

Review of the Clean Air Act

Call for evidence

September 2013

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Summary

This is a Call for Evidence to support a policy review of the Clean Air Act 1993¹ in Scotland. The Act is being reviewed with the following objectives:

- Updating the provisions of the Act to ensure it remains fit for purpose;
- Streamlining and simplifying burdens on business and local authorities; and
- Making environmental rules and regulations more user friendly;

This Call for Evidence presents our evidence to date on the importance of the measures in the Act for air quality management and the burdens in terms of time and resources that the Act places on local authorities and business. It also outlines selected stakeholders' views for improving the Act. These are not necessarily Scottish Government views or proposed policy options and the feasibility of their implementation has not been considered.

The main purpose of this Call for Evidence is to seek your views on the current evidence base and your assistance with filling in evidence gaps. We welcome any comments and ideas you have for improving the Act and meeting the above policy objectives.

The document covers each section of the Act (see below), explaining in simple terms what the purpose of each provision is and outlining the evidence gathered to date:

- Part I: Dark Smoke
- Part II: Smoke, Grit, Dust and Fumes
- Part III: Smoke Control Areas
- Parts IV to VII: Variety of Measures

The Act applies to the whole of Great Britain, but this Call for Evidence is a Scotland only exercise. A similar exercise is being undertaken in England by Defra and we are working together to ensure harmonised approaches are adopted where possible. We welcome comments from throughout the UK and further afield.

The Call for Evidence is open for eight weeks from 20th September to 15th November 2013.

Responses should be sent by email to andrew.taylor2@scotland.gsi.gov.uk

¹ <http://www.legislation.gov.uk/ukpga/1993/11>

Section One: Introduction

History and Purpose of the Clean Air Act

The Clean Air Acts of 1956 and 1968 were introduced to deal with the smogs of the 1950s and 1960s which were caused by the widespread burning of coal for domestic heating and by industry. These smogs were blamed for the premature deaths of thousands of people in the UK.

The Acts gave local authorities powers to control emissions of dark smoke, grit, dust and fumes from industrial premises and furnaces and to declare "smoke control areas" in which emissions of smoke from domestic properties are banned. Since then, smoke control areas have been introduced in many of our large towns and cities in the UK and in large parts of the Midlands, north west, south Yorkshire, north east of England, central and southern Scotland. The implementation of smoke control areas, the increased availability and use of natural gas and the changes in the industrial and economic structure of the UK lead to a substantial reduction in concentrations of smoke and associated levels of sulphur dioxide (SO₂) between the 1950s and the present day.

These Acts were repealed and consolidated by the Clean Air Act 1993 which, together with Regulations and Orders made under the Acts, provide the current legislative framework within Great Britain.

The Act focuses on the control of smoke, but this can also help reduce emissions of a wide range of other pollutants such as particles, sulphur dioxide (SO₂), polycyclic aromatic hydrocarbons (PAH), black carbon and PCDD/F (dioxins and furans) which may be present in smoke.

Control of these emissions to air and ambient air quality is important for human health and the environment. Emissions limits for a range of pollutants including oxides of nitrogen, sulphur dioxide are set in the National Emissions Ceilings Directive (2001/81/EC)² and the Gothenburg Protocol³ also includes ceilings for particulate matter (PM_{2.5}). Limits and targets for pollutants such as nitrogen dioxide, particulate matter (PM₁₀, PM_{2.5}), sulphur dioxide and PAHs in ambient air are set in the Ambient Air Quality Directive (2008/50/EC)⁴ and Fourth Daughter Directive (2004/107EC)⁵.

² <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:309:0022:0030:EN:PDF>

³ http://www.unece.org/env/lrtap/multi_h1.html

⁴ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>

⁵ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:023:0003:0016:EN:PDF>

The UK is compliant with the limit values for PM₁₀ and the target value for PM_{2.5}, but future objectives for PM_{2.5} including the National Exposure Reduction Target may be more challenging to meet. The continued control of small scale combustion may be important for achieving this target. The UK also has some localised areas of exceedance of the target value for polycyclic aromatic hydrocarbons (PAHs), mainly associated with industry.

The Act therefore helps control emissions from combustion which is important for meeting national emission reduction commitments as well as for ambient air quality. The 2012 Assessment of the effectiveness of Clean Air Act measures showed the effectiveness of Smoke Control Areas in controlling ambient levels of PAHs, PM_{2.5} and PM₁₀⁶. Without the Clean Air Act measures it is likely that concentrations of these pollutants would be higher and this could worsen the compliance situation with the relevant limit and target values.

The UK, like many other member states, continues to have exceedances of NO₂ limit values in urban areas close to the roadside. Whilst the Act's primary focus is on particulates, the provisions on Chimney Heights also ensure that local impacts of NO_x and other pollutants are controlled by ensuring adequate dispersion from small combustion sources. This can also assist in the control of NO₂ hotspots and therefore help local authorities and the Scottish Government achieve domestic objectives and EU Limit Values.

The Future Role of the Clean Air Act

At a European level, developments in the areas of Ecodesign⁷, Eco Labelling⁸ and the Construction Products Regulations⁹ are underway and are likely to have an impact on the policy context of the Act. The Ecodesign approach provides EU-wide rules for the environmental performance of energy related products. The approach is geared at enhancing product quality and environmental protection and facilitating free movement of goods across the EU. Ecodesign will eventually introduce new standards and emissions criteria for a number of appliances and supersede limits set in the Act.

The Construction Products Regulations came into force on 1st July 2013. This legislation introduces harmonised standards for construction products and facilitates the marketing of appliances which have met the required standard throughout EU without restriction. Again this potentially impacts upon the requirements for appliances (some of which fall within the definition of a construction product) currently specified in the Act and its future role.

⁶ http://uk-air.defra.gov.uk/reports/cat05/1303201551_20072012-AEA-Report-CAA.pdf

⁷ http://ec.europa.eu/enterprise/policies/sustainable-business/ecodesign/index_en.htm

⁸ <http://ec.europa.eu/environment/ecolabel/>

⁹ <http://ec.europa.eu/enterprise/sectors/construction/legislation/>

Additionally the EU Commission is currently reviewing the Thematic Strategy on Air Pollution¹⁰ and is considering further source control for small combustion plants.

At national level, the Renewable Heat Incentive¹¹ which provides financial incentives to those purchasing biomass boilers or other renewable technologies is currently in place for the non domestic sector and is due to be rolled out to domestic users next spring. Legislation which will introduce emission criteria for PM₁₀ and NOx as a condition of accreditation is due to be introduced in September this year. The scheme is currently planned to run until 2021.

Planning for these EU and national level changes is essential to determine the future role of the Act and will necessarily form part of this review.

Better Environmental Regulation

As the Clean Air Acts are now almost sixty years old and have around forty associated Regulations, a comprehensive review is long overdue.

An initial stage of the Red Tape Challenge of the Clean Air Act in England reviewed the administrative aspects of the exemption and authorisation process for fuels and fireplaces. As a result of collaborative working with stakeholders, a proposal has been developed which would modernise the process, remove the requirement for producing Statutory Instruments and instead use digital capability to publish monthly an online list of approved fuels and fireplaces in England. A similar approach is to be introduced in Scotland.

The changes would mean business could bring products to market more quickly, local authorities and others requiring information on authorisations and exemptions would have access to improved online resources and the Scottish Government could save resources required to publish regular Statutory Instruments. This proposal will be included at stage 2 of the Regulatory Reform (Scotland) Bill.

This Call for Evidence supports a wider review of the Clean Air Act over a longer time frame, building on the initial analysis and seeking to fill remaining evidence gaps around the burdens of the Act on business and local authorities and views on stakeholder suggestions for change. Our evidence gathering activities to date are described in Section two. The three policy objectives for the review of the Act are set out in Table 1 below.

¹⁰ http://europa.eu/legislation_summaries/environment/air_pollution/l28159_en.htm

¹¹ <https://www.gov.uk/government/policies/increasing-the-use-of-low-carbon-technologies/supporting-pages/renewable-heat-incentive-rhi>

Table 1: Policy Objectives for the Clean Air Act review

Objectives	Examples
Reducing burdens on business and local authorities	<ul style="list-style-type: none">• Reducing costs for industry and seeking opportunities for growth.• Improving implementation by local authorities through smarter legislation.
Making environmental rules and regulations more user friendly	<ul style="list-style-type: none">• Improving guidance so that it is cheaper and easier for business to comply with it and for local authorities to implement it.• Streamlining and modernising the legislation to make it easier to understand and more relevant to today's environmental challenges.
Maintaining the quality of environmental regulations	<ul style="list-style-type: none">• Helping local authorities meet air quality limits by developing better and not weaker rules.• Working with current and future environmental challenges• Considering impacts of future EU legislation and initiatives.

Next Steps

Following the completion of this Call for Evidence exercise and further work to consider the impact of EU and domestic source control on air quality and Clean Air Act provisions, the scope and ambition of the review will be assessed. Based on available evidence, consideration will be to the future role of the Act and types of regulatory and non regulatory changes which best fulfil the policy objectives. Any proposed legislative changes will then be the subject of a public consultation. Work is already underway to review currently available guidance on the Act and we will be engaging with stakeholders over how this can be improved and developed, to help reduce burdens and modernise the Act without amending the legislation.

Section Two: Call for Evidence

About this Call for Evidence

The purpose of this Call for Evidence is to invite you to help us understand how the Act affects local authorities and business and to contribute your views for future improvements.

In Section 3 we have outlined the main provisions of the Act, our evidence to date on burdens on business and local authorities and some stakeholder suggestions for change. We have identified where we have evidence gaps. The suggestions for improvements are from stakeholders and do not necessarily represent Scottish Government views or, at this stage, potential options for change.

We have asked a series of questions relating to the burden that the Act imposes and your views on improvements. You can choose to answer all questions, or questions relating only to a particular section of the Act. Responses should be sent to andrew.taylor2@scotland.gsi.gov.uk using the form in section three.

Evidence Gathering Work to Date

A robust evidence base is an important input for the review of the Clean Air Act to ensure our understanding of the Act and its burdens on industry is correct and to inform future policy development. To date evidence has been gathered across the UK on:

- the importance of measures in the Act for control of emissions and ambient air quality;
- the burden of measures in the Act on industry and local authorities; and
- ideas for improving the Act to meet the policy objectives.

Two studies for Defra and the Scottish Government have been used as inputs to the analysis, although this Call for Evidence is intended to support the review in Scotland only. These are:

- 2010 Support to the Scottish Government on the Clean Air Act¹².
- 2012 Assessment of effectiveness of measures under the Clean Air Act 1993.

Additional evidence gathering has taken place between 2011 and 2013 and included a questionnaire issued to local authorities and industry, direct follow up consultation with local authorities and a focus group session with local authorities and Industrial and trade representatives.

¹²http://www.scottishairquality.co.uk/documents/reports2/288100630_CAA_SG_R_Issue1_final_30_June_2010_.pdf

The review will draw from these studies as appropriate, and further work is currently being planned to consider the effect of future EU legislation and the Renewable Heat Incentive on the Act provisions. Future proofing and the timing of any changes relative to external developments are very important.

At present a number of evidence gaps remain and we are now looking to fill these through this Call for Evidence. A number of suggestions for change have been made by the stakeholders we have so far engaged with and we would like your views on these as part of this exercise. Also current evidence seems to point towards a low level of burden to industry in complying with the Act and we are seeking confirmation or otherwise of this from a wider stakeholder base.

Further analysis of EU air quality initiatives and the results from this Call for Evidence will then be assessed to inform the scope of the review and allow better understanding of future Clean Air Act requirements.

Stakeholders

This Call for Evidence is intended to help us gather information and views from organisations and individuals who directly work with or have obligations under the Clean Air Act. We are particularly keen to hear from the following:

- all local authorities;
- all members of the public but in particular those who live in a smoke control area and so are required to use exempted appliances and authorised fuels;
- developers, planners, civil engineers, builders– people who are working with the planning process, notifying local authorities prior to the installation of non domestic furnaces and undertaking chimney height calculations;
- all businesses operating in smoke control areas;
- specialist businesses operating in smoke control areas such as barbeque restaurants and pizza oven restaurants;
- industry with combustion processes who have dealt with complaints of dark smoke;
- manufacturers, distributors and installers of boilers, fireplaces, furnaces and combustion appliances who may be required to design or install smokeless appliances, or appliances which meet the requirements for exemption for use in a smoke control area; and.
- small and medium enterprises affected by the Clean Air Act.

Businesses	Parts and Sections of the Clean Air Act	Key questions
<p>All businesses and citizens in smoke control areas who install a boiler, wood burner etc.</p> <p>Businesses with specialist combustion in smoke control areas –pizza ovens, BBQ restaurants etc.</p> <p>Coal merchants and fuel distributors who deliver fuel in smoke control areas.</p>	<p>Part III: Smoke Control Areas – requirements to use exempt appliances and authorised fuels.</p>	<p>Tell us about your experience of living or operating in a smoke control area, what have you done differently to comply with the requirements for exempt appliances and authorised fuels? How much more does it cost you to run your business here than outside smoke control areas?</p>
<p>Developers, planners, builders and engineers.</p>	<p>Part II, Section 4 – Notifications for non domestic furnaces prior to planning permission, Part II, Section 5 – Grit and Dust limits for non domestic furnaces,</p> <p>Part II, Sections 13-15 – Chimney height design and approvals as part of the planning process.</p> <p>Part III: Smoke Control Areas – requirements for exemption of appliances based on emissions performance.</p>	<p>Tell us if you currently undertake notifications, how much of a burden this is, how you design appliances to meet the requirements of smokeless operation.</p> <p>Tell us about your experiences of following guidance on chimney heights, how much time you spend designing chimneys to meet the specification and about any issues arise. Tell us how the guidance could be improved.</p>
<p>Boiler, fireplace, appliance developers, manufacturers. distributors and installers.</p>	<p>Part II, Section 4 – Notifications for non domestic furnaces prior to planning permission, Part II, Section 5 – Grit and Dust limits for non domestic furnaces, Part III: Smoke Control Areas – requirements for exemption of appliances based on emissions performance.</p>	<p>Tell us how you design appliances to meet the requirements of smokeless operation and to meet the requirements for exemption for smoke control areas</p>
<p>Industry with combustion</p>	<p>Part I - requirements not to</p>	<p>Tell us how often dark smoke is an issue for you, how many</p>

	emit Dark Smoke	complaints you deal with each year, how you address it and what you would like to see changed.
Industry connected with Railways, Vessels, Collieries	Part IV Controls of Certain Forms of Air Pollution.	Tell us if you are affected by the requirements of the Act for the control of emissions from these activities, how much burden they place on you and how they could be improved.

Section Three: Your Views

Responding Organisation

Details	
First Name	
Last Name	
Position	
Organisation (if applicable)	
Address	
Email address	
Telephone	

Are you providing personal views or responding on behalf of an organisation?

Do you wish your name to be published alongside your response?

If you are writing on behalf of an organisation or individually, we will not publish your own name in our summary unless you asked for it to be included in the box above. If you ask us to keep your contribution confidential, we will try to meet that wish provided there is good reason, should this information be requested. Please use this box to explain any reasons why your response must be kept confidential.

What is your organisation type?

General Public	
Local Government	
National Government	
Manufacturer	
Developer	
Architect/Engineer/Builder	
Hospitality	
Retail	
3 rd Sector	
Trade Body/Association	
Professional Body/Institution	
Non-Government Organisation	
Research/Academic Institution	
Service sector	
Other (please specify)	

Are you a local authority or business who works directly with or is affected by the Clean Air Act? If so, please detail how the Act affects you, your business or your role in working with the Act.

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Please identify your organisation type (where applicable)

Micro: <10 full time equivalent employees	
Small: 10-49 full time equivalent employees	
Medium: 50-249 full time equivalent employees	
Large: >250 full time equivalent employees	

Clean Air Act Part 1 (Dark Smoke)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/part/1>

Associated regulations:

- The Dark Smoke (Permitted Periods) Regulations 1958 ([1958 No 498](#))
- The Dark Smoke (Permitted Periods) (Vessels) Regulations 1958 ([1958 No 878](#))
- The Clean Air (Emission of Dark Smoke) (Exemption) Regulations 1969 ([1969 No 1263](#))

About this Section

What do these measures do? Sections 1 to 3 of the Act prohibit the emission of Dark Smoke and allow a local authority to address dark smoke from chimneys and furnaces based on visual inspection using a Ringelmann chart. The associated regulations allow emission of dark smoke (and black smoke) for defined periods from specified activities and exempt some activities from dark smoke controls.

What is their relevance for air quality? These sections help control the emissions of products of incomplete combustion, black carbon emissions and help protect visual amenity. The measures are also relevant for the control of greenhouse gases.

Evidence Base

Burden on local authorities: Local authorities in Scotland are estimated to spend around 1200 hours/year in total for following up complaints. The spread between individual authorities will vary widely and an average figure would therefore not be meaningful. We would welcome any figures on the burden for each authority.

Burden on Industry: This is estimated at 660 hours/year to address complaints. This is based on information from local authorities which suggested the time was approximately two thirds of the time that it took local authorities to deal with complaints.

We are seeking your views on the following:

Do you agree with the local authority burden estimates? Do you have any information to support your response and strengthen the evidence base?

Do you agree with the industry burden estimate? Do you have any information to support

your response?

To what extent is this provision which can lead to correction of incomplete combustion, beneficial to industry? Would these benefits occur without these provisions?

Stakeholder Suggestions for Improvement

- Improved implementation, provide clearer guidance for local authorities and the public.
- Remove or tighten exemptions for example the burning of timber and waste from building demolition and site clearance.
- Review provisions to investigate alternative timely, accurate and effective methods. These may include improvements to the current visual method, or a move away from this method to be more specific about the pollutants being controlled (i.e. not using term “Dark Smoke”), making more explicit reference to pollutants such as particulate matter.

We are seeking your views on the following:

What alternative methods are there which would be timely, accurate and effective for control of Dark Smoke?

What benefits if, any, do you perceive from a move away from dark smoke to more specific pollutants?

What problems or additional burdens might these introduce? How practical would these be?

Can you suggest any ideas for burden reduction in this area?

Do you have any further suggestions for improvements?

Clean Air Act Part 2 (Smoke, Grit, Dust and Fumes)

Installation of non-domestic furnaces (Section 4)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/section/4>

About this Section

What do these measures do? New furnaces are required to be capable of smokeless operation and notice is to be given to the local authority prior to installation.

What is their relevance for air quality? Potentially a useful tool for local air quality protection because it could avoid installation of inappropriate appliances and provide some control of new combustion processes. However, smokeless is not defined and the extent to which the notification system is used is unclear.

Evidence Base

Burden on local authorities: An estimated 640 hours/year is spent in total reviewing information relating to Notifications under Section 4 and Chimney Heights approvals (Part II Sections 14 to 16). Local authorities have not provided any information to break this data down between these two activities but current evidence suggests that the notification system is not widely used.

Burden on Industry: Evidence gap.

We are seeking your views on the following:

Is the notification system currently well understood and used by local authorities?

Do you agree with the burden estimates?

What is the amount of time spent by local authorities on reviewing notifications for new non-domestic furnaces?

How much time is spent by industry (developers) in undertaking notifications?

What are the costs to industry in developing appliances to meet the requirements for operation “without emitting smoke”?

Stakeholder Suggestions for Improvement

- Remove requirement for notifications to simplify requirements for local authorities, instead use the system of planning process approvals.
- Update definition of furnace and “without smoke” to reduce burden to local authorities using products standards and emissions limits instead.

We are seeking your views on the following:

Are there additional costs associated for consumers when buying these appliances? How much more expensive are they?

Would there be any disbenefits from removing the notification requirement? How might these be mitigated?

What might be the effects on industry of setting an emission limit for particulate matter and oxides of nitrogen instead of requiring smokeless operation?

Limits on grit and dust emission rate for non-domestic furnaces (Section 5)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/section/5>

Associated regulations:

- The Clean Air (Emission of Grit and Dust from Furnaces) Regulations 1971 ([1971 No 162](#))
- The Clean Air (Measurement of Grit and Dust from Furnaces) Regulations 1971 ([1971 No 161](#))

About this Section

What do these measures do? This Section gives powers to set grit and dust emission limits for non domestic furnaces. These are defined in the 1971 regulations.

What is their relevance for air quality? Limits on grit and dust are potentially useful for controlling emissions of particulate matter, but there is considerable uncertainty as to whether the current limits are effective when compared with the capability of modern technology. These limits may be superseded for some appliances through EU and National initiatives such as the Ecodesign Regulations which will implement minimum standards (including particulate emission) on furnaces which are solid fuel central heating hot water boilers <1 MW output. A proposed amendment to the Renewable Heat Incentive Scheme also includes a particulate emission limit for biomass boilers.

Burden on local authorities: Evidence gap. Are these limits currently being used by local authorities?

Burden on Industry: Evidence gap. Do these limits place a burden on industry, for new or existing furnaces?

We are seeking your views on the following:

Are local authorities currently using these limits?

Do you have any information to support your response and strengthen the evidence base?

How stringent are these limits for industry to comply with?

How do these limits impact on industry currently? Please explain how these limits affect your activities as industry including in terms of design, manufacturing and purchasing of combustion related products.

Do all new furnaces meet these Grit and Dust limits? How do the limits compare with the capability of modern appliance technology?

Stakeholder Suggestions for Improvement

- Concept of grit and dust are outdated and emissions limits could be defined in terms of air pollutants such as particulate matter and oxides of nitrogen.
- Current dust and grit emissions limits don't reflect the capability of modern equipment, so could be tightened.
- Future proofing is important to ensure that limits are consistent with wider European requirements such as Ecodesign, Construction Products Regulations as and when these apply.

We are seeking your views on the following:

What are your views on amending the grit and dust emissions limits to include tighter particulate matter limits and/or introduce new limits for oxides of nitrogen?

What new burdens might this introduce?

Do you have any other suggestions for improvements?

What role might the Act take alongside future EU led controls?

Arrestment plant for new non-domestic furnaces (Section 6) Exemptions from requirements for arrestment plant for new non-domestic furnaces (Section 7) and Requirement to fit arrestment plant for burning solid fuel in other cases (Section 8)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/section/6>

<http://www.legislation.gov.uk/ukpga/1993/11/section/7>

<http://www.legislation.gov.uk/ukpga/1993/11/section/8>

Associated regulations:

The Clean Air (Arrestment Plant) (Exemption) Regulations 1969 ([1969 No 1262](#))

About this Section

Section 6 requires furnaces burning pulverised fuel, 45.4 kg/hr or more of solid fuel, or liquid or gaseous fuels at a rate of 366.4 kW or more to operate with grit and dust arrestment plant that are approved by local authorities.

Section 7 allows the Scottish Ministers and local authorities to exempt furnaces from requirements to fit arrestment plant. The associated regulations define nationally-exempt furnaces and the information required for a local authority to exempt a furnace

Section 8 requires domestic furnaces which are burning pulverised fuel; or burning at a rate of 1.02 tonnes an hour or more, solid fuel in any other form or solid waste to operate with approved grit and dust arrestment plant that are approved by local authorities.

What is their relevance for air quality? Use of approved grit and dust arrestment plant could help to mitigate emissions of particulate matter but is rarely required due to the grit and dust limits currently specified.

Evidence Base

Burden on local authorities: Evidence gap. Feedback to date suggests used very little and is no longer relevant, due in part to the grit and dust limits specified.

Burden on Industry: Evidence gap. Unclear what the burden on industry is.

We are seeking your views on the following:

Do local authorities use these provisions? Are they still relevant?

Are exemptions still required?

Does this provision for local authorities to require arrestment plant place any burden on industry?

If so, what are the financial burdens associated with this?

Stakeholder Suggestions for Improvement

- Set a new emissions limit under Section 4 based on type approvals and product standards and avoid requirement to consider abatement equipment separately to the combustion system.

We are seeking your views on the following:

Would arrestment plants (and exemptions) still be needed as and when new product standards are introduced

Do you have any other suggestions for improvements?

Requirement of the Measurement of grit, dust and fumes by occupiers and Measurement of grit, dust and fumes by local authorities (Sections 10 and 11)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/section/10>

<http://www.legislation.gov.uk/ukpga/1993/11/section/11>

What do these measures do? These measures allow a local authority to require installation of facilities to allow emission measurements and require measurements of emissions by the occupier. In some circumstances, the occupier may request that the local authority undertake such measurements.

What is their relevance for air quality? These measures form part of the suite of grit and dust control sections and enable measurement of grit, dust and fumes by occupiers and local authorities.

Evidence Base

Burden on local authorities: Negligible: evidence to date suggests they are not widely used.

Burden on Industry: Negligible: evidence to date suggests they are not widely used.

We are seeking your views on the following:

Are these measures used and are they still required?

If never or rarely used please explain why? If used please advise how many times per year do you estimate they are used?

What are the burdens associated with them for local authorities, business and the public?

Stakeholder Suggestions for Improvement

- Update emissions limits in regulations associated with Section 4 and replace with product standards. Testing then may not be required as emissions performance better understood.

We are seeking your views on the following:

Under what circumstances might measurement still be used in the future?

What, if any, problems can be foreseen if product standards replaced the requirement for measurement?

Chimney height approval for furnaces (Sections 14, 15 and 16)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/section/14>

<http://www.legislation.gov.uk/ukpga/1993/11/section/15>

<http://www.legislation.gov.uk/ukpga/1993/11/section/16>

Associated regulations:

The Clean Air (Height of Chimneys) (Exemption) Regulations 1969 ([1969 No 411](#))

What do these measures do? These sections require furnaces burning pulverised fuel, 45.4 kg/hr or more of solid matter, or liquid or gaseous fuels at a rate of 366.4 kW or more to operate with a chimney of approved height. Approval is granted by the local authority on demonstration that emissions, as far as practicable, are

prevented from becoming prejudicial to health or a nuisance. There are several sources of guidance and assessments used including the 3rd edition Chimney Heights Memorandum (CHM)¹³ which is Clean Air Act specific and used in industry guidance, D1 stack heights guidance¹⁴, dispersion modelling approaches, Technical Guidance for Local Authorities TG(09)¹⁵, and guidance from Environmental Protection UK¹⁶. Crucially CHM and D1 do not take into account updates and changes to air quality limit values that have been introduced over time.

What is their relevance for air quality? The Sections are important to control local air quality impacts of furnaces to ensure dispersion is adequate and emissions from chimneys are as far as practicable prevented from becoming prejudicial to health or a nuisance.

Evidence Base

Burden on local authorities: Evidence gathering has suggested that local authorities undertake between one and seven chimney height approvals per year. Average time spent dealing with an application is five hours. This gives an estimated Scotland total of around 640 hours/year (this also includes reviewing new non-domestic furnaces).

Burden on Industry: Three types of assessment have been considered - a Chimney Heights Memorandum assessment ('CHM' - guidance designed for the Clean Air Act and also incorporated into industry guidance on chimney heights), a D1 screening assessment and, a detailed dispersion modelling assessment. A CHM and D1 assessment are assumed to take four hours to complete, a dispersion modelling assessment is assumed to cost £5k. It is estimated that there are around 130 chimney assessments done each year, of which 7.5% assumed to require modelling. Therefore around 480 hours estimated for CHM/D1 assessments in Scotland each year. A cost of approximately £48k each year in Scotland to business is estimated for dispersion modelling assessments.

¹³ Chimney Heights, Third edition of the 1956 Clean Air Act Memorandum. 1981, HMSO, ISBN 9780117515567. Available to purchase from The Stationery Office.
<http://www.tsoshop.co.uk/bookstore.asp?FO=1159999&ProductID=9780117515567&Action=Book>

¹⁴ HM Inspectorate of Pollution 'Guidelines on Discharge Stack Heights for Polluting Emission 1993, Environmental Protection Act 1990, Technical Guidance Note D1 (Dispersion)' ISBN 0 11 752794 7. This document is now out-of-print, but is available from the British Library.

¹⁵ <http://laqm.defra.gov.uk/technical-guidance/>

¹⁶ http://www.iaqm.co.uk/text/guidance/epuk/biomass_developers_leaflet.pdf

An evidence gap remains on the cost of design or build work requirements attributable to the Act and the costs which could be avoided through ensuring build is done correctly first time.

We are seeking your views on the following:

Do you agree with the evidence base on burdens for local authorities and industry?

Do you have any information to support your response and strengthen the evidence base?

Can you provide any further information on costs to industry for the design and build of chimneys? Can you provide a range of costs and project examples?

How often are delays with construction projects due to disagreements over chimney height calculations, mistakes in chimney height calculations or similar issues?

Can you provide any examples of burdens to business through costs from redesign or re-build of chimneys?

Stakeholder Suggestions for Improvement

- **Improved implementation:** Clearer guidance and common approach to provision of information (templates). Awareness-raising to increase understanding of scope of legislation and roles and responsibility and promote coherence between local authority planning, building control and environmental health departments. Future proof requirements for increased solid fuel burning activity.

We are seeking your views on the following:

Would the stakeholder suggestions for improvement help the policy objectives to reduce burdens improve implementation and aid enforcement?

What other suggestions for improvement or burden reduction do you have?

Clean Air Act Part III (Creation of Smoke Control Areas)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/part/III>

What do these measures do? Provide local authorities with the powers to designate a Smoke Control Area (SCA). SCAs prohibit smoke emission from a chimney of a building (or fixed plant) in an SCA except from exempted appliances or authorised fuels.

What is their relevance for air quality? SCAs control emissions of particulate matter, pollutants within the particulate phase, products of incomplete combustion, and sulphur dioxide (fuels only). Without smoke control areas it is envisaged that there would be additional use of fuels such as wood and coal, leading to increased emissions and concentrations of particulate matter and polycyclic aromatic hydrocarbons.

Evidence Base

Burden on local authorities: SCAs: Amount of time spent implementing smoke control area provisions ranged from half an hour per year to 474 hours per year. The total hours per year for Scottish local authorities has been estimated at 1800 hours.

The hours per year spent managing the use of appliances/fuels is an estimated Scotland total of 370. This is based on an average of 35 enquiries per year per authority with an SCA, each taking half an hour to complete.

Burden on Industry: Evidence gap relating to the amount of time industry spends dealing with local authority complaints in smoke control areas, as well as the additional relative costs of running a business in a smoke control area rather than outside one. This burden will depend on the nature of the business. Specialist businesses involving combustion should be considered separately from businesses that require appliances and fuels for heating and water only.

The total annual cost to industry of exemptions of appliances and authorisations of fuels through the testing and approvals process is calculated for the UK at £1,067,879. This is based on 58 applications per year and includes application fees of approximately £1500 and costs for testing of £7000. The burdens relating applications are for approval of fuels and appliances in England and the devolved administrations together and are not easily allocated to individual administrations.

We are seeking your views on the following

Do you agree with the burden information for local authorities?

Do you have any information to support your response and strengthen the evidence base? Is there anything missing?

Can you provide any information about the burden to business of operating in an SCA or responding to complaints from local authorities?

Do you agree with the cost estimates for Industry for exemptions and authorisations?

Stakeholder Suggestions for Improvement

- **Improved implementation:** Centralised digital geographic based Smoke Control Area records would reduce burdens for local authorities (once records acquired) and for industry and the public, as the location of these is often unclear or difficult to determine. These are listed as being required to be published under the INSPIRE Directive¹⁷.
- Guidance to clarify what SCAs do, how they are regulated and what the requirements for public and industry are.
- Consolidation of existing Smoke Control Order regulations to simplify legislation.
- Review of generic exemptions such as those related to automatically stoked coal-fired appliances.
- Increase scope of the Act, for example to allow for control of emissions from canal boats in SCAs.
- Amend legislation to prevent exempt appliances causing nuisance due to atypical dispersion of flue gases into neighbouring properties.

We are seeking your views on the following

Can you envisage any problems of additional burdens associated with creating centralised digital geographic based SCA records?

Can you suggest any amendments to the Act or associated legislation which would prevent the problem of exempt appliances causing nuisance to neighbouring properties? What burdens might be associated with this amendment?

What are the likely burdens and benefits associated with the inclusion of canal boats in SCA requirements?

Do you have any further suggestions for improving the regulations for Smoke Control Areas or reducing burdens?

Do you have any suggestions for changes to the testing and approvals process or requirements which Defra and the devolved administrations provide?

¹⁷ <http://inspire.jrc.ec.europa.eu/>

Clean Air Act Parts IV (Controls of Certain Forms of Air Pollution), Part V (Information About Air Pollution), Part VI (Special Cases)

Details:

<http://www.legislation.gov.uk/ukpga/1993/11/part/IV>

<http://www.legislation.gov.uk/ukpga/1993/11/part/V>

<http://www.legislation.gov.uk/ukpga/1993/11/part/VI>

What do these measures do?

These measures contain a variety of controls as outlined below:

- Motor fuel composition (this provision has been deemed necessary for the UK Department for Transport and does not form part of this review).
- Sulphur content of oil (these measures relate to the Sulphur Content of Liquid Fuel Directive¹⁸).
- Cable burning.
- Colliery spoilbanks.
- Railway engines.
- Vessels.
- Information for local authorities on air pollution.

What is their relevance for air quality?

Aside from the motor fuel content requirements and the Sulphur Content of Liquid Fuel regulations, then these are little used provisions which positively contribute to air quality but their effect is considered minimal.

Evidence Base

Burden on local authorities:

Limited information on the burdens associated with these provisions as set out below:

- Information about air pollution- no burden information provided.
- Colliery spoilbanks - no information.

¹⁸ http://europa.eu/legislation_summaries/other/l21050_en.htm

- Cable burning – 110 hours/year, based on an average of six incidents per year taking two hours to deal with and applying to around a quarter of Scottish local authorities.
- Railways – one hour/year – based on only being used by a small number of authorities, which receive only one incident a year.
- Vessels – 90 hours/year – based on port authorities receiving four cases a year taking two hours to deal with.

Burden on Industry:

No information has been provided.

We are seeking your views on the following:

Are these provisions still used and of benefit? What are the benefits?

If never or rarely used please explain why? If used please advise the following: i) which provisions are used? ii) for each provision how many times per year do you estimate they are used?

What burdens are associated with these measures?

Can you suggest any improvements to these provisions?

Any other comments you have on this Call for Evidence or the Clean Air Act.

Other comments: