
Articles

Exterior Lighting as a Statutory Nuisance

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The issue of light pollution and nuisance has only recently attracted interest in legal literature,¹ and litigation concerning light is very recent indeed.² However, the issue has now gained considerable attention from both the media and government.³ Governmental interest culminated in the Department of Environment, Food and Rural Affairs' ("DEFRA") proposal to make certain forms of light subject to statutory nuisance control, now implemented by s.102 of the Clean Neighbourhoods and Environment Act.⁴

Before considering the new law, which received the Royal Assent on April 7, 2005, it is necessary to define certain terms. "Light pollution" we take to mean the invasion of the night sky by unwanted light, the thoughtless byproduct of excessive use of street, flood and advertising lighting. At its worst this renders many of the stars invisible and has a deleterious effect on wildlife. This is a "macro" problem and can only be remedied by coordinated national and international action. By "light nuisance" we mean the "micro" level problems arising from the use of individual light sources. The distinction cannot however be an exact one for an individual street light which causes difficulties for neighbouring households is also adding its light to the overall excess of light problem. The new law is primarily concerned with light nuisance by classifying it, in some cases, as a statutory nuisance. This paper is primarily concerned with that development in the law, and will criticise what its authors perceive to be its defects. It will, however, also set the issue of light nuisance in the wider context of light pollution.

Why light pollution and nuisance should be regulated

It is first necessary to describe the problems posed by exterior lighting to explain why legal intervention has been needed. All forms of exterior lighting can, if badly angled, cause two broad types of problem, namely light pollution and light nuisance. It must be noted that light nuisance is often referred to as

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¹ Morgan Taylor, "And God Divided the Light From the Darkness: Has Humanity Mixed Them Up Again?" (1997) 9(1) *Environmental Law & Management* 32-39; Jewkes, "Light Pollution: A Review of the Law" (1998) J.P.L. 10-22; Hughes and Morgan Taylor, "And Can't Look up and See the Stars" (2004) 16(2) J.E.L. 215-232. Also see: Mizon, *Light Pollution, Responses and Remedies* (Springer-Praxis, London, 2002).

² *Bonwick v Brighton and Hove Council*, unreported, August 9, 2000, County Court Claim no.BN 906 721 (local authority lights); *Stone Haven and District Angling Association v Stonehaven Tennis Club*, unreported, January 1997, Stonehaven Sherrif's Court, (sports ground lights); and *Bacon v Gwynedd CC Tywyn*, unreported, December 2004, case no.AB 300050, concerning sports ground lights.

³ Office of the Deputy Prime Minister ("ODPM") has published *Living Places—Powers, Rights and Responsibilities Consultation* (2002) and *Living Places: Cleaner, Safer, Greener* (Clean Neighbourhoods Paper) (ODPM, London, 2004) which asked for responses concerning light pollution and 15 per cent of respondents raised the issue of lighting; *Full Regulatory Impact Assessment of the Clean Neighbourhoods and Environment Bill* (DEFRA, December 2004), p.67, available at: www.defra.gov.uk/corporate/regulat/ria/2004/cleanneighbourewnv-bill.pdf. Moreover, the Seventh Report of the House of Commons Science and Technology Committee for the Session 2002-2003 considered the issue in its *Light Pollution and Astronomy* consultation, HC 747-1, www.publications.parliament.uk/pa/cm200203/cmselect/cmsstech/747/74702.htm#evidence. The authors' submission is at: www.publications.parliament.uk/pa/cm200203/cmselect/cmsstech/747/747we48.htm

⁴ S.102 has inserted para.(fb) into s.79(1) of the Environmental Protection Act 1990 to provide that "artificial light emitted from premises so as to be prejudicial to health or a nuisance" may constitute a statutory nuisance.

“light trespass” in non-legal UK materials. Of course the distinction between nuisance and trespass is that trespass requires an intentional physical intrusion, and light has not been tested under the law of trespass. It is much more satisfactory for such arguments to be read as references to nuisance. Indeed such case law as there is has been fought on the basis of nuisance. The *Stonehaven* case concerned a floodlit tennis ground that disturbed fish in a nearby river, negatively affecting the success of night time fishing.⁵ There was also one documented case of death, in June 2002, caused at least in part by badly angled floodlighting.⁶

Despite legal interest, neither light pollution or light nuisance has been formally legally defined, but the authors suggest the following as a working definition upon which to base both issues: “every form of artificial light which shines outside the areas it serves to illuminate, including light which is directed above the horizontal into the night time sky, or which creates glare, or other nuisance”.

The astronomical community has been particularly active in arguing that light is a form of pollution that warrants control, with many members calling it “the theft of the night”. Astronomers are concerned about sky glow, which is the yellow/orange atmospheric halo that surrounds all cities and towns when viewed from a distance of a few miles. This glow is caused by light escaping upwards from badly angled light fittings illuminating water vapour and other aerosols in the air, obliterating the night sky in the process. It should be noted that it also represents wasted energy. Satellite images show the scale of the problem and, with a 24 per cent increase in light pollution nationally between 1993–2000, it is getting worse.⁷ In an attempt to combat the problem in the United Kingdom, the Campaign for Dark Skies (“CfDS”) was set up in the early 1990s in association with the British Astronomical Association: the global voice is provided by the US-based International Dark Sky Organisation, which was set up in 1988 and has over 10,000 members.⁸ However, it must be said that the problems are most definitely not restricted to the astronomical community. The night time sky is for all to enjoy. The British Astronomical Association conducted a survey in 1991 which found that light pollution reduced the visibility of the night sky for 90 per cent of the population.⁹ The Campaign to Protect Rural England (“CPRE”) has also joined in pressing for changes in the law, to protect the sky in rural areas.¹⁰

In addition to blotting out the stars, poor lighting may give rise to common law nuisances in a number of ways. Badly angled floodlighting may send glare towards properties,¹¹ and by penetrating curtains and illuminating rooms at night, this can affect sleep, while excessive night time lighting has even been linked to breast and colorectal cancers in humans.¹² The new law is specifically designed to address the deleterious effects of “anti-social lighting” on health,¹³ though not the wider light pollution issue referred to above.

Any form of exterior lighting may be problematic. Most domestic floodlighting uses 500-watt elements

⁵ *Stonehaven*, n.2 *infra*.

⁶ “Blinded” driver kills man”, *The Wallingford Herald*, June 6, 2002, www.thisisoxfordshire.co.uk/oxfordshire/archive/2002/05/31/ABINNEWS0ZM.html

⁷ For the national image provided by the CPRE, see: www.cpre.org.uk/campaigns/landscape-and-beauty/light-pollution/light-pollution-your-area.htm

⁸ International Dark-Sky Association, Inc. 3225 N. First Avenue, Tucson, Arizona 85719–2103 USA, www.darksky.org/

⁹ Newsletter, CfDS, Spring 1992, p.2.

¹⁰ CPRE, 128 Southwark Street, London, SE1 0SW, www.cpre.org.uk/ and its light pollution campaign is at: www.cpre.org.uk/campaigns/landscape-and-beauty/light-pollution/index.htm

¹¹ *Bonwick v Brighton and Hove Council*, unreported, August 9, 2000, County Court Claim no. BN 906 721.

¹² Pauley, “Lighting for the human circadian clock: recent research indicates that lighting has become a public health issue” (2004) 63 *Medical Hypotheses* 588–596, also see: <http://news.bbc.co.uk/1/hi/in-depth/sci-tech/2003/denver-2003/2766161.stm> and see generally on photobiology and pathology the International Dark Sky: www.darksky.org/links/photobio.html

¹³ *Full Regulatory Impact Assessment of the Clean Neighbourhoods and Environment Bill* (DEFRA, London, December 2004), p.16.

which is, arguably, considerably over powered. By contrast the Longstone Lighthouse on the Farne Islands is said to be the most powerful lighthouse in the United Kingdom, and it has been said that it “only has a 1000-watt bulb. If they only need 1000 watts for a lighthouse, why do they sell 500 watts to gardens?”¹⁴ The glare caused by a 500-watt domestic floodlight is easily seen when the light is angled outwards, rather than fully downwards.¹⁵ Despite the claims made for the “security” such lights are supposed to create, at 90 degrees (horizontal), a would-be burglar is completely hidden underneath the light, due to the severe glare. At 45 degrees (which is about the angle of fitting for most of these lights) the would-be burglar is only barely visible (and certainly not identifiable). The view is spoiled by the glare from the light. It is not until one reaches zero degrees, *i.e.* when the light is angled fully downwards, that a burglar is fully visible without glare interfering with the view. Until that point the light does more to conceal rather than reveal the would-be burglar.

It must be noted that the expression “security lighting” is often used in relation to domestic 500-watt floodlights, but there is no direct evidence which directly justifies this appellation. Indeed, there is some controversy in relation to brighter street lighting and crime reduction.¹⁶ While the merits or otherwise of exterior lighting as a crime deterrent are not the subject of this paper, it should be pointed out that if lighting is used it should be used to illuminate a burglar thus assisting passive surveillance; *i.e.* to reveal and not conceal. The UK Government’s crime reduction website states that the use of 500-watt lights “. . . is unfortunate, as in many locations it is inappropriately installed and other forms of lighting could make for a better choice”. Such installations “emit a harsh, intrusive and environmentally unfriendly light that is often a serious nuisance to neighbours”.¹⁷

Other forms of bad lighting include certain types of streetlights (some new as well as old) and lights used to upwardly illuminate both historic buildings, consecrated buildings, and premises such as pubs and clubs. Here a great deal of light generally misses the building and invades adjacent windows, the public highway and the sky. Moreover, such floodlighting is almost always left on all night, despite the fact that few, if any, persons are present to appreciate it. Skybeams, which are usually used as a form of advertising, are also a major source of both light pollution and nuisance. Under current planning regulations, the use of a sky beam is permitted if it is temporary, that is not more than 28 days per calendar year.¹⁸ For more permanent installations planning permission is required, and there are instances in Guildford and Bristol where such applications have been turned down on light pollution grounds.¹⁹ However, we would argue that all sky beams should be subject to regulation, as they may distract motorists, particularly if they are visible from trunk roads; clearly skybeams are advertising and so are intended to be seen and attract attention from a distance.

It is suggested that avoidance rather than remedial action is preferable. In the June 2002 case (referred to earlier), the investigating officer stated, “[w]hen I was driving towards the scene, the officer standing where [the deceased] would have been was barely visible because of the security light”.²⁰ Causing a danger to road users²¹ is, at first sight, the most suitable vehicle for a prosecution. However, the Association of Chief Police Officers and a number of police authorities²² believe that the provision’s

¹⁴ Dowdell, Energy Manager, Hampshire CC (private correspondence to the Campaign for Dark Skies).

¹⁵ For photographs showing the effects of glare and visibility from a floodlight at different angles, see: www.dark-skies.org/floodlights.html

¹⁶ Marchant, “A Demonstration That the Claim That Brighter Lighting Reduces Crime is Unfounded” (2004) 44 Brit. J. Criminol. 441–447. Whilst a leaked Home Office report, “Crime Reduction Review”, is said to have concluded that “measures such as . . . increased street lighting . . . were judged in the report to have been expensive failures” (“Toddler Tearaways Targeted”, *The Times*, June 12, 2005).

¹⁷ www.crimereduction.gov.uk/burglary45.htm

¹⁸ The General Permitted Development Order 1995 (SI 1995/418), Sch.2, Pt 4, Class B permits the use of any land for not more than 28 days in total in any calendar year for a temporary use.

¹⁹ See Hughes and Morgan Taylor (2004), *op. cit.* n.1, at pp.224–226.

²⁰ N.6 *infra*.

²¹ Road Traffic Act 1988, s.22A, as amended.

²² Private correspondence from ACPO, North Yorkshire Police, West Midlands Police.

wording requires “anything placed on or over a road” to have been done “intentionally and without lawful authority or reasonable excuse”,²³ and not merely recklessly or negligently. Thus the purpose of the provision is to catch a deliberate act, such as dropping a lump of concrete into the road, or tampering with a road sign. It could be argued that the justification tendered for fitting a dangerous light would be the common one of security (which often appears to trump all considerations) and so there would be no intention to cause a danger.

According to Martin Howard, Chief Crown Prosecutor for Leicestershire, a more fruitful cause of action is that of public nuisance at common law. The positioning of the light is “an act not warranted by law” and the effect of the act is “to endanger the life, health, property, . . . or comfort of the public, or to obstruct the public in the exercise or enjoyment of rights common to all Her Majesty’s subjects”.²⁴ This common law offence, which is triable either way, does not need society as a whole to be affected, nor does actual knowledge of the nuisance need to be established. However, the interference with the public’s rights must be substantial and unreasonable. For example, a defendant was liable when responsible for a house in ruinous condition and likely to fall down, thus endangering people using the highway.²⁵

Bad lighting can cause both general and specific problems for wildlife. Bats and birds, may become confused by 24-hour lighting, disrupting breeding cycles.²⁶ On a wider environmental issue, if light is not needed, or the lighting level exceeds what is required, it also represents wasted energy damaging the environment by needlessly increasing carbon dioxide levels and other pollutants produced in the course of energy generation such as sulphur dioxide. This is an important point to bear in mind, considering the Kyoto Accord on the reduction in carbon dioxide levels, which is, of course, now in force.²⁷ The cardinal question is, of course, what level of light is truly needed? It is contended that it is time to recognise and reduce by legislation the deleterious effects of light. The new law is a limited move towards tackling light nuisance, but the legislation is unlikely to deal with even that issue comprehensively or successfully.

Light as a statutory nuisance

Exterior lighting may constitute a statutory nuisance by virtue of s.102 of the Clean Neighbourhoods and Environment Act 2005. A new para.(fb) has been inserted into s.79(1) of the Environmental Protection Act 1990 to provide that “artificial light emitted from premises so as to be prejudicial to health or a nuisance” is a statutory nuisance in respect of which local authorities, *i.e.* in general district and unitary authorities in England and London boroughs, have enforcement functions. Complainants will also be able to take a private action in the local magistrates’ court under s.82 of the Environmental Protection Act 1990.

The Act provides for major exclusions listed in s.102(4), and inserts s.79(5B) into the 1990 Act which exempts a wide range of public transport buildings.²⁸ Notwithstanding the exclusions and exemptions,

²³ *ibid.*

²⁴ *Archbold* (Sweet and Maxwell, London, 2005) at para.31–40 *et seq.*

²⁵ *Watts* (1757) 1 Salkeld 357, and see generally *Blackstone’s Criminal Practice* (Blackstone Press, London, 2005), B11.100 *et seq.*

²⁶ See Taylor, “And God Divided the Light From the Darkness: Has Humanity Mixed Them Up Again?” (1997) 9(1) *Environmental Law & Management* 32 at 33 and “Lights out Policy in Cities Saves Birds”, CNN website: www.cnn.com/2004/TECH/science/06/11/life.birds.reut/index.html; the 2003 Canadian “Ecology of the Night” Symposium, which was organised by the Muskoka Heritage Foundation, was devoted to addressing the negative effects of night time lighting on animals. See www.muskokaheritage.org/ecology-night/

²⁷ This requires carbon dioxide emissions to be cut by 12.5 per cent of the 1990 levels by 2010.

²⁸ “Subsection (1)(fb) does not apply to artificial light emitted from (a) an airport; (b) harbour premises; (c) railway premises, not being relevant separate railway premises; (d) tramway premises; (e) a bus station and any associated facilities; (f) a public service vehicle operating centre; (g) a goods vehicle operating centre; (h) a lighthouse; (i) a prison.”

nuisance floodlights from neighbours are now most definitely covered. There has been confusion as to whether street lighting is covered, but DEFRA's intention was to exclude street lighting from the new law's remit.²⁹ Even so, the explanatory notes to the bill were silent on this matter³⁰ and the *Daily Telegraph* considered that street lighting would be covered.³¹ A member of DEFRA's bill team remarked "(a) nuisance can also only be caused by the emission of light from premises, and will therefore only apply to street lighting in exceptional circumstances."³² The Minister of State, Alun Michael, commented on the unsuccessful amendment 57 tabled to expressly include street lighting in Committee:

"Rather than giving local authorities the theoretical ability to issue abatement notices on themselves, it is better to deal with light pollution from street lighting by other means. Modern lighting design can already provide street lighting that does not waste energy and directs light only where it is wanted. That is used increasingly when lighting is replaced and is common for new lighting schemes."³³

If there is nothing to fear from modern street lighting then the Minister would have nothing to fear from the express inclusion of street lighting. It is interesting that the Minister expressly accepted that street lighting may give rise to light pollution, even though unwilling to categorise it as a light nuisance, and contented himself with reliance on the "UK Lighting Board's offer to endorse and commend the use of appropriate guidelines on good practice".³⁴ We will return to whether street lighting may constitute "premises" and so be covered under the actual statutory wording in due course.

The new law is partly a consequence of the recommendations of the Parliamentary Select Committee Report on Light Pollution and Astronomy.³⁵ It is interesting to note the specifically narrow remit of the Committee. Despite this tight focus, the Committee concluded that the Government had failed to address the issues of energy waste and "disquiet and annoyance" caused by light pollution.³⁶ The Committee made a number of recommendations for changes in the law, including the control of domestic floodlighting. They suggested that regulation should either be by way of banning the sale of 500-watt floodlights as "security lighting", or the inclusion of certain forms of light in the list of statutory nuisances, in s.79 of the Environmental Protection Act 1990³⁷ and recommended the latter route, which was taken up by DEFRA. It has already been noted, however, that there was no proposal to control the arguably much greater problem caused by public street lighting.

There are, it is submitted, three fundamental problems with the new law. First, there is an issue of principle. It must be asked whether it is appropriate to utilise the Victorian notion of statutory nuisance to deal with a problem of the latter part of the twentieth and now the twenty-first centuries. It would have been preferable to put in place a scheme of regulation to promote and regulate the proper

²⁹ "...with exemptions for premises used for activities for which artificial light is essential or required by legislation for operational, security or health and safety reasons, and street lighting", *Full Regulatory Impact Assessment of the Clean Neighbourhoods and Environment Bill* (DEFRA, December 2004), p.67.

³⁰ Clean Neighbourhoods and Environment Bill, Explanatory Notes, Bill 11-EN, www.publications.parliament.uk/pa/cm200405/cmbills/011/en/05011x-.htm

³¹ "Switch That Light off or Face a Fine" *Daily Telegraph*, December 9, 2004, p.1.

³² House of Commons Library Research Paper 05/01, p.68, from Personal communication, Wildy, DEFRA Bill Team, December 21, 2004: www.parliament.uk/commons/lib/research/rp2005/rp05-001.pdf

³³ Alun Michael, Standing Committee G 1, February 2005, fn. 42.

³⁴ *ibid.*

³⁵ N.3 *infra*.

³⁶ Recommendation 9 of the Parliamentary Select Committee, n.3 *infra*.

³⁷ Recommendations 19–20 of the Parliamentary Select Committee, n.3 *infra*.

installation and direction of all forms of exterior lighting. This would have avoided most of the problems as opposed to reliance on individual prosecutions for individual infringements of the law, which, at best, is shutting the stable door after the horse has bolted, while at worst it is a recipe for uneven application of the law by individual local authorities charged with administering the law of statutory nuisances,³⁸ which is by its very nature highly discretionary.³⁹

Secondly, it is submitted that restricting the scope of lighting covered so as to exclude public sector lighting such as street lighting is quite simply wrong, as this excludes a major cause, if not the major cause, of light-based nuisance. There appears to be a dichotomy of views and practice between the Highways Agency and most local highway authorities, *i.e.* county, metropolitan and London borough councils. The Highways Agency, backed by the Department of Transport, has addressed lighting on trunk roads, and is now retro-fitting full cut-off lighting (flat glass units which do not emit light above the horizontal). This form of lighting ensures that all light is aimed at the carriageway and not the sky, or dwelling house windows. However, this lighting policy has not filtered down to most local highway authorities. As the Highways Agency has adopted this policy, it is suggested that the Government should issue clear guidance to local highway authorities to retro-fit modern types of lighting when finances permit and British Standards codes of practice and guidance should be updated accordingly.⁴⁰ There could be over-wide variance in local practice until such a code of practice is promulgated, while the CfDS has registered many complaints from individuals suffering from street lighting shining into their bedroom windows at night, a problem often exacerbated when new street lighting is installed.

The problem of street lighting has been compounded by the replacement of old low-pressure sodium lamps (yellow in colour), with much brighter (and higher wattage) high pressure sodium lighting. It is difficult to shield a low pressure sodium lamp due to the size of the bulb, and so many local highway lighting departments have claimed that using high pressure sodium lights automatically leads to a reduction in light pollution and nuisance. While well-aimed high pressure lamps can reduce light nuisance and pollution, many local authorities are unfortunately transferring to these much brighter high pressure lamps, without controlling light spillage, or using non-cut-off units. These brighter lights can (and do) shine into bedroom windows, disturbing sleep as well as increasing the levels of light pollution in the night time sky.⁴¹

One illustrative example has come to the authors' attention from a resident of Bognor Regis. The new (much brighter) high pressure sodium lights fitted in her street caused so much glare that she fell over in her garden at night, the lights acting like spotlights shining into her face. She also commented that she would not look out of her window at night if she heard louts in the street, for fear of being seen at her now floodlit window, and the louts throwing a brick at her. Moreover, she commented that many of her neighbours who had ardently campaigned for new street lighting had had to buy thicker curtains so as to be able to sleep at night.⁴² Fortunately, the local authority has offered to shield one of the lights if her neighbour agrees. However, the issue still remains that these were new lights which, we are told, do not cause light-related problems.

This problem could be eased if authorities were under an obligation to use, and manufacturers were under an obligation to make, light fittings of a more directional nature. Sadly, a number of authorities,

³⁸ See generally Hutter, *The Reasonable Arm of the Law? The Law Enforcement Procedures of Environmental Health Officers* (Clarendon Press, Oxford, 1988), especially Pts I and II.

³⁹ Malcolm and Pointing, *Statutory Nuisance: The Law and Practice* (Oxford University Press, Oxford, 2002), para.4.55 *et seq.*

⁴⁰ Recommendations of the Parliamentary Select Committee, 13 and 14 (paras 82 and 88), n.3 *infra*.

⁴¹ Contrast with the comments of Alun Michael, nn.33 and 34 *infra*.

⁴² Private correspondence from Patricia Goodman, Bognor Regis.

when complaints of intrusive street lighting are made, raise arguments about the costs of baffles and other remedial actions to stop glare, or resort to arguments based on the importance of safety. Some may even insist on a doctor's note stating that street lighting is having a deleterious effect upon the health of a patient before taking action.⁴³ Such arguments miss the point that street lighting, new as well as old, may give rise to civil nuisances, as evidenced by the *Bonwick* case.⁴⁴ More appropriate fitments do exist, but there is no legal requirement to use them. Prevention here would be much preferable than cure, and even more so if adopted on a nationwide basis. Light fittings shielded with metal baffles, or with painted out sections (as for example in York), or of a more directional nature, are utilised in a few but slowly growing number of towns and cities, such as Oxford, Southampton, Portsmouth and Winchester, but this also demonstrates the current inconsistent approach between local highway authorities.

There is an argument put forward by some lighting engineers that full-cut off lighting is not suitable in urban areas, in that it creates a "forbidding environment", as it results in a dark line above the light unit, with adjacent building fronts receiving no light at all, and being cast in shadow. It is generally accepted by lighting engineers that a small amount of light should illuminate the frontage of street buildings. However, shallow bowl cut-off lighting is available, which emits a fraction of the light above the horizontal. This, it is submitted, is an acceptable solution. However, neither of these types of lights have been adopted by many local authorities. A common explanation for not using these lamps is that it would result in a need for more light units due to the performance degradation of this form of lighting used over distance. However, a lighting engineer has stated that such a claim is not applicable to cut-off luminaires and that each situation must be taken on a case by case basis for full cut-off lighting.⁴⁵

Furthermore, failure to bring street lighting within the remit of the law will not provide any incentive to public authorities to minimise nuisance light and save taxpayer's money, which was another major recommendation of the Parliamentary Select Committee. Street lights which direct light into the night sky or dwelling house windows waste both energy and money. The cost of wasted energy due to non-directional street lighting was estimated at £53 million per annum as long ago as 1993.⁴⁶ Replacement street lamps (where the light is directed at the ground) would actually save local authorities money and/or make the streets brighter thus promoting safety. It is for this very reason that the Canadian City of Calgary is in the process of replacing all its current street lighting with more efficient installations, under its EnviroSmart program. The energy saving is currently Canadian \$1.6 million, and it is expected that the lights will pay for themselves in six or seven years. The new lighting scheme has led to a 22 per cent reduction in carbon dioxide emissions, and Calgary Police Services have not reported any increase in street crime.⁴⁷ It is unclear why many UK domestic authorities are reluctant to follow this lead, and why the Government has not issued guidance policy. Calgary has succeeded in showing that light pollution and nuisance can be reduced, saving both taxpayers' money and protecting the environment, without compromising safety.

The third problem with the new law lies in the scope of the breadth of the excepted premises.⁴⁸ Lord Whitty, Minister for Farming Food and Sustainable Energy, has clarified the reasoning behind the

⁴³ From private correspondence with several residents in Leicester.

⁴⁴ N.2 *infra*.

⁴⁵ Webster, Technical Support Manager, DW Windsor Lighting Ltd, Pindar Road, Hoddesdon, Hertfordshire. EN11 0DX.

⁴⁶ Mizon, n.1 *infra* at p.63.

⁴⁷ Private correspondence and see also: <http://content1.calgary.ca/CCA/City+Transportation/Maintaining+Roads/Street+Lights/EnviroSmart+Retrofit/EnviroSmart+Street+Light+Retrofit+Program.htm?Prm=1> see also: www.calgary.ca/cweb/gateway/gateway.asp?GID=394&CID=200&URL=http%2F%2Fcontent1.calgary.ca%2FCCA%2FCity%2BHall%2FBusiness%2FUnits%2FRoads%2FStreet%2BLights%2FEnviroSmart%2BStreet%2BLight%2BRetrofit%2BProgram%2Ehtm. The wasted light from Calgary is shown at: <http://content1.calgary.ca/CCA/City+Transportation/Maintaining+Roads/Street+Lights/EnviroSmart+Retrofit/Satellite+Photograph+-+Full+Size.htm>

⁴⁸ N.28 *infra*.

exemptions stating that they are premises where lighting is “essential or required by legislation for operational, security or health and safety reasons”.⁴⁹ However, removing light nuisances does not lead to an automatic reduction in safety and security. It may improve matters, for example by improving visibility by reducing glare. It is submitted that the exemption should have been limited much more specifically to lighting which is of a good design (by which we mean that which minimises light nuisance, waste energy and pollution, whilst maximising safety). Furthermore, we question whether the exceptions should also have available the defence provided by s.79(9) of the Environmental Protection Act 1990 which enables those made subject to statutory nuisance proceedings to raise the defence of having utilised the “best practical means” (a phrase of uncertain meaning and archaic provenance) to prevent or counteract the effects of the nuisance. The spirit of the defence is unexceptional, but the problem lies in the wide interpretation which can be given to the wording.

The Parliamentary Select Committee stated “that whilst the role of efficient and well positioned street lighting in reducing accidents has been proven, the evidence relating to the correlation between lighting and crime is not conclusive.”⁵⁰ Unfortunately the Committee felt that this matter went beyond its remit, but nevertheless expressed an interest in new evidence on the role that lighting plays in the reduction of crime. Moreover the Committee argued that lighting should only be one consideration for the Government to take into account in developing its policy on security.⁵¹ The Committee further argued that the Government should advise local authorities as to the benefits of good quality new luminaires and the problems of light pollution.

The Select Committee did, however, recommend a requirement that local authorities should review lighting schemes in all new developments, and proposed changes to lighting schemes. It was recommended that only full cut off or cut off lighting should be permitted. The Committee also stated that the new guidance should refer local authorities to, *inter alia*, the Institution of Lighting Engineers *Guidelines for the Reduction of Light Pollution*⁵² (which is currently being updated). The Government has undertaken to issue a new Planning Policy Statement (“PPS”), under the Planning and Compulsory Purchase Act 2004, to “update its advice on the desirability of minimising light pollution.” This anodyne statement it is submitted will do little to alleviate the current unsatisfactory state of law and practice.

It may be asked whether some local authorities harbour unnecessary fears of being sued for failing to provide adequate street lighting and whether this leads to an overzealous view that all lighting is essential, even where it causes a nuisance. The excessive use of lighting under the cloak of safety cannot be justified as essential. However, the belief in the “sanctity of light” as a guarantor of safety may be one explanation for the exception of such lighting under the new law. Safety and security trump all other considerations.

Street lights as “premises”?

It has already been stated that DEFRA did not want to include street lighting in the expanded definition of statutory nuisance. The statutory definition does not expressly include street lights, but neither does it expressly exclude such lighting. It could be argued that streets are “premises”, and so street lighting is covered in the definition. But is this supportable as an argument? The definition of “premises”

⁴⁹ Department for Environment, Food & Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR. (Personal correspondence to Chris Baddiley, CfDS Committee Member.)

⁵⁰ Recommendation 12. (para.74), n.3 *infra*.

⁵¹ Recommendation 12. (para.74), n.3 *infra*.

⁵² Recommendation 25 (para.127), n. 3 *infra*. ILE Guidelines: www.dark-skies.org/ile-gd-e.htm

currently contained in the 1990 legislation is hardly helpful: “‘premises’ includes land and subject to subs.(12) and s.81A(9) below, any vessel”. This definition, which is, of course, derived from previous legislation, principally the Public Health Act 1936, has led to a deal of litigation in which the otherwise undefined word “premises” has been considered. “Land” itself is defined by the Schedule to the Interpretation Act 1978 to include buildings and other structures, land covered by water and any estate, interest, easement, servitude or right in or over land. However, that is not particularly helpful in the present context. Moreover, general judicial utterances on the meaning of “premises” are not particularly illuminating. In *Maunsell v Olins*⁵³ Viscount Dilhorne denied that the word had any recognised or established primary meaning, while Lord Wilberforce considered that “premises” might not have a plain meaning even though it is a word in general use. The issue arises in the present context because of the need to consider whether street lighting could give rise to the existence of a “light nuisance” and, if so, whether it is possible to conceive of a local authority which has both environmental health and street lighting functions either taking action against itself or, indeed, being legally in a position so to do.

However, let us ask initially whether a street can be premises? The answer appears in certain circumstances to be “yes”. In *Att-Gen v Kirk*⁵⁴ a water-filled trench had been left by a builder across a street. This was coupled with a footpath lacking proper paving—consequent on a disagreement between the builder of the street and its landlord. As the landlord was out of possession of the land he was held entitled to an injunction to require the defendant builder not to leave the street in such a state where it could be a nuisance or cause prejudice to health. It is also clear that an obstruction *in* a street, such as a pile of earth in *Brown v Eastern and Midlands Railways*,⁵⁵ can amount to a nuisance. It is, however, submitted that neither of these cases deals analogously with the problem of street lighting affecting the sleep and comfort of householders.

If we look to other legislation which has dealt with nuisances arising in the context of the street one can derive some little assistance when confronting the present problem. In 1993 s.2 of the Noise and Statutory Nuisance Act amended the 1990 Act by inserting s.79(1)(ga) which provided that noise emitted from vehicles, machinery or equipment in a street was to be a statutory nuisance if it was otherwise prejudicial to health or a nuisance. However, while that legislation thoughtfully defined “street” (s.2(4)(c)) to mean highways and other roads, footways, squares or courts that are for the time being open to the public, as well as open spaces where members of the public regularly go to attend markets, it also specifically *excluded* particular types of noise, in particular traffic noise, from the definition of a street noise nuisance. From this two conclusions may be drawn:

1. The fact that in 1993 it was thought specifically necessary to deal with street noise in terms of definition which are clearly different from those pertaining to nuisances emanating from “premises” generally points to “street” and “premises” being, at least, different and, maybe, mutually exclusive concepts. This contention is given added weight by case law. Prior to the 1993 Act external traffic noise could amount to a statutory nuisance: see *Southwark LBC v Ince*⁵⁶ It now appears, following *Haringey LBC v Jowett*,⁵⁷ that since the commencement of the 1993 Act street noise arising from ordinary traffic movement is outwith the ambit of s.79 of the 1990 Act.

⁵³ [1975] A.C. 373.

⁵⁴ (1896) 12 T.L.R. 514.

⁵⁵ (1889) 22 Q.B.D. 391.

⁵⁶ (1989) 153 J.P. 597.

⁵⁷ [1999] E.H.L.R. 410.

2. Parliament arguably intends the ordinary and everyday use of the highway to be to carry traffic and hence for street noise to be *generally* outside the ambit of the statutory nuisance provisions. If that is so then, equally arguably, one can extend this to contending that street lighting, which is a very ordinary feature of the use of the highway, is not to be regarded as, without clear words of definition, a statutory nuisance.

Oddly enough some further support for this argument can be derived from the question of whether a sewer can be “premises”. As long ago as 1897 in *Fulham Vestry v London County Council*⁵⁸ it was considered that the relevant statutory nuisance legislation (the Public Health (London) Act 1891) did not apply to “foul smells” arising from a surface sewer ventilator. Day J. (at p.78) argued: “What are contemplated are nuisances arising from the acts of owners of property, as distinguished from anything which may be caused by the construction of great public works which are entrusted to the County Council”. Other cases gave support to that argument, see *R. v Parlby*⁵⁹ and *R. v Epping (Waltham Abbey) Justices Ex p. Burlinson*.⁶⁰ *Parlby* is generally taken as indicating, historically at least, that to be the “seat” of a nuisance “premises” must be decayed, dilapidated, dirty or out of order in some way.⁶¹ Such a line of argument was accepted in *East Riding of Yorkshire Council v Yorkshire Water Services Ltd.*⁶² It may thus be argued that, historically, the courts have been averse to considering certain facilities provided by public works functions as being capable of being “premises” for the purposes of the law of statutory nuisance unless they are in some way out of order or malfunctioning. By analogy that argument is applicable to properly functioning highways maintained by highway authorities with properly functioning street lighting. Such a facility, it may be argued, is surely, as Day J. said in the *Fulham Vestry* case, a “great public works” which falls outside the conception of “premises” when it is the very functioning of the public works in question that gives rise to the complaint.

By way of counter argument, however, one should note certain dicta in *Hounslow LBC v Thames Water Utilities Ltd*⁶³ which also was a case arising from an alleged nuisance concerning odour emitted from a sewage works. The defendants sought to argue that the plant was not “premises” on the basis of established authorities, including *Parlby* and the *Fulham Vestry* case. *Parlby* itself was distinguished by Pitchford J. in the Queen’s Bench Division Administrative Court on the basis that the wording of the statutory provision in question there, s.91 of the Public Health Act 1875, was not in all material respects that of s.79 of the Environmental Health Act 1990. He pointed out that the concern that had prompted the Court in *Parlby* to exclude sewage treatment works from the definition of “premises” was that a finding of the existence of a nuisance under the 1875 Act led to the closure of the source of the nuisance. If a nuisance emanating from a sewage works was found to exist the works in question would be closed, thus frustrating the public health purpose for which the 1875 Act was passed. This would not, however, be the consequence of a finding that a statutory nuisance exists under the 1990 Act for the Court has a wide range of powers and avenues of approach available to it in seeking the abatement of the nuisance. Pitchford J. further relied on an argument from Lord Hoffman in *Birmingham City Council v Oakley*⁶⁴: “...when a statute employs a concept which may change in content with advancing knowledge, technology or social standards, it should be interpreted as it would be currently understood.”

He further relied on a statement from Lord Scarman in *R. v Chard*⁶⁵ warning of extracting from

⁵⁸ [1897] 2 Q.B. 76.

⁵⁹ [1882] Q.B. 520.

⁶⁰ [1948] 1 K.B. 79.

⁶¹ Malcolm and Ponting, *Statutory Nuisance Law & Practice* (Oxford University Press, Oxford, 2002), para.5.36.

⁶² [2001] Env. L.R. 7.

⁶³ [2003] EWHC 1197; [2004] J.P.L. 301.

⁶⁴ [2001] 1 A.C. 617 at 631.

⁶⁵ [1984] A.C. 279 at 294–295.

previous authorities an inflexible rule of construction to the effect that where certain words in an Act of Parliament have received a judicial construction in one of the superior courts and the legislature has repeated them without alteration in a subsequent statute, the legislature must be taken to have used them according to the meaning which a court of competent jurisdiction has given to them:

“... Lord Macmillan ... treated the rules not as ‘a canon of construction of absolute obligation’ but as a presumption in circumstances where the judicial interpretation was well settled and well recognised: and even then his Lordship thought the rule must yield to the fundamental rule that in construing statutes the grammatical and ordinary sense of the words is adhered to, unless it leads to some absurdity, repugnance or inconsistency.”

Pitchford J. concluded that the Court in the present case was not bound to follow the authority of *Parlby* and in doing so, *en passant*, impliedly rejected the argument of counsel for the defendants that the word “premises” tends to relate to structures of one sort or another. Scott Baker L.J. in his judgment also pointed out that the word “premises” occurs no less than 14 times in s.79 of the 1990 Act, and argued that the word is to be given a wide meaning. Both judges therefore concluded that the sewage works in the present case were to be regarded as “premises” and thus the statutory nuisance jurisdiction applied to them.

However, the rejection of restrictive authorities such as *Parlby* in the context of a works which confers a public benefit does not necessarily indicate that the highway could receive similar consideration in respect of an alleged nuisance arising from public lighting. It must be remembered that the sewage works in the *Hounslow* case was a defined unit of land. Though “premises” clearly does not need to be restricted in its meaning to buildings and structures, can it easily be contended that it applies to the network of streets and roads making up our highway system? It might conceivably be argued that the location of an individual street light that causes nuisance to a householder is “premises”, but the point is not entirely clear and the proposed legislation should, it is submitted, have placed the point beyond debate by declaring that street lighting can be the subject of statutory nuisance actions. Indeed, as we have already pointed out, at one point during the Committee stage of the new legislation, it was proposed by two Conservative members of the Committee⁶⁶ that street lighting should be specifically declared to be capable of giving rise to a statutory nuisance. This amendment was not, however, carried. The statute should not have left the issue to interpretation by a court which might well conclude that the powers of local authorities are limited only to nuisances arising from identifiable units and areas of land.

What Parliament has done is to grant local authorities a jurisdiction to deal with alleged light nuisances arising from particular industrial, commercial and entertainment venues mentioned above, together with domestic premises. There would appear to be no clear intention to grant a jurisdiction to a local environmental health authority to take action against a local highways authority, nor to deal with the vexed issue of how an authority discharging both functions, as for example a unitary authority or a metropolitan district authority in England, is to take action against itself: see *R. v Cardiff City Council Ex p. Cross*,⁶⁷ for an authority not being able to serve proceedings on itself.

The likely exclusion of street lighting from the definition of statutory nuisance shows a failure to recognise what modern lighting can do by way of harm and also lack of appreciation of the control measures available. There may be situations where lighting is deemed essential for the preservation of life or otherwise for the public good—such as light houses (where the highest wattage used is only 1000

⁶⁶ Standing Committee G, House of Commons, February 1, 2005, www.publications.parliament.uk/pa/cm200405/cmstand/g/st050201/am/50201s01.htm

⁶⁷ [1981] J.P.L. 748; (1982) 6 H.L.R. 1.

watts), prison lighting etc. Arguably, a balancing exercise would have to be undertaken in any litigation that might involve such lighting. The public utility of the light would have to be set against the practicality and cost of ameliorating its unwanted side effects. This is very different from a “security and safety” trump-all argument that currently holds so much sway.

We wish, however, to argue for a more radical route of future development in the law. The statutory nuisance route does not prevent a problem but rather puts individuals in the invidious position of having to make complaints about their neighbours’ lights. While some people may be willing to do this, many are not, particularly now householders selling their properties must complete a Seller’s Property Information Form questionnaire which includes a question about neighbour disputes. This will be required as part of the “seller’s pack” under the Housing Act 2004. A light problem, if acknowledged to exist, could put off a potential buyer. On the other hand, the number of recent complaints to environmental health officers about lighting has risen, showing that there is indeed a real problem which must be tackled. The Chartered Institute of Environmental Health (“CIEH”) found that the numbers of complaints concerning light made to Local Authorities rose by 44 per cent from 1993 to 1996.⁶⁸ However, quite surprisingly, the CIEH then stated that no further study would be undertaken as light pollution is not a widespread problem and does not cost the victim anything. A further study would be welcome for it could show that the problem has continued to increase and it would be useful to compare recent lighting complaint statistics with those, for example, relating to noise. What is needed, we believe is a restriction on the sale, supply and manufacture of so-called security and other domestic flood and spot lighting above a particular wattage, perhaps 100 watts. It is also contended that lighting units be made so that they are unable to point above the horizontal, and be supplied with fitting instructions advising about light nuisance and pollution.

The pre-emptive ban for which we contend acknowledges the multi-faceted harm caused by bad lighting to both the environment and local communities. A nationwide ban on the sale and installation of 500-watt domestic flood lighting should also be coupled with a similar nationwide requirement for local authorities only to use the most approved and efficient forms of street illumination.

Further problems inherent in the new law

Without extra funding local environmental health departments may not have the resources to deal with complaints of statutory light nuisances. Investigations may take many months, by which time the complainant may have given up, or reached the perception that the local authority has no interest in the matter. The authors are aware of at least one case where investigations by one planning department for breach of planning conditions relating to lighting took almost a year to process.⁶⁹ A preventative outright ban placed on certain lights and bulb strengths would be preferable to the uncertainties inherent in any system which relies on the use of individual complaints leading to individual investigations and individual remedies.

Conclusion: towards the future

Now that certain forms of lighting may amount to a statutory nuisance, the Government should decide on a national strategy on both light nuisance and light pollution: the evidence that this is a growing

⁶⁸ Memorandum from the Chartered Institute of Environmental Health, submitted by Graham Jukes, Chief Executive, to the Parliamentary Select Committee: www.parliament.the-stationery-office.co.uk/pa/cm200203/cmselect/cmstech/747/747we144.htm

⁶⁹ Blaby DC, in response to complaints concerning floodlighting that had been installed at a supermarket during enlargement without prior planning permission.

problem is compelling. Once a strategy has been developed the Government should ensure that businesses, consumers and local authorities understand what is and is not acceptable. The Energy White Paper stated that encouraging energy efficiency is “the cheapest, cleanest and safest way of addressing our energy policy objectives”.⁷⁰ Consumers could be informed of the problems excessive lighting causes just as they are in relation to other energy saving measures being promoted by the Government. For example, as of April 1, 2005 all new consumer boilers must (by law) be of the condensing type, so as to save energy.⁷¹ If all new bulbs sold for external floodlights were to be limited to a maximum wattage of 100 watts, users could be told that a 500-watt bulb would use as much electricity as five indoor conventional 100-watt bulbs, or about three quarters the energy consumption of an average microwave oven. The authors are not aware of any consumer energy advice which warns about the problems of waste light, despite the fact that it is central policy to encourage consumers to save energy. The Energy Saving Trust’s⁷² “Big Turn Off”, launched in energy efficiency week (October 25–31, 2004), whilst aiming to save £1 billion a year in overall energy consumption, did not address the problem of excessive domestic floodlighting (or any floodlighting, for that matter). It advocated turning down thermostats by one degree, turning off television sets when on standby, boiling only the water actually needed, switching to low energy light bulbs (for *internal* use) and switching off lights in unoccupied rooms. This particular policy, which aims to save £50 million a year, was a golden opportunity missed to address the exterior waste light issue.

There appear to be no official estimates of the cost in either monetary terms or in the tonnage of carbon dioxide generated by the use of exterior floodlighting. However, we suggest the following figure for 500-watt floodlights. It is known that there are 22 million dwellings in the UK, so if one in ten had a 500-watt floodlight, then there would be 2.2 million lights. Generating 1 kW-hr of electricity produces 0.9kg of carbon dioxide emissions, if generated from fossil fuel. Most lights are on an infra-red switch, but most activate needlessly when, for example, cats or pedestrians walk by. If an average light is on for quarter of an hour a night, then the national statistic is $(2.2\text{m} \times 500 \text{ w}) \times 0.25\text{hr/night} = 275,000$ kW-hr/night. Per year this must be multiplied by 365 = 100m kW-hr/year. If 1 kW-hr produces 0.9kg of carbon dioxide, then some 90m kg/yr of carbon dioxide is produced as a by-product from producing the electricity needed to power domestic floodlights within the United Kingdom.

If a new diesel car produces 150g of carbon dioxide per kilometre travelled, then one car would have to travel 600 million km to produce the same amount of carbon dioxide as that produced by home floodlights in the UK. Or, 60,000 cars would have to travel 10,000 km per year. This means that the carbon dioxide produced by domestic floodlights alone is statistically similar to that produced by the car usage of a large town of 114,000 persons.⁷³

The figures above suggest that the annual financial cost is about £10 million for 500-watt lights alone (if the electricity used costs 10p per KW/hr). If the cost of all external lighting left on needlessly was added together total costs would clearly be considerably higher, for example approximately £53 million for street lighting.⁷⁴ Furthermore, a number of “park and ride” car parks, built to cut road congestion and pollution, remain floodlit when locked and empty all night, needlessly resulting in the production of the very greenhouse gasses which they aim to help reduce. If the cost of unnecessary or overpowered

⁷⁰ Department of Trade and Industry, *Our energy future—creating a low carbon future*, Cm.5761, February 2003, para.3.47.

⁷¹ Building Regulations Pt L1 (2002).

⁷² www.est.org.uk/

⁷³ There were a minimum of 24,808,549 cars in the United Kingdom according to the 2001 census (taken from combining household numbers with one or more than one car), and the population was 58,789,194. So this means that at least one in 2.4 persons had access to a car in 2001. See also *The Times*, April 18, 2005, which reported estimates of 30.6 million cars in Britain in 2005, with only 26 per cent of all households having no car access. This is a car per 1.9 persons.

⁷⁴ This takes the 1993 figure, and assumes that the reduced wastage from the installation of full/ cut off fittings is offset by the upgrading of all lights to brighter units and the increase in street light numbers which are not full/cut off.

business floodlighting is added, the total cost could top £100 million per annum. Using the same formula for carbon dioxide production, this is similar to an urban area with 1.1 million inhabitants.⁷⁵

The new law fails to tackle many problems of light nuisances and hardly takes on light pollution. However, in the words of DEFRA, it

“provides a first step towards reducing light pollution, although the Act could not possibly have dealt with all sources of light pollution. The [Act] is designed primarily to give local authorities new powers to deal with anti-social behaviour that affects the local environment, and a new licensing scheme for lighting, for example, would have been out of place in this particular piece of legislation.”⁷⁶

Sceptics might even see it as a sop, given to appease the anti-light pollution lobby, without actually achieving a tangible result. The better option would have been for Parliament to legislate (and for the Government to educate) to introduce and promote a lighting strategy including pre-emptive regulation. This should ban certain forms of lighting, but should also disseminate guidance to local authorities to create a homogenous national approach to good lighting for all of us to use. Modern lighting does not have to create a nuisance to achieve the objective of crime deterrence, and to address this issue does not lead to a failure to promote safety and security. However, until coherent and integrated action is taken at government level, light related nuisance and light pollution will continue to remain a Cinderella issue in environmental legal protection.

⁷⁵ This is more than Birmingham (977,000). Calculated from National statistics at: www.statistics.gov.uk/census2001/profiles/uk.asp

⁷⁶ Private correspondence from Jon Lartice, DEFRA. Department for Environment, Food & Rural Affairs, Nobel House, 17 Smith Square, London SW1P 3JR.