitted from a lighthouse (within the meaning of Part 8 of the Merchant Shipping Act 1995 (c.21)).”.

111 Statutory nuisance: land covered with water

(1) Section 79 of the 1990 Act is further amended as follows.

(2) In subsection (1), after paragraph (e), insert—

“(ea) any water covering land or land covered with water which is in such a state as to be prejudicial to health or a nuisance;”.

(3) After subsection (5), insert—

“(5ZA) For the purposes of subsection (1)(ea) above, “land”—

(a) includes structures (other than buildings) in, on or over land;

(b) does not include—

(i) mains or other pipes used for carrying a water supply;

(ii) any part of the public sewerage system;

(iii) any other sewers, drains or other pipes used for carrying sewage;

(iv) the foreshore, that is to say, the land between the high and low water marks of ordinary spring tides;

(v) the seabed.

(5ZB) In subsection (5ZA) above—

“drain”, “sewage” and “sewer” have the meanings given by section 59 of the Sewerage (Scotland) Act 1968 (c.47);

“main” has the meaning given by section 109(1) of the Water (Scotland) Act 1980 (c.45);

“pipe” includes a service pipe within the meaning of that section of that Act;

“public sewerage system” has the meaning given by section 29 of the Water Services etc. (Scotland) Act 2005 (asp 3).”.

112 Power to make further provision regarding statutory nuisances

(1) The 1990 Act is further amended as follows.

(2) In section 79—

(a) in subsection (1), for “(1A)” substitute “(1ZA)”; and

(b) after subsection (1), insert—

“(1ZA)The Scottish Ministers may by regulations—

(a) amend this section so as to—

(i) prescribe additional matters which constitute statutory nuisances for the purposes of this Part;

(ii) vary the description of any matter which constitutes a statutory nuisance;
(b) in relation to an amendment under paragraph (a), amend this Act and any other enactment to make such incidental, supplementary, consequential, transitory, transitional or saving provision as the Scottish Ministers consider appropriate.

(1ZB) Before making regulations under subsection (1ZA) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (1ZC) below.

(1ZC) Those persons are—

- (a) such associations of local authorities; and
- (b) such other persons,

as the Scottish Ministers consider appropriate.”.

113 Enforcement of statutory nuisances: fixed penalty notice

(1) The 1990 Act is further amended as follows.

(2) In section 80 (summary proceedings for statutory nuisances), after subsection (4), insert—

“(4A) Where a local authority have reason to believe that a person has committed an offence under subsection (4) above, the local authority may give that person a notice (a “fixed penalty notice”) in accordance with section 80ZA offering the person the opportunity of discharging any liability to conviction for that offence by payment of a fixed penalty.”.

(3) After that section, insert—

“80ZA Fixed penalty notice: supplemental

(1) This section applies to a fixed penalty notice given under section 80(4A).

(2) A fixed penalty notice must give reasonable particulars of the circumstances alleged to constitute the offence.

(3) A fixed penalty notice must also state—

- (a) the amount of the fixed penalty;
- (b) the period within which it may be paid;
- (c) the—
 - (i) person to whom; and
 - (ii) address at which,payment may be made;
- (d) the method or methods by which payment may be made;
- (e) the consequences of not making a payment within the period for payment.

(4) The amount of the fixed penalty under section 80(4A) is—

- (a) in the case of a nuisance relating to industrial, trade or business premises, £400;
- (b) in any other case, £150.

(5) The period for payment of the fixed penalty is 14 days beginning with the day after the day on which the notice is given.

(6) The local authority may extend the period for paying the fixed penalty in any particular case if they consider it appropriate to do so by sending notice to the person to whom the fixed penalty notice was given.

(7) No proceedings for an offence under section 80(4) may be commenced before the end of the period for payment of the fixed penalty.

(8) In proceedings for an offence under section 80(4), a certificate which—

(a) purports to be signed by or on behalf of a person having responsibility for the financial affairs of the local authority; and

(b) states that payment of the amount specified in the fixed penalty notice was or was not received by the expiry of the period within which that fixed penalty may be paid,

is sufficient evidence of the facts stated.

(9) Where proceedings for an offence in respect of which a fixed penalty notice has been given are commenced, the notice is to be treated as withdrawn.

(10) Any sum received by a local authority under section 80(4A) accrues to that authority.

(11) The Scottish Ministers may, by regulations—

(a) provide that fixed penalty notices may not be given in such circumstances as may be prescribed;

(b) provide for the form of a fixed penalty notice;

(c) provide for the method or methods by which fixed penalties may be paid;

(d) modify subsection (4)(a) or (b) above so as to substitute a different amount (not exceeding level 2 on the standard scale) for the amount for the time being specified there;

(e) provide for the amount of the fixed penalty to be different in different cases or descriptions of case;

(f) modify subsection (5) above so as to substitute a different period for the period for the time being specified there;

(g) provide for the keeping of accounts, and the preparation and publication of statements of account relating to fixed penalties under section 80(4A).

(12) Before making regulations under subsection (11) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (13) below.

(13) Those persons are—

(a) such associations of local authorities; and

(b) such other persons,

as the Scottish Ministers consider appropriate.”.

(4) In section 81 (supplementary provisions), for subsection (3), substitute—

“(3) Where an abatement notice has not been complied with, the local authority may, whether or not—

- (a) proceedings have been taken for an offence under section 80(4); or
- (b) a fixed penalty notice has been given under section 80(4A) in respect of that offence (regardless of whether the fixed penalty notice is accepted),

abate the nuisance and do whatever may be necessary in execution of the abatement notice.”.

114 Procedure for regulations

(1) Section 161 (regulations, orders and directions) of the 1990 Act is amended as follows.

(2) In subsection (2), at the beginning insert “Subject to subsection (2B) below,”.

(3) After subsection (2A), insert—

“(2B) No statutory instrument containing regulations made under section 79(1ZA) or 80ZA(11) above may be made unless a draft of it has been laid before, and approved by resolution of, the Scottish Parliament.”.

115 Sewerage nuisance: local authority powers

(1) Section 26 of the Water Services etc. (Scotland) Act 2005 (asp 3) is amended as follows.

(2) In subsection (10), for the words from “nuisance” in the second place where it appears to the end, substitute “nuisance—

- (a) which constitutes a sewerage nuisance; and
- (b) in respect of which a sewerage code applies.”.

(3) After that subsection, insert—

“(10A) Paragraphs 2, 3 and 5 of Schedule 3 to the Environmental Protection Act 1990 (c.43) apply to the exercise of functions by a local authority under this section as they apply to the exercise of functions under Part III of that Act, with the following modifications—

- (a) in paragraph 2(1)(a), for “statutory nuisance” substitute “sewerage nuisance”;
- (b) in paragraph 2(1)(b) and (4)(b), for “Part III” substitute “section 26 of the Water Services etc. (Scotland) Act 2005 (asp 3)”;
- (c) in paragraph 3(1), for the words from “, on summary conviction” to the end substitute—

“(a) on summary conviction, to a fine not exceeding the statutory maximum;

(b) on conviction on indictment, to a fine.”;

- (d) in paragraph 3(2), for the words from “, on summary conviction” to the end substitute—

“(a) on summary conviction, to a fine not exceeding the statutory maximum;

(b) on conviction on indictment, to a fine.”;

- (e) in paragraph 5—

(i) for the words “executing Part III” substitute “exercising functions under section 26 of the Water Services etc. (Scotland) Act 2005”;

(ii) the words from “other” to the end are to be disregarded.”.

SCHEDULE 2
(introduced by section 125)
MINOR AND CONSEQUENTIAL AMENDMENTS

The Statutory Nuisance (Appeals) (Scotland) Regulations 1996 (S.I. 1996/1076)

6 (1) The Statutory Nuisance (Appeals) (Scotland) Regulations 1996 are amended as follows.

(2) After regulation 2(2)(e)(iii) (appeals under section 80(3) of the 1990 Act), insert “; or (iv) is a nuisance falling within section 79(1)(ea), (faa) or (fba) of the 1990 Act,”.

**ANNEX 2 – ENVIRONMENTAL PROTECTION ACT 1990 PART III
UNOFFICIAL CONSOLIDATED VERSION**

**ENVIRONMENTAL PROTECTION ACT 1990 PART III
Statutory Nuisances and Clean Air
(UNOFFICIAL CONSOLIDATED VERSION – PLEASE READ IN CONJUNCTION WITH THE
ENVIRONMENTAL PROTECTION ACT 1990 AND THE PUBLIC HEALTH ETC. (SCOTLAND) ACT
2008)**

THIS VERSION RELATES TO SCOTLAND ONLY

79. Statutory nuisances and inspections therefor.

(1) Subject to subsections (1ZA) to (6A) below, the following matters constitute “statutory nuisances” for the purposes of this Part, that is to say—

- (a) any premises in such a state as to be prejudicial to health or a nuisance;
- (b) smoke emitted from premises so as to be prejudicial to health or a nuisance;
- (c) fumes or gases emitted from premises so as to be prejudicial to health or a nuisance;
- (d) any dust, steam, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;
- (e) any accumulation or deposit which is prejudicial to health or a nuisance;
- (ea) any water covering land or land covered with water which is in such a state as to be prejudicial to health or a nuisance;
- (f) any animal kept in such a place or manner as to be prejudicial to health or a nuisance;
- (faa) any insects emanating from premises and being prejudicial to health or a nuisance;
- (fba) artificial light emitted from—
 - (i) premises;
 - (ii) any stationary object,so as to be prejudicial to health or a nuisance;
- (g) noise emitted from premises so as to be prejudicial to health or a nuisance;
- (ga) noise that is prejudicial to health or a nuisance and is emitted from or caused by a vehicle, machinery or equipment in a street or in Scotland, road;
- (h) any other matter declared by any enactment to be a statutory nuisance;

and it shall be the duty of every local authority to cause its area to be inspected from time to time to detect any statutory nuisances which ought to be dealt with under section 80 below or sections 80 and 80A below and, where a complaint of a statutory nuisance is made to it by a person living within its area, to take such steps as are reasonably practicable to investigate the complaint.

(1ZA) The Scottish Ministers may by regulations—

- (a) amend this section so as to—
 - (i) prescribe additional matters which constitute statutory nuisances for the purposes of this Part;
 - (ii) vary the description of any matter which constitutes a statutory nuisance;

(b) in relation to an amendment under paragraph (a), amend this Act and any other enactment to make such incidental, supplementary, consequential, transitory, transitional or saving provision as the Scottish Ministers consider appropriate.

(1ZB) Before making regulations under subsection (1ZA) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (1ZC) below.

(1ZC) Those persons are—

- (a) such associations of local authorities; and
- (b) such other persons,

as the Scottish Ministers consider appropriate.

(1A) No matter shall constitute a statutory nuisance to the extent that it consists of, or is caused by, any land being in a contaminated state.

(1B) Land is in a “contaminated state” for the purposes of sub section (1A) above if, and only if, it is in such a condition, by reason of substances in, on or under the land, that—

- (a) significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused;

and in this subsection “harm”, “pollution” in relation to the water environment, “substance” and “the water environment” have the same meanings as in Part IIA of this Act.

(2) Subsection (1)(b), (fba) and (g) above do not apply in relation to premises (or, in respect of paragraph (fba)(ii) above, a stationary object located on premises)—

- (a) occupied on behalf of the Crown for naval, military or air force purposes or for the purposes of the department of the Secretary of State having responsibility for defence, or
- (b) occupied by or for the purposes of a visiting force;

and “visiting force” means any such body, contingent or detachment of the forces of any country as is visiting force for the purposes of any of the provisions of the Visiting Forces Act 1952.

(3) Subsection (1)(b) above does not apply to—

- (i) smoke emitted from a chimney of a private dwelling within a smoke control area,
- (ii) dark smoke emitted from a chimney of a building or a chimney serving the furnace of a boiler or industrial plant attached to a building or for the time being fixed to or installed on any land,
- (iii) smoke emitted from a railway locomotive steam engine, or
- (iv) dark smoke emitted otherwise than as mentioned above from industrial or trade premises.

(4) Subsection (1)(c) above does not apply in relation to premises other than private dwellings.

(5) Subsection (1)(d) above does not apply to steam emitted from a railway locomotive engine.

(5ZA) For the purposes of subsection (1)(ea) above, “land”—

(a) includes structures (other than buildings) in, on or over land;

(b) does not include—

(i) mains or other pipes used for carrying a water supply;

(ii) any part of the public sewerage system;

(iii) any other sewers, drains or other pipes used for carrying sewage;

(iv) the foreshore, that is to say, the land between the high and low water marks of ordinary spring tides;

(v) the seabed.

(5ZB) In subsection (5ZA) above—

“drain”, “sewage” and “sewer” have the meanings given by section 59 of the Sewerage (Scotland) Act 1968 (c.47);

“main” has the meaning given by section 109(1) of the Water (Scotland) Act 1980 (c.45);

“pipe” includes a service pipe within the meaning of that section of that Act;

“public sewerage system” has the meaning given by section 29 of the Water Services etc. (Scotland) Act 2005 (asp 3).

(5AA) Subsection (1)(faa) above does not apply to insects that are wild animals included in Schedule 5 to the Wildlife and Countryside Act 1981 (c.69).

(5AB) For the purposes of subsection (1)(faa) above, “premises” does not include—

(a) a site of special scientific interest (within the meaning of section 3(6) of the Nature Conservation (Scotland) Act 2004 (asp 6));

(b) such other place (or type of place) as may be prescribed in regulations made by the Scottish Ministers.

(5AC) Before making regulations under subsection (5AB)(b) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (5AD) below.

(5AD) Those persons are—

(a) such associations of local authorities; and

(b) such other persons,

as the Scottish Ministers consider appropriate.

(5BA) Subsection (1)(fba) above does not apply to artificial light emitted from a lighthouse (within the meaning of Part 8 of the Merchant Shipping Act 1995 (c.21)).

(6) Subsection (1)(g) above does not apply to noise caused by aircraft other than model aircraft.

(6A) Subsection (1)(ga) above does not apply to noise made—

(a) by traffic,

- (b) by any naval, military or air force of the Crown or by a visiting force (as defined in subsection (2) above), or
- (c) by a political demonstration or a demonstration supporting or opposing a cause or campaign.

(7) In this Part—

“chimney” includes structures and openings of any kind from or through which smoke may be emitted;

“dust” does not include dust emitted from a chimney as an ingredient of smoke;

“equipment” includes a musical instrument;

“fumes” means any airborne solid matter smaller than dust;

“gas” includes vapour and moisture precipitated from vapour;

“industrial, trade or business premises” means premises used for any industrial, trade or business purposes or premises not so used on which matter is burnt in connection with any industrial, trade or business process, and premises are used for industrial purposes where they are used for the purposes of any treatment or process as well as where they are used for the purposes of manufacturing;

“local authority” means, —

(a) in Greater London, a London borough council, the Common Council of the City of London and, as respects the Temples, the Sub-Treasurer of the Inner Temple and the Under-Treasurer of the Middle Temple respectively;

(b) in England and Wales outside Greater London, a district council;

(bb) in Wales, a county council or county borough council;

(c) the Council of the Isles of Scilly; and

(d) in Scotland, a district or islands council or a council constituted under section 2 of the Local Government etc (Scotland) Act 1994;

“noise” includes vibration;

“person responsible”—

(a) in relation to a statutory nuisance, means the person to whose act, default or sufferance the nuisance is attributable;

(b) in relation to a vehicle, includes the person in whose name the vehicle is for the time being registered under the Vehicle Excise and Registration Act 1994 and any other person who is for the time being the driver of the vehicle;

(c) in relation to machinery or equipment, includes any person who is for the time being the operator of the machinery or equipment;

“prejudicial to health” means injurious, or likely to cause injury, to health;

“premises” includes land (subject to subsection (5AB) above) and, subject to subsection (12) and, in relation to England and Wales, section 81A(9) below, any vessel;

“private dwelling” means any building, or part of a building, used or intended to be used, as a dwelling;

“road” has the same meaning as in Part IV of the New Roads and Street Works Act 1991;

“smoke” includes soot, ash, grit and gritty particles emitted in smoke;

“street” means a highway and any other road, footway, square or court that is for the time being open to the public;

and any expressions used in this section and in the Clean Air Act 1993 have the same meaning in this section as in that Act and section 3 of the Clean Air Act 1993 shall apply for the interpretation of the expression “dark smoke” and the operation of this Part in relation to it.

(8) Where, by an order under section 2 of the Public Health (Control of Disease) Act 1984, a port health authority has been constituted for any port health district, the port health authority, shall have by virtue of this subsection, as respects its district, the

functions conferred or imposed by this Part in relation to statutory nuisances other than a nuisance falling within paragraph (g) or (ga) of subsection (1) above and no such order shall be made assigning those functions; and “local authority” and “area” shall be construed accordingly.

(9) In this Part “best practicable means” is to be interpreted by reference to the following provisions—

(a) “practicable” means reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to the financial implications;

(b) the means to be employed include the design, installation, maintenance and manner and periods of operation of plant and machinery, and the design, construction and maintenance of buildings and structures;

(c) the test is to apply only so far as compatible with any duty imposed by law;

(d) the test is to apply only so far as compatible with safety and safe working conditions, and with the exigencies of any emergency or unforeseeable circumstances;

and, in circumstances where a code of practice under section 71 of the Control of Pollution Act 1974 (noise minimisation) is applicable, regard shall also be had to guidance given in it.

(10) A local authority shall not without the consent of the Secretary of State institute summary proceedings under this Part in respect of a nuisance falling within paragraph (b), (d), (e) or (g) and, in relation to Scotland, paragraph (ga), of subsection (1) above if proceedings in respect thereof might be instituted under Part I under regulations under section 2 of the Pollution Prevention and Control Act 1999 of the Alkali &c. Works Regulation Act 1906 or section 5 of the Health and Safety at Work etc. Act 1974.

(11) The area of a local authority which includes part of the seashore shall also include for the purposes of this Part the territorial sea lying seawards from that part of the shore; and subject to subsection (12) and, in relation to England and Wales, section 81A(9) below, this Part shall have effect, in relation to any area included in the area of a local authority by virtue of this subsection—

(a) as if references to premises and the occupier of premises included respectively a vessel and the master of a vessel; and

(b) with such other modifications, if any, as are prescribed in regulations made by the Secretary of State.

(12) A vessel powered by steam reciprocating machinery is not a vessel to which this Part of this Act applies.

80. Summary proceedings for statutory nuisances.

(1) Where a local authority is satisfied that a statutory nuisance exists, or is likely to occur or recur, in the area of the authority, the local authority shall serve a notice (“an abatement notice”) imposing all or any of the following requirements—

(a) requiring the abatement of the nuisance or prohibiting or restricting its occurrence or recurrence;

(b) requiring the execution of such works, and the taking of such other steps, as may be necessary for any of those purposes,

and the notice shall specify the time or times within which the requirements of the notice are to be complied with.

(2) Subject to section 80A(1) below, the abatement notice shall be served—

(a) except in a case falling within paragraph (b) or (c) below, on the person responsible for the nuisance;

(b) where the nuisance arises from any defect of a structural character, on the owner of the premises;

(c) where the person responsible for the nuisance cannot be found or the nuisance has not yet occurred, on the owner or occupier of the premises.

(3) A person served with an abatement notice may appeal against the notice to a magistrates' court or in Scotland, the sheriff within the period of twenty-one days beginning with the date on which he was served with the notice.

(4) If a person on whom an abatement notice is served, without reasonable excuse, contravenes or fails to comply with any requirement or prohibition imposed by the notice, he shall be guilty of an offence.

(4A) Where a local authority have reason to believe that a person has committed an offence under subsection (4) above, the local authority may give that person a notice (a "fixed penalty notice") in accordance with section 80ZA offering the person the opportunity of discharging any liability to conviction for that offence by payment of a fixed penalty.

(5) Except in a case falling within subsection (6) below, a person who commits an offence under subsection (4) above shall be liable on summary conviction to a fine not exceeding level 5 on the standard scale together with a further fine of an amount equal to one-tenth of that level for each day on which the offence continues after the conviction.

(6) A person who commits an offence under subsection (4) above on industrial, trade or business premises shall be liable on summary conviction to a fine not exceeding £40,000.

(7) Subject to subsection (8) below, in any proceedings for an offence under subsection (4) above in respect of a statutory nuisance it shall be a defence to prove that the best practicable means were used to prevent, or to counteract the effects of, the nuisance.

(8) The defence under subsection (7) above is not available—

(a) in the case of a nuisance falling within paragraph (a), (d), (e), (f) or (g) of section 79(1) above except where the nuisance arises on industrial, trade or business premises;

(aa) in the case of a nuisance falling within paragraph (ga) of section 79(1) above except where the noise is emitted from or caused by a vehicle,

machinery or equipment being used for industrial, trade or business purposes;

(b) in the case of a nuisance falling within paragraph (b) of section 79(1) above except where the smoke is emitted from a chimney; and

(c) in the case of a nuisance falling within paragraph (c) or (h) of section 79(1) above.

(9) In proceedings for an offence under subsection (4) above in respect of a statutory nuisance falling within paragraph (g) or (ga) of section 79(1) above where the offence consists in contravening requirements imposed by virtue of subsection (1)(a) above it shall be a defence to prove—

(a) that the alleged offence was covered by a notice served under section 60 or a consent given under section 61 or 65 of the Control of Pollution Act 1974 (construction sites, etc); or

(b) where the alleged offence was committed at a time when the premises were subject to a notice under section 66 of that Act (noise reduction notice), that the level of noise emitted from the premises at that time was not such as to constitute a contravention of the notice under that section; or

(c) where the alleged offence was committed at a time when the premises were not subject to a notice under section 66 of that Act, and when a level fixed under section 67 of that Act (new buildings liable to abatement order) applied to the premises, that the level of noise emitted from the premises at that time did not exceed that level.

(10) Paragraphs (b) and (c) of subsection (9) above apply whether or not the relevant notice was subject to appeal at the time when the offence was alleged to have been committed.

80ZA Fixed penalty notice: supplemental

(1) This section applies to a fixed penalty notice given under section 80(4A).

(2) A fixed penalty notice must give reasonable particulars of the circumstances alleged to constitute the offence.

(3) A fixed penalty notice must also state—

(a) the amount of the fixed penalty;

(b) the period within which it may be paid;

(c) the—

(i) person to whom; and

(ii) address at which,

payment may be made;

(d) the method or methods by which payment may be made;

(e) the consequences of not making a payment within the period for payment.

(4) The amount of the fixed penalty under section 80(4A) is—

(a) in the case of a nuisance relating to industrial, trade or business premises, £400;

(b) in any other case, £150.

(5) The period for payment of the fixed penalty is 14 days beginning with the day after the day on which the notice is given.

(6) The local authority may extend the period for paying the fixed penalty in any particular case if they consider it appropriate to do so by sending notice to the person to whom the fixed penalty notice was given.

(7) No proceedings for an offence under section 80(4) may be commenced before the end of the period for payment of the fixed penalty.

(8) In proceedings for an offence under section 80(4), a certificate which—

- (a) purports to be signed by or on behalf of a person having responsibility for the financial affairs of the local authority; and
- (b) states that payment of the amount specified in the fixed penalty notice was or was not received by the expiry of the period within which that fixed penalty may be paid,

is sufficient evidence of the facts stated.

(9) Where proceedings for an offence in respect of which a fixed penalty notice has been given are commenced, the notice is to be treated as withdrawn.

(10) Any sum received by a local authority under section 80(4A) accrues to that authority.

(11) The Scottish Ministers may, by regulations—

- (a) provide that fixed penalty notices may not be given in such circumstances as may be prescribed;
- (b) provide for the form of a fixed penalty notice;
- (c) provide for the method or methods by which fixed penalties may be paid;
- (d) modify subsection (4)(a) or (b) above so as to substitute a different amount (not exceeding level 2 on the standard scale) for the amount for the time being specified there;
- (e) provide for the amount of the fixed penalty to be different in different cases or descriptions of case;
- (f) modify subsection (5) above so as to substitute a different period for the period for the time being specified there;
- (g) provide for the keeping of accounts, and the preparation and publication of statements of account relating to fixed penalties under section 80(4A).

(12) Before making regulations under subsection (11) above, the Scottish Ministers must consult, in so far as it is reasonably practicable to do so, the persons mentioned in subsection (13) below.

(13) Those persons are—

- (a) such associations of local authorities; and
- (b) such other persons,

as the Scottish Ministers consider appropriate.

80A. Abatement notice in respect of noise in street.

(1) In the case of a statutory nuisance within section 79(1)(ga) above that—

- (a) has not yet occurred, or
- (b) arises from noise emitted from or caused by an unattended vehicle or unattended machinery or equipment,

the abatement notice shall be served in accordance with subsection (2) below.

(2) The notice shall be served—

- (a) where the person responsible for the vehicle, machinery or equipment can be found, on that person;
- (b) where that person cannot be found or where the local authority determines that this paragraph should apply, by fixing the notice to the vehicle, machinery or equipment.

(3) Where—

- (a) an abatement notice is served in accordance with subsection (2)(b) above by virtue of a determination of the local authority, and
- (b) the person responsible for the vehicle, machinery or equipment can be found and served with a copy of the notice within an hour of the notice being fixed to the vehicle, machinery or equipment,

a copy of the notice shall be served on that person accordingly.

(4) Where an abatement notice is served in accordance with subsection (2)(b) above by virtue of a determination of the local authority, the notice shall state that, if a copy of the notice is subsequently served under subsection (3) above, the time specified in the notice as the time within which its requirements are to be complied with is extended by such further period as is specified in the notice.

(5) Where an abatement notice is served in accordance with subsection (2)(b) above, the person responsible for the vehicle, machinery or equipment may appeal against the notice under section 80(3) above as if he had been served with the notice on the date on which it was fixed to the vehicle, machinery or equipment.

(6) Section 80(4) above shall apply in relation to a person on whom a copy of an abatement notice is served under subsection (3) above as if the copy were the notice itself.

(7) A person who removes or interferes with a notice fixed to a vehicle, machinery or equipment in accordance with subsection (2)(b) above shall be guilty of an offence, unless he is the person responsible for the vehicle, machinery or equipment or he does so with the authority of that person.

(8) A person who commits an offence under subsection (7) above shall be liable on summary conviction to a fine not exceeding level 3 on the standard scale.

81. Supplementary provisions.

(1) Subject to subsection (1A) below, where more than one person is responsible for a statutory nuisance section 80 above shall apply to each of those persons whether or not what any one of them is responsible for would by itself amount to a nuisance.

(1A) In relation to a statutory nuisance within section 79(1)(ga) above for which more than one person is responsible (whether or not what any one of those persons is responsible for would by itself amount to such a nuisance), section 80(2)(a) above shall apply with the substitution of “any one of the persons” for “the person”.

(1B) In relation to a statutory nuisance within section 79(1)(ga) above caused by noise emitted from or caused by an unattended vehicle or unattended machinery or equipment for which more than one person is responsible, section 80A above shall apply with the substitution—

- (a) in subsection (2)(a), of “any of the persons” for “the person” and of “one such person” for “that person”,
- (b) in subsection (2)(b), of “such a person” for “that person”,
- (c) in subsection (3), of “any of the persons” for “the person” and of “one such person” for “that person”,
- (d) in subsection (5), of “any person” for “the person”, and
- (e) in subsection (7), of “a person” for “the person” and of “such a person” for “that person”.

(2) Where a statutory nuisance which exists or has occurred within the area of a local authority, or which has affected any part of that area, appears to the local authority to be wholly or partly caused by some act or default committed or taking place outside the area, the local authority may act under section 80 above as if the act or default were wholly within that area, except that any appeal shall be heard by a magistrates’ court or in Scotland, the sheriff having jurisdiction where the act or default is alleged to have taken place.

(3) Where an abatement notice has not been complied with, the local authority may, whether or not—

- (a) proceedings have been taken for an offence under section 80(4); or
- (b) a fixed penalty notice has been given under section 80(4A) in respect of that offence (regardless of whether the fixed penalty notice is accepted),

abate the nuisance and do whatever may be necessary in execution of the abatement notice.

(3A) The power under subsection (3) above shall, where the matter to be abated is a statutory nuisance by virtue of section 79(1)(g) above, include power to seize and remove any equipment which it appears to the authority is being or has been used in the emission of the noise in question.

(3B) A person who wilfully obstructs any person exercising, by virtue of subsection (3A) above, the power conferred by subsection (3) above shall be liable, on summary conviction, to a fine not exceeding level 3 on the standard scale.

(3C) Schedule 1 to the Antisocial Behaviour etc. (Scotland) Act 2004 (asp 8) shall have effect in relation to equipment seized by virtue of subsection (3A) above as it does in relation to equipment seized under section 47(2) of that Act, subject to the following modifications—

- (a) in paragraph 1(a), “noise offence” means an offence under section 80(4) above in respect of a statutory nuisance falling within section 79(1)(g) above; and
- (b) in paragraph 1(b), “seized equipment” means equipment seized by virtue of subsection (3A) above.

(4) Any expenses reasonably incurred by a local authority in abating, or preventing the recurrence of, a statutory nuisance under subsection (3) above may be recovered

by them from the person by whose act or default the nuisance was caused and, if that person is the owner of the premises, from any person who is for the time being the owner thereof; and the court or sheriff may apportion the expenses between persons by whose acts or defaults the nuisance is caused in such manner as the court consider or sheriff considers fair and reasonable.

(5) If a local authority is of opinion that proceedings for an offence under section 80(4) above would afford an inadequate remedy in the case of any statutory nuisance, they may, subject to subsection (6) below, take proceedings in the High Court or, in Scotland, in any court of competent jurisdiction, for the purpose of securing the abatement, prohibition or restriction of the nuisance, and the proceedings shall be maintainable notwithstanding the local authority have suffered no damage from the nuisance.

(6) In any proceedings under subsection (5) above in respect of a nuisance falling within paragraph (g) or (ga) of section 79(1) above, it shall be a defence to prove that the noise was authorised by a notice under section 60 or a consent under section 61 (construction sites) of the Control of Pollution Act 1974.

(7) The further supplementary provisions in Schedule 3 to this Act shall have effect.

82. Summary proceedings by persons aggrieved by statutory nuisances.

(1) A magistrates' court may act under this section on a complaint or, in Scotland, the sheriff may act under this section on a summary application, made by any person on the ground that he is aggrieved by the existence of a statutory nuisance.

(2) If the magistrates' court or, in Scotland, the sheriff is satisfied that the alleged nuisance exists, or that although abated it is likely to recur on the same premises or, in the case of a nuisance within section 79(1)(ga) above, in the same street or, in Scotland, road, the court or the sheriff shall make an order for either or both of the following purposes—

(a) requiring the defendant or, in Scotland, defender to abate the nuisance, within a time specified in the order, and to execute any works necessary for that purpose;

(b) prohibiting a recurrence of the nuisance, and requiring the defendant or defender, within a time specified in the order, to execute any works necessary to prevent the recurrence;

and, in England and Wales, may also impose on the defendant a fine not exceeding level 5 on the standard scale.

(3) If the magistrates' court or the sheriff is satisfied that the alleged nuisance exists and is such as, in the opinion of the court or of the sheriff, to render premises unfit for human habitation, an order under subsection (2) above may prohibit the use of the premises for human habitation until the premises are, to the satisfaction of the court or of the sheriff, rendered fit for that purpose.

(4) Proceedings for an order under subsection (2) above shall be brought—

(a) except in a case falling within paragraph (b), (c) or (d) below, against the person responsible for the nuisance;

(b) where the nuisance arises from any defect of a structural character, against the owner of the premises;

(c) where the person responsible for the nuisance cannot be found, against the owner or occupier of the premises.

(d) in the case of a statutory nuisance within section 79(1)(ga) above caused by noise emitted from or caused by an unattended vehicle or unattended machinery or equipment, against the person responsible for the vehicle, machinery or equipment.

(5) Subject to subsection (5A) below, where more than one person is responsible for a statutory nuisance, subsections (1) to (4) above shall apply to each of those persons whether or not what any one of them is responsible for would by itself amount to a nuisance.

(5A) In relation to a statutory nuisance within section 79(1)(ga) above for which more than one person is responsible (whether or not what any one of those persons is responsible for would by itself amount to such a nuisance), subsection (4)(a) above shall apply with the substitution of “each person responsible for the nuisance who can be found” for “the person responsible for the nuisance”.

(5B) In relation to a statutory nuisance within section 79(1)(ga) above caused by noise emitted from or caused by an unattended vehicle or unattended machinery or equipment for which more than one person is responsible, subsection (4)(d) above shall apply with the substitution of “any person” for “the person”.

(6) Before instituting proceedings for an order under subsection (2) above against any person, the person aggrieved by the nuisance shall give to that person such notice in writing of his intention to bring the proceedings as is applicable to proceedings in respect of a nuisance of that description and the notice shall specify the matter complained of.

(7) The notice of the bringing of proceedings in respect of a statutory nuisance required by subsection (6) above which is applicable is—

(a) in the case of a nuisance falling within paragraph (g) or (ga) of section 79(1) above, not less than three days’ notice; and

(b) in the case of a nuisance of any other description, not less than twenty-one days’ notice;

but the Scottish Ministers may, by order, provide that this subsection shall have effect as if such period as is specified in the order were the minimum period of notice applicable to any description of statutory nuisance specified in the order.

(8) A person who, without reasonable excuse, contravenes any requirement or prohibition imposed by an order under subsection (2) above shall be guilty of an offence and liable on summary conviction to a fine not exceeding level 5 on the standard scale together with a further fine of an amount equal to one-tenth of that level for each day on which the offence continues after the conviction.

(9) Subject to subsection (10) below, in any proceedings for an offence under subsection (8) above in respect of a statutory nuisance it shall be a defence to prove that the best practicable means were used to prevent, or to counteract the effects of, the nuisance.

(10) The defence under subsection (9) above is not available—

- (a) in the case of a nuisance falling within paragraph (a), (d), (e), (f), or (g) of section 79(1) above except where the nuisance arises on industrial, trade or business premises;
- (aa) in the case of a nuisance falling within paragraph (ga) of section 79(1) above except where the noise is emitted from or caused by a vehicle, machinery or equipment being used for industrial, trade or business purposes;
- (b) in the case of a nuisance falling within paragraph (b) of section 79(1) above except where the smoke is emitted from a chimney;
- (c) in the case of a nuisance falling within paragraph (c) or (h) of section 79(1) above; and
- (d) in the case of a nuisance which is such as to render the premises unfit for human habitation.

(11) If a person is convicted of an offence under subsection (8) above, a magistrates' court or the sheriff may, after giving the local authority in whose area the nuisance has occurred an opportunity of being heard, direct the authority to do anything which the person convicted was required to do by the order to which the conviction relates.

(12) Where on the hearing of proceedings for an order under subsection (2) above it is proved that the alleged nuisance existed at the date of the making of the complaint or summary application, then, whether or not at the date of the hearing it still exists or is likely to recur, the court or the sheriff shall order the defendant or defender (or defendants or defenders in such proportions as appears fair and reasonable) to pay to the person bringing the proceedings such amount as the court or the sheriff considers reasonably sufficient to compensate him for any expenses properly incurred by him in the proceedings.

(13) If it appears to the magistrates' court or to the sheriff that neither the person responsible for the nuisance nor the owner or occupier of the premises or (as the case may be) the person responsible for the vehicle, machinery or equipment can be found the court or the sheriff may, after giving the local authority in whose area the nuisance has occurred an opportunity of being heard, direct the authority to do anything which the court or the sheriff would have ordered that person to do.

Statutory nuisances: Scotland

83. Repealed

Termination of existing controls over offensive trades and businesses

84. Termination of Public Health Act controls over offensive trades etc.

- (1) Where a person carries on, in the area or part of the area of any local authority—
 - (a) in England or Wales, a trade which—
 - (i) is an offensive trade within the meaning of section 107 of the ^{M17}Public Health Act 1936 in that area or part of that area, and
 - (ii) constitutes a prescribed process designated for local control for the carrying on of which an authorisation is required under section 6 of this Act; or
 - (b) in Scotland, a business which—
 - (i) is mentioned in section 32(1) of the Public Health (Scotland) Act 1897 (or is an offensive business by virtue of that section) in that area or part of that area; and

(ii) constitutes a prescribed process designated for local control for the carrying on of which an authorisation is required under the said section 6,

subsection (2) below shall have effect in relation to that trade or business as from the date on which an authorisation is granted under section 6 of this Act or, if that person has not applied for such an authorisation within the period allowed under section 2(1) above for making applications under that section, as from the end of that period.

(2) Where this subsection applies in relation to the trade or business carried on by any person—

(a) nothing in section 107 of the Public Health Act 1936 or in section 32 of the Public Health (Scotland) Act 1897 shall apply in relation to it, and

(b) no byelaws or further byelaws made under section 108(2) of the said Act of 1936, or under subsection (2) of the said section 32, with respect to a trade or business of that description shall apply in relation to it;

but without prejudice to the continuance of, and imposition of any penalty in, any proceedings under the said section 107 or the said section 32 which were instituted before the date as from which this subsection has effect in relation to the trade or business.

(3) Subsection (2)(b) above shall apply in relation to the trade of fish frying as it applies in relation to an offensive trade.

(4) When the Scottish Ministers considers it expedient to do so, having regard to the operation of Part I and the preceding provisions of this Part of this Act in relation to offensive trades or businesses, he may by order repeal—

(a) sections 107 and 108 of the Public Health Act 1936; and

(b) section 32 of the Public Health (Scotland) Act 1897;

and different days may be so appointed in relation to trades or businesses which constitute prescribed processes and those which do not.

(5) In this section—

“prescribed process” has the same meaning as in Part I of this Act; and

“offensive trade” or “trade” has the same meaning as in section 107 of the Public Health Act 1936.

Application to gases of certain Clean Air Act provisions

85. Repealed

ENVIRONMENTAL PROTECTION ACT 1990
SCHEDULE 3 - STATUTORY NUISANCES: SUPPLEMENTARY PROVISIONS
(UNOFFICIAL CONSOLIDATED VERSION FOR INFORMATION ONLY)

Appeals to magistrates' court

1. — (1) This paragraph applies in relation to appeals under section 80(3) against an abatement notice to a magistrates' court.

(2) An appeal to which this paragraph applies shall be by way of complaint for an order and the Magistrates' Courts Act 1980 shall apply to the proceedings.

(3) An appeal against any decision of a magistrates' court in pursuance of an appeal to which this paragraph applies shall lie to the Crown Court at the instance of any party to the proceedings in which the decision was given.

(4) The Secretary of State may make regulations as to appeals to which this paragraph applies and the regulations may in particular—

(a) include provisions comparable to those in section 290 of the Public Health Act 1936 (appeals against notices requiring the execution of works);

(b) prescribe the cases in which an abatement notice is, or is not, to be suspended until the appeal is decided, or until some other stage in the proceedings;

(c) prescribe the cases in which the decision on appeal may in some respects be less favourable to the appellant than the decision from which he is appealing;

(d) prescribe the cases in which the appellant may claim that an abatement notice should have been served on some other person and prescribe the procedure to be followed in those cases.

1A. *Appeals to Sheriff*

(1) This paragraph applies in relation to appeals to the sheriff under section 80(3) against an abatement notice.

(2) An appeal to which this paragraph applies shall be by way of a summary application.

(3) The Scottish Ministers may make regulations as to appeals to which this paragraph applies and the regulations may in particular include or prescribe any of the matters referred to in sub-paragraphs (4)(a) to (d) of paragraph 1 above.

Powers of entry etc

2. — (1) Subject to sub-paragraph (2) below, any person authorised by a local authority may, on production (if so required) of his authority, enter any premises at any reasonable time—

(a) for the purpose of ascertaining whether or not a statutory nuisance exists; or

(b) for the purpose of taking any action, or executing any work, authorised or required by Part III.

(2) Admission by virtue of sub-paragraph (1) above to any premises used wholly or mainly for residential purposes shall not except in an emergency be demanded as of right unless twenty-four hours notice of the intended entry has been given to the occupier.

(3) If it is shown to the satisfaction of a justice of the peace on sworn information in writing—

(a) that admission to any premises has been refused, or that refusal is apprehended, or that the premises are unoccupied or the occupier is temporarily absent, or that the case is one of emergency, or that an application for admission would defeat the object of the entry; and

(b) that there is reasonable ground for entry into the premises for the purpose for which entry is required,

the justice may by warrant under his hand authorise the local authority by any authorised person to enter the premises, if need be by force.

(4) An authorised person entering any premises by virtue of sub-paragraph (1) or a warrant under sub-paragraph (3) above may—

(a) take with him such other persons and such equipment as may be necessary;

(b) carry out such inspections, measurements and tests as he considers necessary for the discharge of any of the local authority's functions under Part III; and

(c) take away such samples or articles as he considers necessary for that purpose.

(5) On leaving any unoccupied premises which he has entered by virtue of sub-paragraph (1) above or a warrant under sub-paragraph (3) above the authorised person shall leave them as effectually secured against trespassers as he found them.

(6) A warrant issued in pursuance of sub-paragraph (3) above shall continue in force until the purpose for which the entry is required has been satisfied.

(7) Any reference in this paragraph to an emergency is a reference to a case where the person requiring entry has reasonable cause to believe that circumstances exist which are likely to endanger life or health and that immediate entry is necessary to verify the existence of those circumstances or to ascertain their cause and to effect a remedy.

(8) In the application of this paragraph to Scotland, a reference to a justice of the peace or to a justice includes a reference to the sheriff.

2A. — (1) Any person authorised by a local authority may on production (if so required) of his authority—

(a) enter or open a vehicle, machinery or equipment, if necessary by force, or

(b) remove a vehicle, machinery or equipment from a street or, in Scotland, road to a secure place,

for the purpose of taking any action, or executing any work, authorised by or required under Part III in relation to a statutory nuisance within section 79(1)(ga) above caused by noise emitted from or caused by the vehicle, machinery or equipment.

(2) On leaving any unattended vehicle, machinery or equipment that he has entered or opened under sub-paragraph (1) above, the authorised person shall (subject to sub-paragraph (3) below) leave it secured against interference or theft in such manner and as effectually as he found it.

(3) If the authorised person is unable to comply with sub-paragraph (2) above, he shall for the purpose of securing the unattended vehicle, machinery or equipment either—

- (a) immobilise it by such means as he considers expedient, or
- (b) remove it from the street to a secure place.

(4) In carrying out any function under sub-paragraph (1), (2) or (3) above, the authorised person shall not cause more damage than is necessary.

(5) Before a vehicle, machinery or equipment is entered, opened or removed under sub-paragraph (1) above, the local authority shall notify the police of the intention to take action under that sub-paragraph.

(6) After a vehicle, machinery or equipment has been removed under sub-paragraph (1) or (3) above, the local authority shall notify the police of its removal and current location.

(7) Notification under sub-paragraph (5) or (6) above may be given to the police at any police station in the local authority's area or, in the case of the Temples, at any police station of the City of London Police.

(8) For the purposes of section 81(4) above, any expenses reasonably incurred by a local authority under sub-paragraph (2) or (3) above shall be treated as incurred by the authority under section 81(3) above in abating or preventing the recurrence of the statutory nuisance in question.]

Offences relating to entry

3. — (1) A person who wilfully obstructs any person acting in the exercise of any powers conferred by paragraph 2 or 2A above shall be liable, on summary conviction, to a fine not exceeding level 3 on the standard scale.

(2) If a person discloses any information relating to any trade secret obtained in the exercise of any powers conferred by paragraph 2 above he shall, unless the disclosure was made in the performance of his duty or with the consent of the person having the right to disclose the information, be liable, on summary conviction, to a fine not exceeding level 5 on the standard scale.

Default powers

4. — *This paragraph does not apply to Scotland.*

Protection from personal liability

5. Nothing done by, or by a member of, a local authority or by any officer of or other person authorised by a local authority shall, if done in good faith for the purpose of executing Part III, subject them or any of them personally to any action, liability, claim or demand whatsoever (other than any liability under section 17 or 18 of the Audit Commission Act 1998 (powers of district auditor and court)).

Statement of right of appeal in notices

6. Where an appeal against a notice served by a local authority lies to a magistrates' court or, in Scotland, the sheriff by virtue of section 80, it shall be the duty of the authority to include in such a notice a statement indicating that such an appeal lies as aforesaid and specifying the time within which it must be brought.

**ANNEX 3 – STATUTORY NUISANCE (APPEALS) (SCOTLAND) REGULATIONS 1996
UNOFFICIAL CONSOLIDATED VERSION**

**The Statutory Nuisance (Appeals) (Scotland) Regulations 1996
(UNOFFICIAL CONSOLIDATED VERSION FOR INFORMATION ONLY)**

Citation, commencement, interpretation and extent

1. — (1) These Regulations may be cited as the Statutory Nuisance (Appeals) (Scotland) Regulations 1996, shall come into force on 2nd May 1996 and shall extend to Scotland only.

(2) In these Regulations—

“the 1974 Act” means the Control of Pollution Act 1974;

“the 1990 Act” means the Environmental Protection Act 1990; and

“the 1993 Act” means the Noise and Statutory Nuisance Act 1993.

Appeals under section 80(3) of the 1990 Act

2. — (1) The provisions of this regulation apply in relation to an appeal brought by any person under section 80(3) of the 1990 Act (appeals to the sheriff) against an abatement notice served upon him by a local authority.

(2) The grounds on which a person served with such notice may appeal under section 80(3) of the 1990 Act are such one or more of the following grounds as are appropriate in the circumstances of the particular case:—

- (a) that the abatement notice is not justified by section 80 of the 1990 Act (summary proceedings for statutory nuisances);
- (b) that there has been some informality, defect or error in, or in connection with, the abatement notice, or in, or in connection with, any copy of the abatement notice served under section 80A(3) of the 1990 Act (certain notices in respect of vehicles, machinery or equipment) ;
- (c) that the authority have refused unreasonably to accept compliance with alternative requirements, or that the requirements of the abatement notice are otherwise unreasonable in character or extent, or are unnecessary;
- (d) that the time or, where more than one time is specified, any of the times, within which the requirements of the abatement notice are to be complied with is not reasonably sufficient for the purpose;
- (e) where the nuisance to which the notice relates—
 - (i) is a nuisance falling within section 79(1)(a), (d), (e), (f) or (g) of the 1990 Act and arises on industrial, trade, or business premises; or
 - (ii) is a nuisance falling within section 79(1)(b) of the 1990 Act and the smoke is emitted from a chimney; or
 - (iii) is a nuisance falling within section 79(1)(ga) of the 1990 Act and is noise emitted from or caused by a vehicle, machinery or equipment being used for industrial, trade or business purposes, or
 - (iv) is a nuisance falling within section 79(1)(ea), (faa) or (fba) of the 1990 Act,

that the best practicable means were used to prevent, or to counteract the effects of, the nuisance;

- (f) that, in the case of a nuisance under section 79(1)(g) or (ga) of the 1990 Act, the requirements imposed by the abatement notice by virtue of section 80(1)(a) of the 1990 Act are more onerous than the requirements for the time being in force, in relation to the noise to which the notice relates, of—
 - (i) any notice served under section 60 or 66 of the 1974 Act (control of noise on construction sites and from certain premises); or
 - (ii) any consent given under section 61 or 65 of the 1974 Act (consent for work on construction sites and consent for noise to exceed registered level in a noise abatement zone) ; or
 - (iii) any determination made under section 67 of the 1974 Act (noise control of new buildings);
- (g) that, in the case of a nuisance under section 79(1)(ga) of the 1990 Act, the requirements imposed by the abatement notice by virtue of section 80(1)(a) of the 1990 Act are more onerous than the requirements for the time being in force, in relation to the noise to which the notice relates, of any condition of a consent given under paragraph 1 of Schedule 2 to the 1993 Act (loudspeakers in streets or roads);
- (h) that the abatement notice should have been served on some person instead of the appellant, being—
 - (i) the person responsible for the nuisance; or
 - (ii) the person responsible for the vehicle, machinery or equipment; or
 - (iii) in the case of a nuisance arising from any defect of a structural character, the owner of the premises; or
 - (iv) in the case where the person responsible for the nuisance cannot be found or the nuisance has not yet occurred, the owner or occupier of the premises;
- (i) that the abatement notice might lawfully have been served on some person instead of the appellant being—
 - (i) in the case where the appellant is the owner of the premises, the occupier of the premises; or
 - (ii) in the case where the appellant is the occupier of the premises, the owner of the premises,

and that it would have been equitable for it to have been so served;

- (j) that the abatement notice might lawfully have been served on some person in addition to the appellant, being—
 - (i) a person also responsible for the nuisance; or
 - (ii) a person who is also owner of the premises; or
 - (iii) a person who is also an occupier of the premises; or
 - (iv) a person who is also the person responsible for the vehicle, machinery or equipment,

and that it would have been equitable for it to have been so served.

(3) If and so far as an appeal is based on the ground of some informality, defect or error in, or in connection with, the abatement notice, or in, or in connection with any copy of the notice served under section 80A(3) of the 1990 Act, the court shall dismiss the appeal if it is satisfied that the informality, defect or error was not a material one.

(4) Where the grounds upon which an appeal is brought include a ground specified in paragraph (2)(i) or (j) above, the appellant shall serve a copy of his notice of appeal on any other person referred to, and in the case of any appeal to which this regulation applies he may serve a copy of his notice of appeal on any other person having an interest in the premises, vehicle, machinery or equipment in question.

(5) On the hearing of the appeal the court may—

- (a) quash the abatement notice to which the appeal relates; or
- (b) vary the abatement notice in favour of the appellant in such manner as it thinks fit; or
- (c) dismiss the appeal,

and an abatement notice that is varied under sub-paragraph (b) above shall be final and shall otherwise have effect, as so varied, as if it had been so made by the local authority.

(6) Subject to paragraph (7) below, on the hearing of an appeal the court may make such order as it thinks fit—

- (a) with respect to the person by whom any work is to be executed and the contribution to be made by any person towards the cost of the work, or
- (b) as to the proportions in which any expenses which may become recoverable by the authority under Part III of the 1990 Act are to be borne by the appellant and by any other person.

(7) In exercising its powers under paragraph (6) above the court—

- (a) shall have regard, as between an owner and an occupier, to the terms and conditions, whether contractual or statutory, of any relevant tenancy and to the nature of the works required; and
- (b) shall be satisfied before it imposes any requirement thereunder on any person other than the appellant, that that person has received a copy of the notice of appeal in pursuance of paragraph (4) above.

Suspension of notice

3. (1) Where—

- (a) an appeal is brought against an abatement notice served under section 80 or section 80A of the 1990 Act; and
- (b) either—
 - (i) compliance with the abatement notice would involve any person in expenditure on the carrying out of works before the hearing of the appeal; or
 - (ii) in the case of a nuisance under section 79(1)(g) or (ga) of the 1990 Act, the noise to which the abatement notice relates is noise necessarily caused in the course of the performance of some duty imposed by law on the appellant; and

(c) either paragraph (2) below does not apply, or it does apply but the requirements of paragraph (3) below have not been met,

the abatement notice shall be suspended until the appeal has been abandoned or determined by the court.

(2) This paragraph applies where—

(a) the nuisance to which the abatement notice relates—

(i) is injurious to health; or

(ii) is likely to be of a limited duration such that suspension of the notice would render it of no practical effect; or

(b) the expenditure which would be incurred by any person in the carrying out of works in compliance with the abatement notice before any appeal has been decided would not be disproportionate to the public benefit to be expected in that period from such compliance.

(3) Where paragraph (2) above applies the abatement notice—

(a) shall include a statement that paragraph (2) above applies, and that as a consequence it shall have effect notwithstanding any appeal to the sheriff which has not been determined by the sheriff; and

(b) shall include a statement as to which of the grounds set out in paragraph (2) above apply.

Amendment of the Control of Noise (Appeals) (Scotland) Regulations 1983

4. In the Control of Noise (Appeals) (Scotland) Regulations 1983—

(a) in regulation 2(1) (interpretation), in the definition of "local authority" , for the words "an islands or district council" , substitute the words "a council constituted under section 2 of the Local Government etc. (Scotland) Act 1994" ;

(b) regulation 4 (appeals under section 58(3) of the 1974 Act) shall be omitted; and

(c) in regulation 10(1) (suspension of notices), the word "58," shall be omitted.

APPENDIX 1 – TECHNICAL GUIDANCE ON INSECT NUISANCE

INTRODUCTION

There are many insects that may be the cause of a statutory nuisance. These insects may be vectors of disease (such as mosquitoes), pathogen transfer (flies) and nuisance (such as midges, fruit flies). Some insects have been linked with asthma (domestic exposure to cockroaches).

This Technical Guidance considers a range of insects and evaluates the potential for each one to cause health impact and nuisance. The guidance is provided in the form of insect specific factsheets as follows that consider indicators of nuisance and common control measures:-

Section 1	Mosquitoes
Section 2	Flies General
Section 3	Fruit Flies
Section 4	Sewage Flies
Section 5	Cockroaches
Section 6	Midges

These factsheets include general indicators of the types of controls that may be taken into account when evaluating best practicable means. In addition to these insect-specific factsheets there are three process-specific good practice guidance sheets as follows:-

Section 7	Good practice for animal husbandry units
Section 8	Good practice for manure handling
Section 9	Good practice for waste water treatment works (WWTWs)

Whilst Section 9 relates to WWTWs, it is intended that Scottish Ministers will utilise the powers within the Water Services etc (Scotland) Act 2005 to produce a new code for insect control and such a code will supersede this guidance.

Environmental management should be the first option when assessing insect control measures. Any mitigating treatment should take account of factors including impact on health and well-being; impact on the target and non-target species; impact on the environment including ground and water source contamination; cost and efficacy.

Also attached to this Appendix is Schedule 5 of the Wildlife and Countryside Act 1981.

SECTION 1 - MOSQUITOES (CULICIDAE)

MOSQUITOES (CULICIDAE) FACTSHEET	
Classification	<p>Mosquitoes are within the family Culicidae and there are over 3,000 species worldwide. There are about 30 species of mosquito in the UK the most common being <i>Aedes</i> spp, <i>Anopheles</i> spp and <i>Culex</i> spp. There are four stages of life, eggs laid on water which hatch within a few hours; larva and pupa that are free swimming in water and must come to the surface to breath; and the winged adult.</p>
Habitat	<p>Mosquitoes occupy a range of breeding habitats including aquatic waters (such as coastal salt waters), brackish inland waters, stagnant pools and water-filled hollows (including in trees and logs), marshes, artificial outdoor sites (water butts, tyres) and underground water (sumps, drains, flooded cellars). Female mosquitoes feed on avian and mammalian blood typically beginning at dusk with a peak at midnight with rain, wind and cool conditions reducing feeding. The dispersion of mosquitoes from the breeding site depends upon species. Some species (such as <i>Aedes caspius</i>) can cause biting nuisance at up to 8km from breeding sites and others (such as <i>Culex pipiens</i>) only traveling a few hundred metres from the breeding site. Some species overwinter as adults in sheltered locations with others remaining in egg (in damp hollows) or larval stages (in pools and ditches).</p>
Health Impact	<p>There are a number of diseases carried by mosquitoes including malaria and a range of arboviruses (West Nile Virus, Yellow Fever and Dengue). Mosquito-borne infections are still unusual in Europe but international travel and trade and climate change are increasingly likely to introduce both vectors and pathogens in the UK with malaria and West Nile fever the main concerns. There is currently little evidence of mosquito-borne disease and the main concern is bites that can cause severe skin eruption and localised pain. Bites occur near coastal marshes, woodland areas and some localized urban areas.</p>
Nuisance	<p>There are no objective levels at which a statutory nuisance may exist. As a general guideline, an occupier might feel irritation if five or more 'flying' mosquitoes are present in a room for three successive days.</p>
Assessment	<p>Mosquitoes can be monitored by indirect methods such as habitat assessment or direct methods such as larval monitoring in water or traps (light traps, carbon dioxide baited light traps, odour traps). Where traps are used they are usually more effective in a humid, sheltered location with long vegetation away from bright light sources. Mosquito larvae can be found in clean and polluted, fresh and brackish, and stagnant or slow-flowing waters, such as marshes. They can also be found in swamps, tidal floodwaters, lakes, puddles, pools, ponds, tree holes, rock holes and creeks, as well as in gutters, flowerpots, tin cans, buckets, dishes, tyres, pits and cellars.</p>

<p>Controls</p>	<p>Mosquito management should seek to effect control by promoting environmental changes detrimental to the development of mosquitoes, rather than treating mosquitoes with pesticides. Correct sanitation and water management are key factors in prevention and control should be aimed at both the larval and adult stages of life cycle. As mosquitoes do not normally rest in buildings, control of adults can be impractical. Larval control can be achieved through eliminating or changing the characteristics of larval sites.</p>
<p>Sanitation and Water Management</p>	<p>Sanitation and water management, such as source reduction, are key to any solution. Preventing mosquitoes breeding in the immediate surroundings of dwellings and housing estates, by ensuring that there are no potential breeding places is crucial. The following key points should be considered.</p> <ol style="list-style-type: none"> 1. Man-made containers of water such as old car tyres, empty pots, open sewers and drains containing putrid and anoxic water should, as far as is practicable, be drained and kept empty. 2. Water can be channelled to increase flow. 3. Cesspools, and cisterns - mosquito nets should be installed in aeration gaps, to ensure that covers do not leak. 4. Septic tank open discharge should not be allowed. Instead an underground purification bed should be installed; once it is linked to a sewer system, the old pit should be filled or destroyed. 5. Wells, watering and leisure pools, rainwater tanks, swimming pools not in use, construction site excavations, potted plants with saucers, cemetery flower vases and diverse containers should be emptied every 10 days or be covered with mosquito nets. Moreover, all receptacles not in use should be eliminated. Fish can be introduced in leisure ponds (as they feed on the larva). 6. Rainwater butts and tanks should have close-fitting lids. 7. For rainwater channels, all obstacles to the flow of water should be removed. 8. In the case of Sustainable Urban Drainage Systems (SUDS) detention ponds should meet the requirements of the Sewers for Scotland 2nd Edition. 9. Water treatment plants working on a part time basis can create problems, if they are too big for the amount of water to be treated. Also, abandoned plants that still retain rainwater can create problems. 10. Wastewater treatment ponds should be clear of rooted vegetation, and the water height should be maintained at more than 80 cm. 11. Ponds that use vegetation as a purification measure should be sufficient in number, so as to allow for more than one month of total dryness a year (in winter). 12. Embankments must be covered with cement or a geotextile fabric, and ponds must be designed in a manner that avoids zones with stagnant waters.

<p>Larviciding</p>	<p>Treatment efficiency, economic and ecological costs influence the final choice of intervention methods and controlling larval development is most effective. The aquatic habitats that are breeding sites should be identified accurately. There are a number of larvicides typically chemical (temephos), biochemical (such as <i>Bacillus thuringiensis</i> var. <i>israeliensis</i> and <i>Bacillus sphaericus</i>) or growth regulators (such as diflubenzuron and methoprene). Biochemicals and growth regulators have the advantage of being more specific, whereas chemicals are less expensive and easier to use, especially for very large habitats. Light oil or lecithin can be applied to water to reduce the surface tension and prevent larvae from obtaining oxygen. Such agents spread readily over large areas. The technique should not be used where rivers, watercourses (other than open sewers and drains containing putrid and anoxic water), lakes or ponds may be affected and the Scottish Environmental Protection Agency should be consulted before use.</p>
<p>Adulticiding</p>	<p>Treating adult mosquitoes can reinforce control, if efficacy in treating breeding sites is poor or if larviciding is not possible. To increase control efficiency limiting both the number of applications and the area covered and may avoid large-scale repetitive treatments in a sensitive environment. However, adult control, which is usually done by fogging, must be carefully applied, due to its low specificity and risks (such as allergies or damage to vehicle paintwork) that may result. As a consequence such applications are often restricted to critical situations that result in a risk to health.</p> <p>Adult mosquitoes can be killed outdoors and indoors, depending on where they rest. When done indoors, it is usually through spraying residual insecticides (generally a pyrethroid) on the walls of residences thus giving a long-lasting effect (up to two months or more). Outdoor treatment of adults uses ultra low volume (ULV) applications produced by cold (emulsion) or thermal (diesel suspension) foggers, mounted on a vehicle or aircraft. This has no long-lasting effect and must be repeated daily during either periods of high risk of disease outbreak or periods of severe nuisance biting. The active ingredients available are organophosphates (such as fenitrothion and malathion) or pyrethroids (such as deltamethrin and permethrin). Spraying operations are usually carried out early in the morning before mosquitoes become active and target the resting places of adult mosquitoes (such as hedges and groves close to human habitations).</p>
<p>Other Controls</p>	<p><u>Use of predators (biological control)</u> - is an area of research involving a range of bacteria, fungi, protozoa, nematodes, viruses, fish, insects, snails and plants</p> <p><u>Passive protection</u> - may not necessarily eliminate the problem but they can limit its impact. This includes avoiding vector-infested areas, by using physical barriers, such as screens and nets, or using space repellents such as burning basil-type herbs, seeds of the neem tree, tree wood and resin of aromatic trees or pyrethrum dispensers.</p> <p><u>Genetic control and transgenic mosquitoes</u> - consists of the release of genetically modified individuals in the field, to reduce or modify the composition of natural populations of target insects. The results of studies on this method have been inconclusive.</p>

SECTION 2 – FLIES (DIPTERA)

FLIES (DIPTERA) FACTSHEET	
Classification	<p>Flies, from the insect order Diptera, constitute a major group of nuisance species in rural and urban environments worldwide. Some 120,000 different species of flies have been described and they inhabit almost all marine and non-marine ecosystems. Flies are common in rural areas where there are poultry farms, stables and piggeries, which provide an abundant supply of manure in which they can breed especially in summer and autumn months.</p> <p>The major urban and agricultural species of pest fly in the world is the housefly (<i>Musca domestica</i>). The housefly is important because it is ubiquitous, prolific and large populations can develop very quickly. The autumn fly (<i>Musca autumnalis</i>), the false stable fly (<i>Muscina stabulans</i>) and the lesser housefly (<i>Fannia canicularis</i>) behave like houseflies. The lesser housefly is one of the most abundant flies found in human dwellings in many parts of the world.</p> <p>Calliphorids, such as the green blowfly (<i>Lucilia sericata</i>), the blue blowfly (<i>Calliphora vicina</i>) and <i>Chrysomya</i> spp are usually associated with animal carcasses, refuse and faecal material; they will, however, enter structures and land on food.</p> <p>A number of species of flesh flies, in the family Sarcophagidae, can be present in urban areas being attracted to animal carcasses and decaying meat, and many deposit living larvae instead of eggs. The major biting fly in urban areas is the stable fly (<i>Stomoxys calcitrans</i>).</p> <p><u>Housefly Life cycle</u> - Adult females do not exceed 10–14 days of age and can produce 1000 or more eggs in their lifetime in clutches of 100–150. The life-cycle from egg to adult can be as short as 6.5 days at about 33°C and up to a month or more when temperatures are much lower. Under optimum conditions, eggs hatch in 12–18 hours and the larval stage complete their development in 3–5 days. Subsequent pupation and adults can emerge after another 4–5 days of pupal development.</p>
Habitat	<p>Houseflies are associated with conditions that exist in rotting, fermenting or moist organic matter with a high protein content. Flies are often attracted to sites because of a breakdown in standards of hygiene. Occasionally, the problem may be localized due to a dead bird or rodent, or due to external causes, such as a nearby farm or cattle in an adjacent field. Thus the most important aspect of fly control is to trace the cause of the problem and correct it. Only then can preventative measures be undertaken.</p> <p>Houseflies tend to disperse randomly and may move from contaminated to clean substrates several times in the course of a day. Their flight speed without wind, is 8 km an hour and their known daily flight range is between 3 km and 30 km, but wind, animals, and vehicles can also distribute them. As adults, houseflies overwinter in a quiescent state and become active intermittently when temperatures exceed about 15°C. Adults remain active year-round in protected environments, such as animal housing. Populations can grow to large numbers over the winter in animal housing and the adults disperse to nearby urban areas in the spring, when the housing is opened and cleaned out.</p>

<p>Health Impact</p>	<p>Flies can become contaminated with more than a hundred different pathogens that cause human disease developing and feeding in and on animal manure, human excrement, waste and many types of decaying organic matter. Most of the diseases caused by flies in urban areas are intestinal in nature, and victims may suffer a series of flu-like symptoms, including elevated temperature, diarrhoea and vomiting. Some bacteria, such as <i>E. coli</i> serotype 0157:H7, are extremely pathogenic and may cause death. It has been shown that houseflies transmit <i>Salmonella typhimurium</i> to people and there is strong evidence that flies play a role in certain human enteric bacterial infections; for example, flies can mechanically transfer pathogenic organisms, such as those that cause salmonellosis, shigellosis, and cholera.</p> <p>Synanthropic flies (flies ecologically associated with humans) may carry bacteria resistant to a number of antibiotics possibly playing an epidemiological role in health facilities. They also have been identified as vectors of protozoan parasites, such as <i>Toxoplasma</i> and <i>Cryptosporidium parvum</i>. They have also been incriminated in the transmission of viral pathogens, including poliovirus, coxsackievirus and enteroviruses.</p> <p>Flies are capable of transferring the eggs and cysts of various cestodes and nematodes particularly hookworms and ascarids.</p> <p>Stable flies mainly affect livestock but can also be a nuisance as their bite is very painful. Some people have allergic reactions to the stable fly bite, some of which can be life threatening. It is presumed that biting flies are involved in the transmission of Lyme disease.</p> <p>Flesh flies, notably the spotted flesh fly (<i>Wohlfahrtia magnifica</i>), are known to cause myiasis (a disease that results from infestation of living tissue by fly larvae) in humans and animals.</p>
<p>Nuisance</p>	<p>Flies are prolific and it is difficult to quantify the emotional effects of large numbers of flies on people. The encroachment of urban development into the countryside has resulted in significant increases in housefly populations in communities adjacent to farms, even though the source of flies may be over 6km away. Flies can cause nuisance by restricting outdoor recreational activities, particularly those that involve cooking or consumption of food . Flies are also considered to be an indication of unsanitary conditions. In general, in domestic premises, it is likely that the nuisance threshold will be very low and control actions might be taken in cases of few house flies. As a guideline, an occupier will normally experience some irritation if there are five or more active house flies present in any one room at any one time on three successive days but the impact may also depend on the size of room, number of people /premises affected etc. The most important aspect of fly control is to trace the cause of the problem.</p>
<p>Assessment</p>	<p>Flies can be monitored with baited traps, sticky ribbons, or spot cards. Spot cards are approximately 80mm x 125mm white index cards that are attached to a house-fly resting surface. A minimum of five cards should be placed in a suspect source facility and left in place for seven days. As a guide, a count of 100 or more faecal or vomit spots per card per week may be taken to indicate a high level of house fly activity and a need for control.</p>

Controls

Physical prevention is preferred to pesticide usage. It may be preferable to control harbourage and breeding material rather than to treat an infestation once it is established. Larvicides can be used although adulticides should be the last line of defence. Premises need to adopt an integrated approach to house fly control that includes building design; effective management and systematic monitoring of house fly populations. Ordinarily, house fly control from 1 to 2 km around sensitive sites will prevent ingress into a sensitive area (containing dwellings, for example). In cases where no local breeding area can be identified, adult house flies may be flying long distances (i.e. several miles) from infestation sources of, for example, refuse tips or animal houses. Good sanitation, and elimination of breeding areas are necessary for good management.

Prevention

1. Proper sanitation is the key to fly control. Deny flies access to food, shelter and a place to lay their eggs.
2. Do not allow flies to come in contact with contaminated substances and thus contaminate themselves.
3. Although management of adult flies can provide temporary relief, the location and elimination of development sites for immature stages is the best method for long-term control.
4. Prevent flies from entering buildings, by keeping doors closed and window screens in proper repair.
5. If flies do enter structures, eliminate them with traps or other suitable methods as quickly as possible.
6. Wet straw should not pile up in or near buildings and, as one of the best fly breeding materials and is not recommended as animal bedding.
7. Fly traps may be useful in some house fly control programmes if enough traps are used, placed correctly, and used both indoors and outdoors. House flies are attracted to white surfaces and baits that give off odours. Lesser house flies are shyer of traps.
8. Dustbins, wheelie-bins, paladins and skips should have tight-fitting lids and be cleaned regularly. Dry and wet rubbish should be placed in plastic rubbish bags and sealed up. All waste receptacles should be located as far from building entrances as possible.
9. For control at waste disposal sites, refuse should be deposited onto the same area as inorganic wastes to reduce the capacity of breeding resources, or covered with soil or other inorganic wastes of around 15 cm consistent thickness.
10. Electronic fly killers that can attract insects to an electrified grid by using an ultra-violet light source are not generally effective against houseflies. If they are used, one trap should be placed for every 30 feet of wall inside buildings, but not placed over or within five feet of food preparation areas. Recommended placement areas outdoors include near building entrances, in alleyways, beneath trees, and around animal sleeping areas and manure piles.

Chemical control measures

1. Chemical treatment should be considered as a last resort, as it may only be treating the insects in the vicinity at the time of treatment and not the source
2. Although most pesticides do have a residual effect and may work on particular species throughout their lifecycle.
3. The use of pesticides near water bodies is risky and must be minimised.
4. For adult control, conventional knockdown or residual treatments will kill the majority of adult flies in spite of the development of high resistance levels in a number of housefly populations.
5. Residual insecticides applied to the house flies' favoured resting areas will control landing flies in some situations, although they should not generally be applied to breeding areas, as insecticide breakdown can be rapid and resistance may be encouraged.
6. In poultry houses, the use of mists, fogs or baits may be necessary for house fly control.
7. Residual wall sprays can be applied where the flies congregate. Resistance can develop more rapidly in house fly populations on farms on a continuous insecticide regime using a single chemical than on farms in which insecticides are alternated.
8. Residual insecticides may be applied to favoured resting areas for house flies. Breeding areas should be avoided as spray targets as, where the insecticide breaks down in an area where eggs are developing, it may encourage increased resistance in the house fly population.
9. Outdoors, house fly control can include the use of chemical treatments in the bottom of skips, and treatment of vertical walls adjacent to skips and other breeding sites, with microencapsulated or wettable powder formulation, and the use of fly baits near adult feeding sources.
10. Indoors, house fly control can include automatic misters, fly paper, electrocuting and baited traps that can be used in milking parlours and other areas of low fly numbers.

SECTION 3 – FRUIT FLIES (DROSOPHILA)

<i>FRUIT FLIES (DROSOPHILA)</i>	
Classification	Fruit flies compromise several species of the genus <i>Drosophila</i> (family Drosophilidae).
Habitat	Attracted to ripened or fermenting fruit and vegetables. Associated with commercial composting activities and fruit & vegetable producers, wholesalers, and packers. Fruit flies can be a problem year-round in domestic kitchens.
Health Impact	Fruit flies do not carry disease but they can contaminate foodstuffs particularly where there are poor hygiene standards or exposed, ripe fruit.
Nuisance	The sheer numbers that congregate can create a nuisance. As a guideline, an occupier will normally experience some distress if there are 50 or more 'flying' fruit flies present in any one room at any one time on three successive days.
Assessment	Find the source of attraction and breeding sites. Inaccessible breeding sites (e.g., waste-disposals and drains) can be evaluated by taping a clear plastic food storage bag over the opening overnight. If flies are breeding in these areas, the adults will emerge and be caught in the bag.
Controls	<p>The best control measure is elimination of the sources of attraction. Produce that has ripened should be covered rather than discarded in the open as a rotting potato or a waste or recycling bin which is not emptied or cleaned can breed thousands of fruit flies. Where regular spillages of fruit juice or pulp inside buildings attract fruit flies, windows and doors should be equipped with tight-fitting (16 mesh) screens to help prevent adult fruit flies from entering from outdoors. All spillages and accumulations of fruit and vegetable juice and pulp should still be cleaned up regularly and thoroughly.</p> <p>Once a structure is infested with fruit flies, all potential breeding areas must be located and eliminated as the problem will continue no matter how often insecticides are applied to control the adults. Once the source has been eliminated and flies given time to disperse an aerosol insecticide can be used to kill remaining flies.</p>

SECTION 4 – SEWAGE FLIES

SEWAGE FLIES	
Classification	Sewage filter flies belong to the family Psychodidae, commonly known as moth flies. The principle sewage filter flies are <i>Psychoda albipennis</i> , other species of <i>Psychoda</i> and <i>Tinearia alternata</i> .. Sewage filter flies have a relatively slow breeding cycle with about eight generations a-year.
Habitat	They like moist, organic or septic systems for egg laying, and are common in the vicinity of sewage works. The larvae are often considered beneficial as an essential part of the cycle that breaks down waste into water-soluble compounds
Health Impact	They do not bite or sting, but can be a nuisance, flying in the eyes, mouth and nostrils of people. Because of their points of origin, they can carry disease, although actual transmission is extremely unlikely. They do not pose a contamination risk to food.
Nuisance	One way to confirm an infestation is by using a stick trap. As a general guideline, they might cause an occupier distress if 50 or more 'flying' sewage filter flies are present in a room on three successive days, though obviously this indication will vary and depend on such factors as room size etc. Most infestations take place during the spring and summer months as the adults emerge.
Assessment	Location of larval breeding sites is necessary and one method to check potential individual breeding sites is to cover the entrance with plastic film taped to the floor or fixture. If sewage filter flies are breeding there, they will accumulate beneath the film within a day or two.
Controls	<p>Once located the larval breeding sites should be eliminated. Cleaning of breeding places to remove any organic matter will help elimination. A slow-moving drain can be cleaned with a stiff brush or other tool. Drains that cannot be scrubbed can be rinsed with water under high pressure, sterilised with boiling water, or treated with a bacterial agent to biodegrade the organic matter.</p> <p>Household insecticides can be used to control adult sewage filter flies, but the effects will be very temporary unless the source of the larvae is also removed. Operators of waste water treatment works should have systems in place for treating beds with a larvicide where there is a risk of nuisance and should routinely check for high concentrations of sewage filter flies. The timing and dosing of the filter beds is critical to effectiveness, and must be carefully managed to prevent the release of chemicals into waterways or an effect on the balance of organisms in the ecosystem. In some cases it may be best to limit treatment to knock down or surface treatments.</p>

SECTION 5 – COCKROACHES

COCKROACHES	
Classification	There are three main pest species: the American (<i>Periplaneta americana</i>), German (<i>Blattella germanica</i>) and Oriental (<i>Blatta orientalis</i>) Cockroaches. The German and Oriental species are common in the UK.
Habitat	Cockroaches are nocturnal and they prefer warm dark spaces. Cockroaches are highly adaptable and extremely mobile, moving into new buildings via sewer pipes, ducts etc. The Oriental cockroach is the most common and largest of the two and can climb rough surfaces and will congregate around water sources. The German cockroach is smaller, but is able to climb vertical smooth surfaces.
Health Impact	Cockroaches can cause allergic reactions in susceptible individuals (e.g., asthmatics) and individuals exposed to infestations for long periods of time. Their presence may cause an occupier distress. They can contaminate a range of stored food products.
Nuisance	It is essential to identify the species and determine the extent and severity of the problem. The presence of cockroaches within premises has a significant emotional effect particularly as they are considered to be an indication of unsanitary conditions. In general, in domestic premises, it is likely that the threshold will be very low and control actions might be taken in cases of a few cockroaches.
Assessment	It is essential to identify the locations where cockroaches are breeding or gaining access to structures. The use of traps is important in determining the extent and severity of the problem. Trap counts provide a quantitative mechanism upon which to base treatments and evaluate the success of the control measures. Trapping can also reduce unnecessary treatments and thereby reduce the amount of insecticides applied.
Controls	<p><u>Prevention</u> - cracks in walls, floors and ceilings or inaccessible voids between and behind equipment should be eliminated as these areas provide harbourage. Also the potential for movement across common pipes and conduits should be eliminated.</p> <p><u>Cleaning and sanitation</u> – in addition to removing harbourage sites, sources of food and water should also be eliminated.</p> <p>Insecticides - insecticidal sprays, dusts and gel baits should be applied to cracks, crevices and voids where cockroaches harbour. Non-repellent insecticides should be used to avoid scattering cockroaches and slow-acting baits might be used indoors whenever possible to improve the control of early instars.</p>

SECTION 6 – MIDGES

MIDGES	
Classification	<p>Biting midges are found world-wide and are in the genus <i>Culicoides</i> along with mosquitoes. Many prey on other insects whilst others feed on mammals or birds – only a few feed on humans. There is one dominant species that causes nuisance by biting humans <i>Culicoides impunctatus</i>. Other species found include <i>Culicoides obsoletus</i> (the garden midge), <i>Culicoides halophilus</i> (associated with salt marshes) and <i>Culicoides nubeculosus</i> (commonly found in stables and cattle sheds).</p> <p>The egg and pupal stages are very short (a few days) but the larval stage lasts for around 10 months.</p>
Habitat	<p>Some larva live in muddy margins of lochs, some on salt marshes and others in farmyards or drainage ditches. The Highland Midge prefers blanket bog, raised mires or poorly drained acidic grasslands. The larvae need significant moisture and hence are concentrated in high rainfall areas. Midges can drift passively for more than 1km from larval breeding grounds and this is one reason why localized larval treatment is of limited use as the midges can travel a large distance. In sheltered woodland sites there is much less dispersion and hence a greater concentration of biting.</p>
Health Impact	<p>Midges are biting and blood-sucking insects and one of the main impacts arises from the irritation caused by the bite. There are many diseases for which midges are vectors but few transmissible to humans and even fewer indigenous to the UK.</p>
Nuisance	<p>Midges have a habit of attacking in numbers generally in the evenings. Whilst they are active between April and October, most biting occurs from June to August.</p>
Controls	<p><u>Habitat manipulation</u> - given the concentration of midges (estimated at up to 24 million larva per hectare) and the distance of travel, wholesale landscape modification is not feasible. However on a localized basis it has been found that dam construction to flood land and keep standing water between the midge and the breeding ground can help control midges.</p> <p><u>Insecticide and Larvicide applications</u> - the larval breeding grounds of the Highland Midge are associated with damp areas of rough moorland bearing <i>Sphagnum</i> or <i>Polytrichum</i> mosses and the rush <i>Juncus articulatus</i>. The larvae occur within the top 10mm of soil and treatment relies on washing the larvicide into the soil (thus rain is key to successful treatment).</p>

SECTION 7 – GOOD PRACTICE FOR ANIMAL HUSBANDRY UNITS

<i>GOOD PRACTICE FLY MANAGEMENT GUIDANCE FOR ANIMAL HUSBANDRY UNITS</i>	
General Measures	<ol style="list-style-type: none"> 1. Proper sanitation is the key to fly control. Deny flies access to food, shelter and a place to lay their eggs. 2. Do not allow flies to come in contact with contaminated substances and thus contaminate themselves. 3. Although management of adult flies can provide temporary relief, the location and elimination of development sites for immature stages is the best method for long-term control. 4. If flies do enter structures, eliminate them with traps or other suitable methods as quickly as possible. 5. Food and materials on which the house flies can lay their eggs should be removed, destroyed as a breeding medium, or isolated from the egg-laying adult house fly. 6. Windows and doors can be proofed with fly screens of approximately 1.5 mm mesh. 7. Follow the good practice guidance for manure producers.
Process Control	<ol style="list-style-type: none"> 8. Wet manure should be removed at least twice weekly if necessary to break the breeding cycle. 9. Wet straw should not pile up in or near buildings and, as one of the best fly breeding materials, it is not recommended as bedding. 10. Spilled feed should not be allowed to accumulate, and should be cleaned up at least twice a week. 11. Dustbins, wheelie-bins, paladins and skips should have tight-fitting lids and be cleaned regularly. Dry and wet rubbish should be placed in plastic rubbish bags and sealed up. All waste receptacles should be located as far from building entrances as possible. 12. Electronic fly killers that can attract insects to an electrified grid by using an ultra-violet light source are not generally effective against houseflies. House flies are not particularly attracted to them and, although they may kill the occasional one, they cannot cope with large numbers. If they are used, one trap should be placed for every 30 feet of wall inside buildings, but not placed over or within five feet of food preparation areas. Recommended placement areas outdoors include near building entrances, in alleyways, beneath trees, and around animal sleeping areas and manure piles. 13. Fly traps may be useful in some house fly control programmes if enough traps are used, placed correctly, and used both indoors and outdoors. House flies are attracted to white surfaces and baits that give off odours. Lesser house flies are shyer of traps. 14. Integrated fly control programmes for poultry houses tend to be based on (i) selective application of insecticides against the adult; (ii) early introduction of insecticide control measures in early spring before house flies appear, repeated as needed throughout the warm months, and (iii) effective manure management – both in respect of removal from the poultry houses, transport, storage and spreading on land.

Chemical Control

15. Chemical treatment should be considered as a last resort, as it may only be treating the insects in the vicinity at the time of treatment and not the source, although most pesticides do have a residual effect and may work on particular species throughout their lifecycle.
16. For adult control, conventional knockdown or residual treatments will kill the majority of adult flies in spite of the development of high resistance levels in a number of housefly populations.
17. Residual insecticides applied to the house flies' favoured resting areas will control landing flies in some situations, although they should not generally be applied to breeding areas, as insecticide breakdown can be rapid and resistance may be encouraged.
18. In poultry houses, the use of mists, fogs or baits may be necessary for house fly control. Insecticides to control maggots should not be applied to manure, which should be kept dry and removed only during the winter.
19. When flies are a major pest in commercial egg production facilities, applying adulticides, or larvicides, to suppress adult densities directly or indirectly, can control them.
20. Residual wall sprays can be applied where the flies congregate. Resistance can develop more rapidly in house fly populations on farms on a continuous insecticide regime using a single chemical than on farms in which insecticides are alternated. Residual insecticides may be applied to favoured resting areas for house flies. Breeding areas should be avoided as spray targets as, where the insecticide breaks down in an area where eggs are developing, it may encourage increased resistance in the house fly population.
21. Outdoors, house fly control can include the use of chemical treatments in the bottom of skips, and treatment of vertical walls adjacent to skips and other breeding sites, with microencapsulated or wettable powder formulation, and the use of fly baits near adult feeding sources.
22. Indoors, house fly control can include automatic misters, fly paper, electrocuting and baited traps that can be used in milking parlours and other areas of low fly numbers.

SECTION 8 – GOOD PRACTICE FOR MANURE HANDLING

<i>GOOD PRACTICE FLY MANAGEMENT GUIDANCE FOR MANURE HANDLING</i>	
Producers	<ol style="list-style-type: none"> 1. It is important if fly problems are to be prevented that manure supplied is of the best possible quality in terms of fly and maggot infestation. It is also important that manure supplied is capable of being stored in such a way as to prevent it causing a problem with flies. 2. Manure should be as dry as possible before it is allowed to be taken for use. This makes it difficult for flies to breed and also allows it to be stored in a manner that enables it to be covered more easily. A level of at least 50% dry matter is desirable and 30% dry matter should be the minimum. Manure with a dry matter content below 30% should not be supplied unless satisfied that it will be used and incorporated immediately. If the manure is to be used on pasture or for top dressing a growing crop, it is essential that it is applied only in small droplets that will either dry out or be taken into the soil very quickly. If it cannot be used immediately it must be stored within a manageable facility and not a field store. 3. Regular inspections of animal houses should be made to identify any infestations of maggots or flies at an early stage to allow treatment as soon as possible. A monitoring and treatment process should be implemented and records maintained to show what has been done. Research of ADAS approved schemes suggests that one way of monitoring fly and larval activity is to use a grid system. The use of ADAS endorsed schemes may be used to demonstrate "Best Practice". 4. A number of monitoring squares, (six for large poultry houses) shall be marked out along the inside walls, ceilings and the undersides of walkways. They should be 1 metre by 1 metre and marked out with a visible marker to form a border on an area where flies are likely to land. A count of flies on the wall and ceiling squares should be made on a regular basis at all times and twice weekly during the summer months from the beginning of April until the end of October. 5. There should also be six designated areas where maggot activity is monitored. These should be approximately 0.5 metre square areas that are intrusively investigated. A rough guide to larval assessment is 0 = 0 larvae, 1 = 5% of manure covered by larvae, 2 = 10% of manure covered by larvae, 3 = 20% covered by larvae, 4 = 30% of manure covered by larvae, 5 = 40% of manure covered by larvae. When the average larval count in any manure pit is 2, the manure in that pit should be treated with a proprietary larvicide applied in accordance with the manufacturer's recommendations. No manure should be taken from the house if the average larval count in the pit is 2 or above. 6. The use of sticky traps and indicator boards is also recommended where adult flies are known to congregate, such as pit ends and around feed hoppers and these should be monitored and changed regularly.

Transporters

7. It is recommended that all staff receive suitable training to enable them to effectively monitor and treat any infestations.
8. Manure should not be removed if it is infested with larvae and full treatment of any manure that routine inspection shows to be infested should be completed prior to its removal. This may take up to four weeks to be completely effective so forward planning is essential. For some larvicides there is a minimum time between application on manure and the spreading on land. Details can be obtained from the manufacturers and must be taken into account before spreading on the land.
9. When transporting poultry manure from its point of origin to the place where it is delivered, it is important that care is taken to minimise the impact that it may have on residential areas during transit. It is important that the manure is not transported unless it is of sufficient quality. It is also important that when the manure is delivered to the end user it is done so in such a way as to enable it to be stored/covered if necessary at the end of each day. It is the responsibility of the haulier to ensure that:
 - Manure that does not have a minimum content of 30% dry matter is only transported in suitable vehicles that are designed for the purpose.
 - Trailers are not overloaded allowing manure to be spilled onto the highway.
 - Trailers should be covered if practical, particularly if moving more than short distances or through residential areas.
 - Manure is delivered in such a way as to enable it to be easily covered.
 - Experience has shown that narrow rows or 'windrows' of manure are more easily covered.
 - The recipients are aware of this guidance and their responsibilities to observe it.
 - That the recipient of the manure has made provision for covering the manure if necessary. The manure should then be covered at the end of each day of delivery.
10. Delivery should only be made if the contractor is satisfied that the recipient is aware of the guidance and their responsibilities under it. Delivery should not be made if the recipient is unable to ensure that the manure is adequately covered, should this be necessary, and in this case the manure should be returned to its point of origin or other suitable storage facility.
11. It is also important that care is taken to prevent mud being deposited on the highway as this can pose additional dangers to other road users.

Storage

12. The storage of manure is one of the most important factors in preventing fly infestations. It has been seen that even manure that is produced, transported and delivered in a dry, fly-free state can in some cases become infested and cause problems.
13. It is important when manure is delivered and is being stored without covering because it has been supplied in a fly free condition, that the pile is monitored by the recipient on a frequent basis at least three times per week to ensure that there is no fly activity.
14. At the first sign of fly activity the manure should be covered. It is therefore essential that recipients of manure have stocks of suitable sheeting material before receiving the manure so that it can be used at very short notice.
15. During the summer months from the beginning of May to the end of September recipients storing manure near to residential areas should consider covering the manure if storing for more than a few days, as the covering will also help to prevent any odour nuisance from occurring. While it is important that manure is stored in such a way as to prevent fly nuisance, care should also be taken to ensure that other codes of practice designed to protect land and watercourses are observed.
16. Although it may not be necessary to cover all piles of poultry manure, the potential for problems to occur is increased during the summer months from the beginning of May to the end of September. During this time users of poultry manure may wish to take a 'safety first' approach when deciding whether a pile of poultry manure needs to be covered.
17. When storing manure it is the responsibility of the recipient to ensure that:
 - Any piles of manure that are not covered on delivery must be inspected frequently and at least three times per week for signs of fly infestation and a record kept of these checks for examination by the Local Authority. At the first sign of fly activity on or around the pile the manure must be covered immediately.
 - All stored manure that needs to be covered is covered at the end of each day of delivery to prevent flies migrating to or from the pile. This will serve to reduce the odour emitted during storage, prevent flies infesting the manure and raise the temperature inside the pile to a level that will kill any flies or larvae that are already inside. It will also help to prevent the potential for odour nuisance to any nearby residential premises.
 - The manure should be deposited between two pre-prepared earthen ditches or bunds in narrow rows or 'windrows'.
 - The manure should then be tightly covered with polythene in such a way as to leave no gaps. Suitable polythene can be obtained from most agricultural suppliers.
 - The edges of the polythene should then be buried in the ditches by back filling to prevent flies escaping and to prevent the wind from removing the sheeting.

Spreading

18. Simply weighting down the sheeting is usually not effective. The piles of manure should be checked at least every four days by the recipient to ensure that there is no damage to the polythene. Damaged polythene will need to be replaced.
19. All manure that needs to be covered in this way should remain covered for a minimum of ten days before it is used or until it is used to ensure that any flies or fly larvae are killed and the pile does not become more infested.
20. Avoid putting storage piles next to dwellings, places of work, popular leisure areas etc..
21. Manure should be stored on level ground to avoid run off.
22. Do not store manure over field drains or within ten metres of a watercourse.
23. The spreading of manure has been associated with a number of fly infestations in recent years, even where it has been demonstrated that the manure used is free from infestation. It is recognised by independent entomologists that the odour given off during spreading can attract naturally occurring populations of flies and causes them to artificially concentrate and increase in numbers.
24. Manure should be incorporated by deep cultivation within 24 hours of spreading. This is in accordance with the DEFRA Air Code 1998 and will minimise odour and ammonia emissions and prevent access by flies that may be in the area.
25. When spreading on pasture, only manure that is free from flies and larvae and of low odour should be used. Animals should not graze fields until the minimum time period recommended by ADAS has passed. Care should also be taken that other DEFRA Codes of Practice for protection of soil and water are followed and that manure is not over-applied. (Spreading of manure that has been stored before spreading will be deemed to be the responsibility of the farmer and not the producer.)
26. Manure should not be applied to ground that is waterlogged, flooded, frozen hard or snow covered. It should not be applied within ten metres of ponds or watercourses or within 50m of wells or boreholes.
27. The spreading of manure on Bank Holidays and Sundays should be avoided.
28. Operators should make every effort to remove mud and manure from the tractor and trailer/spreader wheels before driving on the highway.

SECTION 9 – GOOD PRACTICE FOR WASTE WATER TREATMENT WORKS

GOOD PRACTICE INSECT MANAGEMENT GUIDANCE FOR WASTE WATER TREATMENT WORKS (WWTW)	
Introduction	<ol style="list-style-type: none"> 1. The major nuisance species derived from WWTW filter beds are the moth fly, <i>Tinearia</i> (= <i>Psychoda</i>) <i>alternata</i> (filter/drain fly), and the window gnat, <i>Sylvicola</i> (= <i>Anisopus</i>) <i>fenestralis</i> (Scopoli).¹⁷ other <i>Psychoda</i> species, such as <i>Psychoda albipennis</i> Zetterstedt (= <i>Psychoda severini</i> Tonnoir) and <i>Psychoda cinerea</i> Banks, may also occasionally emerge in high numbers. 2. Whilst none of the filter-derived insects sting or suck blood, they cause annoyance and can be nuisance in domestic situations. Similarly, whilst there is no evidence that they transmit disease, in the case of <i>Tinearia</i> / <i>Psychoda</i> species, enteric bacteria have been found on their bodies and they may cause allergic reactions through the shedding of hairs and scales and through post-mortem disintegration. More seriously, there have been reports of human urogenital myiasis caused by psychodids although there are no reports from the UK, probably because infected humans are required to have an intimate association with polluted water for infection to occur. 3. The biology, ecology and thermal requirements of the <i>Tinearia</i> / <i>Psychoda</i> species and <i>S. fenestralis</i> allows for predictions on the likelihood of high population outbreaks to be made. The chironomids <i>Lymnophyes minimus</i> (Meigen) and <i>Metriocnemus</i> sp. may also occur in numbers sufficiently high to cause annoyance to the general public on occasion. Dipterans found in association with filter beds include sphaerocerid, ephydrid, ceratopogonid and sepsid flies. 4. Mosquitoes (Culicidae) have been reported as being associated with WWTWs but their larval development is not typically associated with the filter bed. Where problems occur, these can be related to other niches created in and around the WWTWs where areas of standing stagnant water are present. 5. The interactions within and between macro invertebrate species in WWTW filter beds indicates that species competition plays an important role in populations of any given insect species, and that the likelihood of the numbers of any given insect species rising to nuisance status may be governed by what other species co-occur within a given filter bed. Therefore, species richness can be seen as an important factor in regulating fly populations and also in maintaining the efficiency of the filter through preventing the excess accumulation of film. 6. Low, but variable, thermal thresholds ensure that most of the major nuisance insects can be found throughout the year although they typically egress as adults in large numbers at defined points, depending on each species' developmental rate and the prevailing thermal regimes. Wind speed, precipitation and diurnal rhythms also play important factors in governing the egress of flies from filter beds.

**Factors
Affecting Insect
Populations in
Filter Beds**

7. The medium used in the percolating filters affects species diversity. Factors include both the size and derivation of the substrate used and the smoothness of the substrate and these are variable between WWTWs. Typically, the filter beds are constructed using a rocky substrate, such as gravel, blast furnace slag, clinker, pebbles etc. depending on local availability. Filter beds may be variable in depth, area and shape.
8. Insect populations can be affected by the type and grade of filter substrate used. An important factor appears to be the size of the matrix and it appears that the major psychodid species favour larger stones, of greater than 5 cm in diameter that generally facilitate higher emergence rates. Similarly, using a smaller grade of medium is also seen as a factor in reducing the emergence of the window gnat, *S. fenestralis*.
9. The quantity of organic material loaded onto the bed and the presence of industrial and agricultural effluents within the settled sewage applied to the beds can also alter species composition, usually through creating an impoverished faunal structure. For example, *T. alternata* is favoured by the relatively high loading provided by "strong" sewage. When chemical pollutants are present *T. alternata* may be the only dipteran species present which, in the absence of competition, can lead to very high population levels.
10. The quantity of film present in a filter is reliant on the dynamics between species present, the extent of scouring and the time of year. Therefore, the availability of food present for developing psychodids may not necessarily be correlated with the physical loading of the bed and competition with other species may become a factor.
11. In the case of *S. fenestralis*, largest populations occur at high organic matter levels but film levels are quickly reduced resulting in reduction in numbers due to low food availability. Recirculation of effluent to reduce the quantity of organic matter can also reduce populations.
12. Filter beds typically receive a volume of effluent periodically via nozzles on a rotating distributor arm and the volume applied, and the frequency of passes, varies between WWTWs. A low dosing frequency tends to inhibit all dipteran fly populations, increase chironomids but *Tinearia alternata* and *Psychoda* species are more prevalent in higher dosing regimes. Also where psychodids are rare, *S. fenestralis* invasion of the filter bed may occur and may further suppress the filter fly populations.
13. It has been noted that the efficiency of application of sewage to filters is also a factor in species success. Poor distribution over the filter bed leads to drier lanes forming from which egression of *Tinearia* and *Psychoda* occurs. Similarly, whilst *S. fenestralis* larvae are more common in the subject areas of filter beds, the pupae are more commonly found in the drier interjet regions from where the adults egress. Efficient distribution of liquid over the whole bed, through the installation of splash plates or better jet spacing, allows for a more even wetting of the filter which can suppress fly emergence to a degree.

Control

14. Control of flies deriving from the filter beds of WWTWs is a choice between either a chemical or physical approach. The options available for mosquito control may be broader due to their breeding sites being located away from the treatment process.
15. Whilst chemical control of filter-breeding flies may be necessary in certain circumstances, the damage done to the ecological balance of the beds may lead to reduced efficiency. Extensive studies have shown that manipulation of the filter beds through physical or operational measures can minimize insect nuisance. However, chemical and biological control techniques (such as insect growth regulators) have been investigated although these control measures have not been entirely satisfactory for controlling dipterans.
16. Prior to the advent of synthetic insecticides, a number of chemical techniques involving the application of creosote, paraffin and calcium chloride were employed at WWTWs, primarily for the control of *Tinearia alternata* and *Psychoda* species developing in biological filters. However the use of organochlorine insecticides (e.g. BHC, DDT) became prevalent although exposures led to resistance in the target insects and to environmental concerns. Later control measures utilised organophosphate insecticides, such as malathion and pirimiphos-methyl, and whilst effective in some cases, their use was again restricted due to environmental concerns.
17. The benzoyl urea insecticide diflubenzuron (dimilin) has also been evaluated but showed poor efficacy against *S. fenestralis* whilst against psychodids some activity has been recorded, although not in WWTW applications. A second chitin synthesis inhibitor, cyromazine, has also been explored as a potential midge control agent in the STW environment, albeit with variable degrees of control and in the context of the activated sludge process. More recently, alternative (biorational) methods for the control of insects associated with WWTW filter beds have been evaluated using insect growth regulator (IGR) and juvenile hormone analogue (JHA)..
18. IGR has shown potential against mosquitoes in related aquatic environments.
19. Approaches using a JHA-based strategy are particularly attractive as these compounds only act against late stage larvae and thus allow grazing juvenile populations to persist, which is beneficial for the efficient functioning of the filter beds. Further work has involved the use of the entomopathogenic bacterium *Bacillus thuringiensis* (*Bt*). A dipteran specific isolate of this bacillus, *Bacillus thuringiensis* var. *israelensis* (*Bti*), was tested against several nuisance fly species in both laboratory and field situations, and was shown to be efficacious in reducing numbers of both *S. fenestralis* and psychodid species, amongst others. The use of strains of this bacterium is typically environmentally benign as it is highly host specific, rapidly kills fly larvae, and the likelihood of non-target effects, particularly to aquatic fauna, is negligible. Currently, *Bti* is the only larvicide used against insects developing in percolating filters and other aquatic environments associated with WWTWs.

20. For mosquitoes, that breed in still water, a wide range of insecticides, including conventional, biological, botanical and biorational formulations, have been used over the years that include both JHAs, such as methoprene, and *Bti* formulations. In the case of *Bti*, a major limitation is the very short window of opportunity for effective use whilst, although it has a broader window for treatment, the efficacy of methoprene cannot be gauged until it is too late to retreat. *Bti* suffers the additional disadvantage that it is not recycled within insect populations, shows very limited persistence, and efficacy against mosquito larvae has been negatively correlated with organic pollution.
21. Methoprene, on the other hand, has been reported to have better persistence and, in most cases, shows higher efficacy against mosquito larvae. Currently in the UK, as with the filter-derived flies, control at WWTWs is achieved through the use of VectoBac.
22. Many of the suggested methods for physical control have been inferred from observations and research into the biologies of the major dipteran species associated with WWTWs filter beds. These include manipulations of the size of the matrix used in the filter, and by default, the interstitial spaces. Such research has indicated that stone sizes below a certain diameter can be deleterious to *T. alternata* and *Psychoda* species resulting in inhibition of adult emergence.
23. However, reduced interstitial spaces can lead to clogging of the filter through build up of organic matter, leading to surface ponding of the sewage. Flooding of filters for periods of time has been considered a potential control for *Psychoda* species, although periods of 24-48 hrs are typically required to eliminate all filter fly larvae. There is some evidence in the literature that this procedure can be effective, although it requires a watertight filter and the filter bed to be capable of physically withstanding the weight of water held.
24. Conversely, the complete drying of the filter has also been considered, but practicalities limit its potential. Firstly, drying periods may be long and require the filter to be withdrawn from use for periods in excess of a week. Secondly, drying of the filter is severely deleterious to the zoogloea and associated no-dipterans, leading to the beneficial fauna of the filter being effectively destroyed. Enclosure of the filters as a means of preventing the emerged of flies from escaping such as the use of netting has been used particularly due to the withdrawal of available insecticides in recent years.
25. Dosing frequency has frequently been evaluated as a mechanism for regulating the egress of flies from filter beds. This serves both to regulate the wetness of the filter at any given time, and the biological loading. There are indications that the even distribution of sewage over the bed is beneficial is inhibiting filter fly emergence, whilst higher organic loading may benefit them. A low dosing rate, in terms of the volume applied has the opposite effect and is frequently cited as a factor in the inhibition of egression of both *T. alternata*, *Psychoda* sp. and *S. fenestralis* adults.

Spreading	<p>29. The spreading of manure has been associated with a number of fly infestations in recent years, even where it has been demonstrated that the manure used is free from infestation. It is recognised by independent entomologists that the odour given off during spreading can attract naturally occurring populations of flies and causes them to artificially concentrate and increase in numbers.</p> <p>30. Manure should be incorporated by deep cultivation within 24 hours of spreading. This is in accordance with the DEFRA Air Code 1998 and will minimise odour and ammonia emissions and prevent access by flies that may be in the area.</p> <p>31. When spreading on pasture, only manure that is free from flies and larvae and of low odour should be used. Animals should not graze fields until the minimum time period recommended by ADAS has passed. Care should also be taken that other DEFRA Codes of Practice for protection of soil and water are followed and that manure is not over-applied. (Spreading of manure that has been stored before spreading will be deemed to be the responsibility of the farmer and not the producer.)</p> <p>32. Manure should not be applied to ground that is waterlogged, flooded, frozen hard or snow covered. It should not be applied within ten metres of ponds or watercourses or within 50m of wells or boreholes.</p> <p>33. The spreading of manure on Bank Holidays and Sundays should be avoided.</p> <p>34. Operators should make every effort to remove mud and manure from the tractor and trailer/spreader wheels before driving on the highway.</p>
------------------	---

Summary

1. Filter bed facilities are the major cause of insect nuisance from WWTWs across the UK. Despite being gradually phased out in favour of ASP facilities, at least half WWTWs in the UK continue to use trickling filters.
2. Minor problems are reported to be associated with nuisance insects emanating from WWTW filter beds.
3. Window gnats, filter flies and chironomids are the primary causes of nuisance.
4. A major problem is the location of new housing and/or business premises in close proximity to WWTWs
5. Procedures associated with the location of pest sources, and the identification of the pest species appear to be, for the most part, adequate.
6. There is a requirement for an effective adulticide that can be applied when large numbers emerge from the filters.
7. Breeding sites for mosquitoes (i.e. stationary water) should be prevented or removed.
8. Insect pest control at WWTWs should be proactive and undertaken routinely as part of the usual operation of the plants and not solely in response to complaints.
9. Simple screening measures should be implemented where feasible (netting, enclosure) and the planting of barrier vegetation (tall trees/shrubs).
10. The development/investigation of effective adulticides should be considered to alleviate problems when larvicides and physical control procedures prove insufficient to prevent the egress of large numbers of adult flies.

Wildlife and Countryside Act 1981 - SCHEDULE 5

Sections 9, 10, 22 and 24 ; Animals which are Protected

Common name	Scientific name
Adder (in respect of section 9(5) only)	<i>Vipera berus</i>
Anemone, Ivell's Sea	<i>Edwardsia ivelli</i>
Anemone, Startlet Sea	<i>Nematosella vectensis</i>
Apus	<i>Triops cancriformis</i>
Bats, Horseshoe (all species)	Rhinolophidae
Bats, Typical (all species)	Vespertilionidae
Beetle, Rainbow Leaf	<i>Chrysolina cerealis</i>
Beetle, Violet Click	<i>Limoniscus violaceus</i>
Burbot	<i>Lota lota</i>
Butterfly, Northern Brown Argus	<i>Aricia artaxerxes</i>
Butterfly, Adonis Blue	<i>Lysandra bellargus</i>
Butterfly, Chalkhill Blue	<i>Lysandra coridon</i>
Butterfly, Silver-studded Blue	<i>Plebejus argus</i>
Butterfly, Small Blue	<i>Cupido minimus</i>
Butterfly, Large Copper	<i>Lycaena dispar</i>
Butterfly, Purple Emperor	<i>Apatura iris</i>
Butterfly, Duke of Burgandy Fritillary	<i>Hamearis lucina</i>
Butterfly, Glanville Fritillary	<i>Melitaea cinxia</i>
Butterfly, Heath Fritillary	<i>Melicta athalia</i> (otherwise known as <i>Melitaea athalia</i>)
Butterfly, High Brown Fritillary	<i>Argynnis adippe</i>
Butterfly, Marsh Fritillary	<i>Eurodryas aurinia</i>
Butterfly, Pearl-bordered Fritillary	<i>Boloria euphrosyne</i>
Butterfly, Black Hairstreak	<i>Strymonidia pruni</i>
Butterfly, Brown Hairstreak	<i>Thecla betulae</i>
Butterfly, White Letter Hairstreak	<i>Stymonida w-album</i>
Butterfly, Large Heath	<i>Coenonympha tullia</i>
Butterfly, Large Blue	<i>Maculinea arion</i>
Butterfly, Mountain Ringlet	<i>Erebia epiphron</i>
Butterfly, Chequered Skipper	<i>Carterocephalus palaemon</i>
Butterfly, Lulworth Skipper	<i>Thymelicus action</i>
Butterfly, Silver Spotted Skipper	<i>Hesperia comma</i>
Butterfly, Swallowtail	<i>Papilio machaon</i>
Butterfly, Large tortoiseshell	<i>Nymphalis polychloros</i>
Butterfly, Wood White	<i>Leptidea sinapis</i>
Cat, Wild	<i>Felis silverstris</i>
Cicada, New Forest	<i>Cicadetta montana</i>
Crayfish, Atlantic Stream	<i>Austropotamobius pallipes</i>
Cricket, Field	<i>Gryllus campestris</i>
Cricket, Mole	<i>Gryllotalpa gryllotalpa</i>
Dolphin, Bottle-nosed	<i>Tursiops truncatus</i> (otherwise known as <i>Tursiops tursio</i>)
Dolphin, Common	<i>Delphinus delphis</i>
Dormouse	<i>Muscardinus avellanarius</i>

Dragonfly, Norfolk Aeshna	<i>Aeshna isosceles</i>
Frog, Common (in respect of section 9(5) only)	<i>Rana temporaria</i>
Grasshopper, Wart-biter	<i>Decticus verrucivorus</i>
Leech, Medicinal	<i>Hirudo medicinalis</i>
Lizard, Sand	<i>Lacerta agilis</i>
Lizard, Viviparous (in respect of section 9(5) only)	<i>Lacerta vivipara</i>
Marten, Pine	<i>Martes Martes</i>
Mat. Trembling Sea	<i>Victorella pavid</i>
Moth, Barberry Carpet	<i>Pareulype berberata</i>
Moth, Black-veined	<i>Siona lineata</i> (otherwise known as <i>Idea lineata</i>)
Moth, Essex Emerald	<i>Thetidia smaragdaria</i>
Moth, New Forest Burnet	<i>Zygaena viciae</i>
Moth, Reddish Buff	<i>Acosmetia caliginosa</i>
Newt, Great Crested (otherwise known as Warty newt)	<i>Triturus cristatus</i>
Newt, Palmate (in respect of section 9(5) only)	<i>Triturus helveticus</i>
Newt, Smooth (in respect of section 9(5) only)	<i>Triturus vulgaris</i>
Otter, Common	<i>Lutra lutra</i>
Porpoise, Harbour (otherwise known as Common porpoise)	<i>Phocaena phocaena</i>
Sandworm, Lagoon	<i>Armandia cirrhosa</i>
Shrimp, Fairy	<i>Chirocephalus diaphanous</i>
Shrimp, Lagoon Sand	<i>Gammarus insensibilis</i>
Slow-worm (in respect of section 9(5) only)	<i>Anguis fragilis</i>
Snail, Glutinous	<i>Myxas glutinosa</i>
Snail, Sandbowl	<i>Catinella arenaria</i>
Snake, Grass (in respect of section 9(5) only)	<i>Natrix helvetica</i> (also known as <i>Natrix natrix</i>)
Snake, Smooth	<i>Coronella austriaca</i>
Spider, Fen Raft	<i>Dolomedes plantarius</i>
Spider, Ladybird	<i>Eresus niger</i>
Squirrel, Red	<i>Sciurus vulgaris</i>
Toad, Common (in respect of section 9(5) only)	<i>Bufo bufo</i>
Toad, Natterjack	<i>Bufo calamita</i>
Turtles, Marine (all species)	<i>Dermodochelyidae</i> and <i>Cheloniidae</i>
Vendace	<i>Coregonus albula</i>
Walrus	<i>Odebenus rosmarus</i>
Whale (all species)]	<i>Cetacea</i>
Whitefish	<i>Coregonus lavaretus</i>
Allis Shad (in respect of section 9(1) and (4)(a) only)	<i>Alosa alosa</i>

Mussel, Freshwater Pearl	<i>Margaritifera margaritifera</i>
Beetle	<i>Graphoderus zonatus</i>
Beetle	<i>Hypebaeus flavipes</i>
Beetle	<i>Parcymus aeneus</i>
Beetle, Lesser Silver Water	<i>Hydrochara caraboides</i>
Beetle, Mire Pill (in respect of section 9(4)(a) only)	<i>Curimopsis nigrita</i>
Hatchet Shell, Northern	<i>Thyasira gouldi</i>
Lagoon Snail	<i>Paludinella littorina</i>
Lagoon Snail, De Folin's	<i>Caecum armoricum</i>
Lagoon Worm, Tentacled	<i>Alkmaria romijni</i>
Moth, Sussex Emerald	<i>Thalera fimbrialis</i>
Sea Fan, Pink (in respect of section 9(1), 9(2) and 9(5) only)	<i>Eunicella verrucosa</i>
Sea Slug, Lagoon	<i>Tenellia adspersa</i>
Sturgeon	<i>Acipenser sturio</i>
Beetle, Stag (in respect of section 9(5) only)	<i>Lucanus cervus</i>
Dameselfly, Southern	<i>Coenagrion mercuriale</i>
Goby, Couch's	<i>Gobius couchii</i>
Goby, Giant	<i>Gobius cobitis</i>
Hydroid, Marine	<i>Clavopsella navis</i>
Moth, Fiery Clearwing	<i>Bembecia chrysidiformis</i>
Moth, Fisher's Estuarine	<i>Gortyna borelii</i>
Mussel, Fan (in respect of section 9(1), (2) and (5) only)	<i>Atrina fragilis</i>
Shad, Twaite (in respect of section 9(4)(a) only)	<i>Alosa fallax</i>
Shark, Basking	<i>Cetorhinus maximus</i>
Vole, Water (in respect of section 9(4) only)	<i>Arvicola terrestris</i>

Note. The common name or names given in the first column of this Schedule are included by way of guidance only; in the event of any dispute or proceedings, the common name or names shall not be taken into account.

APPENDIX 2 – TECHNICAL GUIDANCE ON LIGHT NUISANCE

INTRODUCTION

The problem of light nuisance generally arises from poorly designed and badly installed and operated lighting schemes leading to nuisance from excessive light intrusion and glare.

This Appendix gives guidance on both the assessment of the nuisance and determination of the conditions applicable to many possible light nuisance sources. The sources that may lead to complaint include:-

- Industrial Developments
- Retail Developments
- Housing Developments
- Transport Interchanges
- Roads and footpaths
- Exterior Sports Grounds and Arenas
- Feature Lighting for Civic Enhancement, including both manmade structures and naturally occurring ones
- Illuminated Advertisements
- Laser shows, sky beams and light art
- Security lighting Refurbishment of existing lighting installations, both large and small

The guidance is provided in the form of general technical guidance on light, the components of lighting schemes and procedural guidance as follows:-

- Section 1 Glossary
- Section 2 Evaluation of Lighting and Investigation of complaints
- Section 3 Mitigation Measures

These sections are followed by best practice guidance on specific lighting issues as follows:-

- Section 4 Security Lights
- Section 5 Sports Facilities
- Section 6 Streetlighting
- Section 7 Commercial Lighting
- Section 8 Amenity Light for Buildings
- Section 9 Advertising Lights

In addition two ILE publications are attached as Annexes to this Appendix:-

- Annex 1 Reduction of Obtrusive Light - Institution of Lighting Engineers
- Annex 2 Domestic Security Lighting - Institution of Lighting Engineers

SECTION 1 – GLOSSARY

TERM	DEFINITION
Light	(or luminous flux) is electromagnetic radiation visible to the eye and is measured in <i>lumens (lm)</i>
Efficiency	of a light is measured in <i>lumens per watt (lm/W)</i>
Illuminance	is a measure of the amount of light falling on a surface and is measured in <i>lumens per square metre</i> or <i>lux</i> . The illuminance of direct sunlight is around 100,000 lux, normal daylight is 5,000 to 10,000 lux and moonlight around 0.25 lux
Luminance	the eye sees the light radiating or reflecting from an object which is termed the <i>luminance</i> and is measured in <i>candelas per square metre (cd/m²)</i>
Intensity	or luminous intensity is the strength of the light in a given direction and is measured in <i>candela (cd)</i>
Glare	uncomfortable brightness of a light source when viewed against a darker background. The luminous intensity gives an indication of the level of glare likely
Trespass	best measured by illuminance in the vertical plane of a window or building boundary
Lamps	<p>There are two main types of lamps – incandescent filament lamps and gas discharge lamps.</p> <p><u>Incandescent filament lamps</u> work by heating a metal filament until it glows. The light produced is broad spectrum. These are commonly used in domestic situations and some may contain a halogen gas. They are low efficiency and short life but can be plugged directly into a power supply.</p> <p><u>Gas discharge lamps</u> are either based on ultraviolet light from gas discharge reacting with a phosphor coating on the glass to give visible light (such as tubular fluorescent lights and low energy bulbs) or a metal halide bulb (low and high pressure sodium) that produce visible light directly. These need additional equipment to work and cannot be plugged directly into the mains supply. They have high efficiency and a long life.</p>
Luminaires	These are the fittings into which the lamps are placed to protect against weather and physical damage. They may also incorporate optical devices to control and direct the light to reduce uncontrolled light escape. They are generally either fixed like a lamp post) or variable angle (like a security light).

The relationship between some of these terms is shown below.

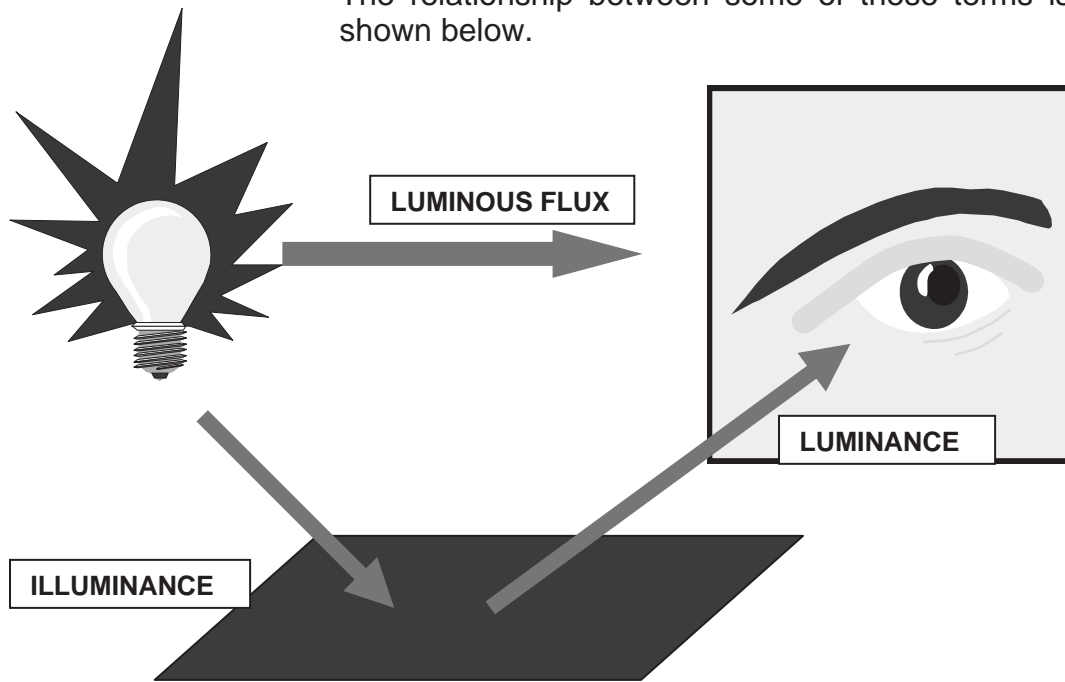


Table A2.2 below illustrates some common lamps types and Table A2.3 some common luminaire types. These were taken from a publication issued in 1997 by the Countryside Commission - Lighting in the Countryside: Towards Good Practice – now available on-line at www.communities.gov.uk.



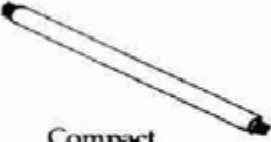





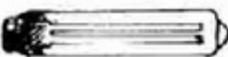
Name	Colour appearance	Colour rendering <i>Ra-Sun=100</i>	Efficiency <i>Lumens/watt</i>	Rated life <i>Hours</i>
Tungsten bulb 	Off-white	Excellent	Low	1000
Tungsten Halogen 	White	Excellent	Low	2000
Tubular fluorescent 	White	Good	Medium	6000-10,000
Compact fluorescent 	White	Good	Medium	10,000
Metal Halide warm 	White	Good	High	6000-20,000
Metal Halide cool 	White	Good	High	6000-20,000
High Pressure Mercury 	White	Poor	Medium	12,000-24,000
High Pressure Sodium 	Yellow	Poor	High	14,000-24,000
Low Pressure Sodium 	Orange	N/a	High	16,000

Figure A2.2
























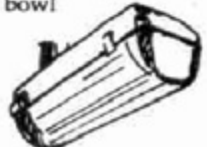


Type	Peak Intensity (l)	Light Distribution	Comments
FLOODLIGHTS			
		<i>Beam Width</i>	
Symmetrical beam (tungsten halogen)	800-3000	Hor. 	Very popular due to low initial cost, seen here with light sensor.
		Vert. 	
Symmetrical beam (discharge lamps)	1000-2000	Hor. 	Popular due to relative low cost. Little real optical control.
		Vert. 	
Symmetrical "projector" beam	200-30,000	Hor. 	Useful tool if carefully used. Mainly used for sports lighting.
		Vert. 	
Simple asymmetric beam	800-3000	Hor. 	Popular luminaire for sports lighting due to light weight.
		Vert. 	
Asymmetric beam - HCO (Horizontal Cut- Off)	700-800	Hor. 	Gaining popularity due to good control of upward light.
		Vert. 	
STREET AND CAR PARK LIGHTS			
		<i>Approx. UWLR (upward light waste ratio)</i>	
Reflector optic with clear bowl	300	3%	For high pressure discharge lamps. Can be used with both orange and white lamps.
			
Refractor optic with bowl	<200	10%	For low pressure sodium lamps. Very cheap to run.
			

Figure A2.3







Type	Peak Intensity (l)	Light Distribution	Comments
Reflector optic and flat glass (HCO) 	500	0%	For high pressure discharge lamps. Minimal light pollution. Various optics available.
Decorative 'Post Top' luminaire 	<300	40%	Old design. Unsuitable for rural areas.
Traditional style lantern with high performance optic. 	<500	<1%	Very low light pollution.
Opal sphere 	<200	51%	Very wasteful of energy and light.
BULKHEAD LIGHTS			
Opal Diffuser 	150	50%	Very wasteful unless in a confined space.
Refractor optic with limited upward light 	<500	15%	Can be glaring and very obtrusive.

Figure A2.3 Cont.

SECTION 2 – EVALUATION OF LIGHTING AND INVESTIGATION OF COMPLAINTS

It should be remembered that the purpose of any lighting installation is to illuminate an area usually by projecting light downwards. It is how this downward light is managed and its effects mitigated and controlled that are important: there will always be a degree of reflected upward light. As a general rule the darker the building or ground cover surfaces are, the lower the upward reflected component and conversely the lighter and wetter the building or ground cover then the higher the upward reflected component will be.

Excessive levels of illuminance and glare due to poorly designed, directed, operated and maintained lighting systems, will cause much artificial light nuisance. The periodic, often deliberate, flickering of light used for advertising can prove to be distracting and like glare, promote degrees of irritation, annoyance and distress. The rate of flicker and the duration of exposure can cause over-stimulation of electrical activity to the human brain. Over exposure to and excessive stimulation by flicker and similar lighting such as strobe lighting has been known to induce attacks in people who suffer with epilepsy or migraine.

The flowsheet in Figure A3.1 below summarises the key steps in undertaking a review of a lighting scheme and some of the key data used for evaluation of lighting schemes referred to in Figure A3.1 is summarised below.

	<i>OBTRUSIVE LIGHT CALCULATIONS – Curfew should be taken at 23.00 hours</i>
Environmental Zone	<p>The nationally recognised environmental zones are as follows:</p> <p>E1: <i>Intrinsically dark Areas - National Scenic Areas</i></p> <p>E2: <i>Areas of low district brightness - Rural or small village locations</i></p> <p>E3: <i>Areas of medium district brightness - Urban or small town locations</i></p> <p>E4: <i>Areas of high district brightness - Large town or city centre with high levels of night time activity</i></p> <p>The selected zone should be justified.</p>

Source Intensity	<p>Direct line of sight of the light emitted from luminaires is probably the principal source of obtrusive lighting complaints. This is light radiated directly from the luminaire and the recommended limiting values are:-</p> <table border="1" data-bbox="614 416 1350 533"> <thead> <tr> <th>Source Intensity</th> <th>E1</th> <th>E2</th> <th>E3</th> <th>E4</th> </tr> </thead> <tbody> <tr> <td>Pre Curfew (cd)</td> <td>2500</td> <td>7500</td> <td>10000</td> <td>25000</td> </tr> <tr> <td>Post curfew (cd)</td> <td>0</td> <td>500</td> <td>1000</td> <td>2500</td> </tr> </tbody> </table>	Source Intensity	E1	E2	E3	E4	Pre Curfew (cd)	2500	7500	10000	25000	Post curfew (cd)	0	500	1000	2500
Source Intensity	E1	E2	E3	E4												
Pre Curfew (cd)	2500	7500	10000	25000												
Post curfew (cd)	0	500	1000	2500												
Light Intrusion	<p>Light intruding through property windows can be predicted by calculating values on a vertical grid representing a window. The recommended limits are additive to what is already present – these need to be zero if the current levels exceed the limits.</p> <table border="1" data-bbox="614 797 1350 913"> <thead> <tr> <th>Intrusion</th> <th>E1</th> <th>E2</th> <th>E3</th> <th>E4</th> </tr> </thead> <tbody> <tr> <td>Pre Curfew (lux)</td> <td>2</td> <td>5</td> <td>10</td> <td>25</td> </tr> <tr> <td>Post curfew (lux)</td> <td>1</td> <td>1</td> <td>2</td> <td>5</td> </tr> </tbody> </table>	Intrusion	E1	E2	E3	E4	Pre Curfew (lux)	2	5	10	25	Post curfew (lux)	1	1	2	5
Intrusion	E1	E2	E3	E4												
Pre Curfew (lux)	2	5	10	25												
Post curfew (lux)	1	1	2	5												
Upward Light Ratio	<p>The upward light ratio will vary depending on the tilt angles and light distribution. Many quality luminaires produce a 0% upward light ratio at zero degrees of tilt but will produce an upward light ratio of 2.5% with 10° of tilt. Some luminaires can produce as much as 50% upward light ratio at tilt angles greater than 40° and if this was the case then the lighting installation could be classed as being an obtrusive and inefficient lighting solution.</p> <table border="1" data-bbox="614 1350 1350 1429"> <thead> <tr> <th>Sky Glow</th> <th>E1</th> <th>E2</th> <th>E3</th> <th>E4</th> </tr> </thead> <tbody> <tr> <td>Upward light ratio</td> <td>0%</td> <td>2.5%</td> <td>5%</td> <td>15%</td> </tr> </tbody> </table>	Sky Glow	E1	E2	E3	E4	Upward light ratio	0%	2.5%	5%	15%					
Sky Glow	E1	E2	E3	E4												
Upward light ratio	0%	2.5%	5%	15%												
Glare	<p>The effect of glare, as viewed by an external observer, can be controlled by limiting the viewed source intensity. An additional glare evaluation may be required to protect the interests of road users, spectators and players. Vehicle drivers should not be subjected to a threshold increment level greater than 15% from non-street lighting installations situated adjacent to a public highway.</p>															
Building Luminance	<p>Building luminance is normally only carried out for structures which are illuminated. Different surface textures and colours reflect light in different proportions and any luminance calculation should include for a schedule of surface colours and reflection factor characteristics to be assumed in the calculation process.</p>															

Combined Effects

The calculation of the combined effects of direct and upward reflected light can be used to demonstrate a comparison between the old and new lighting installation techniques for the difference in upward reflections where new lighting has been designed in conjunction with landscaping techniques that soften their effect by reducing the area allocated to hard landscaping.

The flowsheet below at Figure A3.1 summarises the steps in a lighting design.

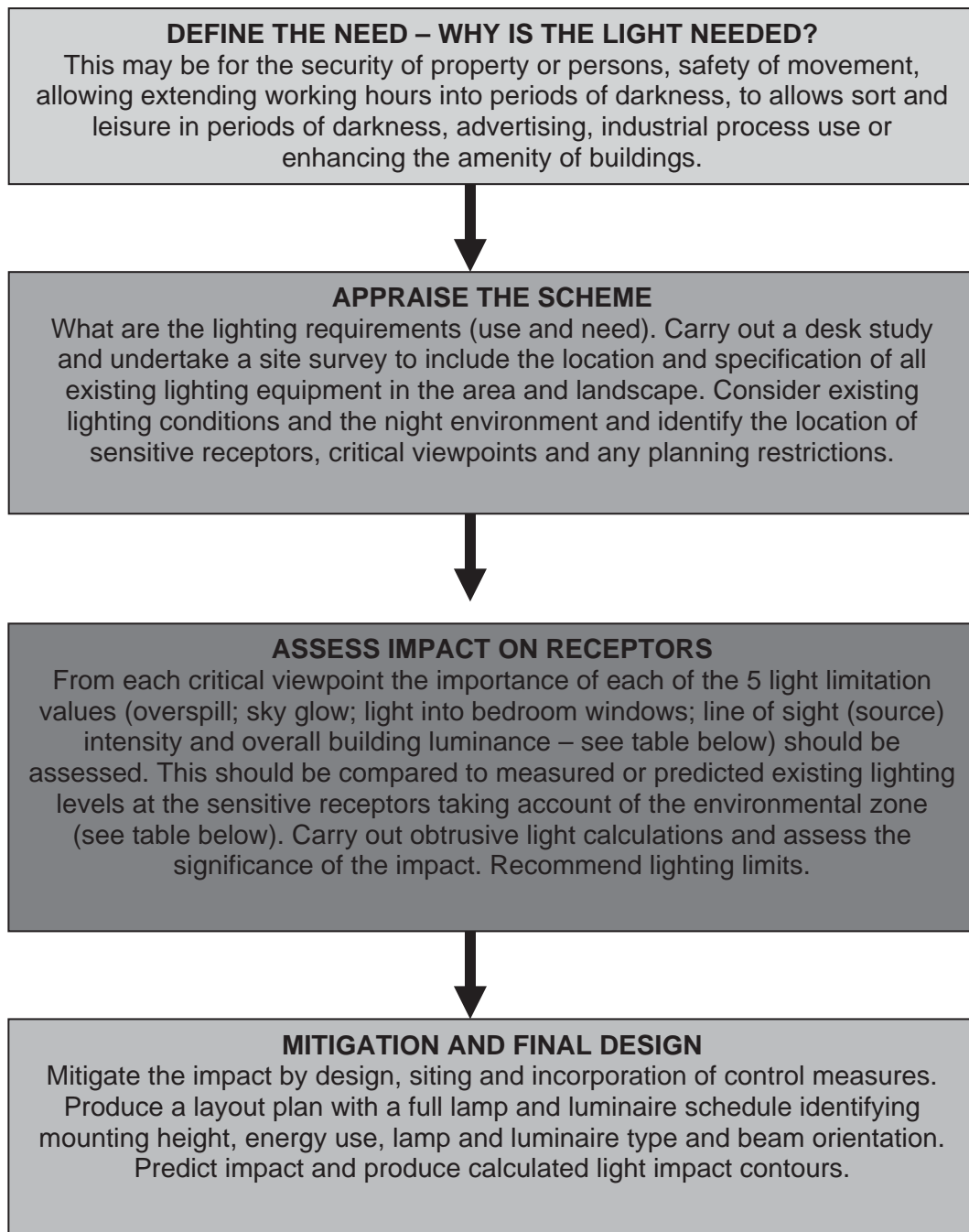


Figure A3.1 – Scheme Design

In all cases the investigation of complaints should be a systematic procedure. The following methodology was proposed in a report produced in 2006 for Defra by Temple titled *'Assessment of the Problem of Light Pollution from Security and Decorative Light'*.

Methodology and Guidance for Examining Complaints Regarding Obtrusive Light

1. VISIT THE SITE

NB: Always try to view the site during daylight hours, before a night time appraisal – it will help you to understand the layout of the situation better.

Daytime:

Try to view source of obtrusive light from complainants' viewpoint and assess:

- What is its function and whether it would appear to be fulfilling this?
- What type of luminaire is it? If possible draw or photograph it for future identification.
- What is its mounting height and does it appear to be correctly aimed?
- Note the time of year and whether any natural vegetation would help screen the light at any other time of year.
- Try to visit the owner(s) of the obtrusive light to ascertain their requirements for the lighting, the lighting standards they are working to, and hours of operation. If possible acquire details of the lamps and luminaires together with their mounting height.

Night-time:

- Assess which Environmental Zone you are in by looking all around you before entering any properties.
- Try to view source of obtrusive light from complainants' viewpoint and assess:
- What is the exact problem:
 - (i) Intensity/glare from source(s) when looked at?
 - (ii) Levels of light trespass through windows?
 - (iii) Frequency of switching?
 - (iv) Other
- Make a note of the exact number and location of the light sources that appear to be the problem. Note their colour: deep orange, light orange, yellowy white or cool white. Do you see it as a problem? If one of source brightness, is your eye drawn towards it?
- Assuming you have an illuminance meter, place the receptor flat on and at the centre of the window, or other appropriate surface if this is not possible, and note the reading. [NB Expect a value between 1- 25 LUX unless it appears very bright]
- Examine in your own mind whether a re-aiming and/or fitting of some sort of shield or baffles to the luminaire(s) - could alleviate the problem, or maybe a fence or some vegetation.

<p>2. PLANNING STATUS</p>	<p>Confirm the status of the lighting installation with your Planning Department. If it has been granted permission check whether...</p> <ul style="list-style-type: none"> ● the layout ● mounting heights ● number and types of luminaires ● required mitigation <p>agree with what you have seen on site and/or have obtained from the owner of the installation.</p> <p>If the lights were <u>dark orange</u> they were “low pressure sodium SOX” lamps used mainly for highway and low level security lighting.</p> <p>If the lights were <u>light orange</u> they were “high pressure sodium – SON” lamps used for all types of lighting.</p> <p>If the lights were <u>yellowy white</u> (like an ordinary household bulb) and light up instantly, they were probably “tungsten halogen - TH” lamps used mainly for domestic security lighting.</p> <p>If the lights were <u>cool white</u> they were probably “metal halide – MH” lamps used mainly for sports lighting.</p>
<p>3. OBTRUSIVE LIGHT GUIDELINES [e.g. ILE, CIE]</p>	<p>Having assessed which Environmental Zone the installation / complainant is in ...</p> <p>Do the luminaires at their installed aiming angles appear to be within the “upward light ratio” (ULR) required? The owner of the lights should be able to confirm the exact value from a computer design programme.</p> <p>How do any vertical light trespass measurements you have made compare with those given in the tables? (NB. Those before curfew apply for any lighting installations that have a defined early switch off. Those after curfew for those installations that are on all night)</p> <p>How is the glare problem? The owner of the lights should be able to confirm the maximum intensity value from a computer design programme. If not, the degree of light trespass can be an indication of whether the glare is excessive or not.</p> <p>Looking back on your own visual assessment, do you agree with the suggested nuisance?</p>
<p>4. MITIGATION</p>	<p>If it is decided that there is a nuisance issue to address, there are a number of mitigation measures that can be suggested:</p> <p>Switching off – Does it need to be functioning all the time or could a carefully located presence detector be used? If this is already the case, can the detector be better located so as to reduce nuisance switching?</p>

	<p>Could the hours of illumination be further limited by agreement between the parties?</p> <p>Could the luminaire(s) be better aimed on to the task and away from complainant(s)?</p> <p>Could there be a reduction of light level to an agreed standard by dimming or replacing the existing lamps with lower powered ones?</p> <p>Fitting of shields or baffles on problem luminaire(s)</p> <p>Replacement of obsolete luminaires with those of better optical design.</p> <p>Design and planting of landscape screening or fencing.</p>
<p>5. FURTHER ASSISTANCE</p>	<p>If you, or your Authority's highway lighting engineer feel unable to properly assess the situation a list of suitably qualified independent lighting engineers can be obtained through the websites of either the Institution of Lighting Engineers (ILE) - www.ile.org.uk or the Society of Light and Lighting (SLL) - www.cibse.org</p>

SECTION 3 – MITIGATION MEASURES

Many cases of potential light nuisance can be remedied by changing the light specification, relocating the offending light, by readjusting its aim or by fitting a screen to control the spread of light. The following summarises some of the impacts of changes to lighting schemes:-

Parameter	Change	Advantages	Disadvantages	Design Impact
Mounting Height	Increase height	Less spill Simple shielding Less glare	More conspicuous in the day	Narrow beams Downward aiming
	Reduce height	Less conspicuous in the day	More spill Difficult to shield More glare	Smaller lamps Wider beams Upward aiming
Set Back	Increased		More spill Difficult to shield	Narrow beams Higher aiming
	Reduced	Less spill Simple shielding		Wider beams Lower aiming
Luminous flux output	Increased	More efficient	More spill	Higher mounting Fewer luminaries Reduced Control
	Decreased		Less efficient	More luminaries Increased control
Beam type	Narrow	Controls spill Reduced shielding	More luminaries	Allows good directivity
	Wide		Reduces containment Difficult to shield	Limited directivity
Distance from Property	Increased	Reduced spill impact Simple shielding Isolation from receptor		Less effect on receptor
	Decreased		Increased spill Difficult shielding	Need good light control
Vertical aiming angle	High		More spill More visible lamp Difficult to shield	Higher vertical illuminance
	Low	Less spill Lamp less visible Simple shielding		High horizontal illuminance Low vertical illuminance Simple spill control

A copy of the Guidance Notes for the Reduction of Obtrusive Light by the Institution of Lighting Engineers (ILE) 2005 [www.ile.co.uk] is reproduced at Annex 1 of this Appendix..

In addition to this guidance there is useful guidance provided in CIE Publication 150:2003 Guide on the limitation of the effects of obtrusive light from outdoor lighting installations Published by the “International Commission on Illumination (CIE).

One of the key control methods for minimizing the impact of new or substantially changed lighting schemes is through planning controls. Planning conditions may cover such matters as:

- hours of illumination;
- light levels;
- column heights;
- specification and colour treatment for lamps and luminaires;
- the need for full horizontal cut-off;
- no distraction to the highway;
- levels of impact on nearby dwellings;
- use of demountable columns;
- retention of screening vegetation;
- use of planting and bunding to contain lighting effects;
- erection of demonstration luminaires; and
- review of lighting impacts after installation.

SECTION 4 – SECURITY LIGHTS

<i>BEST PRACTICE GUIDANCE ON SECURITY LIGHTS</i>	
Requirements	<p>Security lighting should provide the minimum level of illumination necessary to light a property. The designed lighting area may be a site area, building, create a direct visual deterrent to criminals, or it may consist of a presence detection system to switch on when someone invades a selected space. Poorly designed security lighting may not always act as a real deterrent to crime as glare may cast areas into permanent dark shadow, creating dark spots that may potentially assist intruders. The growing use of sophisticated CCTV security systems may also reduce the need for visible lighting, through the use of infrared lighting and infrared cameras.</p>
Design Characteristics	<p>The lamps and luminaires range from fixed angle wall-mounted bulkhead units using one 500 lumen lamp to a 20m tower fitted with several 100,000 lumen lamps installed in multi-angle projectors. Maximum lighting levels, usually defined on the ground, would be around 20-30 lux. Ideally, security lights should be controlled by photoelectric switches. For domestic and small scale security lighting, the <i>ILE Guidance Notes</i> recommend passive infra red detectors with a maximum 150W (2000 lumen) tungsten halogen lamp, or low level lighting such as a compact fluorescent porch tube of just 9W (600 lumen). Light nuisance from domestic security lights can be remedied by relocating the offending light, by readjusting its aim or by fitting a screen to control the spread of light.</p>
Controls	<ul style="list-style-type: none"> a) Control lighting with photo-electric switches on the minimum time-setting – avoid sensors that can be tripped by road or footway users. b) Timers adjusted to the minimum can reduce the operation of the light c) A separate switching detector can be used on some models to sense the movement of intruders on the property. d) Lighting should be directed down and mounted as low as possible to minimize light escape above the property boundary height (such as the hedge or wall) and hence reduce the direct lighting of adjacent premises. e) Luminaires and detectors should be aimed to detect and light people on the property, not people or animals walking down the street. f) Balance levels of light with other lighting in and around the site to avoid glare and light spill as well as dark spots. g) Consider the use of alternative security measures, such as an inside light that is on a time-switch, or CCTV.

- h) Minimise the level of illumination as high-powered lights are rarely necessary in domestic situations and can cause glare –usually a maximum of 150W.
- i) Lighting can be shielded
- j) Special optics or ‘double asymmetric’ luminaries (which are designed to ensure full flow of light over the lit area from each floodlight) can be aimed facing downwards while still spreading light over a wide distance. The reflector becomes less visible to onlookers resulting in low glare to the surrounding locality.
- k) Bulkhead or porch lights are cheaper than security lights, use less energy, and have reduced glare. Movement detectors on these lights are generally mounted lower and so are less susceptible to nuisance switching.
- l) Vegetation may help screen the light at certain times of year provided the movement of vegetation itself does not trigger light.
- m) consider a curfew time of 23.00 after which lighting levels should be further restricted.

The ILE guide is attached as Annex 2.

SECTION 5 – SPORTS FACILITIES

<i>BEST PRACTICE GUIDANCE ON SPORTS FACILITY LIGHTING</i>	
Requirements	<p>CIBSE, the Sports Council and other specific sporting bodies have agreed comprehensive lighting standards for the floodlighting of sporting activities. The guidance recommends a hierarchical approach, with up to three levels of lighting, for recreational, county and national play. The emphasis is changing and high powered multi-angle 'asymmetric' luminaires, which can illuminate a playing field while minimising light spill, are widely available</p>
Design Characteristics	<p>The majority of exterior sports lighting installations have requirements for horizontal illuminance at ground level only (generally between 100-500 lux). However, all need some degree of vertical illuminance in order to see the ball. Generally, the lighting scheme will consist of lights mounted on columns at a height that exceeds that expected of the ball during play. Sports floodlights tend to be tall and may often seem intrusive in visual terms. However, there are advantages in mounting the lamp as high as possible so that its light can be directed downwards, minimising glare and sky glow. It may be possible to use hinged columns that can be lowered to the ground and de-mounted during the summer months.</p> <p>An exception is golf driving ranges, which require levels of illumination on a vertical plane of around 50 lux. However the light is required over a fairly limited horizontal plane so, with careful screening, these lighting installations can also be controlled to minimise the environmental impacts. Ground-mounted luminaires are sometimes used. They have the advantage of being virtually invisible during daylight hours and may also reduce the risk of night-time glare but they will always cause some additional skyglow. The long term solution lies in careful site design, involving some form of substantial screening at the far end of the range.</p> <p>A wide range of lamps and luminaires has been developed for lighting sports facilities. They vary from fixed angle 15,000 lumen units to multi-angle projectors utilising 180,000 lumens or more. For sports such as football and hockey, 16m masts are usually used, whereas for tennis lower heights of between 8-12m will normally suffice. Luminaires should ideally be designed, installed and maintained to ensure that there is full horizontal cut-off, with glare, light spill and energy use kept to a minimum.</p>

Controls

1. Floodlights should be switched off after a locally agreed curfew of say 21.00-22.00 hrs, which would equate with that of natural twilight in midsummer.
2. Consider potential for temporary floodlighting and for lowering lighting columns in summer, when they are not in use;
3. Design lighting to be as directional as possible, using the minimum number of lights required, and to minimise light pollution;
4. The colour of lighting poles may have significant influence – light colours should be used if lights are generally seen against the sky, or dark if there is a backdrop of vegetation; and
5. Floodlights should only be on when the facility is in use.
6. Zero upward light can be achieved by using double asymmetric full horizontal cut-off luminaires.
7. Additional shielding, suitably painted black, can provide further mitigation if required.

SECTION 6 – STREETLIGHTING

<i>BEST PRACTICE GUIDANCE ON STREETLIGHTING</i>	
Requirements	<p>Streetlights are generally operated throughout the hours of darkness as a service to the residents and road users of the area. The principle role is to promote safe movement of traffic and providing for the security to people and property.</p> <p>Road lighting is designed to create an even luminance on the road surface as it is seen by the motorist; other details of forms and textures are unimportant. Pedestrians are more concerned with identifying local landmarks and negotiating the correct route.</p>
Design Characteristics	<p>Road lighting schemes are generally designed using British Standard BS 5489. The standard is split into ten codes of practice that cover the principal different categories of lighting schemes. The design process involves careful consideration of the specific locations for lighting columns to give the best distribution of light. For example, on straight roads a staggered arrangement will produce an optimal effect, but on curves the luminaires are placed on the outside of the curve to ensure reflection off the road surface and at T-junctions a column is always positioned opposite the minor road approach.</p> <p>Lighting is normally required at at-grade roundabouts for reasons of safety. It concludes that a reduction in lighting at isolated junctions is unlikely to affect road safety but would result in less overall environmental intrusion.</p> <p>In general local highways authorities use high pressure sodium lamps with flat glass horizontal cut-off (HCO) luminaires for new rural road and junction lighting schemes. Columns are usually 10-12m high, with 8m high columns sometimes being preferred at isolated locations. Individual lamp light outputs normally vary between 12,000 and 50,000 lumens. Non-HCO low pressure sodium luminaires may require fewer columns and be more energy efficient, but high pressure sodium luminaires normally have a lower whole life cost if the columns are over 8m high and may therefore be preferred. Most road lamps are installed in fixed angle luminaires, whose main beams of light radiate out, up and down the road at between 60 and 75 degrees to the downward vertical. There is normally no need for any light to radiate above the horizontal and it is becoming more common to stipulate that luminaires have a full HCO.</p> <p>Lighting installations for pedestrian pathways are normally scaled down versions of the above, although many use more decorative luminaires. Mounting heights are usually between 4-6m and light outputs vary between 3,000-6,000 lumens.</p>

Controls

1. The simple use of front and / or back shields can improve illumination on the road whilst reducing intrusion elsewhere.
2. As most street lighting is alight throughout the night, the obtrusive light levels to be adhered to should be those given for all night, i.e. after curfew.
3. In addition, the Scottish Government's 'Lighting in the Countryside: Towards good practice' includes street lighting, and is applicable to towns as well as country.
4. Reduce the number of columns to a minimum - a single column may be sufficient on many small roundabouts;
5. Consider colour of lighting columns in relation to surrounding landscape, ie use a dark colour if the columns are set against backdrop of vegetation;
6. Give priority to the use of high pressure sodium lights which give some degree of colour rendition, and to the use of luminaires with full horizontal cut-off, wherever a lit junction is necessary;
7. Carry out a visual appraisal and design lighting scheme to minimise visual intrusion of light at night and of structures by day.

SECTION 7 – COMMERCIAL LIGHTING

<i>BEST PRACTICE GUIDANCE ON COMMERCIAL LIGHTING</i>	
Requirements	The use of artificial lighting to extend the working day is usually justified on economic grounds. Lighting may also be used in glass houses for bringing on commercial horticultural produce such as vegetables, fruits and flowers but can be controlled simply by drawing blinds to mask the light from the outside.
Design Characteristics	The CIBSE lighting guides together recommend a wide range of light levels for specific tasks. Maximum lighting levels depend on potential safety concerns but would not normally be higher than 50 lux. A wide range of lamps and luminaires can be employed for lighting the work place and there are many examples of equipment that can fulfil a specific lighting task with minimum spilled light elsewhere. However, it is important to ensure that the correct lighting equipment is selected for the task in hand and that it is competently installed and maintained thereafter.
Controls	There are economic and environmental benefits to be gained by switching off the lights when they are no longer required. The Health and Safety Executive guides are also important, and it should be noted that a fundamental principle of the Scottish Government's approach is that safety standards (on roads, pathways and external work areas) should be met through the maximum use of (non- lighting) physical measures such as separation of vehicles and pedestrians, so that the minimum use of light is needed.

SECTION 8 –AMENITY LIGHTING FOR BUILDINGS

<i>BEST PRACTICE GUIDANCE ON COMMERCIAL LIGHTING</i>	
Requirements	Amenity lighting is increasingly considered a worthwhile investment for villages seeking to enhance their potential for tourism. It may also be valued as a means for generating a sense of local identity and pride and for bringing vitality to the village centre during the evening.
Design Characteristics	A combination of different types of lighting is usually involved, with street lights, wall-mounted floodlights, decorative porch lights, signs and lighting within shop windows all contributing to the overall effect. There is a wide choice of lighting products on the market, but care with siting, installation and maintenance is essential to anticipate the effect of the light and avoid light spill. It is becoming common practice to use high pressure sodium or metal halide lamps for amenity lighting as these have better colour rendering properties. The practice of mounting lights on existing buildings will minimise the number of lighting columns along the street, although the process of obtaining permission from individual property owners may be time-consuming. The design of a co-ordinated scheme inevitably needs to be a flexible process, taking advantage of local opportunities and working around the inevitable constraints.
Controls	The Royal Fine Art Commission's <i>Lighten our Darkness</i> and the <i>Guide to Good Urban Lighting</i> published by CIBSE and the ILE contain much useful and relevant advice. They emphasise the need to balance light and shadow and to design lighting so that it enhances the architectural detail of the building rather than overwhelming it.

SECTION 9 – ADVERTISING LIGHTS

<i>BEST PRACTICE GUIDANCE ON COMMERCIAL LIGHTING</i>	
Requirements	<p>Illuminated advertisements are subject to planning approval and therefore there are options to control potential light nuisance at this stage. Where fluorescent lamps are used there is rarely any light trespass, glare or light pollution problems. This is not necessarily so for tungsten halogen floodlights and the lights must be positioned on site to minimise light trespass and glare.</p>
Design Characteristics	<p>Within remote rural areas, the lighting associated with hotels, public houses and petrol filling stations may have a significant impact. Many modern petrol filling stations have carefully designed promotional lighting schemes with full horizontal cut-off and white light sources, but elsewhere lighting associated with commercial advertising is often of a poor standard.</p>
Controls	<p>The <i>ILE Guidance Notes</i> recommend appropriate levels of light for lighting both buildings and signs. A wide range of lamps and luminaires is available for promotional lighting and most are sold in DIY centres, although many are out of keeping with their immediate surroundings. One common example is the use of tubular fluorescent lamps that tend to be dominant and intrusive within the overall scale of the typical village street.</p> <p>Flicker can be significant problem with some advertising lights.</p>

ANNEX 1 TO APPENDIX 2 – ILE GUIDANCE ON THE REDUCTION OF OBTRUSIVE LIGHT



The Institution of Lighting Engineers

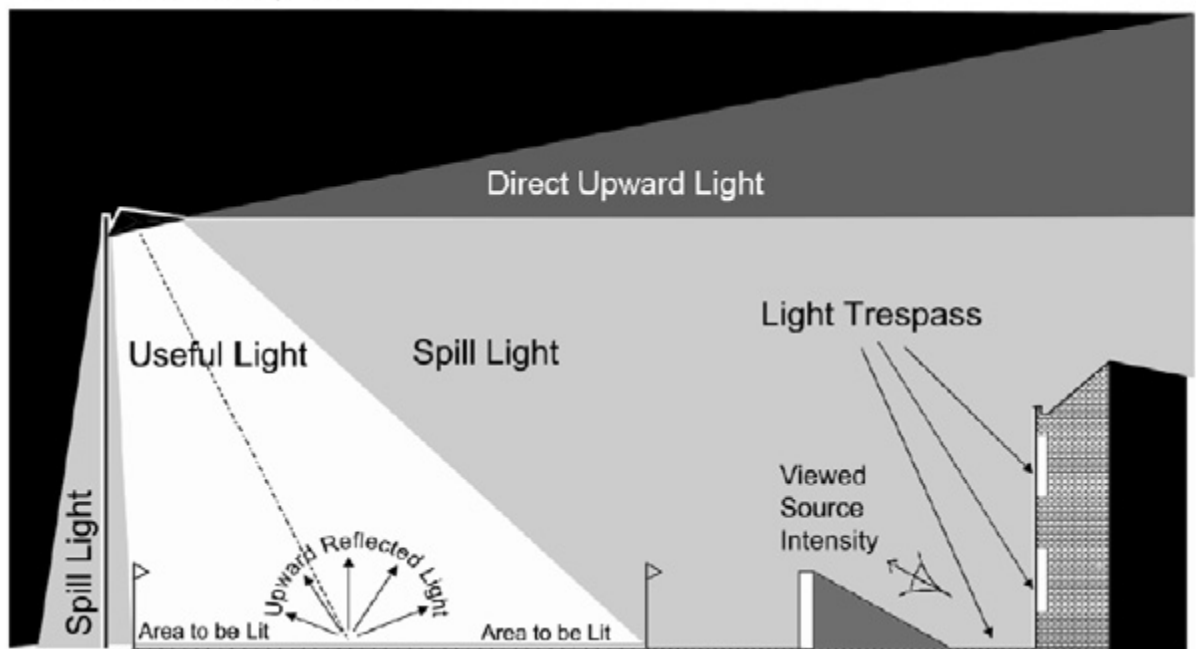
E-mail ile@ile.org.uk Website www.ile.org.uk

GUIDANCE NOTES FOR THE REDUCTION OF OBTRUSIVE LIGHT

ALL LIVING THINGS adjust their behaviour according to natural light. Man's invention of artificial light has done much to enhance our night-time environment but, if not properly controlled, **obtrusive light** (commonly referred to as light pollution) can present serious physiological and ecological problems.

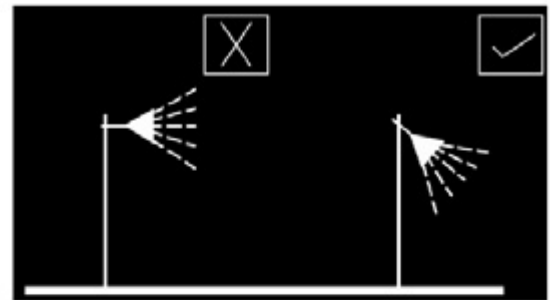
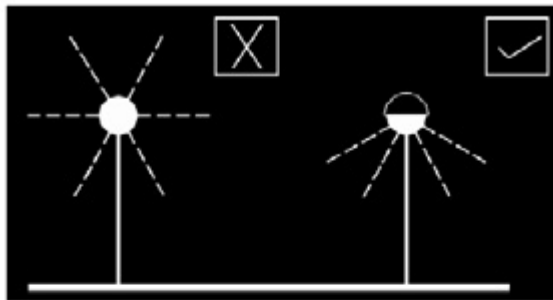
Obtrusive Light, whether it keeps you awake through a bedroom window or impedes your view of the night sky, is a form of pollution and can be substantially reduced without detriment to the lighting task.

Sky glow, the brightening of the night sky above our towns, cities and countryside, **Glare** the uncomfortable brightness of a light source when viewed against a dark background, and **Light Trespass**, the spilling of light beyond the boundary of the property or area being lit, are all forms of obtrusive light which may cause nuisance to others, waste money and electricity and result in the unnecessary emissions of greenhouse gases. Think before you light. Is it necessary? What effect will it have on others? Will it cause a nuisance? How can I minimise the problem?



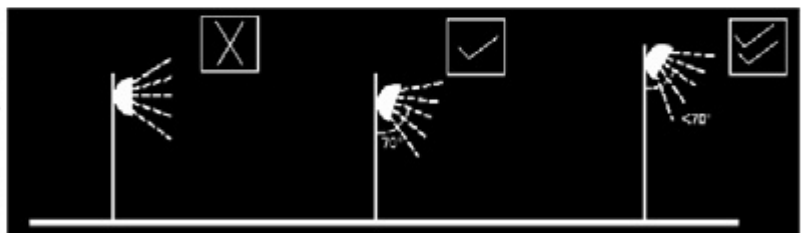
Do not "over" light. This is a major cause of obtrusive light and is a waste of energy. There are published standards for most lighting tasks, adherence to which will help minimise upward reflected light. Organisations from which full details of these standards can be obtained are given on the last page of this leaflet.

Dim or switch off lights when the task is finished. Generally a lower level of lighting will suffice to enhance the night time scene than that required for safety and security.



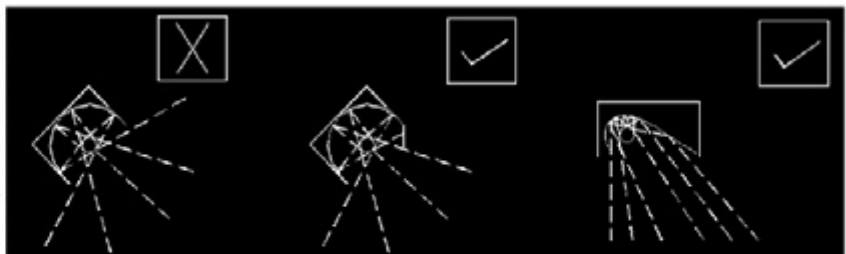
Use specifically designed lighting equipment that minimises the upward spread of light near to and above the horizontal. Care should be taken when selecting luminaires to ensure that appropriate units are chosen and that their location will reduce spill light and glare to a minimum. Remember that lamp light output in LUMENS is not the same as lamp wattage and that it is the former that is important in combating the problems of obtrusive light

Keep glare to a minimum by ensuring that the main beam angle of all lights directed towards any potential observer is not more than 70°. Higher mounting heights allow lower main beam angles, which can assist in reducing glare. In areas with low ambient lighting levels, glare can be very obtrusive and extra care should be taken when positioning and aiming lighting equipment. With regard to domestic security lighting the ILE produces an information leaflet GN02 that is freely available from its web site.



The UK Government will be providing an annex to PPS23 Planning and Pollution Control, specifically on obtrusive light. However many Local Planning Authorities (LPA's) have already produced, or are producing, policies that within the new planning system will become part of the local development framework. For new developments there is an opportunity for LPA's to impose planning conditions related to external lighting, including curfew hours.

For sports lighting installations (see also design standards listed on Page 4) the use of luminaires with double-asymmetric beams designed so that the front glazing is kept at or near parallel to the surface being lit should, if correctly aimed, ensure minimum obtrusive light. In most cases it will also be beneficial to use as high a mounting height as possible, giving due regard to the daytime appearance of the installation. The requirements to control glare for the safety of road users are given in Table 2.



When lighting vertical structures such as advertising signs direct light downwards, wherever possible. If there is no alternative to up-lighting, as with much decorative

lighting of buildings, then the use of shields, baffles and louvres will help reduce spill light around and over the structure to a minimum.

For road and amenity lighting installations, (see also design standards listed on Page 4) light near to and above the horizontal should normally be minimised to reduce glare and sky glow (Note ULRs in Table 1). In sensitive rural areas the use of full horizontal cut off luminaires installed at 0° uplift will, in addition to reducing sky glow, also help to minimise visual intrusion within the open landscape. However in many urban locations, luminaires fitted with a more decorative bowl and good optical control of light should be acceptable and may be more appropriate.

ENVIRONMENTAL ZONES:

It is recommended that Local Planning Authorities specify the following environmental zones for exterior lighting control within their Development Plans.

Category	Examples	
E1:	Intrinsically dark landscapes	National Parks, Areas of Outstanding Natural Beauty, etc
E2:	Low district brightness areas	Rural, small village, or relatively dark urban locations
E3:	Medium district brightness areas	Small town centres or urban locations
E4:	High district brightness areas	Town/city centres with high levels of night-time activity

Where an area to be lit lies on the boundary of two zones the obtrusive light limitation values used should be those applicable to the most rigorous zone.

DESIGN GUIDANCE

The following limitations may be supplemented or replaced by a LPA's own planning guidance for exterior lighting installations. As lighting design is not as simple as it may seem, you are advised to consult and/or work with a professional lighting designer before installing any exterior lighting.

Environmental Zone	Sky Glow ULR [Max %] ⁽¹⁾	Light Trespass (into Windows) Ev [Lux] ⁽²⁾		Source Intensity I [kcd] ⁽³⁾		Building Luminance Pre-curfew ⁽⁴⁾
		Pre- curfew	Post- curfew	Pre- curfew	Post- curfew	Average, L _(cd/m²)
E1	0	2	1*	2.5	0	0
E2	2.5	5	1	7.5	0.5	5
E3	5.0	10	2	10	1.0	10
E4	15.0	25	5	25	2.5	25

ULR = Upward Light Ratio of the Installation is the maximum permitted percentage of luminaire flux for the total installation that goes directly into the sky.

Ev = Vertical Illuminance in Lux and is measured flat on the glazing at the centre of the window

I = Light Intensity in Cd

L = Luminance in Cd/m²

Curfew = The time after which stricter requirements (for the control of obtrusive light) will apply; often a condition of use of lighting applied by the local planning authority. If not otherwise stated - 23.00hrs is suggested.

* = From Public road lighting installations only

- (1) **Upward Light Ratio** – Some lighting schemes will require the deliberate and careful use of upward light – e.g. ground recessed luminaires, ground mounted floodlights, festive lighting – to which these limits cannot apply. However, care should always be taken to minimise any upward waste light by the proper application of suitably directional luminaires and light controlling attachments.
- (2) **Light Trespass (into Windows)** – These values are suggested maxima and need to take account of existing light trespass at the point of measurement. In the case of road lighting on public highways where building facades are adjacent to the lit highway, these levels may not be obtainable. In such cases where a specific complaint has been received, the Highway Authority should endeavour to reduce the light trespass into the window down to the after curfew value by fitting a shield, replacing the luminaire, or by varying the lighting level.
- (3) **Source Intensity** – This applies to each source in the potentially obtrusive direction, outside of the area being lit. The figures given are for general guidance only and for some sports lighting applications with limited mounting heights, may be difficult to achieve.
- (4) **Building Luminance** – This should be limited to avoid over lighting, and related to the general district brightness. In this reference building luminance is applicable to buildings directly illuminated as a night-time feature as against the illumination of a building caused by spill light from adjacent luminaires or luminaires fixed to the building but used to light an adjacent area.

Light Technical Parameter TI	Road Classification ⁽⁵⁾			
	No road lighting	ME5	ME4/ ME3	ME2 / ME1
	15% based on adaptation luminance of 0.1cd/m ²	15% based on adaptation luminance of 1cd/m ²	15% based on adaptation luminance of 2 cd/m ²	15% based on adaptation luminance of 5 cd/m ²

TI = Threshold Increment is a measure of the loss of visibility caused by the disability glare from the obtrusive light installation

- (5) Road Classifications as given in BS EN 13201 - 2: 2003 Road lighting Performance requirements
Limits apply where users of transport systems are subject to a reduction in the ability to see essential information. Values given are for relevant positions and for viewing directions in path of travel. See CIE Publication 150:2003, Section 5.4 for methods of determination. For a more detailed description and methods for calculating and measuring the above parameters see CIE Publication 150:2003.

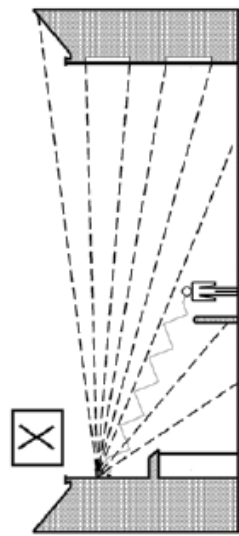
RELEVANT PUBLICATIONS AND STANDARDS:

British Standards: www.bsi.org.uk	BS 5489-1: 2003 Code of practice for the design of road lighting – Part 1: Lighting of roads and public amenity areas BS EN 13201-2:2003 Road lighting – Part 2: Performance requirements BS EN 13201-3:2003 Road lighting – Part 3: Calculation of performance BS EN 13201-4:2003 Road lighting – Part 4: Methods of measuring lighting performance. BS EN 12193: 2003 Light and lighting – Sports lighting
Countryside Commission/DOE www.odpm.gov.uk	Lighting in the Countryside: Towards good practice (1997) <i>(Out of Print)</i>
CIBSE/SLL Publications: www.cibse.org	CoL Code for Lighting (2002) LG1 The Industrial Environment (1989) LG4 Sports (1990+Addendum 2000) LG6 The Exterior Environment (1992) FF7 Environmental Considerations for Exterior Lighting (2003)
CIE Publications: www.cie.co.at	01 Guide lines for minimizing Urban Sky Glow near Astronomical Observatories (1980) 83 Guide for the lighting of sports events for colour television and film systems (1989) 92 Guide for floodlighting (1992) 115 Recommendations for the lighting of roads for motor and pedestrian traffic (1995) 126 Guidelines for minimizing Sky glow (1997) 129 Guide for lighting exterior work areas (1998) 136 Guide to the lighting of urban areas (2000) 150 Guide on the limitations of the effect of obtrusive light from outdoor lighting installations (2003) 154 The Maintenance of outdoor lighting systems (2003)
Department of Transport www.defra.gov.uk	Road Lighting and the Environment (1993) <i>(Out of Print)</i>
ILE Publications: www.ile.org	TR 5 Brightness of Illuminated Advertisements (2001) TR24 A Practical Guide to the Development of a Public Lighting Policy for Local Authorities (1999) GN02 Domestic Security Lighting, Friend or Foe
ILE/CIBSE Joint Publications ILE/CSS Joint Publications	Lighting the Environment – A guide to good urban lighting (1995) Seasonal Decorations – Code of Practice (2005)
Campaign for Dark Skies (CFDS) www.dark-skies.org	

NB: These notes are intended as guidance only and the application of the values given in Tables 1 Et 2 should be given due consideration along with all other factors in the lighting design. Lighting is a complex subject with both objective and subjective criteria to be considered. The notes are therefore no substitute for professionally assessed and designed lighting, where the various and maybe conflicting visual requirements need to be balanced.

© 2005 The Institution of Lighting Engineers. Permission is granted to reproduce and distribute this document, subject to the restriction that the complete document must be copied, without alteration, addition or deletion.

When aiming floodlights make sure you only light the area that needs lighting. The aim of the floodlight can easily be checked at night when you can see the actual area being lit.

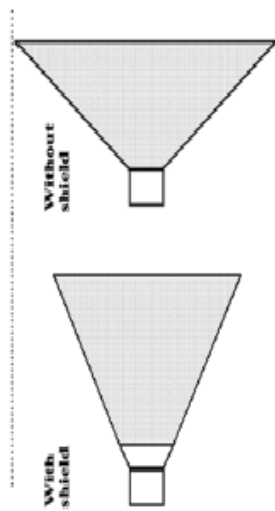


Be careful not to put light onto other peoples properties or into windows as this can be very upsetting and a constant source of complaint.



If a neighbour does approach you about your security lamp listen carefully and try to understand their complaint. If you can adjust the light to shine in a different direction or angle it down to reduce the light onto or into their property tell them that is what you will do and when you will do the work.

If after adjusting the angle and aim of the floodlight it is still causing annoyance and upset then consider fitting a hood or shield to control and restrict the light to the area to be lit.



Through this leaflet, we hope to help you overcome some of the problems and difficulties found when installing domestic security lights.

The Institution of Lighting Engineers
Regent House, Regent Place
Rugby CV21 2PN
United Kingdom

Tel: 01788 576492, Fax 01785 540145

Email info@ile.org.uk
www.ile.org.uk

Copyright © ILE 2003



Institution of Lighting Engineers

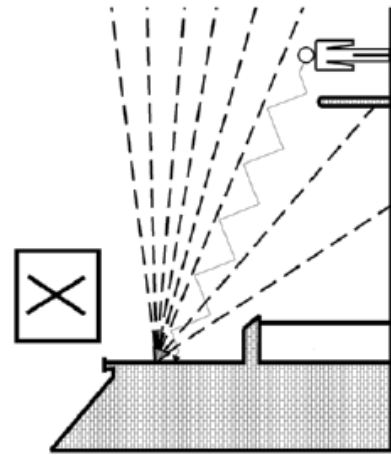
Domestic Security Lighting, Friend or Foe

Since the first cave dweller discovered fire, mankind has used light as a defence against animals and other predators. It is now simple and cheap to provide and operate outdoor lighting, which would have amazed our ancestors by the amount of light produced.

Well designed, installed and maintained security lights bring comfort and well being to our lives providing us with a sense of security in our homes. However, much security lighting is installed without due consideration of its suitability for the task and its effect on neighbours and the environment. Domestic security lights should provide the minimum level of illumination necessary to light a property. Whilst you may be happy with a light that illuminates half the street your neighbours may not.

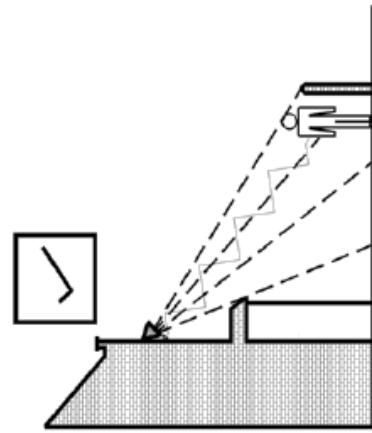
Because of price and ease of installation, many people install tungsten halogen floodlights. These units can provide satisfactory security lighting if correctly installed and aimed, however, it is rarely necessary to use a lamp of greater than 2000 lumens (150W) in such fittings. The use of a higher power only causes more glare and darker shadows. Glare affects our ability to see and dark shadows offer a convenient hiding place for criminals.

Many of these floodlights are fitted with detectors to sense the movement of intruders. Unfortunately if badly installed they also detect small animals roaming around the garden causing the light to switch on and off throughout the night. This can be a nuisance to neighbours.



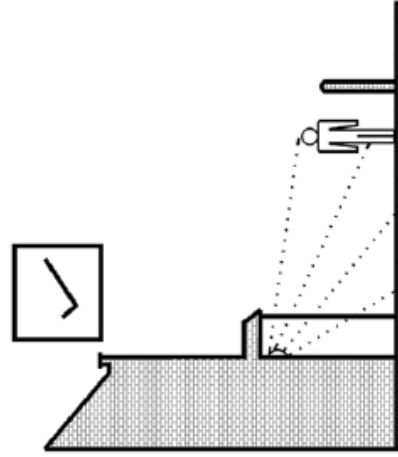
Movement detectors can be useful if they are correctly installed and aimed. Unfortunately, many systems do not allow the detector to be separately aimed from the floodlight.

Remember when buying such equipment check to see if the detector can be separately aimed or better still purchase a separate detector, which can be installed in the best position and correctly aimed to minimise unnecessary switching.



Floodlights and detectors should be aimed to only detect and light people on your property. They should not detect a person or animals walking down the street. If the floodlight is fitted with a timer, this should be adjusted to the minimum to reduce the operation of the light.

For many properties, a better solution for security lighting is to use a bulkhead or porch lights fitted with a low power 600-900 lumens (9/11w) compact fluorescent lamp. These units can be left lit all night, providing all night security, for only a few pounds of electricity per year.



Besides being cheap to run, this type of light is kinder to the environment providing a gentle wash of light with reduced glare. Bulkhead and porch lights cast fewer shadows reducing the hiding places for criminals. These units can be fitted with a movement detector if required. These units are generally mounted lower and are therefore less susceptible to nuisance switching and complaints from neighbours.

© Crown copyright 2009

This document is also available on the Scottish Government website:
www.scotland.gov.uk

RR Donnelley B59073 01/09

Further copies are available from:

Duncan McNab
Air Noise & Nuisance Team
Scottish Government
Area 1G North
Victoria Quay
Edinburgh
EH6 6QQ
Tel: 0131 244 0393

