Department for Environment Food & Rural Affairs

Consultation on the review of the Crematoria Guidance PGN(5/12)

A joint consultation of the UK government, the Scottish Government, the Welsh Government and the Department of Agriculture, Environment and Rural Affairs in Northern Ireland.

October 2023

Scottish Government gov.scot

Department of Agriculture, Environment and Rural Affairs www.daera-ni.gov.uk

Llywodraeth Cymru Welsh Government

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Contents

General information

Purpose of this consultation

This consultation seeks views on the proposed new guidance that will replace the existing crematoria guidance PG5/2(12). The proposed new guidance is included in Annex A of this document.

The UK Government and devolved administrations have worked with industry and regulators, and have developed a number of measures that will reduce further emissions from crematoria. These measures relate to pollutants emitted during the cremation process.

We will use the responses to this consultation to help inform the finalisation of the new crematoria guidance.

Who the consultation is for

This consultation will be of interest to

- regulatory bodies,
- individual operators,
- trade associations
- professional bodies of the crematoria industry.

However, this consultation is open to any organisation or individual with an interest in the matter.

Areas of the UK covered

This consultation relates to the proposed new crematoria guidance that will apply to the whole of the UK.

Process guidance notes are issued as guidance in Scotland and as statutory guidance in:

- England and Wales under regulation 65(1) of the Environmental Permitting (England and Wales) Regulations 2016 (EPR).
- Northern Ireland under regulation 41(1) of the Pollution Prevention Control (Industrial Emissions) (Northern Ireland) Regulations 2013 (PPC-NI).

The above regulations along with the Pollution Prevention and Control (Scotland) Regulations 2012 (PPC-S), are referred to collectively as 'the Regulations' in the guidance.

How to respond to this consultation

You can respond to this consultation in one of the following ways:

- Online using the **Citizen Space** page where you have accessed this document.
- Email your responses to: consultation.coordinator@defra.gov.uk

Any responses received after 3 December will not be analysed. To make sure your response is included, please consider responding online.

Duration of the consultation

This consultation opens for 8 weeks on the 9 October and will close on 3 December 2023.

We consider a shorter duration is appropriate for this consultation. The technical guidance is of particular relevance to individuals or groups who are directly or indirectly involved in the crematoria industry, who have been involved in the review process and are knowledgeable of the detail of the guidance.

Confidentiality and data protection

A summary of responses to this consultation will be published on the UK government website at: www.gov.uk/defra. An annex to the consultation summary will list all organisations that responded but will not include personal names, addresses or other contact details.

Defra may publish the content of your response to this consultation to make it available to the public without your personal name and private contact details (for example, home address, email address, etc).

If you click on 'Yes' in response to the question asking if you would like anything in your response to be kept confidential, you are asked to state clearly what information you would like to be kept as confidential and explain your reasons for confidentiality. The reason for this is that information in responses to this call for evidence may be subject to release to the public or other parties in accordance with freedom of information law (these are primarily the Environmental Information Regulations 2004 (EIRs), the Freedom of Information Act 2000 (FOIA) and the Data Protection Act 2018 (DPA)). We have obligations, mainly under the EIRs, FOIA and DPA, to disclose information to particular recipients or to the public in certain circumstances. In view of this, your explanation of your reasons for requesting confidentiality for all or part of your response would help us balance these obligations for disclosure against any obligation of confidentiality. If we receive a request for the information that you have provided in your response to this call for evidence, we will take full account of your reasons for requesting confidentiality of your response, but we cannot guarantee that confidentiality can be maintained in all circumstances.

If you click on ‘No’ in response to the question asking if you would like anything in your response to be kept confidential, we will be able to release the content of your response to the public, but we won’t make your personal name and private contact details publicly available.

This is a joint UK consultation and any responses to this consultation will be shared with officials in the Department of Agriculture, Environment and Rural Affairs in Northern Ireland, Scottish Government, Welsh Government and the Environment Agency’s Local Authority Unit.

This consultation is being conducted in line with the Cabinet Office “Consultation Principles”

Please find our latest privacy notice uploaded as a related document alongside our consultation document.

Quality assurance

If you have any comments or complaints about the consultation process, please address them to:

Consultation Coordinator at: consultation.coordinator@defra.gov.uk

About you

1. Would you like your response to be confidential? (Select one option only)

- Yes
- No

If you answered yes, please give your reason (Open text)

2. Who are you responding as? (Select one option only)

- Individual – You are responding with your personal views, rather than as an official representative of a business, business association or other organisation
- Public sector body - You are responding in an official capacity as a representative of a local government organisation, public service provider or other public sector body in the UK or elsewhere
- Industry – You are responding in an official capacity representing the views of a business
- Campaign group or non-government organisation (NGO) – You are responding in an official capacity as the representative of an NGO, trade union trade union or other organisation
- Academia – You are responding in an official capacity as a representative of an academic institution
- Other (please specify)

3. What is the name of your organisation?

4. Please select where you or your organisation is based (select all that apply):

- England

- Scotland
- Wales
- Northern Ireland

Introduction

Cremation is a regulated industry so environmental permits require that crematoria must meet the standard for emissions to air determined by best available techniques (BAT), described in the relevant process guidance note, to ensure pollutant emissions and impacts to the environment are minimised. BAT for this sector is set out in the Process Guidance Note PG 5/2 (12)[1]. It was published in September 2012.

It is a priority to reduce emissions of mercury and other key pollutants. The cremation industry is responsible for emissions of the following pollutants emitted at different stages during the combustion process:

- mercury (Hg)
- other particulate matter (PM)
- nitrogen oxides (NOx)
- dioxins and furans
- acidic gas Hydrogen chloride (HCl)

Mercury emissions from crematoria are the greatest cause for concern but other pollutants emitted during combustion include particulate matter (PM), nitrogen oxides (NOx), acidic gases as well as dioxins and furans. Mercury can be extremely toxic. In humans there can be damage to the brain, kidneys and lungs. Mercury is also a threat to the natural environment, where it occurs in various forms as it it bioaccumulates in fatty tissues and so can persist in the environment for long periods and can get into the food chain. Mercury is emitted to air from those crematoria which have no abatement measures in place, and in much smaller quantities from abated crematoria.

In the 25 Year Environment Plan the UK government committed to reducing land-based emissions of mercury into the air and water in England by 50% between 2016 and 2030. We have seen significant action in the reduction of mercury emissions through the removal of unabated coal and the decommissioning of the UK's only mercury chlor-alkali facility. Emissions from crematoria now represent a larger proportion of remaining total mercury emissions. There are also environmental targets for particulate matter under the Environment Act 2021.

[1] Crematoria: process guidance note 5/2 - GOV.UK (www.gov.uk)

Therefore, a review process of the existing crematoria guidance PGN (5/12) took place that has led to the agreed standards in the proposed new guidance, which is included in Annex A of this document.

Review process

The guidance has been revised following a review by regulators working with the industry. The proposed revised guidance sets new standards that will improve the environmental performance of the crematoria industry.

The evidence-led review of existing techniques determined BAT for the sector and introduced pollutants of national importance which were absent from previous process guidance notes. Some definitions were also revised to ensure consistency of compliance across the sector.

The review of the guidance began in June 2021 and was led by the Environment Agency's Local Authority Unit. It involved relevant technical experts, industry and other interested parties across the UK who participated in a Technical Working Group (TWG). A list of representatives and organisations which participated at different stages of the TWG can be found in Annex B of the consultation document.

The review process was open and participative and was data and evidence led. The technical detail and requirements agreed in the proposed new guidance were developed through various phases of engagement and meetings with relevant groups, including:

- regulators,
- trade associations
- professional bodies

The proposed new guidance substantially reduces the environmental impact of the cremation sector through its emissions to air. We have tightened emission limit values (ELVs) for particulate matter and acidic gases like hydrogen chloride from unabated cremators. We have also tightened concentration-based limit values for most pollutants from abated cremators (tables 4.4 and 4.5 of the proposed new guidance). These reductions in emission limit values are the result of analysis of data on the current performance of crematoria. We are consulting on changes in the key areas identified by the TWG to improve air quality and protect human health and the environment.

Responses to the public consultation will be considered before the adoption of the final updated guidance.

Questions about key changes

Implementation of mandatory mercury abatement

A key purpose of the new guidance is to extend the mercury abatement technology (flue gas treatment), which currently operates across around 70% of crematoria, to the rest of the

sector. Flue gas treatment is the best available technique for the sector to reduce emissions to air of:

- mercury
- particulates
- acid gases
- dioxins and furans

The proposed implementation dates have been amended as follows to allow sufficient time to implement:

- 1 year from publication of the new guidance, all new and replacement cremators will be fitted with flue gas treatment that includes mercury abatement
- 4 years from publication of the new guidance, cremators will be fitted with flue gas treatment that includes mercury abatement. Otherwise, their operation will be limited to 100 hours per calendar year.

The following exceptions to the requirement to install flue gas treatment are set out in point 3.3.2:

- standby cremators, the operation of which will be limited to 100 hours in any calendar year
- temporary cremators that replace an unabated cremator will be limited to operating for a maximum of one calendar year
- small-scale cremators
- existing cremators where retrofitting of flue gas treatment is not technically possible due to limitations of space and restrictions on building.

Operators of existing crematoria that are unable to fit flue gas treatment due to limitations of space and are unable to expand, will be required to present evidence for assessment by their regulator. All such crematoria will also be required to carry assess the impact of emissions on local air quality for approval by their regulator. These additional requirements can be found under section 3.3.3. of the proposed new guidance.

Question 1. To what extent do you agree or disagree with the introduction of the first implementation date after one year from the publication of the new guidance, for new and replacement cremators? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 2. To what extent do you agree or disagree with the introduction of the second implementation date after four years from the publication of the new guidance, for all cremators? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 3. To what extent do you agree or disagree with the exceptions for the installation of flue gas treatment? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 4. Provide any other comments you may have about any of the changes in relation to the implementation of mandatory mercury abatement in the proposed new guidance.

Status of standby and temporary cremators

Standby cremators are included in the existing guidance and are defined as "*for use in the event of breakdown of the main cremator or other occasional need for additional cremator capacity*" (5.25). They should be permitted subject to compliance with all the criteria in 5.26.

The definition of **standby cremators** is similar to the one used in the current guidance, although a reference to its permanent nature has been added. It now defines a standby cremator as "one that is **permanently retained** for use in the event of breakdown of the main cremator or other occasional need – excluding small scale cremators – for additional cremator capacity at the crematoria. The 100-hour limit on standby cremators is carried forward from existing guidance if the standby cremator is not connected to abatement equipment".

The operation of the standby cremators is subject to a series of conditions under the new guidance (3.4.1):

- the standby cremator must be included in the environmental permit and be clearly identified
- the relevant regulator must be notified, in advance where practicable, of the operation of the standby cremator
- the standby cremator shall not be brought into operation unless there is a clear operational need. All periods of operation and the reason for standby cremator operation must be recorded in the log
- standby cremators, which are not fitted with or connected to flue gas treatment equipment, shall operate for no more than 100 hours in any calendar year
- the number of hours operating standby cremators shall be reported to the regulator

The proposed new guidance also covers temporary cremators for the first time.

A **temporary cremator** is defined as "*a cremator installed on a temporary basis usually as a replacement for one that has been taken out of service for replacement or major refurbishment*" (2.3.3). An unabated temporary cremator can replace an abated cremator and still operate for more than 100 hours in a calendar year. If this is the case, an assessment of the impact of the local ambient air quality must be made as part of the permit variation application.

After the first year from publication of the new guidance, if a temporary cremator is installed to provide additional capacity or is intended to be in service for more than one calendar year, it must meet the standards for new cremators.

Question 5. To what extent do you agree or disagree with the introduction of 'temporary cremator'? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 6. Do you think the definition of 'standby cremators' is currently clear? (Response options: Very clear, clear, unclear, very unclear)

Question 7. Do you think the definition of the newly introduced 'temporary cremators' is clear? (Response options: Very clear, clear, unclear, very unclear)

Question 8. Provide any other comments you have about standby or temporary cremators.

Operational controls on cremators

Operational controls on cremators in relation to the combustion temperature and residence time of the combustion gases in the secondary combustion chamber are addressed in the new guidance. Operational control values have been summarised and detailed in Table 4.1 as follows:

Table 4.1 Operational controls

Substance or parameter	Operating limit	Cremator type	Averaging period
Carbon monoxide	< 100 mg/Nm^3 (Note 1)	All	As an average concentration between 2 minutes and 62 minutes from the start of each cremation. (Note 4)
Oxygen content at exit of secondary combustion chamber (Note 2)	Minimum of 6% volume/volume	All	As an average concentration between 2 minutes and 62 minutes from the start of each cremation. (Note 4)
Oxygen content at exit of secondary combustion chamber (Note 2)	Minimum of 3% volume/volume	All	5-minute averages throughout the whole of each cremation.
Temperature of secondary combustion chamber	Minimum of 850˚C	Unabated cremators	5-minute averages throughout the whole of each cremation.
Temperature of secondary combustion chamber	Minimum of 800˚C	All other cremators (Note 3)	5-minute averages throughout the whole of each cremation.
Residence time of secondary	Minimum of 2 seconds	All	5-minute averages throughout the whole of each cremation.

Substance or parameter	Operating limit	Cremator type	Averaging period
combustion chamber (Note 5)			

Note 1: Note this is a performance target, not an emission limit value. CO measurement should ideally be made at the exit of the secondary combustion chamber. Modification to existing cremators is not required.
Note 2: Oxygen concentration can be measured wet or dry.
Note 3: In the event of flue gas treatment equipment failure, the minimum temperature must be increased to 850˚C.
Note 4: For small-scale cremators, the averaging period will be between 2 and 32 minutes as the cremation time will be shorter.
Note 5: Without correction for temperature, oxygen, or water vapour.

As specified in point 4.1.2 of the proposed new guidance, residence time in the secondary combustion chamber will be demonstrated by calculation and verified at commissioning stage. Temperature must equal or exceed the values set above.

For cremators fitted with flue gas treatment, different conditions for the temperature, residence time and oxygen content at the exit of the secondary combustion chamber may be authorised by the regulator provided all the other requirements of this guidance are met, including all emission limit values. The regulator will then specify those conditions in the permit. The frequency of dioxin monitoring (see Table 4.3) will be increased to annual in such circumstances.

As part of the proposed new guidance, the limit for carbon monoxide has been made an operational control limit as opposed to an emission limit value.

Question 9. To what extent do you agree or disagree with the proposed limit of 100mg/m3 of carbon monoxide as an operational limit as opposed to an emission limit value in the proposed new guidance? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 10. To what extent do you agree or disagree that these operational control limits for temperature, residence time and oxygen content can be relaxed provided compliance with all emission limits can still be achieved? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 11. Provide any other comments you have about any of the operating conditions.

Operation of abated cremators in bypass mode

The existing guidance sets out certain conditions where failure of the abatement systems entails the operation of abated cremators in bypass mode.

Emergency relief vents (ERV) or bypass systems should not normally be used when cremation is underway, or during maintenance. The existing guidance only allows the use of emergency relief vents (ERV) or bypass systems in two circumstances, in 5.18:

- when the heat removal plant has failed, and the abatement plant would be damaged; or
- during warm-up and shutdown

The new guidance adds a third situation in point 4.9.1:

- due to short term power interruptions.

The new guidance removes the need to notify regulators with immediate effect in the event that an ERV or bypass is used during cremation. The operator is still expected to report the number of hours of operation in bypass to the regulator.

The proposed new guidance offers some flexibility to operators to use bypass mode, in case an equipment malfunction occurs, provided that:

- it can meet all the operational standards for an unabated cremator.
- the period of such operation does not exceed 100 hours in any calendar year, without the prior agreement of the regulator.

Otherwise, the cremator should not be used until the failed system is repaired. Reporting to regulators is now limited to the total number of hours. In the unusual and unexpected circumstances where the use of an ERV exceeds the 100-hour annual limit, an assessment of the impact on local ambient air quality will be required.

Question 12. To what extent do you agree or disagree with the changes introduced that set more restrictive conditions in current guidance? (Options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 13. Provide any other comments you have about any of the operating conditions in bypass mode.

Proposals for nitrogen oxides

Nitrogen oxides (NOx) arise during combustion (thermal NOx) and from the nitrogen that may form part of the materials being burned in the cremator. The new guidance identifies two techniques for the controlling and reduction of this key pollutant: control of materials and selective non catalytic reduction (SNCR).

Materials contained in body-bag and coffin construction materials may be a high source of NOx emissions. The operating principle under the new guidance is prevention at source, as these do not come fully under the control of the operator. This refers to the reduction of the thermal load and the avoidance of materials containing high amounts of nitrogen, or at least minimising the amount to reduce the quantity of NOx produced. (5.6)

SNCR is an established technique in many industrial sectors as a NOx abatement technique in combustion processes and can achieve reductions in emissions of between 60% and 80%.

In the SNCR process, ammonia or urea is injected into the furnace to reduce NOx emissions. However, the SNCR process is considered an emerging technique under the new guidance, as its application to cremation is not yet optimised and available from all manufacturers (5.7).

The proposed new guidance brings NOx into the scope of key pollutants for the sector for the first time. A limit has been set for NOx at 200 mg/Nm^3 (Table 4.5). This ELV will not have effect before 2027 to give operators time to prepare. Operators can decide whether to achieve the limit through further abatement, by using SNCR or by tighter controls over coffin materials. The new guidance sets a minimum monitoring frequency for NOx (Table 4.3, in section 4.2.)

Table 4.3 Emission monitoring frequencies and standards for periodic monitoring

Substance or parameter	Standards	Minimum monitoring frequency
Particulate matter	EN 13284-1	Once every year
Dioxins and furans (PCDD/F)	EN 1948, Parts 1, 2 and 3	Once every 3 years (Notes 1 and 2)
Mercury	EN 13211	Once every year
Hydrogen chloride (HCl)	EN 1911	Once every year
Total organic carbon (TOC)	EN 12619	Once every year
Oxides of Nitrogen NO_X (NO and NO_2 expressed as NO_2) (Note 3)	EN 14792	Once every year
Ammonia (NH_3) (Notes 3 and 4)	EN ISO 21877	Once every year

Note 1: Once every year for unabated cremators and cremators using operating conditions different to those in Table 4.1.
Note 2: The first measurement for a new cremator shall be in the first 12 months of operation.
Note 3:. From end of implementation phase (e.g. four year from publication of new guidance).
Note 4: Only where NO_X abatement is installed. To measure ammonia slip associated with the SNCR process.

The new guidance also includes monitoring for ammonia (NH_3) where NOx abatement is installed due to the slip of associated emissions with the SNCR process, as described above (Table 4.3).

Table 4.5 Emission Limit Values for all other cremators

Substance	Emission limit value	Applies to existing or new cremators	Averaging period
Particulate matter	10 mg*/Nm3	Existing	Note 4
Particulate matter	5 mg/Nm3	New	Note 4
Hydrogen chloride (HCl)	30 mg/Nm3	Existing	Note 4

Substance	Emission limit value	Applies to existing or new cremators	Averaging period
Hydrogen chloride (HCl)	20 mg/Nm3	New	Note 4
Total organic carbon (TOC)	20 mg/Nm3	Existing	Note 4
Total organic carbon (TOC)	10 mg/Nm3	New	Note 4
Oxides of Nitrogen NOx (NO and NO2 as NO2)	200 mg/Nm3 (Note 3)	All	Note 4
Ammonia (NH_3) (Note 1)	No limit applies	All	Note 4
Mercury	50 µg**/Nm3	Existing	Note 4
Mercury	30 µg/Nm3	New	Note 4
PCDD/F (Note 2)	0.1 ng***/Nm3	All	Note 4

Note 1: Only where NOX abatement is installed. To measure ammonia slip associated with the SNCR process.
Note 2: A longer monitoring period will be needed. The length of the monitoring period should reflect the expected emission level and the level of the monitoring uncertainty.
Note 3: From end of implementation phase (e.g. four years from publication of new guidance).
Note 4: As an average concentration over 3 x 60 minutes as described in sections 4.3.2 and 4.3.3
(*) miligrammes
(**) one millionth of a gram
(***) nanogram

Question 14. To what extent do you agree or disagree with the ELVs set for NOx in the proposed new guidance? (Response options: Strongly Agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 15. To what extent do you agree or disagree with setting ELVs for NOx from the end of the four-year implementation period in the proposed new guidance? (Response options: Strongly Agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 16. To what extent do you agree or disagree with the monitoring frequency set for NOx and ammonia (NH3) in the proposed new guidance? (Response options: Strongly Agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 17. Provide any other comments you have about the proposals for NOx in the proposed new guidance.

Stack height and air quality assessments

Under the existing guidance, the methodology for calculating the stack height is contained in HMIP Technical Guidance Note (Dispersion) D1 'Guidelines on Discharge Stack Heights for Polluting Emissions'[2], dated June 1993.

The new guidance supplements this methodology with a requirement to assess the impact of emissions on local air quality, and for this assessment to show no significant impact on the environment or human health. This is especially important given that NOx emissions are not part of the existing guidance and therefore were not considered when the stack heights of many crematoria were designed.

Question 18. To what extent do you agree or disagree with the requirement of producing an impact assessment on local air quality as a way to complement existing stack height methodology? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 19. Provide any other comments you have about this matter in the proposed new guidance.

Carbon emissions

Carbon emissions at crematoria are caused by:

- the use of fuel and electricity use
- the combustion of materials
- actual cremations.

Small quantities of other greenhouse gases and nitrous oxide (N_2O) may also be emitted from NOx abatement.

Carbon emissions can be reduced through improvement of fuel consumption and energy efficiency and by minimising the weight of material in coffins.

Existing requirements for collecting data on fuel consumption and energy efficiency will generate information that will help with achieving the net zero carbon emissions commitment by 2050.

[2] HMIP 1993 '*Guidelines on Discharge Stack Heights for Polluting Emission. Technical Guidance Note D1 (Dispersion)*' ISBN 0 11 752794 7 is now out-of-print, but is available from the British Library.' See the following for more info: FAQ 89 - HMIP D1 Stack Height Calculation | LAQM (defra.gov.uk)

Fuel and electricity consumption will be measured for each cremator (including all abatement equipment). Where there is more than one cremator operating with a shared flue gas treatment system, fuel and electricity consumption shall be measured for the whole system.

After the first year of the publication of the new guidance, all new and replacement cremators will be fitted with appropriate fuel and electricity metering.

At the end of the four-year implementation period, all cremators will be fitted with appropriate fuel and electricity metering.

Operators of crematoria will report on an annual basis about their carbon emissions from:

- fuel,
- electricity consumption, and
- coffin materials.

Fuel and electricity consumption can be converted into carbon dioxide emissions using publicly available emissions factors. Carbon intensity data is available for different fuels and electricity use from the national grid.

Funeral directors should pass sufficient information on carbon content of coffin materials to crematoria operators for these to be included in their calculations (4.6.3). Reports will include a justification of the calculation methodology and relevant sources used (4.6.4).

Further work is needed on developing emission factors for nitrous oxide (N_2O) emissions, so these have been excluded from calculations at the present time.

The new guidance explores these measures further in Sections 5.4 and 5.6.

Question 20. To what extent do you agree or disagree with the new measures considered for calculation and reporting of carbon emissions? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 21. To what extent do you agree or disagree with the implementation dates considered to fit fuel and electricity metering? (Response options: strongly agree, agree, neither agree nor disagree, disagree, strongly disagree)

Question 22. Provide any comments you have about the measurement and reporting requirements for carbon emissions in the proposed new guidance.

The Crematoria Abatement of Mercury Emissions Organisation (CAMEO) scheme

Under the current guidance, crematoria have had to fit mercury abatement or join a burden sharing arrangement (4.28)

The industry currently operates a burden sharing scheme – called CAMEO – which has provided a flexible way of achieving the target of 50% abated cremations that the existing guidance requires. The current performance of the CAMEO scheme is around 70% of cremations carried out in equipment fitted with mercury abatement.

It works on the basis of a tradable mercury abated cremations. Operators that do not have abatement systems installed have had to pay into a fund that is then distributed to those that do. This has offered a way to share the financial burden of those which have abated with those which have not. Those member operators which have abated have received an income to offset their costs.

In the proposed new guidance, existing unabated cremators will be required to participate in a burden sharing arrangement until the end of the four-year implementation phase. After that, mercury abatement will be mandatory so the CAMEO or any other burden sharing scheme will no longer be needed.

Supplementary information is provided in Appendix A of the proposed new guidance.

Question 23. To what extent do you agree or disagree with the changes affecting the CAMEO burden scheme currently in place? (Response options: Strongly Agree/agree/neither agree nor disagree/ disagree/strongly disagree)

Question 24. Provide any comments you have about the role of the CAMEO in the proposed new guidance.

Additional comments about the proposed new guidance

Question 25. Are there any other comments you want to make about the proposed new guidance.

Impact assessment

A de minimis assessment for the proposed new crematoria guidance has been completed. The report summarises the rationale for government intervention, the options considered, and the expected costs and benefits, setting out the impact on businesses.

We have completed a de minimis assessment in line with Regulatory Policy Committee guidance[3], which allows departments to self-certify measures deemed to have an annual

[3] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/916918/better-regulation-guidance.pdf

direct impact on businesses of less than £5.0 million. This assessment has been subject to scrutiny by experts in Defra's Office of the Chief Economist and Better Regulation Unit.

The results show a benefit-cost ratio of 2.09, indicating that updating this guidance would deliver more benefits to society than the costs would impose.

The net air quality improvement is worth £22.37 million over 2024 to 2033 and is comprised of the reductions in emissions of:

- $PM_{2.5}$,
- Mercury, and
- Dioxins.

It will also produce a reduction in pollutant emissions from gas use, less the increase in emissions from electricity generation. The Equivalent Annualised Net Direct Cost to Business, a measure of the direct costs and benefits to businesses, is estimated at £1.59 million.

A complete de minimis assessment of regulatory impact is available in Annex C of this consultation document.

Consultee Feedback on the Online Survey

Dear Consultee

Thank you for taking your time to participate in this online survey. It would be appreciated, if you can provide us with an insight into how you view the tool and the area(s) you feel is in need of improvement, by completing our feedback questionnaire.

Question: Overall, how satisfied are you with our online consultation tool?

Very satisfied

Satisfied

Neither satisfied nor dissatisfied

Dis-satisfied

Very dissatisfied

Don't know

Please give us any comments you have on the tool, including suggestions on how we could improve it.

ANNEX A – Proposed new crematoria guidance

Annex A is included separately

ANNEX B – Organisations Participating in the Review

Representatives from the following organisations have participated to some extent in the Technical Working Group over the course of the review.

- ADM Ltd (A company which specialises in air quality modelling)
- Association of Private Crematoria and Cemeteries (Trade body representing private sector operators of crematoria)
- Atesta Ltd (A company which provides emissions monitoring services)
- Buckinghamshire Council
- Bury Metropolitan Borough Council
- Cannock Chase Crematorium
- Carmarthenshire Council
- Cheltenham Council
- Chesterfield Council
- DAERA – Department of Agriculture, Environment and Rural Affairs in Northern Ireland
- Department of the Environment, Food and Rural Affairs (Government Department)
- DFW Europe Ltd. (A company which manufactures crematoria equipment)
- Dudley Metropolitan Borough Council
- EHRC – The Environmental Health Resource Centre (An environmental consultancy specialising in local authority regulation)
- Environment Agency (Local Authority Unit) – provider of technical support to local authority regulators in England and Wales
- Facultative Technologies Ltd. (A company which manufactures crematoria equipment)
- FBCA – Federation of Burial and Cremation Authorities (Trade body for owners and operators of cemeteries and crematoria)
- FFMA – Funeral Furnishing Manufacturers' Association (Trade body representing manufacturers of coffins and other supplies to the funeral industry)
- Full Circle Funerals (a company providing funeral director services)
- Gwynedd Council
- Greenwich Crematorium
- Hambleton District Council
- ICCM – Institute of Cemetery and Crematorium Management (Industry professional body, provider of education and training services)
- IFZW (A company which manufactures crematoria equipment)
- Leeds City Council
- Lewes District and Eastbourne Borough Councils
- LifeArt (A company which manufactures coffins)
- Lisburn & Castlereagh City Council
- Liverpool City Council
- London Borough of Enfield
- Martin Cranfield Associates Ltd. (An environmental consultancy specialising in local authority regulation)

- Matthews Environmental Solutions (A company which manufactures crematoria equipment)
- Memoria Group (A company operating several crematoria)
- Ministry of Justice (Government Department)
- Parkgrove Crematorium (A privately operated crematoria in Angus)
- PJ Combustion Solutions Ltd (A company providing maintenance services to the crematoria sector)
- Rochdale Metropolitan Borough Council
- Rose PM (A company providing construction and consultancy services to the crematoria sector).
- SAIF – The National Society of Allied and Independent Funeral Directors (Trade body representing smaller funeral directors)
- Salford City Council
- SEPA – Scottish Environment Protection Agency
- Scottish Government
- Sheffield Metropolitan Borough Council
- Stockport Metropolitan Borough Council
- Swansea Council
- The CDS Group (A service company and consultancy in the crematoria sector)
- The Cremation Society (A charity providing information and services to the industry and the public on cremation).
- Wakefield Metropolitan Borough Council
- Welsh Government
- West Northants Unitary Council
- Worcester Regulatory Services –shared services across several local authorities in the Worcester area.
- York City Council

ANNEX C – De-minimis assessment (DMA)

Annex C is included separately