



Department
for Environment
Food & Rural Affairs

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Stakeholder Questionnaire on the Review of the Clean Air Act

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Section One: Overview of Questionnaire

Scope of this questionnaire	To elicit stakeholder ideas on Clean Air Act 1993 (CAA) reform, establish burdens, potential changes to CAA, scope for improvements
To:	Local authorities, Greater London Authority, Devolved Administrations and selected industry stakeholders. Additional copies of this document may be made without seeking permission.
Questionnaire return instructions	Please complete questionnaire electronically. Boxes for responses will expand when text is added but please be concise with responses to questions. Please complete and return your responses by email to: CleanAirAct1993@ricardo-aea.com The deadline for responses is the 12th February 2013.

Responding Organisation

Please state whether you are responding as an individual authority or on behalf of a group of authorities. For the latter please make it clear which authorities are represented and, if applicable, how the views of others were collected:

Who are you representing and how were views collected?

Responding organisation: Environmental Protection UK (EPUK)

Whose views are represented and how views were collected :

EPUK represents a membership of environmental professionals from across UK local government authorities, consultancies, experts and other environmental authorities in the field of the environmental.

These views have been compiled from members of the Air Quality Committee representing EPUK members.

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Section Two: Background Information

Objectives of the Review

As part of the Government's Red Tape Challenge, Defra have committed to review the Clean Air Act. The review will seek to reduce burdens on business and local authorities without a reduction in the scale of environmental protection.

The review process will involve identifying measures which are considered redundant and measures which can be improved to help local authorities meet EU air quality limits and help reduce costs for businesses. Opportunities to improve implementation will be explored.

Summary of the Clean Air Act

Parts I-III comprise the main provisions:

- Part I **prohibits dark smoke emissions** from domestic and industrial chimneys. It also prohibits dark smoke from non-chimney sources on industrial or trade premises;
- Part II sets up a notification and approval system for new non-domestic furnaces to control **smoke, grit, and dust emissions** and **chimney heights** There is provision to make Regulations extending some of Part II to control fumes and gases;
- Part III contains the **smoke control area** provisions.

The remaining provisions deal with:

- making regulations about composition of motor vehicle fuel and sulphur content of fuel oil
- prohibiting cable burning
- applicability to vessels and steam engines
- LAs obtaining information about air pollution
- emissions from mine waste

- LA research into air pollution
- a power to give effect to international agreements
- ancillary and administrative provisions

Section Three: Questionnaire and Options Development

CAA Part I (Dark Smoke)

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

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](#))

Sections 1 to 3 of the CAA prohibit the emission of Dark Smoke and appear to be a relatively straightforward measure allowing LA to address dark smoke from chimneys and furnaces based on visual inspection. The associated regulations allow exceptions for Dark Smoke emission, limit duration of Black Smoke emission and exclude certain activities.

Q1. How effective do you think Part I of the CAA is as a mechanism for control of smoke emissions ? Please provide supporting information to justify your view.

Effectiveness : [1- very effective to 4- very ineffective]

Supporting comments :

Q2. How effective do you think that Statutory Nuisance would be for the control of dark smoke if Part I of the Clean Air Act was removed and why?

Effectiveness : [1- very effective to 4- very ineffective]

Supporting comments :

Q3. Are the derogations for emission of dark smoke provided in the 1958 Permitted Periods regulations as provided in the links above still required?

Q4. What issues arise in applying Part I and how could Part I be amended to address such issues ? For example, is the Ringelmann chart a suitable reference Standard?

Q5. Are there other sources of smoke or particulate material that you think should be controlled by suitable changes to Part I of the Clean Air Act, for example control of non-combustion sources?

CAA Part II (Smoke, Grit, Dust and Fumes)

Installation of non-domestic furnaces (Section 4)

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

Requirement for new furnaces to be capable of smokeless operation, prior notice to LA of installation and approval of furnaces. This is potentially a useful tool for air quality protection as it could avoid installation of inappropriate appliances and provide some control of new combustion processes in areas with exceedences of air quality limits. However, smokeless is not defined and the extent to which the notification system is used is unclear.

Q6. How effective do you think Section 4 is in providing an effective mechanism for control of non-domestic furnaces? Please provide supporting information to justify your view.

Effectiveness : [1- very effective to 4- very ineffective]

Supporting comments :

Q7. What issues arise in applying Section 4, how could Section 4 be amended to address such issues? For example, absence of guidance on smokeless, is notification and approval process used/enforceable...

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

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

Associated Regulation :

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

This Section gives powers to set grit and dust emission limits which were enacted by the 1971 regulation. Limits unchanged since 1971 and don't reflect capability of modern equipment, furthermore the emission limits appear little used. Grit emission limits have little relevance for health impact and hence air quality, the reference BS test method

(defined in separate [Regulations](#)) has been withdrawn and superseded by ISO and EN total particulate measurement methods. Section could be made more relevant with updated (total particulate) emission limit such as 150^1mg/m^3 aligned with the EN303-5:2012 product standard² for solid fuel hot water boilers (Class 3).

Q8. Which of the following options would you prefer to replace the limits in the 1971 regulations for boilers?

- (a.) No limit
- (b.) 150mg/m^3
- (c.) a limit greater than 150mg/m^3
- (d.) a limit less than 150mg/m^3

Please explain your position,

Q9. Do you feel that the limits above in question 8 should also apply to other furnaces or processes (for example oil fired furnaces, solid fuel boilers larger than 500kW, air heaters) or can you suggest any other low-burden mechanism to limit emissions and support Air Quality goals?

Arrestment plant for new non-domestic furnaces (Section 6)

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

This Section requires furnaces burning:

- pulverised fuel;
- 45.4 kg/hr or more of solid fuel;
- liquid or gaseous fuels at a rate of 366.4 kW or more

¹ Standardised to 10% O₂ and Standard temperature and pressure (STP 0°C, 101.3kPa)

² BS EN 303-5:2012 Heating boilers. Heating boilers for solid fuels, manually and automatically stoked, nominal heat output of up to 500 kW. Terminology, requirements, testing and marking

to operate with approved grit and dust arrestment plant. Modern appliances appear to meet grit and dust emission limits without use of arrestment plant.

Q10. Is this Section used and if so how frequently?

Q11. Would you support replacing this Section by a (total particulate) emission limit requirement? and do you have any suggestions for alternative legislative mechanisms to control emissions that could be applied for example the use of Ecodesign limits for boilers less than 500kW?

Exemptions from requirements for arrestment plant for new non-domestic furnaces (Section 7)

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

Associated Regulations :

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

This Section allows the Secretary of State 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.

Current use of Section is unclear and need for (grit and dust) arrestment plant for modern appliances may be limited.

Q12. Is there still a need for the exemptions that are provided in the 1969 regulations? If not why aren't they required?



Measurement of grit, dust and fumes (Sections 10 and 11)

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

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

Associated Regulations :

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

Allows the LA to require measurements of emissions (or the occupier may require the LA to undertake measurements). Not clear if these powers are used

Q13. Are these Sections used (if so, under what circumstances and how often)?

Q14. Would retentions of this section be useful in the event of a new emission limit being introduced? And do you have any suggestions for alternative mechanisms that could be applied to verify emission performance?

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

<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](#))

These sections requires furnaces burning :

- pulverised fuel;
- 45.4 kg/hr or more of solid matter;
- 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. The Sections are important to control local impacts of furnaces however guidance available to Local Authorities for approval does not reflect current air quality standards.

Q14. What issues arise when approving chimney heights? (for example quality of guidance) and do you have any suggestions for new approaches that reduce burdens to local authorities and/or developers?

Q15. What problems do you foresee if building regulations were relied upon in place of the Clean Air Act?

Q16. How much time do you (as a local authority) spend dealing with enquiries relating to chimney heights and approvals on a per application basis? Please provide details in terms of staff time and other financial costs.

Q17. Are the exemptions in the associated [regulations](#) still appropriate?

CAA Part III (Smoke Control Areas)

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

Smoke Control Areas

Defra is looking to gather suggestion for improving the way that Smoke Control Areas are created and how they are publicised. Options that could be considered for smoke control areas include different pollutants, alignment with Air Quality Management Areas, implementing smoke control areas and central management of digital records.

Q18. Do you have any suggestions for improvements that could be made to the current approach to create smoke control areas that is detailed in [Section 18](#)?

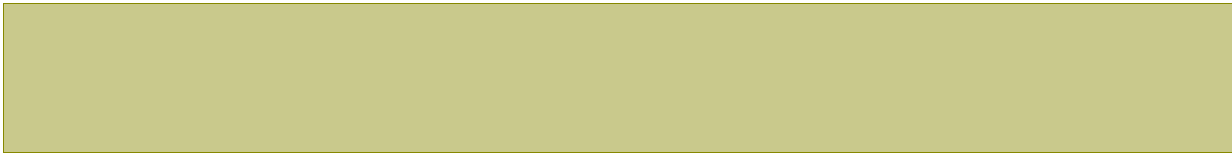
Resource burdens on Local Authorities relating to prohibition of smoke emissions and the acquisition of unauthorised fuels in Smoke Control Areas

Q19. If you have Smoke Control Areas in your Authority, how much time do you estimate that your Local Authority spends (hours) ensuring [Section 20](#) (emission of smoke) and [Section 23](#) (acquisition of an unauthorised fuel) of the Clean Air Act are suitably enforced?

Streamlining of the Applications Process (Fuels and Appliances)

Defra have been working on a proposal for streamlining the approach to exemption of appliances and authorisation of fuels to reduce costs to industry through a self-certification mechanism that would negate the need for Statutory Instruments. The Instruments would be replaced by legislation specifying the criteria for exemption/authorisation demonstrated via test house certification. However this has implications for consumer protection and the accessibility of records.

Q20. What are your views on the above proposal for a self-certification process and what aspects of such a process would be important to you as regulators?



CAA Part IV (Controls of Certain forms of Air pollution)

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

Cable Burning

Q21. [Section 33](#) concerns cable burning to recover metal. As a Local Authority have you used this provision to prosecute or threaten prosecution, if so on what frequency?

CAA Part V (Information about air pollution)

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

Q22. We have no specific questions concerning Part V of the Clean Air Act however if you have any comments on this Part or suggestions for improvement please provide them below.

CAA Part VI (Special Cases)

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

Colliery Spoilbanks

Q23. [Section 42](#) applies to colliery spoilbanks requiring owners of a mine or quarry to employ all practicable means to prevent their combustion and minimise emissions of smoke and fumes. Are you as a local authority aware of colliery spoilbanks in your Authority and if so have you had the need to use this provision to prosecute or threaten to prosecute offenders in the last 10 years?

Railway Engines

Q24. [Section 43](#) concerns the prohibition of dark smoke from railway engines. Have you as a Local Authority had a need to use this provision to prosecute or threaten prosecution and, if so, on what frequency?

None

Vessels

Q25. [Section 44](#) concerns the prohibition of dark smoke from vessels. Have you as a Local Authority had a need to use this provision to prosecute or threaten prosecution and, if so on what frequency?

CAA Part VII (Miscellaneous and General)

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

Definitions

Q26. [Section 64](#) provides definitions or terms used in the Clean Air Act 1993. Are there any definitions that you think are missing or any that need further clarification?

Further Comments

Q27. If you would like to provide more information or if you have specific concerns about the review of the Clean Air Act then please provide below.

EPUK represents a membership of environmental professionals from across UK local government authorities, consultancies, experts and other environmental authorities in the field of the environmental. These views have been compiled from members of the Air Quality Committee representing EPUK members.

The CAA is seen as crucial in local air quality management but does require updating. Key areas that need review are:

- Biomass (calculations not appropriate)
- emission limits and stack calculations (need revision)
- fuel types and storage regulation (regulation needs review),
- appliance compliance (needs updating with regard to RHI),
- linking regulations to local air quality management especially AQMA's (essential)
- align to PM10, PM2.5 and NOx limits (to update to current knowledge, TSP outdated)
- Improve CAA to provide clear and concise guidance for regulators and public

CAA retention:

Authorities often rely on the CAA to control emissions where there is other legislation to protect human health and the environment. The CAA does require updating though and comments can be found below.

Biomass:

Due to the upsurge in biomass CHP installations and domestic appliance sales, biomass is a real and current concern. The CAA needs to be updated as the calculations are not appropriate for biomass, there is a guidance gap, between calc and modelling requirement, there needs to be a guidance for developers and LA's to determine appropriate emissions, compliant appliance regulation and stack heights for clean dispersion.

Pollutants:

The CAA should be updated to assess pollutants that are currently assessed as a health concern rather than nuisance, including PM10, PM2.5 and NOx. There should be strengthening of the CAA with regard to alignment to AQMA's and Smoke Control Areas.

In addition the emissions limits would reduce what is going into the environment, rather than having taller stack regulation which purely disperses this higher but with the same total emission.

Planners and urban developers may prefer the emissions limit approach to avoid having high level stacks in the urban realm, however an updated CAA revision must ensure stacks are also of a sufficient height to provide effective dispersion to avoid nuisance!

Self regulation:

Self regulation is a concern, especially in areas with AQMA's as there needs to be a managed approach focus on reducing emissions of concern in AQMAs i.e. NOx and PM10/2.5. There needs to be appropriate management of checks to ensure

- manufacturer demonstrate compliance
- operator demonstrates servicing and maintenance
- fuel supply is appropriate and stored correctly

Renewable Heat Incentive:

The CAA exempt appliances system needs to be aligned with the air quality criteria of the Renewable Heat Incentive. At the moment they're are few (if any) boilers that meet the RHI criteria that are exempt under the CAA, which technically means that local authorities could prosecute people who install them in Smoke Control Areas. Some kind of merging or alignment of the two systems needs attention.