Lisburn & Castlereagh City Council

Civic Headquarters
Lagan Valley Island
Lisburn BT27 4RL

Tel: 028 9244 7300
www.lisburncastlereagh.gov.uk

Chairperson: Councillor C McCready

Vice-Chairperson: Councillor R Carlin

Aldermen: J Baird, M Gregg, S Skillen, J Tinsley

Councillors: S Burns, P Catney, G Hynds, P Kennedy, J Laverty BEM, A McIntyre, M McKeever, R McLernon, N Parker

Ex Officio:

The Right Worshipful the Mayor, Councillor A Gowan

Deputy Mayor, Councillor G McCleave

Notice Of Meeting

A meeting of the Environment and Sustainability Committee will be held on **Wednesday, 3rd January 2024** at **6:00 pm** for the transaction of the undernoted Agenda.

For those Members attending this meeting remotely, the Zoom details are included in the Outlook invitation that has been issued.

David Burns
Chief Executive

Agenda

1.0 Apologies

2.0 Declaration of Interests

(i) conflict of interest on any matter before the meeting (Members to confirm the specific item)
(ii) pecuniary or non-pecuniary interest (Member to complete disclosure of interest form)

3.0 Report by the Acting Head of Service (Environmental Health, Risk and Emergency Planning)

3.1 Consultation Response - "Stopping the Start: Our New Plan to Create a Smoke Free Generation"

For Decision

3.2 E-Cigarette Test Purchasing Exercise Fixed Penalties

For Decision

3.3 Consultation on Proposed Updated Guidance on Crematoria

For Noting

4.0 Confidential Report from the Acting Director of Environmental Services

4.1 Off Street Car Parking Contract

For Decision

Confidential due to Information relating to the financial or business affairs of any particular person (including the Council holding that information).

Item 4.1 confidential - Off Street Car Parking Enforcement Contract (f).pdf ***Not included***

Redacted Item 4.1 confidential - Off Street Car Parking Enforcement Contract (f).pdf ***Page 114***

4.2 Estimates Process – Directorate Update

For Decision

Confidential due to Information relating to the financial or business affairs of any particular person (including the Council holding that information).

Item 4.2 Confidential - Estimates.pdf ***Not included***

5.0 Any Other Business

Lisburn & Castlereagh City Council

Committee:	Environment & Sustainability
Date:	3rd January 2024
Report from:	Head of Service (Acting) - Environmental Health, Risk and Emergency Planning

Item for:	Decision
Subject:	Consultation Response - "Stopping the Start: our new plan to create a smoke free generation"

1.0 **Background and Key Issues**

1. On 4th October 2023, the Department of Health and Social Care (DHSC) published a command paper (Government publications presented to Parliament by command of "His Majesty" and are usually published in a numbered series), Stopping the start: our new plan to create a smoke free generation, setting out proposed action to protect future generations from the harms of smoking by creating the first smoke free generation, which the UK Government and devolved administrations are now seeking to consult on.

2. The command paper also set out measures to crack down on youth vaping. The Action on Smoking and Health (ASH) report, Use of e-cigarettes among young people in Great Britain, shows that the number of children using vapes has tripled in the past 3 years and a staggering 20.5% of children in Great Britain had tried vaping in 2023. According to the Northern Ireland Young Person's Behaviour and Attitudes Survey 2022, 21.3% of 11 to 16 year olds in Northern Ireland reported having ever used an e-cigarette.

3. The Consultation asks questions in 3 areas for which new legislation would be needed:

    1. Creating a smoke free generation.
    2. Tackling youth vaping.
    3. Enforcement.

4. An email was sent to Members on 14th November 2023 requesting their comments on the Consultation to be received by 30th November 2023 for inclusion in the Consultation response.

5. Attached as **Appendix 1 EH** is a copy of the Consultation response which was submitted prior to the closing date of 6th December 2023.

2.0 **Recommendation**

It is recommended that Members retrospectively approve the response to the "Stopping the start: our new plan to create a smoke free generation" Consultation.

3.0 **Finance and Resource Implications**

None.

4.0 **Equality/Good Relations and Rural Needs Impact Assessments**

4.1	Has an equality and good relations screening been carried out?	Yes

4.2	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out. Screening completed (attached as **Appendix 2 EH**). Screened out – Consultation response only.	
4.3	Has a Rural Needs Impact Assessment (RNIA) been completed?	No
4.4	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out. Not required – Consultation response only.	

Appendices:	**Appendix 1 EH**	-	Consultation response – Stopping the start: our new plan to create a smoke free generation.
	Appendix 2 EH	-	Equality Screening document.

Appendix 1 EH

CREATING A SMOKEFREE GENERATION AND TACKLING YOUTH VAPING: YOUR VIEWS

(Published 12 October 2023)

Summary

Background

Smoking is the single most entirely preventable cause of ill health, disability, and death in the UK. It is responsible for around 80,000 deaths a year, including about:

- 64,000 deaths per year in England (as reported by the Office for Health Improvement and Disparities in Local tobacco control profiles)
- 8,300 deaths per year in Scotland (as reported by the Scottish Public Health Observatory's information on smoking attributable deaths)
- 5,600 deaths per year in Wales (as reported by the Public Health Wales Smoking in Wales report)
- 2,200 deaths per year in Northern Ireland (as reported by the Northern Ireland Department of Health's tobacco control information)

No other consumer product kills up to two-thirds of its users. The Office for National Statistics' Adult smoking habits in the UK 2022 reported that 6.4 million people in the UK were current smokers. This was 12.9% of people in the UK, and:

- 12.7% in England
- 14.1% in Wales
- 14.0% in Northern Ireland
- 13.9% in Scotland

Smoking causes harm throughout people's lives, not only for the smoker but for those around them. It is a major risk factor for poor maternal and infant outcomes, significantly increasing the chance of stillbirth and can trigger asthma in children. Smoking causes around 1 in 4 of all UK cancer deaths and is responsible for the great majority of lung cancer cases. Smoking is also a major cause of premature heart disease, stroke and heart failure, and increases the risk of dementia in the elderly. Smokers lose an average of 10 years of life expectancy, or around 1 year for every 4 smoking years.

As a result, smoking puts significant pressure on the NHS. In England, almost every minute of every day someone is admitted to hospital because of smoking, and up to 75,000 GP appointments could be attributed to smoking each month - equivalent to over 100 appointments every hour.

That is why, on 4 October 2023, the Department of Health and Social Care (DHSC) published a command paper Stopping the start: our new plan to create a smokefree generation setting out proposed action to protect future generations from the harms of smoking by creating the first smokefree generation, which the UK Government and devolved administrations are now seeking to consult on.

Devolved administrations is a collective term for the executive bodies in Northern Ireland, Scotland and Wales: the Northern Ireland Executive, the Scottish Government and the Welsh Government.

The command paper also set out measures to crack down on youth vaping. The Action on Smoking and Health (ASH) report Use of e-cigarettes among young people in Great Britain shows that the number of children using vapes has tripled in the past 3 years and a staggering 20.5% of children in Great Britain had tried vaping in 2023. According to the Northern Ireland Young persons behaviour and attitudes survey 2022, 21.3% of 11 to 16 year olds in Northern Ireland reported having ever used an e-cigarette.

Due to nicotine content and the unknown long-term harms, vaping carries risks to health and lifelong addiction for children. The health advice is clear: young people and people who have never smoked should not vape.

The UK Government and devolved administrations have a duty to protect our children from the potential harms associated with underage vaping, while their lungs and brains are still developing. So, the UK Government and devolved administrations are consulting on several proposals on youth vaping including:

- restricting flavours
- regulating point of sale displays
- regulating packaging and presentation
- considering restricting the supply and sale of disposable vapes
- whether regulations should extend to non-nicotine vapes
- taking action on the affordability of vapes

These will need to balance having the biggest impact on youth vaping with ensuring vapes continue to support adult smokers to quit.

The command paper also focused on new measures to ensure the law is enforced. Underage and illicit sales of tobacco, and more recently vapes, are undermining the work of the UK Government and devolved administrations to regulate the industry and protect public health. In England and Wales, the government is seeking to introduce new powers for local authorities to issue fixed penalty notices (on the spot fines) to clamp down on those irresponsibly selling tobacco products and vapes to underage people.

Consultation overview

The consultation asks questions in 3 areas for which new legislation would be needed:

1. Creating a smokefree generation: on smoking, the case for change is clear and the UK Government and devolved administrations are consulting on the smokefree generation policy and its scope to inform future legislation.
2. Tackling youth vaping: while there is also significant evidence for action to tackle youth vaping, within each proposal the UK Government and devolved administrations are consulting on several options to ensure we take the most appropriate and impactful steps, building on England's analysis of the youth vaping call for evidence.
3. Enforcement: the consultation also asks questions on the proposal to introduce new powers for local authorities in England and Wales to issue fixed penalty notices to enforce age of sale legislation of tobacco products and vapes.

The UK Government and devolved administrations would like to understand the impacts on businesses and on people, and if there are any impacts on groups with protected characteristics (see Discrimination: your rights). We want to hear from:

- the public - from young people, parents, carers and teachers
- the retail sector and the independent vaping industry
- local authorities across the UK
- clinicians and medical professionals
- public health stakeholders and academic experts
- employers and trade unions

The UK Government and devolved administrations would like to receive as much detail as possible under each of the themes of the consultation. For each multiple choice question, you will be able to provide additional information and evidence to support your answer through free text boxes.

The UK Government and devolved administrations will only make any decisions on these proposed measures after fully considering:

- the consultation responses we receive
- the evidence provided in those responses
- a further review of the international evidence base

Following this, impact assessments will be published.

The UK Government, Scottish Government and Welsh Government intend to bring forward legislation as soon as possible. In Northern Ireland, the outcome of this consultation will inform decisions of incoming ministers and the Northern Ireland Executive, or in the absence of ministers, those decisions that can be taken under the Northern Ireland (Executive Formation etc) Act 2022. This applies to all proposals in the consultation document.

Territorial extent

Health policy is a devolved matter in Scotland, Wales and Northern Ireland. DHSC in England, the Directorate for Population Health in Scotland, the Health and Social Services Group in Wales and the Department of Health in Northern Ireland are each responsible for improving public health. This includes reducing tobacco use by implementing comprehensive tobacco control strategies and minimising the health risks of youth vaping.

Environmental policy, like health policy, is a devolved matter. DHSC, the Department for Environment, Food and Rural Affairs and the devolved administrations will work together to agree a policy across the 4 nations on restricting disposable vapes and other appropriate measures.

While the legislative proposals in the command paper Stopping the start: our new plan to create a smokefree generation set out an approach for England only, governments across the UK are now consulting to understand whether they should take action in the areas outlined in the paper. So, with agreement with the devolved administrations, DHSC is leading this consultation UK-wide.

Tobacco industry declaration

The UK is a party to the World Health Organization Framework Convention on Tobacco Control and so has an obligation to protect the development of public health policy from the vested interests of the tobacco industry.

To meet this obligation, we ask all respondents to disclose whether they have any direct or indirect links to, or receive funding from, the tobacco industry.

Legislating to create a smokefree generation

There is no more addictive product that is legally sold in our shops than tobacco. Three-quarters of smokers would never have started if they had the choice again.

As outlined in the command paper Stopping the start: our new plan to create a smokefree generation, we want to stop the start of addiction, as it is much easier to never start smoking than to have to quit. The UK Government, Scotland and Wales will bring forward legislation making it an offence to sell tobacco products to anyone born on or after 1 January 2009.

The law will stop children turning 14 this year or younger from ever legally being sold tobacco products. In effect, raising the smoking age by a year each year until it applies to the whole population. The Department of Health in Northern Ireland will consider measures relating to a smokefree generation following this consultation.

Policy summary

This policy will make it an offence for anyone born on or after 1 January 2009 to be sold tobacco products (and in Scotland, also an offence for anyone born on or after 1 January 2009 to purchase tobacco products).

This follows a similar approach to New Zealand who became the first country in the world to introduce a restriction on the sale of tobacco to anyone born after a specified date, as part of its Smokefree Aotearoa 2025 Action Plan. The New Zealand legislation makes it an offence to sell smoked tobacco products to anyone born on or after 1 January 2009, to first take effect in January 2027.

The UK Government, Scotland and Wales will also make it an offence for anyone at or over the legal age to purchase tobacco products on behalf of someone born on or after 1 January 2009 ('proxy purchasing'). The Department of Health in Northern Ireland will consider appropriate measures relating to a smokefree generation following this consultation.

Products in scope of the new legislation will mirror the current scope of age of sale legislation for tobacco products. This includes a wider range of products (see 'Product scope' below) than the New Zealand legislation, which only included smoked tobacco. However, New Zealand is taking forward other measures which the UK Government is not proposing, including through a licensing scheme to significantly reduce the number of retail outlets that can sell tobacco and through new limits to reduce the nicotine strength of cigarettes.

Product scope

In England and Wales, the current age of sale restriction is imposed under the Children and Young Persons Act 1933. The age of sale restriction applies to tobacco products and cigarette papers.

In Scotland, the age of sale restrictions are set out Part 1 of the Tobacco and Primary Medical Services (Scotland) Act 2010. Those restrictions apply to tobacco products and cigarette papers, which are defined in section 35 of that act.

In Northern Ireland, the age of sale restrictions for tobacco are set out in the Health and Personal Social Services (Northern Ireland) Order 1978 and through subsequent amendments.

We propose that all tobacco products, cigarette papers and herbal smoking products would be subject to the proposed age of sale.

Products that would be in scope of the change include:

- cigarettes
- cigarette papers
- hand rolled tobacco
- cigars
- cigarillos
- pipe tobacco
- waterpipe tobacco products (for example shisha)

- chewing tobacco
- heated tobacco
- nasal tobacco (snuff)
- herbal smoking products

All other products such as vapes and nicotine replacement therapies would be out of scope for the smokefree generation proposal, because they do not contain tobacco and are often used as a quit aid for those who smoke.

Age of sale statements

In England and Wales, the Children and Young Persons (Protection from Tobacco) Act 1991 requires retailers selling tobacco to display a notice in a prominent position at the point of sale stating that "it is illegal to sell tobacco products to anyone under the age of 18".

In Scotland, this requirement is contained in the Tobacco and Primary Medical Services (Scotland) Act 2010.

In Northern Ireland, this requirement is contained in the Children and Young Persons (Protection from Tobacco) (Northern Ireland) Order 1991.

In light of this, the UK Government, Scotland and Wales propose that display statements will need to be changed and required to read "it is illegal to sell tobacco products to anyone born on or after 1 January 2009".

The Department of Health in Northern Ireland will consider measures relating to age of sale statements following this consultation.

Prohibiting anyone born on or after 1 January 2009 from ever being sold tobacco products (and also from purchasing tobacco products, in Scotland) will impact children who are turning 14 or younger in 2023. Setting this date will mean the change in the law would come into effect in 3 to 4 years' time from January 2027, when this group of children turns 18.

Question

Do you agree or disagree that the age of sale for tobacco products should be changed so that anyone born on or after 1 January 2009 will never be legally sold (and also in Scotland, never legally purchase) tobacco products?

- Agree
- Disagree
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

There has been overwhelming evidence that the use of tobacco products causes illness and premature deaths with a high cost to the economy as well as the personal impact. Despite increasing restrictions such as advertising bans, display bans, age restrictions, health warnings and graphic images on packaging, 14% of the adult population in NI continue to smoke and underage sales continue to be difficult to police. The introduction of a lifetime ban

on selling to our future populations would be the best option to prevent more tobacco related deaths and illness without impacting on those already addicted.

Proxy sales refer to a person at or over the legal age of sale purchasing a product on behalf of someone under the legal age of sale. Proxy sales are prohibited under existing tobacco age of sale legislation. In this context, prohibiting proxy sales would mean that anyone born before 1 January 2009 would be prohibited from purchasing tobacco products on behalf of anyone born on or after 1 January 2009.

Question

Do you think that proxy sales should also be prohibited?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We agree that the current provision prohibiting proxy sales should be extended to mean that anyone born before 1st January 2009 should be prohibited from purchasing tobacco products on behalf of anyone born on or after 1st January 2009. In doing this it is hoped that fewer children will start smoking as they will be unable to easily obtain cigarettes. Failure to introduce a ban on proxy sales would completely dilute the impact of any lifetime ban legislation. Whilst this type of law is often difficult in practice to enforce it has been used to good effect in other legislation and acts as a deterrent.

The following products would be in scope of the new legislation:

- cigarettes
- cigarette papers
- hand rolled tobacco
- cigars
- cigarillos
- pipe tobacco
- waterpipe tobacco products (for example, shisha)
- chewing tobacco
- heated tobacco
- nasal tobacco (snuff)
- herbal smoking products

This mirrors the current scope of age of sale legislation in England and Wales. Existing age of sale requirements in Scotland currently cover products consisting wholly or partly of tobacco and which are intended to be smoked, sniffed, sucked or chewed. Insofar as the products listed would not be within the scope of the existing restrictions, it is proposed that the scope of the Scottish legislation be expanded to include them.

Question

Do you agree or disagree that all tobacco products, cigarette papers and herbal smoking products should be covered in the new legislation?

- Agree
- Disagree
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

The wider the scope of the legislation in relation to tobacco & tobacco related products, the more difficult it is to introduce potential loopholes or exemptions. This will also assist in removing ambiguity when it comes to the enforcement of the various products on the market.

It is currently a legal requirement for retail premises to display the following statement 'it is illegal to sell tobacco products to anyone under 18'. This requirement would need to be changed to align with the new age of sale.

Question

Do you agree or disagree that warning notices in retail premises will need to be changed to read 'it is illegal to sell tobacco products to anyone born on or after 1 January 2009' when the law comes into effect?

- Agree
- Disagree
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Point of sale signage is a recognised means of raising awareness of the legislative provisions and also acts as a deterrent to potential underage buyers and sellers. Such a significant shift in the law would need to be communicated as widely as possible and that includes point of sale signage. It may however be beneficial to also introduce wording to the signage to reflect the ban on proxy sales. "It is also illegal for anyone to buy or procure tobacco products for anyone born on or after 1 January 2009" .

Tackling the rise in youth vaping

Vapes are an effective tool for adult smokers to quit, especially when combined with expert support. Ensuring vapes can continue to be made available to current adult smokers is vital to supporting current smokers to quit. However, vaping is not recommended for children, or indeed non-smokers, and carries risk of future harm and addiction. The number of children vaping has risen sharply over the past few years. In England, we carried out a youth vaping call for evidence and received a variety of suggested measures to reduce the appeal and availability of vapes to children.

The Tobacco and Related Products Regulations 2016 sets product standards for nicotine vapes including restrictions on maximum nicotine strength, refill bottle and tank size limits, packaging and advertising (including prohibiting advertising on television and radio) in the UK.

In 2022, the Scottish Government consulted on proposals to make regulations under existing powers in the Health (Tobacco, Nicotine etc. and Care) (Scotland) Act 2016 to restrict the advertising and promotion of nicotine vapour products (nicotine vapour products include both nicotine and non-nicotine vapes). The proposals included restrictions on advertising, brand-sharing in products and services, free distribution and nominal pricing and sponsorship.

In Wales, the Public Health (Wales) Act 2017 introduced regulatory making powers to introduce a national register of retailers of tobacco and nicotine products. In Northern Ireland, the Health (Miscellaneous Provisions) Act (Northern Ireland) 2016 provides a power to ban vape sales from vending machines.

As outlined in the command paper Stopping the start: our new plan to create a smokefree generation, it is important to consult on a set of proposals to reduce youth vaping, ensuring we get the balance right between protecting children and supporting adult smokers to quit. The proposals being consulted on include:

- restricting vape flavours
- regulating vape packaging and product presentation
- regulating point of sale displays
- restricting the supply and sale of disposable vapes
- exploring further restrictions for non-nicotine vapes and other nicotine consumer products such as nicotine pouches
- action on the affordability of vapes, exploring a new duty on vapes

The ‘Stopping the start: our new plan to create a smokefree generation’ paper also set out an existing plan to legislate in order to close the loophole in our laws which allows industry to give free samples of nicotine and non-nicotine vapes (and other nicotine products) to under 18s, as well as to introduce an age restriction for non-nicotine vapes. These would apply to England and Wales only, but we will explore the possibility of inclusion of the other devolved administrations in such provisions where appropriate.

Restricting vape flavours

Evidence on vape flavours

Research shows that children are attracted to the fruit and sweet flavours of vapes, both in their taste and smell, as well as how they are described. Restricting flavours has the potential to significantly reduce youth vaping.

In Great Britain, the ASH 2023 report Use of e-cigarettes among young people in Great Britain shows that the most frequently used vape flavouring for children is ‘fruit flavour’, with 60% of current children using them. Seventeen per cent of children who vape choose sweet flavours such as chocolate or candy.

However, research by London South Bank University has found that there is evidence that flavoured vaping products can assist adults to quit smoking. So, any restriction on flavours

needs to be carefully balanced with ensuring vapes continue to be available and accessible to support adults to quit smoking.

This is why the UK Government, Scotland and Wales are considering the options for how vape flavours and descriptions could be restricted in legislation. The Department of Health in Northern Ireland will consider measures relating to flavours following this consultation.

More information on the range of flavours and types of devices is available in Annex 1: vape types and flavours.

Options for how we can restrict vape flavours

Option 1: limiting how the vape is described.

Vape flavours can be restricted by the way they are described. For example, New Zealand has done this by mandating vape flavour descriptions, in their Smokefree Environments and Regulated Products Amendment Regulations 2023, to a specified list that includes generic flavour names such as ‘tobacco’ or ‘berry’. This means that vapes could be called ‘blueberry’, but not ‘blueberry muffin’ for example.

Option 2: limiting the ingredients in vapes.

Vape flavours can be restricted by only permitting certain ingredients to be used in the product. In the Netherlands, for example, there is a specified list of ingredients that can be used in vapes, which are those that produce a ‘tobacco’ taste and pose almost no health harm.

Option 3: limiting the characterising flavours (the taste and smell) of vapes.

The characterising flavours of vapes (the way a vape smells or tastes to a consumer) can be restricted. In 2020, when menthol flavoured cigarettes were banned in the UK, they were restricted based on the characterising flavour of menthol. Finland, for example, has restricted all characterising flavours for vapes, apart from the flavour of tobacco.

Options for which flavours vapes should be limited to

As well as consulting on how the UK Government and devolved administrations should restrict vape flavours, we are also asking which flavours vapes should be limited to. We are considering restricting flavours to one of the following options:

- Option A: flavours limited to tobacco only
- Option B: flavours limited to tobacco, mint and menthol only
- Option C: flavours limited to tobacco, mint, menthol and fruits only

We will also consider regulating non-nicotine vapes in the same way.

Question

Do you agree or disagree that the UK Government and devolved administrations should restrict vape flavours?

- Agree
- Disagree
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe that vape flavours should be restricted for a number of reasons.

It is important to minimise the attractiveness and appeal of such products to users, particularly young people. Fruit, mint and menthol smells and tastes are much more appealing than tobacco – by restricting flavours to tobacco only, the appeal is significantly reduced.

If vapes are being used as an aid to quit smoking then should be limited to tobacco flavour and made as unattractive as possible to discourage new users.

In addition restricting flavours will assist in regulating the safety of vapes on the market and allow consistent enforcement.

Question

Which option or options do you think would be the most effective way for the UK Government and devolved administrations to implement restrictions on flavours? (You may select more than one answer)

- Option 1: limiting how the vape is described
- Option 2: limiting the ingredients in vapes
- Option 3: limiting the characterising flavours (the taste and smell) of vapes
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Evidence is showing that more young people are trying vapes than cigarettes and are likely to do so regardless of parental behaviours, therefore strong measures are needed to reduce the appeal of vapes. Every possible measure should be considered and implemented.

Question

Which option do you think would be the most effective way for the UK Government and devolved administrations to restrict vape flavours to children and young people?

- Option A: flavours limited to tobacco only
- Option B: flavours limited to tobacco, mint and menthol only
- Option C: flavours limited to tobacco, mint, menthol and fruits only

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

As previously stated, it is essential that vapes are made completely unappealing to children and young people. By ensuring they are restricted to tobacco flavour only, they are more likely to be used as a smoking cessation aid rather than a recreational pastime in their own right. Whilst research is indicating that flavoured vapes have more appeal for adults using them in an attempt to quit smoking, this is offset by the evidence that young people are more attracted to fruit and sweet flavoured vapes. The priority must be to prevent more people taking up the habit rather than weakening legislation on the basis that flavoured vapes are a preferred smoking cessation aid. The use of vapes are not without health risks and to promote them as a smoking cessation product creates the illusion that they are a safe product when the long-term health effects are not fully known. They may be considered "safer" than cigarettes but they are not "risk free".

Question

Do you think there are any alternative flavour options the UK Government and devolved administrations should consider?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Flavours should be made as unattractive as possible to children and young people to prevent uptake and avoid future addiction.

Question

Do you think non-nicotine e-liquid, for example shortfills, should also be included in restrictions on vape flavours?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe that the non-nicotine e-liquids should be included in the restrictions on vape flavours. There is evidence to suggest that vaping without nicotine may still cause harm to health and this could act as a gateway for users starting vaping nicotine e-liquids.

In addition as they can be mixed with nicotine containing e-liquids and could provide a loophole for users to make their own flavoured e-liquids. This would make the other proposed flavour restrictions on vapes pointless with such an easy workaround.

Regulating point of sale displays

Unlike tobacco products, vapes are currently allowed to be displayed at the point of sale. Children can see and handle vapes in retail outlets where they are often displayed alongside confectionery and on accessible shelves. The ASH report Public support for government action on tobacco found that 74% of adults in England support the prohibiting of point of sale promotion of vapes.

The UK Government and devolved administrations want to limit the exposure of children to vapes and keep them out of sight and reach of children. However, it is important not to inhibit people who currently smoke from accessing vapes as a quit aid, so they must remain visible enough.

Specialist vape shops are retail outlets that specialise in the sale of vaping products. The UK Government and devolved administrations want to consider if they should be an exception to any restrictions, as they usually have a wider selection of devices and products available. Also, some shops have staff trained by the National Centre for Smoking Cessation and Training, to offer more tailored advice for smokers wanting to quit. The UK Government and devolved administrations are keen to hear responses on this and we have included a specific question on this.

The UK Government, Scotland and Wales will also consider regulating non-nicotine vapes and non-nicotine e-liquids in the same way. The Department of Health in Northern Ireland will consider measures relating to non-nicotine vapes, following consultation. There is the opportunity to provide your opinions and evidence about this in the section on non-nicotine vapes.

There are 2 options for regulating point of sale displays of vapes:

- Option 1: vapes must be kept behind the counter and cannot be on display, like tobacco products
- Option 2: vapes must be kept behind the counter but can be on display

Question

Which option do you think would be the most effective way to restrict vapes to children and young people?

- Option 1: vapes must be kept behind the counter and cannot be on display, like tobacco products
- Option 2: vapes must be kept behind the counter but can be on display

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe that in order to prevent people from starting to vape and to assist those wishing to quit vaping, all vapes and vaping paraphernalia must be kept behind the counter and not on display. Evidence has shown that marketing of tobacco products encourages young people to smoke and the point of sale display restrictions have been successfully implemented in retailers and could easily be extended to vapes.

In addition we believe that a registration scheme for retailers selling vapes should be introducedThis could be similar to the current register for retailers of tobacco products in Northern Ireland, through the Tobacco Register NI, including similar sanctions. This would provide councils with a comprehensive list of retailers who sell vapes without the excessive cost or administrative burden for both businesses and councils that a licensing scheme would likely introduce.

We also believe that mandatory age identification checks should be introduced and the acceptable forms of ID be specified.

In addition vending machines supplying all vapes should be prohibited to prevent access to young people. We are aware vending machines supplying vapes for sale exist at a range of premises across N. Ireland. This would ensure vapes are brought in line with the prohibition of cigarette vending machines in Northern Ireland.

Question

Do you think exemptions should be made for specialist vape shops?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We do not agree that exemptions should be made for specialist vape shops. Unlike specialist tobacco retailers, which are rare, there are a large number/proliferation of specialist vape shops.

It is known that vapes are currently of particular appeal to children and young people. The relaxation of any display ban regulations relies on a secure entry system to the premises to ensure that those underage are not admitted to the shop in the first place. There are concerns that there would not be the same controls in place in specialist vape shops, many of which currently occupy prominent high street locations.

Question

If you disagree with regulating point of sale displays, what alternative measures do you think the UK Government and devolved administrations should consider?

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe that additional measures should be included, along with point of sale restrictions. Registration of premises selling vapes should mirror the current register for retailers of tobacco products in Northern Ireland, through the Tobacco Register NI. This would provide councils with a comprehensive list of retailers who sell vapes without the excessive cost or administrative burden for both businesses and councils that a licensing scheme would likely introduce.

Regulating vape packaging and product presentation

The youth vaping call for evidence in England showed that children are attracted to vapes through brightly coloured products and packaging and child friendly images such as cartoons. They are designed to appeal to children, and this must stop.

Research on vape packaging published by the JAMA Network has shown that standardised vape packaging with reduced brand imagery can decrease the appeal to young people who have not previously smoked or vaped, without reducing the appeal of vapes to adult smokers.

Options for regulating vape packaging

The UK Government, Scotland and Wales are considering further regulating the packaging of vapes. The Department of Health in Northern Ireland will consider measures relating to regulating vape packaging following this consultation. We want to ensure that no part of the vape device, nor its packaging, is targeted at children. This includes:

- any unit packet (first wrap or container of an item)
- any container pack (the portable device in which a material is stored, transported, disposed of or handled)
- the presentation of the vape device

There are several possible options for how packaging and presentation of vapes can be restricted.

Option 1: prohibiting the use of cartoons, characters, animals, inanimate objects and other child friendly imagery, on both the vape packaging and vape device. This would still allow for colouring and tailored brand design.

Option 2: prohibiting the use of all imagery and colouring on both the vape packaging and vape device. This would still allow for branding, such as logos and names.

Option 3: prohibiting the use of all imagery and colouring and branding for both the vape packaging and vape device. This is equivalent to the standardised packaging rules on tobacco.

Question

Which option do you think would be the most effective way for the UK Government and devolved administrations to restrict the way vapes can be packaged and presented to reduce youth vaping?

- Option 1: prohibiting the use of cartoons, characters, animals, inanimate objects, and other child friendly imagery, on both the vape packaging and vape device. This would still allow for colouring and tailored brand design
- Option 2: prohibiting the use of all imagery and colouring on both the vape packaging and vape device but still allow branding such as logos and names
- Option 3: prohibiting the use of all imagery and colouring and branding (standardised packaging) for both the vape packaging and vape device

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Question

We believe that standardised packaging for both the device and packaging of vapes should be introduced. This has been successfully introduced for tobacco and will reduce the appeal to young people and for those trying to quit vaping.

Recognition must be given to the fact that the long-term health effects of vapes are still not fully known but they have become appealing to young people and their popularity is increasing. Every effort must therefore be made to restrict their use and minimise their appeal to potential new users, in particular those underage. It therefore makes sense to impose similar restrictions on the imagery, colouring and branding (standardised packaging) that exists for tobacco.

If you disagree with regulating vape packaging, what alternative measures do you think the UK Government and devolved administrations should consider?

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Restricting the supply and sale of disposable vaping products

The use of disposable vaping products (sometimes referred to as single-use vapes) has increased substantially in recent years. Disposable vapes are products that are not rechargeable, that are not refillable or that are neither rechargeable nor refillable. In contrast, a reusable vape is a product which can be recharged and fully refilled an unlimited number of times by the user. Products can contain vape liquid with or without nicotine.

There is growing concern over the environmental impacts of disposable vapes given their lithium batteries and hard to recycle components and the increasing frequency in which these products are littered or thrown in the bin. Recent research on vape disposal by YouGov commissioned by Material Focus found that almost 5 million disposable vapes are either littered or thrown away in general waste every week.

There are measures already in place to ensure responsible production and disposal of waste electrical and electronic items through the Waste Electrical and Electronic Equipment Regulations 2013 (WEEE) and obligations under the Waste Batteries and Accumulators Regulations 2009. However, evidence suggests compliance with these obligations is low, given the recent surge of businesses supplying disposable vapes. Both the WEEE and batteries regulations are being reviewed, with consultations planned.

In 2023, the Scottish Government commissioned Zero Waste Scotland to examine the environmental impact of single-use vapes and consider options to tackle the issue. Environmental impacts highlighted by Zero Waste Scotland's Environmental impact of single-use e-cigarettes review include:

- the impact of littering
- fire risks associated with unsafe disposal of their contents, including lithium batteries and chemicals

- greenhouse gas emissions and water consumption generated in their manufacture

There is also evidence of a significant and widespread increase in the use of disposable vapes by children. ASH's Use of e-cigarettes among young people in Great Britain survey found that 69% of vape users aged 11 to 17 mainly used disposable vapes in 2023. Northern Ireland's Young person's behaviour and attitude survey 2022 shows that 85.7% of 11 to 16 year olds in Northern Ireland who currently use e-cigarettes reported that they used disposables.

There are a range of policy options to tackle the environmental impact of single-use vapes, including improved product design, increasing access to responsible disposal options, public communication campaigns, as well as potential restrictions on single-use vapes.

The UK Government, Scotland and Wales are considering restrictions on the sale and supply of disposable vaping products (including non-nicotine vapes), including prohibiting the sale of these products, due to the environmental impacts of disposable vapes. Northern Ireland will consider measures relating to disposable vapes following this consultation.

The approach to the enforcement of any restrictions would be a matter for individual nations, with civil sanctions such as fixed penalty notices being the preferred enforcement mechanism where appropriate.

Question

Do you agree or disagree that there should be restrictions on the sale and supply of disposable vapes?

That is, those that are not rechargeable, not refillable or that are neither rechargeable nor refillable.

- Agree
- Disagree
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

The Council agrees that the sale and supply of disposable vapes should be prohibited. Disposable vapes are particularly used by children and young people due to their accessibility, ease of use and cost.

It is important that urgent measures are put in place to prevent the continued environmental impact of disposable vapes made from hard to recycle components and containing lithium batteries.

Question

Do you agree or disagree that restrictions on disposable vapes should take the form of prohibiting their sale and supply?

- Agree
- Disagree
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe that disposable vapes should be prohibited from being sold and supplied. There are alternative types of vapes available for those using vaping as a tool to quit smoking. The vast majority of young people and children who vape use disposable vapes due to their accessibility, ease of use and cost.

Banning disposable vapes completely would also be the most effective longer term environmental solution as well as removing the most popular type of vape for young people from the supply chain.

Question

Are there any other types of product or descriptions of products that you think should be included in these restrictions?

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe it is crucial that any restriction should be clearly defined to include any novel and innovative products, including rechargeable disposables and limits should be placed on the amount of nicotine sold per pack.

Question

Do you agree or disagree that an implementation period for restrictions on disposable vapes should be no less than 6 months after the law is introduced?

- Agree
- Disagree
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Question

The Council believes that there should be a shorter limit of no greater than 3 months to sell through existing stock.

Are there other measures that would be required, alongside restrictions on supply and sale of disposable vapes, to ensure the policy is effective in improving environmental outcomes?

All disposable vapes should be banned and for those remaining on the market consideration should be given to implementing an Extended Producer Responsibility (EPR) scheme for Vapes and associated funding. This would then place responsibility for the end-of-life management of vape devices on manufacturers, encouraging them to design products with recycling in mind.

Safe storage at collection points and onward transportation to final end destinations should be given greater consideration.

Communications on disposal and recycling of Vapes should be clearer and readily available

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Non-nicotine vapes and other nicotine consumer products

Non-nicotine vapes

Non-nicotine vapes (or nicotine-free vapes) are covered by the General Products Safety Regulations (GPSR) 2005 in the UK.

Like nicotine vapes, they can come in liquid form to be used in a device or already contained as a liquid in a device. There are 3 categories of these types of non-nicotine vapes:

- shortfill and longfill vapes
- disposable (single-use) vapes
- alternative non-nicotine vapes

Alternative non-nicotine vapes are often advertised as wellness vapes. They are not currently subject to the same age restrictions or product standards as nicotine-containing vapes and there are some calls for non-nicotine vapes to be regulated in the same way as nicotine vapes.

There is evidence that children are accessing these products and the UK Government and devolved administrations want to prevent potential future health harms from non-nicotine vapes. Scotland has already introduced age of sale requirements for non-nicotine vapes.

So, the UK Government and the Welsh Government will seek to introduce legislation to prohibit the sale of non-nicotine vapes to under 18s as a first step to protect children from accessing and using these vapes. The Department of Health in Northern Ireland will consider measures relating to non-nicotine vapes to under 18s following this consultation.

The UK Government and devolved administrations are also interested in views on whether we should also impose further restrictions on non-nicotine vapes that we have outlined in this consultation for nicotine vapes.

Other nicotine consumer products

There are other consumer nicotine products in the UK market such as nicotine pouches. They are not regulated under the Tobacco and Related Products Regulations 2016 but by GPSR. There are no mandated age of sale restrictions in the UK, but the UK Government, Northern Ireland and Wales have regulatory making powers to mandate these.

Recent research on tobacco-free nicotine pouch use in Great Britain suggests that although nicotine pouch use is low among adults (0.26% or 1 in 400 users in Great Britain), it is more popular with younger and middle-aged men who also use other nicotine products and have a history of smoking. Northern Ireland's Young person's behaviour and attitudes survey 2022 shows that 4.8% of year 11 and year 12 pupils reported ever having used nicotine pouches in 2022.

Question

Do you have any evidence that the UK Government and devolved administrations should consider related to the harms or use of non-nicotine vapes?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Question

Do you think the UK Government and devolved administrations should regulate non-nicotine vapes under a similar regulatory framework as nicotine vapes?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe that non-nicotine vapes should be restricted in the same way as those containing nicotine. The long term health effects of vaping are currently unknown and they could act as gateway for users switching to nicotine containing vapes or even smoking cigarettes.

Ensuring that new restrictions are similar will also assist retailers in complying and enforcement officers in ensuring consistency.

Question

Do you have any evidence that the UK Government and devolved administrations should consider on the harms or use of other consumer nicotine products such as nicotine pouches?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Question

Do you think the UK Government and devolved administrations should regulate other consumer nicotine products such as nicotine pouches under a similar regulatory framework as nicotine vapes?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

Nicotine is highly addictive and as such all products should be regulated in the same way to prevent addiction and users moving onto other more harmful products.

Affordability

Price difference between vaping and smoking
There is currently a significant difference in price between vapes and tobacco products, in part because vapes are only subject to VAT, whereas tobacco has VAT and duty (at least a £7.87 duty on a packet of 20 cigarettes). Smoking is 3 times more expensive than vaping, and it is estimated that the average smoker in England could save around £670 per year from switching to vaping. This price differential is important, as it can encourage smokers to switch from cigarettes to vapes.
However, this also means that vapes are more readily accessible to young people and other non-smokers, especially disposable and refillable devices.

Cost of vapes

Disposable vapes are considerably cheaper to buy than other vape products. The most popular disposable vape among young people in 2022 was the Elf Bar, which costs around £5, compared to a reusable Elf Bar which costs around £8. Mod or tank devices vary in price, but are in the region of £40 to £50, with additional costs for the e-liquid.

Table 1: average cost of vapes across different product categories

Product category	Unit cost (average)
Disposable	£6
Reusable: pre-filled pod kits	£12
Reusable: vape kits (refillable cartridges)	£40

Duty and taxes on vapes

Fifteen European countries including Germany and Italy have introduced a national tax on vapes and Canada has introduced a vaping duty. American research on the intended and unintended effects of e-cigarette taxes on youth tobacco use shows that taxes on vapes are associated with reductions in vaping, but at the potential risk of increasing youth smoking.

The effect of increasing the prices of vapes

The majority of respondents in DHSC's youth vaping call for evidence (64%) said price increases would reduce the demand for vapes. Thirty-six per cent of respondents said vapes are affordable and within the average child's buying power and that price has a significant impact on the appeal of vapes, with a further 22% stating that disposable vapes specifically are affordable.

A quarter of respondents thought there was a risk that price increases may have a negative impact on smoking cessation progress, given the use of vapes as an aid to quit smoking. Eleven per cent of respondents stated that the price differential between vapes and cigarettes increased the appeal of vaping.

Policy considerations

This consultation covers a range of measures to reduce the appeal and availability of vapes to children. To support this agenda, the UK Government thinks that there is a strong case to take action on affordability and so is exploring options, including a new duty on vapes as other countries have done, while ensuring that there is a significant differential between duty on vapes and duty on tobacco products.

Question

Do you think that an increase in the price of vapes would reduce the number of young people who vape?

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

We believe that the price of vapes, particularly disposables, should be increased to prevent accessibility for young people. In addition there should be a restriction on price promotions on vapes by retailers.

Enforcement

A strong approach to enforcement is vital if the smokefree generation and youth vaping policy is to have real impact. Underage and illicit sale of tobacco, and more recently vapes, is undermining work to regulate the industry and protect public health.

In Stopping the start: our new plan to create a smokefree generation, additional steps were set out to clamp down on those illegally selling tobacco products and vapes to underage people and to prevent illicit products from being sold.

One of these measures is introducing new powers for local authorities to issue fixed penalty notices to enforce age of sale legislation for tobacco products and vapes in England and Wales.

In Scotland, local authorities already have powers to issue fixed penalty notices to retailers and individuals who commit an offence under the Tobacco and Primary Medical Services (Scotland) Act 2010. In Northern Ireland, there is local enforcement through the Tobacco Retailers Act (Northern Ireland) 2014. It is proposed that the existing enforcement regime would continue to apply to age of sale restrictions.

Introducing on the spot fines for underage sales

Local authorities take a proportionate approach to enforce age of sale restrictions on tobacco products and vapes, that reflects the level of offence committed. For example, in England, penalties can be escalated, starting with a warning through to a maximum fine of £2,500. In the case of the most serious or repeat offences, local authorities can apply for a court order to prevent the offending retailer from opening for a period of time.

The current penalty regime requires local authorities to prosecute the individual or business in question and for the individual or business in question to be convicted in a magistrates' court. Trading standards officers say this time-consuming court procedure limits their ability to issue fines and is a significant gap in their operational capabilities.

Question

Do you think that fixed penalty notices should be issued for breaches of age of sale legislation for tobacco products and vapes?

Powers to issue fixed penalty notices would provide an alternative means for local authorities to enforce age of sale legislation for tobacco products and vapes in addition to existing penalties.

- Yes
- No
- Don't know

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

In Northern Ireland we have the option of a Fixed Penalty Notice for the sale of tobacco products and it has been an efficient and effective way of dealing with people who sell to children.

Question

What level of fixed penalty notice should be given for an underage tobacco sale?

- £100
- £200
- Other

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

In Northern Ireland we currently have a £250 Fixed Penalty Notice for selling both tobacco products and vapes to children.

We believe that the fixed penalty amount should be £250 and recommend a sliding scale for FPNs with the amount increasing for repeat offenders. In addition we support the introduction of an offence for non-payment of a FPN.

Question

What level of fixed penalty notice should be given for an underage vape sale?

- £100
- £200
- Other

Please explain your answer and provide evidence or your opinion to support further development of our approach. (maximum 300 words)

In Northern Ireland we currently have a £250 Fixed Penalty Notice for selling both tobacco products and vapes to children.

We believe that the fixed penalty amount should be £250 and recommend a sliding scale for FPNs with the amount increasing for repeat offenders. In addition we support the introduction of an offence for non-payment of a FPN.

How to respond

This consultation seeks feedback on the proposed measures, to inform future legislation. On youth vaping, there are a number of options proposed, to ensure the UK Government and devolved administrations take the most appropriate and impactful steps, building on existing evidence.

The consultation closes on 6 December 2023 at 11:59pm and you can respond via our online survey.

Lisburn & Castlereagh City Council

Section 75 Equality and Good Relations Screening template (Oct 2022)

Part 1. Information about the activity/policy/project being screened

Report for ESC on consultation completed by EHSU on
Creating a smokefree generation and talking youth vaping.

Name of the activity/policy/project

Consultation on Creating a smokefree generation of people

Is this activity/policy/project – an existing one, a revised one, a new one?

New

What are the intended aims/outcomes the activity/policy/project is trying to achieve?

Reporting on the likely impact of banning tobacco sales, including e-cigarettes to all those born after 2009 to create a generation of non-smokers.

Who is the activity/policy/project targeted at and who will benefit? Are there any expected benefits for specific Section 75 categories/groups from this activity/policy/project? If so, please explain.

It proposes methods of cigarette sales prevention, and targets everyone in the community.

Who initiated or developed the activity/policy/project?

DOH

Who owns and who implements the activity/policy/project?

Department of Health

Are there any factors which could contribute to/detract from the intended aim/outcome of the activity/policy/project?

Yes

If yes, give brief details of any significant factors.

These will be considered in the final legislation

Financial

Legal

Other

Who are the internal and external stakeholders (actual or potential) that the activity/policy/project will impact upon? Delete if not applicable

Everyone will be affected by the final legislation- if enacted

Staff

Service users

Other public sector organisations

Voluntary/community/trade unions

Other

Other policies/strategies/plans with a bearing on this activity/policy/project

Name of policy/strategy/plan	**Who owns or implements?**
All other Smoke free legislation	

Available evidence

What evidence/information (qualitative and quantitative) have you gathered or considered to inform this activity/policy? Specify details for each Section 75 category.

Have send draft response to all ESC elected members as the closing date of the consultation is the date of the ESC meeting.

Most up to date NISRA population data from Census 2021 (published 22/09/22)
Lisburn and Castlereagh Census Data

Section 75 Category	Details of evidence/information
Religious Belief	N/A
Political Opinion	"
Racial Group	"
Age	Will impact on those born after 2009
Marital Status	N/A
Sexual Orientation	"
Men & Women Generally	""
Disability	"
People with and without Dependants	"

Needs, experiences and priorities

Taking into account the information referred to above, what are the different needs, experiences and priorities of each of the following categories, in relation

to the particular activity/policy/decision? Specify details for each of the Section 75 categories

Section 75 Category	**Details of needs/experiences/priorities**
Religious Belief	N/A
Political Opinion	"
Racial Group	"
Age	"
Marital Status	"
Sexual Orientation	"
Men & Women Generally	"
Disability	"
People with and without Dependants	"

Part 2. Screening questions

1 What is the likely impact on equality of opportunity for those affected by this activity/policy, for each of the Section 75 equality categories?

Section 75 Category	**Details of likely impact – will it be positive or negative? If none anticipated, say none**	**Level of impact - major or minor*** - see guidance below
Religious Belief	**positive**	**major**
Political Opinion	"	"
Racial Group	"	"
Age	"	"
Marital Status	"	"

Sexual Orientation	"	"
Men & Women Generally	"	"
Disability	"	"
People with and without Dependants	"	"

* See Appendix 1 for details.

2(a) Are there opportunities to better promote equality of opportunity for people within the Section 75 equality categories?

Section 75 Category	IF Yes, provide details	If No, provide details
Religious Belief		No
Political Opinion		"
Racial Group		"
Age		"
Marital Status		"
Sexual Orientation		"
Men & Women Generally		"
Disability		"
People with and without Dependants		"

Equality Action Plan 2021-2025

Does the activity/policy/project being screened relate to an action in the Equality Action Plan 2021-2025? No

2(b) DDA Disability Duties (see Disability Action Plan 2021-2025)

Does this policy/activity present opportunities to contribute to the actions in our Disability Action Plan:

- to promote positive attitudes towards disabled people?
- to encourage the participation of disabled people in public life?

No

3 To what extent is the activity/policy/project likely to impact on good relations between people of different religious belief, political opinion or racial group?

Good Relations Category	**Details of likely impact. Will it be positive or negative?** [if no specific impact identified, say none]	**Level of impact – minor/major***
Religious Belief	Positive	
Political Opinion	"	
Racial Group	"	

*See Appendix 1 for details.

4 Are there opportunities to better promote good relations between people of different religious belief, political opinion or racial group?

Good Relations Category	**IF Yes, provide details**	**If No, provide details**
Religious Belief		no
Political Opinion		"
Racial Group		"

Multiple identity

Provide details of any data on the impact of the activity/policy/project on people with multiple identities. Specify relevant Section 75 categories concerned.

N/A

Part 3. Screening decision/outcome

Equality and good relations screening is used to identify whether there is a need to carry out a **full equality impact assessment** on a proposed policy or project. There are 3 possible outcomes:

1) **Screen out** - no need for a full equality impact assessment and no mitigations required because no relevance to equality, no negative impacts identified or only very minor positive impacts for all groups. This may be the case for a purely technical policy for example.
2) **Screen out with mitigation** - no need for a full equality impact assessment but some minor potential impacts or opportunities to better promote equality and/or good relations identified, so mitigations appropriate. Much of our activity will probably fall into this category.
3) **Screen in for full equality impact assessment** – potential for significant and/or potentially negative impact identified for one or more groups so proposal requires a more detailed impact assessment. [See Equality Commission guidance on justifying a screening decision.]

Choose only one of these and provide reasons for your decision and ensure evidence is noted/referenced for any decision reached.

Screening Decision/Outcome	**Reasons/Evidence**
Option 1 **Screen out** – no equality impact assessment and no mitigation required [go to Monitoring section]	Due to the positive effects of the consultation it has been screened out
Option 2 **Screen out with mitigation** – some potential impacts identified but they can be addressed with appropriate mitigation or some opportunities to better promote equality and/or good relations identified [complete mitigation section below]	
Option 3	

Screen in for a full Equality Impact Assessment (EQIA) [If option 3, complete timetabling and prioritising section below]	

Mitigation (Only relevant to Option 2)

Can the activity/policy/project plan be amended or an alternative activity/policy introduced to better promote equality of opportunity and/or good relations?

If so, give the **reasons** to support your decision, together with the proposed changes/amendments or alternative activity/policy and ensure the mitigations are included in a revised/updated policy or plan.

No

Timetabling and prioritising for full EQIA (only relevant to Option 3)

If the activity/policy has been **'screened in'** for full equality impact assessment, give details of any factors to be considered and the next steps for progressing the EQIA, including a proposed timetable.

Is the activity/policy affected by timetables established by other relevant public authorities? Yes/No. If yes, please provide details.

Part 4. Monitoring

Public authorities should consider the guidance contained in the Commission's Monitoring Guidance for Use by Public Authorities (July 2007).

Effective monitoring will help a public authority identify any future adverse impact arising from the activity/policy which may lead the public authority to conduct an equality impact assessment, as well as help with future planning and activity/policy development.

What will be monitored and how? What specific equality monitoring will be done? Who will undertake and sign-off the monitoring of this activity/policy and on what frequency?

N/A

Part 5 - Approval and authorisation

	Position/Job Title	**Date**
Screened by: Brona Turley	Env Manager	04.12.23
Reviewed by:	Equality Officer	
Approved by:		

Note: On completion of the screening exercise, a copy of the completed Screening Report should be:

- approved and 'signed off' by a senior manager responsible for the activity/policy
- included with Committee reports, as appropriate
- sent to the Equality Officer for the quarterly screening report to consultees, internal reporting and publishing on the LCCC website
- shared with relevant colleagues
- made available to the public on request.

Evidence and documents referenced in the screening report should also be available if requested.

Appendix 1 – Equality Commission guidance on equality impact

*Major impact:

a) The policy/project is significant in terms of its strategic importance;
b) Potential equality matters are unknown, because, for example, there is insufficient data upon which to make an assessment or because they are complex, and it would be appropriate to conduct an equality impact assessment in order to better assess them;
c) Potential equality and/or good relations impacts are likely to be adverse or are likely to be experienced disproportionately by groups of people including those who are marginalised or disadvantaged;
d) Further assessment offers a valuable way to examine the evidence and develop recommendations in respect of a policy about which there are concerns amongst affected individuals and representative groups, for example in respect of multiple identities;
e) The policy is likely to be challenged by way of judicial review;
f) The policy is significant in terms of expenditure.

Minor impact

a) The policy is not unlawfully discriminatory and any residual potential impacts on people are judged to be negligible;
b) The policy, or certain proposals within it, are potentially unlawfully discriminatory, but this possibility can readily and easily be eliminated by making appropriate changes to the policy or by adopting appropriate mitigating measures;
c) Any asymmetrical equality impacts caused by the policy are intentional because they are specifically designed to promote equality of opportunity for particular groups of disadvantaged people;
d) By amending the policy there are better opportunities to better promote equality of opportunity and/or good relations.

No impact (none)

a) The policy has no relevance to equality of opportunity or good relations;
b) The policy is purely technical in nature and will have no bearing in terms of its likely impact on equality of opportunity or good relations for people within the equality and good relations categories.

Lisburn & Castlereagh City Council

Committee:	Environment & Sustainability
Date:	3rd January 2024
Report from:	Head of Service (Acting) - Environmental Health, Risk and Emergency Planning

Item for:	Decision
Subject:	E-cigarette Test Purchasing Exercise Fixed Penalties

1.0 **Background and Key Issues**

1. Under the Nicotine Inhaling Products (Age of Sale and Proxy Purchasing Regulations (Northern Ireland) 2021, officers from the Environmental Health, Risk and Emergency Planning Unit conducted 2 Test Purchase exercises, one on 30th October 2023 and the second on 2nd November 2023.

2. Pre-visit correspondence was issued to all appropriate retailers and a visit carried out to each of the targeted businesses before the test purchase was carried out.

3. A total of 36 premises were surveyed. Of these, 5 premises sold nicotine-inhaling products to the 15-year-old volunteer.

4. All premises which were targeted in the exercise were subsequently visited as outlined in the Test Purchasing guidelines. In line with the Council's Enforcement Policy, a written warning will be issued to all premises which failed the survey containing recommendations to prevent future non-compliance. These premises will also be surveyed during the next Test Purchase exercise.

5. Officers have noted an increase in the number of complaints received in relation to the sale of nicotine products to children under the age of 18 years and are aware of the evidence now available regarding the health problems caused by young people vaping.

6. In light of the findings from the recent Test Purchase exercises and having regard to the increasing health issues linked to vaping, Members are asked to consider implementing a zero tolerance approach to be applied to the sale of nicotine products to children under the age of 18 years and that in these cases, a Fixed Penalty Notice of £250.00 should be issued to the business owner/seller for any detected offences where products are sold.

2.0 **Recommendation**

It is recommended that the Test Purchase report is noted by Members. It is further recommended that Members:-

(a) Approve a Fixed Penalty Notice of £250.00 be issued to any business owner/seller for offences of sale.

(b) Impose a zero tolerance approach be applied to the sale of nicotine products to a child under the age of 18 years

3.0 **Finance and Resource Implications**

There may be the potential for an increase in income related to the issue of any Fixed Penalties.

4.0 **Equality/Good Relations and Rural Needs Impact Assessments**

4.1	Has an equality and good relations screening been carried out?	Yes
4.2	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out. Screening completed (attached as **Appendix 3 EH**)- Screened out as Test Purchasing applies to every business within the City.	
4.3	Has a Rural Needs Impact Assessment (RNIA) been completed?	No
4.4	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out. Not required – operation procedure update only.	

Appendices:	**Appendix 3 EH**	-	Equality Screening document.

Lisburn & Castlereagh City Council

Section 75 Equality and Good Relations Screening template (Oct 2022)

Part 1. Information about the activity/policy/project being screened

Report to ESC on test purchasing exercise.

Name of the activity/policy/project

Report on recent test purchasing exercise.

Is this activity/policy/project – an existing one, a revised one, a new one?
The activity is repeated quarterly.

What are the intended aims/outcomes the activity/policy/project is trying to achieve?

Compliance with The Nicotine Inhaling Products (Age of Sale and Proxy Purchasing) Regulations (NI) 2021

Who is the activity/policy/project targeted at and who will benefit? Are there any expected benefits for specific Section 75 categories/groups from this activity/policy/project? If so, please explain.

Everyone in the district will benefit from non-sale of e-cigs to children.

Who initiated or developed the activity/policy/project?

The Tobacco Task Group in NI.

Who owns and who implements the activity/policy/project?

It is a legislative requirement.

Are there any factors which could contribute to/detract from the intended aim/outcome of the activity/policy/project?

No

If yes, give brief details of any significant factors.

Financial

Legal

Other

Who are the internal and external stakeholders (actual or potential) that the activity/policy/project will impact upon? Delete if not applicable

Staff

Service users

Other public sector organisations

Voluntary/community/trade unions

Other

Other policies/strategies/plans with a bearing on this activity/policy/project

Name of policy/strategy/plan	**Who owns or implements?**
Council Enforcement policy	All Council departments

Available evidence

What evidence/information (qualitative and quantitative) have you gathered or considered to inform this activity/policy? Specify details for each Section 75 category.

All premises which sell tobacco products are subjected to the Test Purchasing exercise at some stage each year.

Most up to date NISRA population data from Census 2021 (published 22/09/22)
Lisburn and Castlereagh Census Data

Section 75 Category	Details of evidence/information
Religious Belief	
Political Opinion	
Racial Group	
Age	
Marital Status	
Sexual Orientation	
Men & Women Generally	
Disability	
People with and without Dependants	

Needs, experiences and priorities

Taking into account the information referred to above, what are the different needs, experiences and priorities of each of the following categories, in relation to the particular activity/policy/decision? Specify details for each of the Section 75 categories

Section 75 Category	Details of needs/experiences/priorities
Religious Belief	All needs considered
Political Opinion	"
Racial Group	""
Age	"
Marital Status	"
Sexual Orientation	"
Men & Women Generally	"
Disability	"
People with and without Dependants	"

Part 2. Screening questions

1 What is the likely impact on equality of opportunity for those affected by this activity/policy, for each of the Section 75 equality categories?
Every section taken into consideration when the legislation was enacted.

Section 75 Category	Details of likely impact – will it be positive or negative? If none anticipated, say none	Level of impact - major or minor* - see guidance below
Religious Belief	Positive	
Political Opinion	"	
Racial Group	"	
Age	"	

Marital Status	"	
Sexual Orientation	"	
Men & Women Generally	"	
Disability	"	
People with and without Dependants	"	

* See Appendix 1 for details.

2(a) Are there opportunities to better promote equality of opportunity for people within the Section 75 equality categories?

Section 75 Category	IF Yes, provide details	If No, provide details
Religious Belief		All premises will be visited in the course of the year
Political Opinion		
Racial Group		
Age		
Marital Status		
Sexual Orientation		
Men & Women Generally		
Disability		
People with and without Dependants		

Equality Action Plan 2021-2025

Does the activity/policy/project being screened relate to an action in the Equality Action Plan 2021-2025? No

2(b) DDA Disability Duties (see Disability Action Plan 2021-2025) [new]

Does this policy/activity present opportunities to contribute to the actions in our Disability Action Plan:

- to promote positive attitudes towards disabled people?
- to encourage the participation of disabled people in public life?

No

3 To what extent is the activity/policy/project likely to impact on good relations between people of different religious belief, political opinion or racial group?

More health opportunities for all as under age sale of tobacco products prevented.

Good Relations Category	**Details of likely impact. Will it be positive or negative?** [if no specific impact identified, say none]	**Level of impact – minor/major***
Religious Belief		N/A
Political Opinion		
Racial Group		

*See Appendix 1 for details.

4 Are there opportunities to better promote good relations between people of different religious belief, political opinion or racial group?

Good Relations Category	**IF Yes, provide details**	**If No, provide details**
Religious Belief		N/A
Political Opinion		
Racial Group		

Multiple identity

Provide details of any data on the impact of the activity/policy/project on people with multiple identities. Specify relevant Section 75 categories concerned.

Part 3. Screening decision/outcome

Equality and good relations screening is used to identify whether there is a need to carry out a **full equality impact assessment** on a proposed policy or project. There are 3 possible outcomes:

1) **Screen out** - no need for a full equality impact assessment and no mitigations required because no relevance to equality, no negative impacts identified or only very minor positive impacts for all groups. This may be the case for a purely technical policy for example.
2) **Screen out with mitigation** - no need for a full equality impact assessment but some minor potential impacts or opportunities to better promote equality and/or good relations identified, so mitigations appropriate. Much of our activity will probably fall into this category.
3) **Screen in for full equality impact assessment** – potential for significant and/or potentially negative impact identified for one or more groups so proposal requires a more detailed impact assessment. [See Equality Commission guidance on justifying a screening decision.]

Choose only one of these and provide reasons for your decision and ensure evidence is noted/referenced for any decision reached.

Screening Decision/Outcome	**Reasons/Evidence**
Option 1 **Screen out** – no equality impact assessment and no mitigation required [go to Monitoring section]	No impact on any section of the community more than any other. All sections will benefit.
Option 2 **Screen out with mitigation** – some potential impacts identified but they can be addressed with appropriate mitigation or some opportunities to better promote equality and/or good relations identified [complete mitigation section below]	

Option 3 **Screen in** for a full Equality Impact Assessment (EQIA) [If option 3, complete timetabling and prioritising section below]	

Mitigation (Only relevant to Option 2)

Can the activity/policy/project plan be amended or an alternative activity/policy introduced to better promote equality of opportunity and/or good relations

If so, give the **reasons** to support your decision, together with the proposed changes/amendments or alternative activity/policy and ensure the mitigations are included in a revised/updated policy or plan.

Timetabling and prioritising for full EQIA (only relevant to Option 3)

If the activity/policy has been **'screened in'** for full equality impact assessment, give details of any factors to be considered and the next steps for progressing the EQIA, including a proposed timetable.

Is the activity/policy affected by timetables established by other relevant public authorities? Yes/No. If yes, please provide details.

Part 4. Monitoring

Public authorities should consider the guidance contained in the Commission's Monitoring Guidance for Use by Public Authorities (July 2007).

Effective monitoring will help a public authority identify any future adverse impact arising from the activity/policy which may lead the public authority to conduct an equality impact assessment, as well as help with future planning and activity/policy development.

What will be monitored and how? What specific equality monitoring will be done? Who will undertake and sign-off the monitoring of this activity/policy and on what frequency? Please give details:

Part 5 - Approval and authorisation

	Position/Job Title	**Date**
Screened by: Brona Turley	EH Manager	04.12.23
Reviewed by:	Equality Officer	
Approved by:		

Note: On completion of the screening exercise, a copy of the completed Screening Report should be:

- approved and 'signed off' by a senior manager responsible for the activity/policy
- included with Committee reports, as appropriate
- sent to the Equality Officer for the quarterly screening report to consultees, internal reporting and publishing on the LCCC website
- shared with relevant colleagues
- made available to the public on request.

Evidence and documents referenced in the screening report should also be available if requested.

Appendix 1 – Equality Commission guidance on equality impact

*Major impact:

a) The policy/project is significant in terms of its strategic importance;
b) Potential equality matters are unknown, because, for example, there is insufficient data upon which to make an assessment or because they are complex, and it would be appropriate to conduct an equality impact assessment in order to better assess them;
c) Potential equality and/or good relations impacts are likely to be adverse or are likely to be experienced disproportionately by groups of people including those who are marginalised or disadvantaged;
d) Further assessment offers a valuable way to examine the evidence and develop recommendations in respect of a policy about which there are concerns amongst affected individuals and representative groups, for example in respect of multiple identities;
e) The policy is likely to be challenged by way of judicial review;
f) The policy is significant in terms of expenditure.

Minor impact

a) The policy is not unlawfully discriminatory and any residual potential impacts on people are judged to be negligible;
b) The policy, or certain proposals within it, are potentially unlawfully discriminatory, but this possibility can readily and easily be eliminated by making appropriate changes to the policy or by adopting appropriate mitigating measures;
c) Any asymmetrical equality impacts caused by the policy are intentional because they are specifically designed to promote equality of opportunity for particular groups of disadvantaged people;
d) By amending the policy there are better opportunities to better promote equality of opportunity and/or good relations.

No impact (none)

a) The policy has no relevance to equality of opportunity or good relations;
b) The policy is purely technical in nature and will have no bearing in terms of its likely impact on equality of opportunity or good relations for people within the equality and good relations categories.

Lisburn & Castlereagh City Council

Committee:	Environment & Sustainability
Date:	3rd January 2024
Report from:	Head of Service (Acting) - Environmental Health, Risk and Emergency Planning

Item for:	**Noting**
Subject:	Consultation on Proposed Updated Guidance on Crematoria

1.0 **Background and Key Issues**

1. This Consultation was issued by the Department for the Environment, Food and Rural Affairs (DEFRA), in association with the devolved administrations, and seeks views on the proposed guidance that will replace the existing crematoria guidance PG5/2(12). The response and proposed guidance are included in the **Appendix 4EH and 5EH** of this report.

2. Lisburn & Castlereagh City Council has been contacted directly for comment having a crematoria at Roselawn, Belfast and operated by Belfast City Council.

3. 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) to ensure pollutant emissions and impacts to the environment are minimised. It is a priority to reduce emissions of mercury and other key pollutants.

4. Therefore, a review process of the existing crematoria guidance PGN (5/12) has taken place that has led to the agreed standards in the proposed new guidance, which is included in **Appendix 4EH and 5EH** of this report.

5. The proposed revised guidance sets new standards that will improve the environmental performance of the crematoria industry and substantially reduces the environmental impact of the cremation sector through its emissions to air.

6. LCCC's response to the consultation, which is attached in **Appendix 4EH,** has been returned and will be considered before the adoption of the final updated guidance**.**

2.0 **Recommendation**

It is recommended that Members note the response to DEFRA's consultation on the proposed updated guidance for crematoria.

3.0 **Finance and Resource Implications**

None.

4.0 **Equality/Good Relations and Rural Needs Impact Assessments**

4.1	Has an equality and good relations screening been carried out?	No
4.2	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out.	No associated equality impact

4.3	Has a Rural Needs Impact Assessment (RNIA) been completed?	No
4.4	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out.	No associated rural needs impact

Appendices:	**Appendix 4 EH** – Consultation Response **Appendix 5 EH** – Proposed Guidance

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

We are the Department for Environment, Food and Rural Affairs. We're responsible for improving and protecting the environment, growing the green economy, sustaining thriving rural communities and supporting our world-class food, farming and fishing industries.

We work closely with our 33 agencies and arm's length bodies on our ambition to make our air purer, our water cleaner, our land greener and our food more sustainable. Our mission is to restore and enhance the environment for the next generation, and to leave the environment in a better state than we found it.

This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at

consultation.coordinator@defra.gov.uk

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? Lisburn & Castlereagh City Council

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. Should operators be allowed to use bypass mode during periods when the cremators are being serviced as long as no cremations are carried out and they can prove that all other operationals standards are being met.

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

Substance	Emission limit value	Applies to existing or new cremators	Averaging period
Particulate matter	5 mg/Nm3	New	Note 4
Hydrogen chloride (HCl)	30 mg/Nm3	Existing	Note 4
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. As NOx has not been monitored previously it is unknown whether our permitted premises would comply with the ELV so it is difficult to know if the limit is suitable. However, from working with the premises I would imagine they would be compliant at present or would be compliant by the end of the four year implementation.

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

Environmental permitting technical guidance PG5/2(23)

Reference document for crematoria

1. Legal status

1.1 This technical guidance applies to the whole of the UK. It is issued by the Secretary of State, the Welsh Ministers, the Scottish Government and the Department of Agriculture, Environment and Rural Affairs in Northern Ireland (DAERA).

1.2 This is 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 this guidance.

This guidance will be taken into account when determining any appeals against a decision made under this legislation.

The cremation of human remains is an activity listed for regulation as follows:

- England and Wales: EPR, Schedule 1, Section 5.1, Part B, (b)
- Scotland: PPC-S, Schedule 1, Section 5.1, Part B, (c)
- Northern Ireland: PPC-NI, Schedule 1, Section 5.1, Part C, (b)

In England, Wales and Northern Ireland, crematoria are regulated by the relevant local authority and in Scotland by the Scottish Environmental Protection Agency (SEPA).

1.3 This technical guidance supersedes:

- PG5/2(12), Statutory Guidance for Crematoria
- The following AQ Notes are also superseded.
  - AQ1(05)
  - AQ9(06)
  - AQ12(05)
  - AQ19(07)
  - AQ23(05)

2. Scope

2.1 This guidance applies to the cremation of human remains in:

- new cremators
- existing gas fired and electric fired cremators, with or without the abatement of emissions to air
- standby cremators
- temporary cremators
- small-scale cremators

Note: Abatement in this context means flue gas treatment.

2.2 **Available Fuels**

At the time of publication, the overwhelming majority of cremators currently in operation in the UK are fuelled using gas, either natural gas or LPG (liquefied petroleum gas). There are only a few cremators which can use both gas and liquid fuels. Some temporary cremators use only liquid fuels. Also, there are a small number of electric cremators, which with one exception have been installed during the past 3 years.

There is a growing focus on the more efficient use of existing fuels, the use of new fuels e.g., biogas, hydrogen, and liquid biofuels and their environmental impacts. The composition of natural gas could also change with the addition of up to 20% hydrogen into the supply network.

The recent increase in electric cremators is partly motivated by the reducing carbon intensity of the electricity network and it is expected that more will be installed in the next few years.

Thus, in the future, cremators will likely use a more diverse range of fuels and so where reference is made in this guidance to new crematoria, this applies to all new cremators regardless of fuel type. Where reference is made to existing crematoria, this applies to gas fired and electric cremators currently in operation.

2.3 **Cremator Types**

2.3.1 In this guidance a new cremator is one that first comes into operation from 1st January 2024. An existing cremator is one that is not a new cremator.

2.3.2 A stand-by cremator is one that is permanently retained for use in the event of breakdown of the main cremator(s) or other occasional need (excluding small-scale cremators) for additional cremator capacity at the crematoria.

Stand-by cremators, which are not fitted or connected to flue gas treatment, shall operate for no more than 100 hours in any calendar year. In general, stand-by cremators should meet all the standards which apply to unabated cremators. This is described in more detail later in the guidance.

The term stand-by cremator is not to be confused with a temporary cremator.

2.3.3 A temporary cremator is 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.

Where an unabated temporary cremator, replaces a cremator with flue gas treatment and is required to operate for more than 100 hours, an assessment of the impact on local ambient air quality (see Section 4.4.2) shall be made as part of the permit variation application.

From 1st January 2024, if the temporary cremator is installed as additional capacity or is intended to be in service for more than one calendar year, it shall meet the standards for new cremators.

2.3.4 A small-scale cremator is one that is retained specifically to cremate stillbirth, neonatal and foetal remains. Small-scale cremators will have a door opening which is a maximum of 300 x 300 mm and the primary chamber will be no more than 1,000 mm long.

Not all the standards for full scale cremators are appropriate for small-scale cremators because of the relatively small mass of pollutants emitted. This is described in more detail later in the guidance.

2.4 Process Description

2.4.1 Cremators comprise of a primary and a secondary combustion chamber. Both chambers have a refractory lining to retain the heat and to protect temperature sensitive equipment. The coffin containing the deceased is placed into the primary chamber through a doorway at one end of the primary chamber. Loading can be done manually or may be partly automated.

In current gas fired cremators, there is usually a single burner installed within the primary chamber which directs a flame at the coffin. Although cremators can have more than one burner in a range of configurations. The direction of the flame can be controlled to a limited extent by adjusting the injection of the combustion air.

As the fuels used diversify, a key technology will be burners which can utilise a range of different fuels, e.g., biofuels, hydrogen, and natural gas / hydrogen blends.

In electric cremators, there are a number of adjustable electrical heating elements (typically 6), which indirectly heats the primary chamber to above the auto-ignition temperature. No additional fuel is added, but air must be added to sustain combustion.

2.4.2 Cremation is a batch process consisting of (excluding pre-heating and shutdown) the steps shown in Table 2.1.

Indicative timings for existing gas cremators are shown in table 2.1. Total cremation times may vary considerably, ranging from as little as 50 minutes to more than 2 hours, depending upon body size.

Cremation times on recently installed electric cremators are longer, but there is insufficient data to make a direct comparison.

Table 2.1 Steps in the cremation process

Process Step	Typical time required (gas cremators)
brief "flash" caused by volatilisation of the veneer on the outside of the coffin	1 minute
burning of the coffin	20 minutes
after the coffin breaks open, burning of the coffin and cremation of the body	40 minutes
calcination of the remains (when there are no flames from the remains at the end of the cremation)	30 minutes
ashing	2 minutes although times may vary

2.4.3 The purpose of the secondary combustion chamber is to provide sufficient temperature and residence time for the complete oxidation of all the gaseous products of combustion in the primary chamber. In gas cremators, typically a single supplementary burner is installed to maintain the temperature of the secondary chamber if needed, although cremators can have more than one secondary burner. In electric cremators, electrical heating elements are used. In both cases, the retained heat from the primary combustion chamber is often sufficient to maintain temperature. Supplementary air is added to ensure there is sufficient oxygen present to complete the combustion process.

2.4.4 The raking of the ashes into a suitable container can be from either end of the primary chamber based on the design. The remains are then taken to a cremulator where they are processed for return to the family of the deceased. Cremulators are compact pieces of equipment fitted with a small filter which can vent internally or externally to the building. Care is needed when moving the remains from the primary chamber to the cremulator to avoid generating dust.

2.5 Flue Gas Treatment

2.5.1 At the time of publication, approximately 70% of cremations in the UK were carried out in cremators fitted with a flue gas treatment system.

Flue gas treatment was originally introduced to reduce emissions to air of mercury, which arise from dental amalgam. However, the flue gas treatment system is also effective at reducing emissions of dust (particulate matter), acid gases and dioxins.

The principle of the system is the injection of reagents into the flue gas, usually a mixture of sodium bicarbonate or lime and activated carbon. The sodium bicarbonate or lime reacts with the acidic gases and the carbon

absorbs mercury and dioxins. The spent reagent is then filtered out of the air stream using a bag or ceramic filter.

Using a different design, the flue gas first passes through a bag or ceramic filter to remove particulates and then the filtered gases pass through a fixed bed of sodium bicarbonate or lime and activated carbon to remove acid gases, mercury and dioxins. In this system, the reagents in the fixed bed need to be replaced before they become fully spent or saturated.

Note: both these forms of flue gas treatment require the combustion gases first to be cooled. This need to cool the exhaust gases is an opportunity to recover heat, usually in the form of hot water, for use, e.g., in heating buildings.

Flue gas treatment is commonly referred to in the industry simply as 'abatement'. Cremators without flue gas treatment are referred to as 'unabated cremators'.

2.5.2 However, flue gas treatment does not remove nitrogen oxides (NO_X). More recently, some equipment providers have started to provide a NO_X abatement option using a process of selective non-catalytic reduction (SNCR). The use of this technique is currently quite limited but is becoming more widespread. This is referred to as 'NO_X abatement' or 'SNCR'.

2.6 Not in Scope

The following activities and techniques are not in the scope of the guidance:

- Spreading of the ashes (remains)
- (Alkaline) hydrolysis
- Burials and composting techniques
- Open pyres
- Animal cremation

All the above are outside the scope of the regulated activity "the cremation of human remains" as described in the Regulations – see section 1.2. In the case of alkaline hydrolysis, this is a relatively new technique that does not have emissions to air and therefore does not come within scope of Part B regulation.

The disposal of spent reagent from flue gas treatment equipment, waste dust ash processing and recovered medical implants is not in scope of the guidance as this is covered by other waste regulation.

2.7 Notes on Who is the Operator

2.7.1 Local Authority is both Operator and Regulator

In circumstances, where the local authority is both the operator and regulator of a crematoria, it must have robust processes in place to ensure that the

regulatory function is separate from and independent of the operational function.

Local Authorities must carry out their regulatory duties in the same fair, consistent and transparent manner as for any operator of any other permit.

2.7.2 Remote Operation of Crematoria

The Regulations state that the operator is the legal entity who has control over the operation of the regulated facility. The following 5 tests are generally used by National Regulators (e.g., in England, The Environment Agency) to help determine who should be the operator, thereby the permit holder, in cases where this may not be clear cut. Typically, the operator will:

- have day-to-day control of the facility or activity, including the manner and rate of operation
- make sure that permit conditions are complied with
- have managerial responsibility over staff and ensure staff competency
- make investment and financial decisions that affect the facility's performance or how the activity is carried out
- make sure the activities are controlled in an emergency

Since the publication of the previous guidance in 2012, there has been an increasing trend to more detailed remote monitoring by the equipment provider and in some instances, the ability to control remotely some aspects of the cremation process. This has the potential to improve operational control, diagnose and correct problems before they lead to performance issues.

Whilst it is unlikely that the scale and extent of external monitoring by the equipment provider is sufficient to make them the operator, regulators may want to keep this under review. The owner of the permit is ultimately responsible for compliance with the permit. This is regardless of whether any activities at the installation are delegated to second and third parties.

In any event, should an offence committed by the operator be due to the act or default of some other person, that other person may also be guilty of the offence and can be proceeded against by the regulator, whether or not proceedings for the offence are taken against the operator.

3. Using this guidance

3.1 General conditions

3.1.1 This guidance describes what are considered the best available techniques (BAT) for the activities within its scope. This guidance also, where appropriate, gives details of any mandatory requirements affecting emissions to air, such as those contained in other regulations or in Directions from the Government.

In the case of this note, at the time of publication this includes:

- Environmental Protection (England) (Crematoria Mercury Emissions Burden Sharing Certificate) Direction 2010 which came into force on 18th March 2010;
- Environmental Protection (Crematoria Mercury Emissions) (Wales) Direction 2010 which came into force on 19th April 2010.

However, arising from the changes in this guidance, these Directions will cease to have effect from 1st January 2024 for new and replacement cremators, and from 1st January 2027 for all cremators.

Note: there are no Directions in force for Scotland or Northern Ireland.

3.1.2 Unless otherwise stated, the provisions of this guidance are generally applicable.

3.1.3 The techniques in this guidance are neither prescriptive nor exhaustive. Other techniques may be used as long as they ensure at least an equivalent level of environmental protection.

3.1.4 Sections 4 and 5 set out emission limit values and other matters that should be considered for inclusion in environmental permits.

3.1.5 However, in each case the regulator may need to consider variable factors such as the configuration, size and other individual characteristics of the crematoria, as well as the locality (e.g., its proximity to particularly sensitive receptors).

3.1.6 After assessing BAT and the environmental impact of emissions to air, permit conditions, including emission limit values, may need to be tighter than those set out in this guidance. In individual cases, it may be justified to:

- include additional conditions
- include different conditions
- not include conditions relating to some of the matters indicated

3.2 **Timetable for compliance and permit reviews**

3.2.1 For new crematoria, the permit shall have regard to the full standards of this guidance from the first day of its operation following the completion of commissioning.

Replacement cremators, other than temporary cremators (see Section 2.3.3), shall be designed to meet the standards specified for new crematoria.

3.2.2 For substantially changed crematoria, e.g., replacement of the main cremation unit, or retrofit of flue gas treatment to an unabated cremator, the permit shall have regard to the full standards of this guidance with respect to the parts of the crematoria that have been substantially changed and any part of the crematoria affected by the change, from the first day of operation following the completion of commissioning. Renewing or replacing the refractory lining of the cremator is not a substantial change.

3.2.3 All crematoria permits shall be reviewed no later than 31st December 2025 or earlier where new, replacement or temporary cremators are installed, or where cremators are substantially changed.

In circumstances where the crematoria remains operational during improvement works, the use of stand-by and / or temporary cremators may need to form part of the project plan. The need to vary permit conditions to maintain compliance with the relevant performance standards through all the changes in operation should form part of the project plan.

This guidance contains all the provisions from previous editions which have not been amended or removed. For existing crematoria, the regulator should have already issued or varied the permit having regard to the previous editions of this guidance.

If regulators have not done so, this should be done as soon as possible, without waiting until 31st December 2025, as part of the next permit review.

3.2.4 Where provisions in the preceding guidance note have been deleted or relaxed, permits should be varied as necessary as part of the next permit review.

3.3 **Mercury Abatement (Flue Gas Treatment)**

3.3.1 Unless meeting one of the exemption criteria in paragraph 3.3.2:

- From 1st January 2024, all new and replacement cremators will be fitted with flue gas treatment that includes mercury abatement.
- From 1st January 2027, all cremators will be fitted with flue gas treatment that includes mercury abatement. Otherwise, their operation will be limited to 100 hours per calendar year.

3.3.2 Flue gas treatment will not be required in the following limited circumstances:

- Standby cremators, whose operation will be limited to 100 hours in any calendar year
- Where, temporary cremators replace an unabated cremator, their operation will be limited to a maximum of one calendar year.
- Small-scale cremators, i.e., cremators designed and built for infants and foetal remains.
- Exceptionally, for existing cremators, where the retrofitting of flue gas treatment is not technically possible due to limitations of space combined with the inability to expand, because development is restricted due to it being a listed building or building an extension would require exhumation.

Where there are technical or logistical problems that might delay completing the retrofit or replacement of an unabated cremator until after 1st January 2027, Operators must raise these problems with their regulator as soon as they become known. Regulators may grant a short delay where these problems are outside the control of the Operator.

3.3.3 Operators of existing cremators intending not to fit flue gas treatment, due to limitations of space combined with the inability to expand, will be required to present evidence that this is not technically possible for assessment by their regulator.

All such crematoria will also be required to carry out an assessment of the impact of emissions to air on local air quality for approval by their regulator.

Where the regulator is satisfied on both counts, the regulator may allow a derogation from the need to fit flue gas treatment for up to 6 years, after which the situation will be reassessed. A condition on reapplication will be included in the permit.

Where the regulator is not satisfied on either count, the regulator may restrict operations or even revoke the permit as necessary.

3.3.4 For existing unabated cremators, the requirement to participate in a burden sharing arrangement will remain in place until 31st December 2026, with a final report made to the regulator no later than 1st April 2027.

3.4 Standby cremators

3.4.1 Standby cremators may be brought into operation subject to the following conditions:

- The standby cremator must be included in the environmental permit and be clearly identified.
- The regulator must be notified, in advance where possible, 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, i.e., a cremation must not be started once 100 hours have elapsed.
- The number of hours operating standby cremators shall be reported to the regulator.

Note: the calculation of 100 operational hours shall exclude periods of pre-heat prior to the start of operation, and any period needed to complete a cremation begun before the 100-hour operational limit has been reached. However, it will include the period between successive cremations carried out on the same day.

In addition:

- The operator shall make visual and olfactory assessments of emissions at the start and at least once during each cremation cycle; the location and result of the assessment shall be recorded in the log.
- If a standby cremator is in operation when emissions testing takes place, the emissions testing will include the standby cremator. Emissions testing shall not be rescheduled or postponed just because the standby cremator is in operation. Emissions to air from the standby cremator shall not exceed any of the relevant emission limit values.

In all other respects, standby cremators must meet the requirements set out in this guidance. Specifically, the standby cremator must comply with the operational controls described in Section 4.1.2, i.e., for temperature in the secondary combustion chamber, and for oxygen and carbon monoxide at the exit of the secondary combustion chamber.

3.5 Small-scale cremators

3.5.1 Small-scale cremators are those developed to cremate stillbirth, neonatal and foetal remains. Some of the requirements of this guidance are not appropriate for such small-scale cremators because of the relatively small mass of pollutants emitted, and the likely absence of mercury.

- Small-scale cremators are not required to fit flue gas treatment.
- Emission limit values for emissions to air do not apply to small-scale cremators.
- Emissions monitoring of small-scale cremators is not required.

In all other respects, small-scale cremators must meet the requirements set out in this guidance. Specifically, the small-scale cremator must comply with the operational controls described in Section 4.1.2.

Where the small-scale cremator is a standalone facility, i.e., not part of an otherwise regulated facility, emissions may be considered trivial and with the agreement of the regulator, will not require a permit.

3.5.2 When stillbirth, neonatal or foetal remains are cremated in other types of cremators (including standby cremators), the guidance for those cremators will still apply. However, because of the shorter cremation times, it is not recommended to carry out emissions monitoring during such cremations.

4. Emission limits, monitoring and other provisions

4.1 Operational Controls

4.1.1 Control over the combustion conditions is of fundamental importance in preventing and controlling emissions to air.

Combustion conditions shall be controlled as described below. The key controls are the combustion temperature and residence time of the combustion gases in the secondary combustion chamber, along with the concentration of carbon monoxide and excess oxygen at the exit of the secondary combustion chamber.

4.1.2 Residence time in the secondary combustion chamber shall be demonstrated by calculation at the design stage and verified at commissioning. Verification may require the temporary installation of additional thermocouples. The residence time requirement should be verified at the operating temperature of the secondary combustion chamber and that temperature must exceed the values set out below.

Table 4.1 Operational Controls

Substance / 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% v/v	All	
	Minimum of 3% v/v	All	5-minute averages throughout the whole of each cremation.
Temperature of secondary combustion chamber	Minimum of 850˚C	Unabated cremators	
	Minimum of 800˚C	All other cremators (Note 3)	
Residence time of secondary combustion chamber (Note 5)	Minimum of 2 seconds	All	

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.

4.1.3 For cremators fitted with flue gas treatment, conditions different to those set out in Table 4.1 as regards 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 all such circumstances.

4.1.4 When re-bricking a cremator, the convolutions of the secondary combustion chamber should be maintained, if it is changed or modified to impact the original design, the volume of the chamber shall be recalculated and reverified.

4.1.5 Some cremators are fitted with an automated shutdown feature, so that the last cremation of the working day can be completed unsupervised. Engaging this function carries a degree of risk that equipment malfunction or unexpected difficulties with the cremation could occur during this period. Therefore, when using this feature, the operator must be satisfied that the cremation has proceeded to a point where this risk is minimal, e.g., the cremation has reached the calcination stage.

4.2 Emissions Monitoring

4.2.1 Emissions of the substances listed in Tables 4.2 and 4.3 must, where relevant, be controlled. The emission limit values and provisions described in this section are achievable using the best available techniques described in Section 5.

4.2.2 Operators shall monitor emissions using the standard specified in Tables 4.2 and 4.3 or an equivalent method agreed by the regulator.

Whilst there are no emission limits for nitrogen oxides or mercury emissions from unabated cremators, operators shall make measurements of emissions and report these to the regulator, to provide emissions data for these substances, e.g., for local air quality purposes and to provide data for future guidance reviews.

Table 4.2 Emission monitoring standards for continuous monitoring

<table>
<tr><th>Substance or Parameter</th><th>Standards</th><th>Calibration Standards (Note 1)</th></tr>
<tr><td>Particulate matter (Note 2)</td><td>EN 15859</td><td rowspan="3">EN 17389</td></tr>
<tr><td>Carbon monoxide</td><td rowspan="2">EN 15058
EN 14789</td></tr>
<tr><td>Oxygen</td></tr>
<tr><td>Temperature</td><td colspan="2">Calibration shall be traceable to national standards</td></tr>
<tr><td colspan="3">Note 1: Instrument calibration to be carried out by making parallel measurements using the relevant reference methods at least once a year. The operator must inform the regulator about the results.
Note 2: Applies to unabated cremators only.</td></tr>
</table>

For crematoria with flue gas treatment, the operator shall install a filter leak detection device that will operate continuously. The instrument shall detect

filter leaks that would be likely to lead to an exceedance of the particulate matter emission limit value in Table 4.5.

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
PCDD/F	EN 1948, Parts 1, 2 and 3	Once every 3 years (Notes 1 and 2)
Mercury	EN 13211	Once every year
HCl	EN 1911	Once every year
TOC	EN 12619	Once every year
NO_X (NO and NO_2 as NO_2) (Note 3)	EN 14792	Once every year
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 1st January 2024. Note 4: Only where NO_X abatement is installed. To measure ammonia slip associated with the SNCR process.		

Where reference is made to a British, European, or International Standard (BS, CEN or ISO) in this section, the standards referred to are correct at the date of publication.

Standards are periodically amended, updated, or replaced so you should check. Further information on monitoring can be found in Environment Agency publications Monitoring stack emissions: measurement locations - GOV.UK (www.gov.uk) and Monitoring stack emissions: techniques and standards for periodic monitoring - GOV.UK (www.gov.uk).

4.2.3 From 1st January 2024, monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme shall be accredited to EN ISO/IEC 17025. In England and Wales, accreditation to MCERTs will show this accreditation.

4.2.4 The regulator may require more frequent monitoring than that set out in Table 4.3 or continuous monitoring, based on the impact of emissions on local air quality or other sensitive receptors.

4.2.5 Whether sampling on a continuous or non-continuous basis, care is needed in the design and location of sampling systems to ensure representative samples for all emissions. This means that:

- sampling points on new crematoria should be designed to comply with the relevant standards Monitoring stack emissions: measurement locations - GOV.UK (www.gov.uk).
- the operator should ensure that stacks or ducts are fitted with facilities for sampling that allow compliance with the sampling standards.

- where this is not possible, e.g., in older cremators which were designed to fit into an existing building, deviations from the standard must be reported as well as an estimation of the increased uncertainty in the monitoring results.

A safe and permanent means of access to the test ports shall be provided, to enable the sampling/monitoring specified in Table 4.3 to be carried out.

4.2.6 Where monitoring is not in accordance with the main requirements of the relevant standard, deviations from the standard shall be reported as well as an estimation of any error invoked.

4.2.7 When sampling for polychlorinated dibenzo dioxins and furans, where it is not possible for the sampling point to be located such that the temperature of the flue gases is below 200°C, such as in an unabated cremator – that is, outside the temperature range where reformation or de novo synthesis takes place - and remains so until discharge to atmosphere, the operator should notify the regulator of the minimum temperature at which the measurement can practically be made, and the reason why this cannot be below 200°C before sampling takes place.

4.2.8 Where continuous monitoring is required for any substance or parameter, it should be carried out as follows:

- All continuous monitoring readings should be on display to appropriately trained operating staff.
- Instruments should be fitted with a visual alarm to warn the operator of abatement equipment failure or instrument malfunction. Regulators should decide whether additionally to specify an audible alarm, having regard to, amongst other things, the likelihood of the visual alarm not being noticed, and the intrusiveness of any such alarm for those using the crematorium.
- The activation of alarms should be automatically recorded.

4.3 Emission Limit Values

4.3.1 All activities shall comply with the emission limits in Tables 4.4 and 4.5.

The reference conditions for emission limits are: 273.1K, 101.3kPa, 11% oxygen v/v, dry gas unless otherwise stated.

Compliance will be assessed using an average value of three consecutive measurements of 60 minutes each, as described below unless otherwise stated.

4.3.2 Cremation is a batch process as described in paragraph 2.4.2 and Table 2.1.

Emissions monitoring for compliance purposes should only occur during adult cremation.

A common reference is needed for compliance monitoring across all types of cremators. The initial stage has too short a duration for sampling of

emissions. It is also not practical to sample emissions during the ashing phase, as the turbulence caused by the open ash door may bias the results. For cremators with flue gas treatment, the emissions will be strongly influenced by the performance of the abatement equipment. Therefore, for these cremators, emission limits are set on a concentration basis only. For unabated cremators, emission limits for some substances have an alternative mass release limit, which are meant to be broadly equivalent.

Emissions are expected to peak during the first hour of the process. Thus, a common reference of one hour starting approximately 2 minutes following the closure of the cremator door is used for unabated cremations and cremations where the flue gas treatment system serves a single cremator.

In the circumstances where 2 or 3 cremators are served by a common flue gas treatment system, it is not possible to set the emissions monitoring period as described above, as each cremator is likely to be at a different part of the process. In such cases, the monitoring period should commence to coincide with the start of cremation in one of the units with the operating status of the other unit(s) carefully recorded. The other unit(s) should operate as normal during this period.

4.3.3 Emissions monitoring should commence as soon as a stable air flow is established following closure of the cremator door. Typically, this will be 2 minutes into the cremation process. Emissions monitoring shall then continue for a period of one hour. For unabated cremators, if the coffin is breached before emissions monitoring begins, or if the cremation is completed (other than ashing) within one hour from the start of monitoring, then the test shall be void and done again. For cremators with flue gas treatment, if any cremator connected to the flue gas treatment system ceases operation during the monitoring period, then the test will be invalidated and done again.

Table 4.4 Emission Limit Values for unabated cremators

Substance	**Emission Limit Value** (Note 1)	**Averaging period**
Particulate matter	80 mg/Nm^3 or 120 g	As an average concentration between 2 minutes and 62 minutes from the start of each cremation or as a total mass emission over the same time period.
HCl	60 mg/Nm^3 or 100 g	
TOC	20 mg/Nm^3	As an average concentration between 2 minutes and 62 minutes from the start of each cremation.
NO_X (NO and NO_2 as NO_2)	No limit applies	

Substance	Emission Limit Value (Note 1)	Averaging period
Mercury	No limit applies	As an average concentration over 3 cremations between 2 minutes and 62 minutes from the start of each cremation.
PCDD/F (Note 2)	1 ng/Nm^3 or 4.5 µg	As an average concentration over 3 cremations between 2 minutes and 62 minutes from the start of each cremation or as a total mass emission over the same time period.
Note 1: Where an emission limit value is expressed both as a concentration or a mass, the operator chooses whether the mass or the concentration limits apply, and the regulator should then specify those limits in the permit. Note 2: A longer monitoring period may be needed where emissions are very low, and the monitoring uncertainty is high as a proportion of the measured value.		

Table 4.5 Emission Limit Values for all other cremators

Substance	Emission Limit Value	Existing or New Cremators	Averaging period
Particulate matter	10 mg/Nm^3	Existing	As an average concentration over 3 x 60 minutes as described in sections 4.3.2 and 4.3.3.
	5 mg/Nm^3	New	
HCl	30 mg/Nm^3	Existing	
	20 mg/Nm^3	New	
TOC	20 mg/Nm^3	Existing	
	10 mg/Nm^3	New	
NO_X (NO and NO_2 as NO_2)	200 mg/Nm^3 (Note 3)	All	
NH_3 (Note 1)	No limit applies		
Mercury	50 µg/Nm^3	Existing	
	30 µg/Nm^3	New	
PCDD/F (Note 2)	0.1 ng/Nm^3	All	
Note 1: Only where NO_X 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 1st January 2027.			

4.3.4 Dilution air may be added for waste gas cooling or improved dispersion where this is shown to be necessary because of the operational constraints of the crematoria. Dilution air should have no effect on the assessment of compliance with emission limit values.

4.3.5 For all cremators, the remains in the cremator should only be moved when calcination is completed.

- Particular care is needed in the removal of ash and non-combustible residues from an unabated cremator to prevent dust emissions via the flue.
- Cremated remains should be moved and allowed to cool before they are processed in the cremulator (ash processor). Processed remains must be stored in a covered container.

If an automated shutdown process is used at the end of a working day, this will take place at the start of the next working day.

4.3.6 Cremulators must be fitted with suitable exhaust filters and a gross filter failure detection device, e.g., differential pressure measurement, which must operate continuously when the cremulator is in use.

Particulate emissions from cremulators so equipped should be insignificant and may be vented internally or externally, no emission limits apply.

4.4 Chimney or Stack Height

4.4.1 Pollutants emitted via a chimney or stack require sufficient dispersion and dilution in the atmosphere to ensure that the resultant ground level concentrations are acceptable in terms of their impact on health and environment.

Historically, stack heights have been calculated using HMIP Technical Guidance Note (Dispersion) D1. However, this dates from 1993 and so is 30 years old. In any event, D1 should be viewed as a dated methodology for calculating stack height. It is not a method for assessing pollutant dispersion and its effects on ambient air quality.

Whatever method is used to determine the stack height (and efflux velocity), an assessment of the impact of emissions on local ambient air quality shall be carried out. For new crematoria, this should form part of the permit application. For existing crematoria, this should be done at permit review.

4.4.2 To assess the impact on local ambient air quality, assessment tools such as the Environment Agency's H1 software tool or air dispersion modelling are required. https://www.gov.uk/government/collections/risk-assessments-for-specific-activities-environmental-permits#H1-software-tool

The H1 software tool is a simplified modelling tool which uses a precautionary approach to calculate a predicted maximum ground level pollutant concentration. It can be used to screen out emissions which are insignificant.

To screen out a substance so that you do not need to do any further assessment of it, the Process Contribution (PC) must meet both of the following criteria:

- the short-term PC is less than 10% of the short-term environmental standard

- the long-term PC is less than 1% of the long-term environmental standard

If you meet both criteria no further assessment of the substance is required.

Where this is not the case, a more detailed assessment of those pollutants will be necessary. This will include the use of background data to determine the Predicted Environmental Concentration (PEC) and could include the use of more sophisticated air dispersion modelling.

Assessments should ordinarily be carried out on the basis that emissions to air are at the maximum permitted level. Where there are no ELVs in place emissions monitoring data can be used.

In circumstances where 2 or 3 cremators discharge through a common chimney, the assessment should be based on the operating scenario which results in the highest predicted ground level concentrations.

4.4.3 Previous versions of the crematoria guidance have not included any reference to emissions of nitrogen oxides. As a result, it is likely that the dispersion of NO_X emissions was not considered when designing the stack height of existing crematoria.

Where necessary, the emission limit values in Table 4.4 or 4.5 may need to be reduced by the regulator for existing crematoria to ensure the impact is acceptable. For new crematoria, the stack height may be increased to ensure the impact is acceptable.

4.4.4 For crematoria with flue gas treatment, each treatment unit can have one flue plus an emergency release vent (ERV) for each cremator connected to the system. As the ERV should only be used very infrequently, an air quality impact assessment of the ERV is not needed if the ERV stack is at least the same height as the main stack or greater.

4.4.5 The exit (efflux) velocity from the stack shall be sufficient to prevent aerodynamic downwash of the discharge plume. Dispersion modelling may be used to justify the efflux velocity under normal operating conditions.

To ensure dispersion is not impaired by either low exit velocity at the point of discharge, or deflection of the discharge, a cap, or other restriction, should not be used at the stack exit. However, a cone may sometimes be useful to increase the exit velocity to achieve greater dispersion.

4.4.6 Liquid condensation on internal surfaces of stacks and exhaust ducts might lead to corrosion and ductwork failure or to droplet emission. Adequate insulation will minimise the cooling of waste gases and prevent liquid condensation by keeping the temperature of the exhaust gases above the dewpoint. A leak in a stack/vent and the associated ductwork, or a build-up of material on the internal surfaces may affect dispersion. Flues and ductwork

should be cleaned to prevent the accumulation of materials, as part of the routine maintenance programme.

4.5 Visible and Odorous Emissions

4.5.1 Emissions from cremators shall in normal operation be free from visible smoke. All releases to air shall be free from persistent visible emissions, other than condensed water vapour. All releases to air should be free from droplets.

There shall be no odorous emissions as perceived by the regulator.

4.5.2 During other than normal operation, the operator shall make periodic visual and olfactory assessments of emissions, including at the start of and during a cremation cycle, when the location and result of the assessment shall be recorded in the log.

4.6 Energy consumption and carbon emissions

4.6.1 The UK has made a commitment to achieve net zero carbon emissions by 2050.

4.6.2 Carbon emissions at crematoria arise from fuel and electricity use. They also arise from the combustion of the coffin (including fittings) and cremation of the deceased. Small quantities of other greenhouse gases (nitrous oxide, N_2O) can also arise from combustion of coffins and from NO_X abatement.

Carbon emissions can be reduced through improved energy efficiency and through minimising the weight of coffins. To achieve the full potential of these techniques, changes to working practices are likely to be needed. These are explored further in Sections 5.4 to 5.6.

The combination of electrical cremators in combination with decarbonisation of the electricity supply has the potential to reduce carbon emissions at crematoria. The replacement of fossil fuels with sustainable biofuels will also reduce carbon emissions, depending on the accounting methodologies used. Carbon capture or use of hydrogen as a fuel are not currently available techniques for crematoria.

Better data is needed on energy consumption and on carbon emissions to support further work in this area.

4.6.3 Carbon emissions are however a key environmental issue for the sector, and it is important these emissions are measured. Therefore, fuel and electricity consumption shall 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.

- From 1st January 2024, all new and replacement cremators will be fitted with appropriate fuel and electricity metering.

- From 1st January 2027, all cremators will be fitted with appropriate fuel and electricity metering.

Fuel and electricity consumption can be converted into carbon dioxide emissions using standard publicly available emission factors. Carbon intensity data is available for different fuels used; data is also available for electricity drawn from the national grid. Carbon intensity data on electricity is updated from time to time. https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting

Data on the carbon content of coffins may be less freely available. However, data on different coffin materials and types should be available through either the FSA (Funeral Suppliers Association) or DMAG (Deceased Management Advisory Groups). This should include data on carbon from renewable naturally occurring raw materials and embedded carbon arising from the manufacturing process. Funeral directors should pass sufficient information to crematoria operators for them to include in calculations. Where possible data should be referenced to a relevant standard.

Carbon emissions from the deceased shall be excluded from calculations of carbon emissions.

Further work is needed on developing emission factors for N_2O emissions, so these should be excluded from calculations at the present time.

4.6.4 Operators of crematoria shall report on an annual basis their carbon emissions from fuel, electricity consumption, coffins including any fittings, but not including the deceased.

Reports will include a justification of the calculation methodology used and references to relevant sources of data, including emission factors. Emissions will be reported as both total mass emissions (kg) and the average mass of emissions per cremation.

4.7 Consumables and Waste Materials

4.7.1 Waste residues collected from inside the flue gas treatment equipment must be disposed of in accordance with waste legislation.

Dusty materials, dusty wastes and wastes containing mercury shall be contained.

4.7.2 Records shall be kept of all wastes sent for recycling or disposal. Specifically, a record shall be kept of the consumption of flue gas treatment reagents.

4.8 Reporting and notifications

4.8.1 Good communication between the crematoria operator and their regulator is essential for an effectively regulated facility.

4.8.2 The operator shall keep records of all inspections, tests, monitoring and visual assessments. The records should be:

- kept on site
- kept by the operator for at least two years; and
- made available for the regulator to examine on request.

If any records are kept off-site, they shall be made available for inspection within one working week of any request by the regulator.

4.8.3 Where an operator intends to carry out periodic emissions monitoring, they shall notify the regulator in sufficient time, (typically 14 to 21 days) so that they can decide whether to observe the testing.

4.8.4 The operator shall submit the results of all periodic emissions testing to their regulator within a timescale and format agreed with the regulator. This shall be no more than 8 weeks from the date of the test, except if there is a non-compliance, see Section 4.8.6.

Note: DEFRA will produce a recommended format for local authority regulators in England to use.

4.8.5 The operator shall also report operational monitoring data, within a timescale, frequency and format agreed with the regulator. These reports must include:

- the number of occasions on which an operating limit in Section 4.1.2 has not been achieved for any parameter in that table
- the recorded values of all substances and parameters listed in Table 4.1 for each of those occasions.

4.8.6 The operator must restore compliance in the shortest possible time, in the event of any:

- non-compliance with any emission limit value
- malfunctions and breakdown of the plant that leads to abnormal operating conditions, e.g., operation of the flue gas treatment bypass
- complaints about odour or smoke.

To restore compliance, the operator shall:

- notify their regulator within 24 hours of receiving the information
- agree the investigation of the issue with their regulator
- undertake the agreed investigation
- adjust the process or activity to minimise those emissions
- if applicable, re-test to demonstrate compliance as soon as possible
- promptly record the events and actions taken
- submit to the regulator, reports and updates as agreed

4.9 Failure of Flue Gas Treatment Equipment

4.9.1 Emergency relief vents (ERV) or bypass systems should not normally be used when cremation is underway, or during maintenance. The ERV/bypass should only be used:

- when the heat removal equipment has failed, and the equipment would otherwise be damaged; or
- during start up and shutdown; or
- due to short term power interruptions.

4.9.2 Where there is a failure of the heat removal equipment during a cremation, that cremation shall be completed operating in bypass mode.

Similarly, where there is an equipment malfunction which does not trigger the ERV or bypass system during a cremation, that cremation shall be completed.

Until the failed system is repaired, the cremator may continue to be operated in bypass mode, 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.

In unusual and unexpected circumstances, where the use of an ERV is likely to exceed 100 hours, an assessment of the impact on local ambient air quality (see Section 4.4.2) shall be made prior to the 100-hour limit being reached.

4.9.3 The number of hours operating in bypass mode shall be reported to the regulator.

5. Best Available Techniques

5.1 Environmental Management

Name of Technique:		Environmental Management System (EMS)
Pollutant(s) Targeted:	Principal pollutant:	All pollutants
	Other pollutants:	

Principle of Operation:

Effective management is central to environmental performance; it is an important component of BAT and of achieving compliance with permit conditions. All crematoria operators must ensure that the management of environmental performance is embedded within their management system whether by adopting published standards (e.g., ISO 14001) or by setting up an environmental management system (EMS) tailored to the nature and size of the crematorium. As a minimum this will include:

- Commitment, leadership, and accountability for the environmental performance of the facility.
- Procedures and processes in place for achieving full compliance with all environmental permit conditions.
- Setting objectives and setting targets for the continual improvement of environmental performance, measuring progress, and revising the objectives and targets according to results.
- Improving energy and resource efficiency
- Managing risks under normal operating conditions and in accidents and emergencies.
- Proper management, supervision and training of staff.
- Proper use of equipment.
- Effective preventative maintenance of equipment.

Training

Staff at all levels must have the necessary training and instruction in their duties relating to control of the process and emissions to air. As a minimum, this shall include:

- awareness of their responsibilities under the environmental permit
- steps that are necessary to minimise emissions during start up and shutdown
- actions to take when there are abnormal conditions, or accidents.

The Crematorium Technicians Training Scheme operated by the Institute of Cemetery and Crematorium Management should be appropriate for this purpose, as should the Training and Examination Scheme for Crematorium Technicians which is run by the Federation of Burial and Cremation Authorities.

The operator shall maintain a statement of the training requirements for each post and keep a record of the training received by each person. These documents shall be made available to the regulator on request for inspection.

Maintenance

Effective preventative maintenance is a key part in achieving compliance with emission limits and other provisions. All aspects of the process including all plant, buildings and the

equipment concerned with the control of emissions to air should be properly maintained. A well-maintained cremator will have:

- Written inspection, maintenance and cleaning programmes and schedules. This should include regular operator checks (daily, weekly or by number of cremations), maintenance by the service engineer, as well as periodic replacement of some items, e.g., brickwork. Cleaning of cremator ducts and flues are considered part of preventative maintenance.
- The inspection and maintenance regime must include all parts of the equipment, instrumentation and control, whose malfunction could have an impact on emissions to air.
- Planned and preventative maintenance can be time based or condition based, all maintenance work should be recorded. Maintenance records shall be made available to the regulator on request for inspection.

Achievable Performance:	Implementation of an EMS will support achieving a good level of environmental performance.

Cross Media Effects:

An EMS provides a good framework for managing environmental impact across all media (i.e., air, water, and land).

Technical Considerations relevant to applicability:

Regulators should use their discretion, in consultation with individual operators, in agreeing the appropriate level of environmental management.

Economic Information:

Effective management should ensure costs are controlled.

Driving Force for Implementation:

Good management control over emissions.

5.2 Good Combustion Control

Name of Technique:		Good combustion control
Pollutant(s) Targeted:	Principal pollutant:	Volatile organic compounds, Particulates (dust)
	Other pollutants:	Carbon monoxide, Odour, PAHs, PCDD/F

Principle of Operation:

To minimise and control emissions to air of CO and unburnt substances from crematoria, BAT is to ensure an optimised combustion.

Optimised combustion is achieved by good design and operation of the equipment, including:

- A primary combustion chamber into which the coffin and deceased are cremated.
- A secondary combustion chamber which ensures the complete oxidation of all gaseous compounds passing from the primary combustion chamber.

The cremator is designed in such a way that the gaseous products of combustion from the primary combustion chamber are held in the secondary combustion chamber at a sufficiently high temperature for a sufficiently long time to ensure they are completely oxidised.

The cremator is designed to achieve a minimum residence time in the secondary combustion chamber of 2 seconds at the operating temperature, and this is verified at commissioning. The secondary combustion chamber starts after the last injection of combustion air and ends where the temperature drops below the relevant minimum value set out in Section 4.1.2 of this guidance. The temperature is measured at the start and end of the secondary combustion zone and both values must exceed the minimum value.

Residence time in the secondary combustion chamber should be demonstrated at commissioning. This may require the temporary installation of additional thermocouples. The residence time requirement should be verified at the operating temperature of the secondary combustion chamber and that temperature must exceed the relevant minimum value set out in Section 4.1.2 of this guidance.

Unabated cremators should also be designed in such a way as to minimise the risk of entrainment of particulate matter by the gas flows.

Achievable Performance:	The main control is to ensure oxygen concentrations achieve the minimum conditions set out in Table 4.1. Carbon monoxide is a key indicator of incomplete combustion and should also be controlled below the level set out in Table 4.1. Controlling CO emissions will minimise emissions of unburnt organic compounds including PAH and PCDD/F, which are much more difficult to monitor. There is limited data available on PCDD/F emissions. For gas fired cremators fitted with flue gas treatment, emissions in the range 0.0004 to 0.014 ng/Nm^3 were reported (5 data points). For electric cremators, emissions in the range 0.006 to 0.018 ng/Nm^3 were reported. No data was reported for unabated cremators.

Technical Considerations relevant to applicability:

The cremator should be designed and operated in order to prevent the discharge of smoke or fumes during loading of a coffin into the primary combustion chamber.

The charging system shall be interlocked to prevent the loading of a coffin into the primary combustion chamber unless the secondary combustion chamber temperature exceeds that specified for good combustion in the permit.

The cremator and all ductwork should be made and maintained gas tight if under positive pressure to prevent the escape of gases from the ductwork or cremator to the air.

When re-bricking a cremator, the convolutions of the secondary combustion chamber should be maintained, the volume of the chamber may need to be recalculated and residence time reverified.

Economic Information:

Cost effective operation of crematorium equipment.
Driving Force for Implementation:
Good operational control of the cremation process.
Example Plants:
All cremators use this technique.

5.3 Flue Gas Treatment

Name of Technique:		Flue Gas Treatment, Mercury Abatement or Dry Scrubbing Process
Pollutant(s) Targeted:	Principal pollutant:	Mercury
	Other pollutants:	Dioxins and furans, acid gases and particulate matter
Principle of Operation:		
Mercury is highly volatile and therefore almost exclusively passes into the flue-gas stream. Mercury is only partially removed with particulate matter. The rest remains in the flue gases as volatile compounds. This technique involves the injection of activated carbon into the flue gas upstream of a bag filter or another dedusting device. Mercury is adsorbed onto the reagent in the flue gas stream and where barrier filters such as bag filters are used, is retained on the bag surface. Benefits include the reduction of mercury emissions to air by adsorption on activated carbon which also adsorbs dioxins. Bag filters also provide a means of dust and metals removal. It is normal for alkaline reagents to be added with the carbon which then allows the reduction of acid gases in the same process step as a multifunctional device. Alternatively, a fixed bed or cartridge of activated carbon and alkaline reagent can be installed downstream of a bag filter.		
Achievable Performance:	Operational aspects are similar to other situations where bag filters are used. Effective bag filter and reagent injection system maintenance is particularly critical for achieving low emission levels. Where a fixed bed or cartridge is used, reagents must be replaced sufficiently frequently to prevent pollutant breakthrough. Mercury is adsorbed (usually at about 95 % removal efficiency) to result in emissions to air below 30 µg/Nm^3.	
Cross Media Effects:		
The cross-media effects are similar to those for other situations where bag filters are used. The energy consumption of bag filters is a significant aspect. In addition, for this technique		

the most significant cross-media effect is the production of residues contaminated with the removed pollutant (mercury). Cremators should be designed in such a way that the exhaust gases are rapidly cooled prior to flue gas treatment to prevent de novo synthesis (formation) of dioxins.
Technical Considerations relevant to applicability:
The applicability of bag filters is discussed in the section on particulate matter removal. Activated carbon injection is generally applicable to new and existing plants. The fire risk is significant with activated carbon. The adsorbent is normally mixed with either sodium bicarbonate or hydrated lime. The effectiveness of adsorbent materials may be reduced if used after expiry of the shelf life of the material.
Economic Information:
Mercury abatement is normally combined with the abatement of acid gas and particulate matter and so capital, installation and maintenance cost information generally relate to the whole system. Additional operating costs are from reagent consumption and disposal of residues as hazardous waste.
Driving Force for Implementation:
Cost-effective reduction of mercury emissions to air.
Example Plants:
Widely used throughout the UK.
Reference Literature:
References not included as they relate to waste incineration.

5.4 Energy Efficient Operation

Name of Technique:		Efficient Operation
Pollutant(s) Targeted:	Principal pollutant:	CO_2 and NO_X
	Other pollutants:	
Principle of Operation:		
To optimise the consumption of energy: • Record the quantity of fuel and electricity consumed for each cremator or cremator/ flue gas treatment equipment combination. • Carry out as many consecutive cremations as possible. • Operate equipment for the longest possible period between start up and shutdown.		

• Minimise periods of idling, i.e., downtime between cremations when the equipment is kept hot, but is not operational. • Fit and maintain high standards of insulation materials to minimise heat losses. • Fit and maintain flue sealing dampers to minimise heat losses when the cremators are idle. • Fit heat recovery. See technique on energy recovery.	
Achievable Performance:	Industry data indicates that gas consumption drops from around $10m^3$ per cremation for 2 cremations to $<5m^3$ per cremation for 6 or more consecutive cremations in the same operating period. Electric cremators operate differently in that they are maintained in a hot state even when non-operational. However, extended operation will also have energy efficiency benefits.
Cross Media Effects:	
Electricity consumption may reduce emissions of carbon dioxide at the crematoria, depending on the carbon intensity of the supply.	
Technical Considerations relevant to applicability:	
Applicable to all types of cremators. The ability to operate for long / extended periods with minimal down time may be limited locally by customer service needs and demand. All cremators with flue gas treatment will need to cool the exhaust gases for the treatment process to be effective, this is a heat recovery opportunity. At this scale of operation, heat will ordinarily be recovered as hot water.	
Economic Information:	
Efficient use of energy will reduce operating costs.	
Driving Force for Implementation:	
• High cost of energy. • Reducing greenhouse gas and NO_X emissions • Reducing operating costs	
Example Plants:	
The most efficient use of energy will occur where equipment is operated 7 days per week, 24 hour per day, such as may be the case in direct cremation. At traditional crematoria, accepting short delays including overnight, between the funeral service and the cremation can facilitate improved scheduling to improve energy efficiency. Traditional crematoria may include some additional direct cremations within their schedule to improve energy efficiency.	

Note: Direct cremation is where the cremation process takes place separately from the funeral service, e.g., either before or in the absence of a funeral service.

5.5 Energy Recovery

Name of Technique:		Energy Recovery
Pollutant(s) Targeted:	Principal pollutant:	Carbon dioxide
	Other pollutants:	Other combustion related emissions
Principle of Operation:		
In crematoria with flue gas treatment, the energy recovered from cooling of the combustion gases prior to treatment is used, thereby displacing the energy that would otherwise have been needed for that purpose.		
Achievable Performance:	Examples of where recovered heat could be used are: • Preheat of primary and secondary combustion air. • Space heating e.g., hot water central heating of the chapel at the crematoria • Other heating e.g., greenhouses for horticulture • Electricity generation using an Organic Rankine Cycle generator	
Cross Media Effects:		
Improved overall energy efficiency		
Technical Considerations relevant to applicability:		
Secondary air coolers are always likely to be needed which can take the full heat load from the cremator as matching the heat supply with demand will always be problematic.		
Economic Information:		
Reducing energy costs should have economic benefits.		
Driving Force for Implementation:		
Energy saving		
Example Plants:		
• The crematorium at Redditch uses recovered heat to heat the swimming pool in the local Leisure Centre. • The crematorium at Huntingdon uses recovered heat in adjacent greenhouses.		

5.6 Control of Materials

Name of Technique:		Control of body bag and coffin construction materials (and other materials placed in the cremator)
Pollutant(s) Targeted:	Principal pollutant:	Nitrogen Oxides (NO_X), HCl, Dioxins and Furans
	Other pollutants:	Particulate Matter, CO_2 and N_2O

Principle of Operation:

The operating principle is prevention at source. The range of materials used for coffin or casket construction includes cardboard, wickerwork (made from willow) as well as wood composite board and solid wood. Shrouds are also available and may use natural fibres such as cotton, linen or wool.

- The weight of coffins should generally be optimised so that they provide sufficient strength and integrity to safely convey the deceased but minimise the quantity of additional 'fuel' for combustion. Resins with a high nitrogen content should be avoided.
- Materials to be avoided in coffin or casket construction, furnishings and body preparation/embalming include halogenates, metals (except steel screws and staples), wax and more than a thin layer of water based lacquer on wood.
- Where a body bag is used, halogenated polymers and those with a high nitrogen content must not be used in the production of body bags. Double and triple bagging of the deceased should not be carried out. Packaging for stillbirth, neonatal and foetal remains should not include any halogenated plastics.
- Similarly coffin handles, linings, clothing, and any personal effects placed in the coffin with the deceased must not contain polymers with a high halogen or nitrogen content (e.g., PVC or melamine).
- Cardboard coffins should not contain chlorine in the wet strength agent. (e.g., not using polyamidoamine-epichlorhydrin based resin (PAA-E).
- Materials used in coffins shall not produce ashes which may be sticky or cause fouling and slagging within the cremator.
- Coffins containing lead or zinc shall not be cremated

Reducing the additional fuel load to the cremator reduces NO_X formation in a number of ways:

- There is less material to combust, and the combustion is less intense which will reduce flame temperatures and so reduce the amount of thermal NO_X produced.
- There will be less nitrogen embedded in the fuel which is also converted to NO_X during the combustion process, e.g., nitrogen present in the construction materials, e.g., urea formaldehyde resins used in the production of some grades of MDF will be converted into NO or NO_2 during combustion.

Similarly, any chlorinated materials present will result in emissions of HCl during combustion. This will increase the emissions load on the flue gas treatment equipment. High levels of HCl increase the risk of dioxin formation during heat recovery.

Achievable Performance:	The operating principle is prevention at source. Reducing the thermal load and the avoidance of high nitrogen containing construction materials, or at least minimising the amount will reduce the amount of NO_X produced.

	NO_X reductions of around 66% and N_2O reductions of over 90% are claimed to be achievable by reducing the secondary fuel load at charging of the cremator. NO_X reductions of around 66% are comparable with the performance of SNCR (see Section 5.7.1)

Cross Media Effects:

Reducing the mass of coffins and the use of single body bags will not reduce the 'fuel load' to the cremator to the extent that it will result in increased fuel consumption.

Minimising the weight of the coffin will also reduce the emission load of particulates on the flue gas treatment equipment. If the reagent dosing rate needs to be increased to deal with an increased level of HCl, this will result in more spent reagent for disposal.

A small amount of nitrous oxide (N_2O) will also be produced during combustion of the coffin. N_2O is a very potent greenhouse gas (300 times that of CO_2). Minimising the coffin weight will therefore help limit the release of this highly potent greenhouse gas.

Accounting for the carbon content of coffin materials and / or body bags is dependent on factors such as the sustainability of the source materials, accounting for their processing into finished products, any associated transportation along the supply chain and the accounting methodology. This is not considered here, other than to make the obvious comment that whatever CO_2 equivalence is assigned by whatever accounting method, minimising the mass of the coffin will reduce the impact.

Technical Considerations relevant to applicability:

The choice of coffin materials is normally made by the bereaved in consultation with the funeral director and is a matter outside the direct control of the crematoria operator. Operators should advise funeral directors so that they may give appropriate guidance to their customers. Operators are unlikely to refuse to carry out a cremation, except in extreme circumstances.

Loading of coffins: Whilst many models of loaders are suitable for use with lightweight materials, some loaders do not handle the softer, more flexible materials very well and may require modification.

In some circumstances, there could be a risk of flash back when loading the coffin into the cremator if inappropriate materials are used. There is also anecdotal evidence of body bags inflating and bursting on loading into the cremator.

Economic Information:

- The cost of different coffin types and body bags is not a matter for the guidance.
- Coffin choice should not impact on fuel consumption but could lead to a small increase in reagent use.

Driving Force for Implementation:

- Minimising emissions of NO_X, particulates, acid gases, dioxins and furans.
- Reducing the impact of crematoria on local ambient air quality

• Minimising greenhouse gas emissions.
Example Plants:
• Applicable to all cremator types • Lightweight coffins are readily sourced and are widely used in the UK.
Reference Literature:
1. *Günther, Björn & Gebauer, Kathrin & Barkowski, Robert & Rosenthal, Michael & Bues, Claus-Thomas. (2012). Calorific value of selected wood species and wood products. European Journal of Wood and Wood Products. 70. 755-757. 10.1007/s00107-012-0613-z.* 2. https://epd-australasia.com/wp-content/uploads/2018/04/epd563-Medium-Density-Fibreboard-v1.1.pdf. 3. https://en.wikipedia.org/wiki/Heat_of_combustion 4. *P W Stephenson, P Cimbaly, D Simanovic, J Weber. Date of issue: April 2008 Stack Emission Survey – Casket Combustion Trial LifeArt Australia Pty Ltd Eastern Suburbs Memorial Park Matraville, NSW Project no.: 3868/S11913A/07* 5. *https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-fifth-edition-volume-i-chapter-10-wood-products-0* 6. *Davies & Co.* 7. Nitrogen Oxides (NOx) | Air Pollution Information System (apis.ac.uk)

5.7 Emerging Techniques

An emerging technique is one which has the potential to provide either a higher level of environmental protection, or the same level of environmental protection in a more cost-effective manner, compared with existing best available techniques.

5.7.1 Selective Non-Catalytic Reduction (SNCR)

Name of Technique:		Selective Non-Catalytic Reduction
Pollutant(s) Targeted:	Principle pollutant:	NO_X – Nitrogen oxides, NO and NO_2
	Other pollutants:	
Principle of Operation:		
Nitrogen oxides arise from combustion (thermal NO_X) and from nitrogen that may form part of the materials being burned in the cremator. In the SNCR process, ammonia or urea is injected into the furnace to reduce NO_X emissions. Ammonia reacts with nitrogen oxide to produce nitrogen and water. Where urea is used, the urea first reacts to produce ammonia and CO_2 with the ammonia then reacting with nitrogen oxide. Nitrogen oxide is a precursor to nitrogen dioxide; thus the technique is effective at reducing emissions of both NO and NO_2. The reaction between ammonia and nitrogen oxide is most effective between 850 ˚C and 950 ˚C which is typically the temperature achieved in the secondary combustion chamber. SNCR is an established technique in other sectors but is included here as an emerging technique because its application to cremation is not yet optimised and not available from all equipment manufacturers.		
Achievable Performance:	SNCR is used as a NO_X abatement technique in combustion processes across a range of industrial sectors and can achieve reductions in emissions of between 60% and 80%.	

	Limited data is available on NO_X emissions because it is not a parameter that has to be monitored in permits. Available data shows NO_X emissions typically from 200 to 350 mg/Nm^3, with some values up to 500 mg/Nm^3. Only one data point for SNCR was obtained showing emissions of 114 mg/Nm^3.

Cross Media Effects:

Overdosing of ammonia or urea results in ammonia slip, i.e., emissions to air of ammonia. Poor control of the process can also lead to increased emissions of nitrous oxide (N_2O) which is a potent greenhouse gas.

On unabated cremators, SNCR can increase particulate emissions.

Technical Considerations relevant to applicability:

Cremation is a batch process and thus emissions never achieve a steady state condition. To be fully effective, the injection rate needs to be controlled throughout the process to deliver the optimum dose at each part of the process. Crematoria are small pieces of equipment, and the installation of sophisticated control systems may not be economic.

Economic Information:

A simple system for dosing urea solution is relatively inexpensive. In February 2022 installation costs were reported as £20,000 - £25,000 per cremator. More sophisticated control systems would increase these costs. The ongoing supply of reagent will typically add £3.00 - £4.00 per cremation to costs and additional maintenance costs are low. However sophisticated control systems to optimise dosage across the cremation cycle could be expensive and is not used in practice.

Driving Force for Implementation:

NOx emissions contribute significantly to poor air quality in urban areas.

Example Plants:

One equipment manufacturer supplies a NO_X abatement system for their gas fired cremators using a fixed dosing rate of urea solution based on factory settings.

6. Cremation standards in the event of mass fatalities

These paragraphs are issued as a precautionary measure in the event of a national emergency giving rise to mass fatalities. These paragraphs are without prejudice to any restrictions or requirements there may be under health and safety legislation.

6.1 The UK or appropriate Devolved Government will alert regulators at the time when an emergency exists which triggers this section of the guidance. There will be a similar alert when the situation is at an end after which this section will no longer apply.

6.2 In the event of mass fatalities, such as could arise from pandemic flu, crematoria may need to operate for sustained or extended periods. This means that there is a greater likelihood of equipment breakdown, including equipment for reducing emissions to air. There could also be implications for staffing of crematoria.

6.3 Regulators and crematoria operators are reminded that it is good practice to ensure that:

- spares and consumables are available at short notice;
- to have an audited list of essential items;
- those spares and consumables subject to continual wear should be held on site or should be available at short notice from guaranteed local suppliers so that plant breakdowns can be rectified rapidly;
- planned and preventative maintenance schedules are adhered to;
- there is a sufficient supply of flue gas treatment reagents;
- staff at all levels need the necessary training and instruction in their duties relating to the control of the process and emissions to air and refer to the Crematorium Technicians Training

6.4 Regulators and crematoria operators should also bear in mind that:

- larger quantities of spares and consumables may be needed in the event of an emergency causing mass fatalities;
- an emergency causing mass fatalities may have implications for the number of trained staff that can be called upon.

To minimise the potential for breakdowns during such an emergency, a simple plan should be drawn up, which should mainly address the holding of additional spares and consumables and the training of suitable numbers of staff.

This plan shall be made available on request to the regulator for inspection.

6.5 If this is done, there might nonetheless be either a breakdown of equipment affecting emissions to air, or a shortage of staff trained on the air pollution aspects of operating the crematorium. There might also be a heightened demand which warrants operating an unabated standby cremator for longer

than the 100 hours allowed. In such circumstances, and in the public interest, regulators should take a balanced view of enforcement action in the event of a breach of permit conditions.

6.6 If best endeavours have been taken to reduce the likelihood of a breakdown or staff shortage, it may well be appropriate to allow a crematorium to continue to operate for a period of time, while breaching permit conditions without any enforcement action being taken.

6.7 One consideration may be whether the crematorium in question is located in a local Air Quality Management Area for any of the pollutants emitted from the crematorium. In such cases, steps should be taken to rectify the breaches where practicable and as soon as is feasible.

The UK or Devolved Governments would not expect these allowances to be continued beyond the duration of the emergency.

Appendix

A. Supplementary information on burden sharing for mercury abatement

There is no obligation on those crematoria with mercury abatement to participate in burden sharing arrangements. Note burden sharing arrangements are a cost sharing mechanism so that crematoria with mercury abatement installed are not at a financial disadvantage to those that do not.

For existing unabated cremators, the requirement to participate in a burden sharing arrangement will remain in place until 31st December 2026, with a final report made to the regulator no later than 1st April 2027.

For unabated plant, the options are:

- Membership of the CAMEO scheme, the current performance of the CAMEO scheme is around 70% of cremations carried out in equipment fitted with mercury abatement.
- Forming a different cluster – the percentage of cremations carried out by the cluster in equipment fitted with mercury abatement shall exceed 50%.

The method by which the crematoria comply with the burden sharing requirements should be set out in the permit through appropriate permit conditions, as follows:

The operator shall send the regulator, by no later than 1 April each year, a certificate from the Crematoria Abatement of Mercury Emissions Organisation (CAMEO) or appropriate evidence from a comparable audited burden sharing arrangement or scheme which specifies for the past calendar year:

a) the total number of cremations
b) the number of cremations undertaken in cremators fitted with operational mercury abatement equipment; or
c) the number of cremations undertaken and the proportion of those subject to burden sharing arrangements; or
d) in cases where mercury abatement is fitted but fewer than 50% of cremations at the installation were undertaken in cremators fitted with it, the relevant information in both b) and c).

Arrangements for cost sharing in the CAMEO or any alternate burden sharing scheme do not form part of the permit conditions.

Lisburn & Castlereagh City Council

Committee:	Environment & Sustainability
Date:	3rd January 2024
Report from:	Head of Service (Acting) - Environmental Health, Risk and Emergency Planning

CONFIDENTIAL REPORT

Reason why the report is confidential:	Information relating to the financial or business affairs of any particular person (including the Council holding that information).
When will the report become available:	The report can be made available upon ratification, however, Appendix 1 will remain confidential.
When will a redacted report become available:	N/A
The report will never become available:	N/A

Item for:	Decision
Subject:	Off Street Car Parking Contract

1.0 **Background and Key Issues**

1. Car parking enforcement, cash collection and PCN processing is currently undertaken on the Council's behalf in 'pay and display' car parks by the Department for Infrastructure (DfI) under a Service Agreement. This Agreement was due to end on 31st October 2023.

2. It was agreed at the Environmental Services Committee (ESC) on 5th May 2021 and Full Council on 25th May 2021:

3. the Council agree not to renew the Service Agreement with the Department for Infrastructure for Car Parking Services post October 2022; and
4. the Council agree to join a tendering process with the other Councils that wished to join such process.

5. It was further agreed at ESC on 6th April 2022 that approval be given to a one-year extension (to 31st October 2023) of the existing DfI Contract to ensure all elements of the new contract tender were adequately addressed. This was further extended at ESC on 4th October 2023 up until 31st March 2024.

6. A single tender was prepared covering car parking services and enforcement services for participating Councils. Once awarded, each Council would then sign a separate contract for the tendered services with the new company.

7. The tender was issued with Belfast City Council as Lead Council, and three companies tendered for the contract. An award date of 10th July 2023 was planned but one company contested the evaluation process. On 27th July 2023 a Writ was served on Belfast City Council preventing them awarding the Tender and challenging the evaluation process. This writ has now been withdrawn.

8. The new contract which has now been awarded to NSL, will continue for 5 years followed by 3 annual reviews however officers are currently negotiating a review after 3 years rather than 5.

9. NSL are the current providers to the existing DfI contract and the costs of the new contract for the same specification show considerable savings (See **Appendix 1 Confidential - Business Case**) compared to DfI costs. Based on last years enforcement contract charges the contract going forward would cost approx. £90,000 with a total income of approx. £600,000 per annum from car park payments and PCN fines.

10. The progression of the proposed contract will not deter consideration and implementation, if approved, of the matters raised under Any Other Business at Environment & Sustainability Committee in November 2023 in relation to charging.

11. Under this new contract there will be differentiation between those TAs in our off-street car parks (Blue uniforms) and the TAs dealing with DfI on-street parking enforcement (Red uniforms).

2.0	**Recommendation** It is recommended that Members agree and authorise the new enforcement and PCN processing contract with NSL for five years based on costs as shown in Business Case following the tender award made by Belfast City Council.	
3.0	**Finance and Resource Implications** This is a contract to replace the existing Department for Infrastructure contract, financial cost will be reduced but the contract will require additional monitoring by Council officers.	
4.0	**Equality/Good Relations and Rural Needs Impact Assessments**	
4.1	Has an equality and good relations screening been carried out?	Yes (MS will add hyperlink in here for Members to view)
4.2	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out	
4.3	Has a Rural Needs Impact Assessment (RNIA) been completed?	Yes (MS will add hyperlink in here for Members to view)
4.4	Brief summary of the key issues identified and proposed mitigating actions **or** rationale why the screening was not carried out.	

Appendices:	[redacted]