

Central Durham Crematorium Joint Committee

27 April 2011



Update Report – Performance and Cremator Replacement

Report of Alan José, Superintendent and Registrar to the Joint Committee

Purpose of the Report

1. To provide members of the Central Durham Crematorium Joint Committee (CDCJC) with the quarterly update relating to performance and other operational matters

Performance Update

Number of Cremations

2. The table below provides details of the number of cremations for the period 1 January 2011 to 31 March 2011 inclusive with comparative data in the same period:

	2009/2010	2010/2011	Change
JANUARY	218 + 3*	232 + 3*	14
FEBRUARY	190 + 2*	157 + 3*	-33 + 1*
MARCH	216 + 1*	232 + 2*	14 + 1*
TOTAL	624 + 6*	621 + 8*	-3 + 2*

* = Non Viable Foetus (NVF)

** = Stillborns (STs)

*** = Body parts

3. The full profile of where families came from can be seen in Appendix 2. In summary 255 came from Durham and 366 from outside of the area. This has led to 621 + 8 NVF cremations undertaken for the period 1 January 2011 to 31st March 2011, compared to 624 in the comparable period last year an increase of 2 NVF and decrease of 3 Cremations.
4. The total number of cremations for the period 1 April 2010 to 31 March 2011 was 2273 which is an increase of 100, up on the same period last year.

Memorials

5. The Table below outlines the number and value of the memorials sold for the last quarter:

	Qtr 3 2010/11 [Oct to Dec]		Qtr 4 2010 /11 [Jan to Mar]	
	Number	£	Number	£
Vase Blocks	10	5481	16	6191.02
Large Plaques	23	8182	20	5731.63
Small Plaques	2	436	4	872.00
Columbaria	4	4239.90	1	1172.00
Total	39	£ 18338.90	41	£ 13966.65

Operational matters

Staffing issues

6. At the last meeting of the CDCJC (26 January 2011) it was reported and agreed that the vacant position should remain until the results of the exercise seeking expressions of interest for early of voluntary retirement / redundancy have being considered.
7. After this has been resolved, the post will be internally advertised with both Durham County Council (DCC) and Spennymoor Town Council (STC). In the meantime a temporary contract has been put in place.

Cremator Independent Testing

8. As required by the Secretary of State under the terms of the Environmental Protection Act (1990), all three L&P Cremators were independently tested by Catalyst Environmental during the period 15–17 February 2011. The results of these tests were within the limits as specified in the Secretary of State's notes for Crematoria. Copies have been forwarded to the Crematorium Regulator.

Environmental Permitting (England & Wales) Regulations 2010 51.675

9. The Crematorium Regulator (Durham County Council Pollution Control Team) has issued a varied permit for operations of the Crematorium. The existing permit has been superseded by this new edition which recognises that new cremators and abatement plant will be installed and fully operational by 31 December 2012. The Full Permit is set out at Appendix 3.

Cremator Replacement & Crematoria Redevelopment Project-Update

10. Project updates have been circulated to Members of the Central Durham Crematorium Joint Committee. These are as set out on Appendix 4
11. The Project Team Leader Richard Fenwick advises that the project is currently on schedule to meet the deadlines set out by English Nature also in line with the project programme. A full updated budget statement, showing a revised forecast and details of expenditure to date is attached at Appendix 5.

12. Newcastle City Council has issued an invitation to members of the Central Durham Crematorium Joint Committee to visit the recently completed IFZW installation at Newcastle Crematorium.
13. The open evening on Wednesday 6 April 2011, was attended by approximately 30 Funeral Directors, Clergy, Funeral Celebrants, together with all members of Central Durham Crematorium Joint Committee. The evening was successful and a good opportunity for discussion about the ongoing development along with ensuring the key stakeholders are given the opportunity to see first hand the changes and understand further how the works are being managed to minimise the impact on mourners and visitors to site. Many of the questions and points related to the current development with some focusing on the areas of further development to increase capacity of the chapel.

Recommendations and reasons

14. It is recommended that Members of the Central Durham Joint Committee:
- (a) Note the content of this report with regards to current performance of the Crematorium;
 - (b) Consider and agree to continue to temporarily fill the vacant post until the wider picture is clearer at which time a recruitment exercise will be undertaken, with the post advertised internally and simultaneously within the two Partner Authorities;
 - (c) Note the progress with regards to the Cremator Replacement and Crematoria Redevelopment Project.

Appendix 1: Implications

Finance –

As identified in the report.

Staffing –

A member of staff has left the Authority and this will be reviewed in due course.

Risk –

None.

Equality and Diversity –

There are no Equality and Diversity implications associated with this report.

Accommodation –

There are no Accommodation implications associated with this report

Crime and Disorder –

There are no Crime and Disorder implications associated with this report.

Human Rights –

There are no Human Rights implications associated with this report.

Consultation –

Officers of Spennymoor Town Council were consulted on the contents of this report.

Procurement –

None.

Disability Discrimination Act –

None.

Legal Implications –

None.

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Varied Permit with Introductory note

Pollution Prevention and Control Act 1999

Environmental Permitting (England and Wales) Regulations 2010 SI 675

Installation address: Central Durham Crematorium Joint Committee

Durham Crematorium

South Road

Durham

DH1 3TQ

Permit Reference: DCC/PC57/10/V2

Contact Details: Durham County Council
Consett Locality Office
Medomsley Road
Consett
DH8 5JA

Tel: 01207 218311

Email: pollution.control@durham.gov.uk

Introductory note

This introductory note does not form part of the statutory requirements of the permit but is provided as guidance and background explanation to the legislation and the permit.

The Permit is issued under Regulation 13 of The Environmental Permitting (England and Wales) Regulations 2010 (S.I. No. 675) to operate an installation carrying out one or more of the activities listed in Part 2 and Part B to Schedule 1 of those Regulations, to the extent authorised by the Permit.

It is legally required that the operator comply with the conditions on pages 9 to 19 of the permit.

Brief description of the installation regulated by this permit

This permit has been written following guidance given by the Government in Process Guidance (PG) Note 5/2: Crematoria. Copies of this and any updated guidance can be found on the Department for Environment Food and Rural Affairs website at www.defra.gov.uk.

Additional Guidance covering the applicability of and issues arising from the Process Guidance Note are produced by DEFRA in the form of Air Quality Notes. The following Air Quality Notes have been and will be considered by the Regulatory Authority in the drafting of this permit and in the subsequent regulation of the permitted installation process:

Air Quality Note 1 (05): Additional Guidance from DEFRA: Control of Mercury Emissions from Crematoria.

Air Quality Note 12 (05): Additional Guidance from DEFRA: Well Maintained Cremators.

Air Quality Note 24 (05): Additional Guidance from DEFRA: Crematoria- Burden Sharing.

Air Quality Note 9 (06): Additional Guidance from DEFRA: Crematoria: Change in Calculation for Burden Sharing.

Air Quality Note 19 (06): Additional Guidance from DEFRA: Amendment of PG5/2(04)-Cremation Temperature

Air Quality Note 10 (07): Additional Guidance from DEFRA: Crematoria: Burden Sharing Update.

Air Quality Note 19 (07): Additional Guidance from DEFRA: Cremation Standards in the Event of Mass Fatalities.

The cremation of human remains is prescribed for Local Authority Environmental Permitting as described in Chapter 5 Waste Management Section 5.1 Incineration and Co-incineration of Waste Part (B) (b) of the Environmental Permitting (England & Wales) Regulations 2010.

The activity at this installation involves the cremation of human remains. There are three cremators comprising of both primary and secondary combustion chambers each served by a flue discharging to atmosphere. There is potential for emissions of the following pollutants to occur from the cremation of human remains: Hydrogen Chloride, Particulates, Carbon Monoxide, Mercury, Polychlorinated dibenzo-p-dioxins (PCDD) and Polychlorinated dibenzofurans (PCDF).

The human remains after cremation are placed in a cremulator resulting in ash. There is potential for particulate emissions from the operation of the cremulator.

Historical Information Relating to the Installation:

This permit supersedes any of the authorisations and permits detailed in the Table below that have been previously issued under Local Authority Industrial Pollution Control:

Superseded Licences/Consents/Permits and Authorisations relating to this installation		
Holder	Reference Number	Date of Issue
Central Durham Crematorium Joint Committee	DCC/LAPPC/P19	08/06/06
Central Durham Crematorium Joint Committee	DCC/LAPPC/P19	06/11/08

Confidentiality

The Permit requires the operator to provide information to Durham County Council. The Council will place the information onto the public register in accordance with the requirements of the Environmental Permitting (England & Wales) Regulations 2010. If the Operator considers that any information provided is commercially confidential, it may apply to the Council to have such information withheld from the register in accordance with the Environmental Permitting (England & Wales) Regulations 2010. To enable Durham County Council to determine whether the information is commercially confidential, the operator should clearly identify the information in question and should specify clear and precise reasons.

Where the Council decides that the information is not commercially confidential then the operator will be notified who then may appeal in accordance with Regulation 31 of the Environmental Permitting (England and Wales) Regulations 2010.

Variations to the permit

This Permit may be varied in the future. If at any time the activity regulated by the following conditions changes such that the conditions no longer reflect the activity and require alteration, the Regulator should be contacted as soon as the operator becomes aware of the change.

The permit changes that may occur fall into the following two categories:

(i) Substantial Changes

A substantial change is an alteration to the installation activity that will have a detrimental impact on the nature or quantity of emissions. The Council will need to know clearly what alterations to the operation of the installation activity will occur from such a change in relation to the impact on emissions. For this type of change the operator will be required to submit a completed application form with the fee that applies.

(ii) Non Substantial Changes

There maybe other changes that the operator or company make that do not fall into the category of a 'substantial change' but do warrant a change to the conditions or other details within the permit. The majority of these will cover administrative changes although when there is an alteration of the name of the registered company as identified by Companies House then the operator is required to submit a transfer application as detailed below and in accordance with Regulation 21 of the Environmental Permitting (England and Wales) Regulations 2010. It is important the operator notifies the Council of these changes so that the permit can be kept up to date.

Surrender of the permit

Where an operator of a Part B installation and mobile plant intends to cease the operation of an installation (in whole or in part) the Regulator should be informed in writing, such notification must include the information specified on a form provided by the Council and in accordance with Regulation 24 of the Environmental Permitting (England and Wales) Regulations 2010.

Where an operator of a Part A2 installation intends to cease the operation of an installation (in whole or in part) a completed application must be submitted to the Regulator and include the information specified on the application form provided by the Council and in accordance with Regulation 25 of the Environmental Permitting (England and Wales) Regulations 2010 with the fee that applies.

Please note the permit remains in place until a Surrender Certificate or a Revocation Notice has been issued. For operators of Part A2 installations the Council must be satisfied that (i) there is no risk of pollution from the installation and (ii) the regulated facility is returned to a satisfactory state taking into consideration the state of the installation prior to the operation of the installation activity.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 21, of the Environmental Permitting (England and Wales) Regulations 2010. A transfer will be allowed unless the Authority considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

For a partial transfer the operator must submit a site plan with the application that clearly shows which part of the site is to be transferred and which part is to be retained by the current operator.

Responsibility under workplace health and safety legislation

This Permit is given in relation to the requirements of the Environmental Permitting (England & Wales) Regulations 2010. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation.

Fees and Charges

The fees and charges that cover Local Authority Environmental Permitting are reviewed and revised annually and can be obtained from the DEFRA web-site: www.defra.gov.uk.

A fee is payable for applications for a substantial change to the permit, a transfer or a partial transfer and for the surrender of the permit in the case of A2 industrial installations.

An annual subsistence fee is payable at the beginning of each financial year. This fee can be paid as a single payment or as a quarterly instalment.

Please note that non-payment of the annual subsistence fee is grounds on which the Council may issue a Revocation Notice. If the permit is revoked it is an offence to continue to operate an activity defined in Schedule 1 of the Environmental Permitting (England & Wales) Regulations 2010 for which a permit is required.

Appeal Procedure

The operator may, for any of the reasons detailed under Regulation 31 of the Environmental Permitting (England & Wales) Regulations 2010 SI 675, appeal to the approved authority. Appeals must be made in accordance with the requirements of Regulation 31 and Schedule 6 of the Environmental Permitting (England & Wales) Regulations 2010.

Appeals should be made for the attention of the Secretary of State for the Environment, Food and Rural Affairs and forwarded to the following address:

The Planning Inspectorate
Environmental Appeals Team
Room 4/04 Kite wing
Temple Quay House
2 The Square
Temple Quay
Bristol
BS1 6PN

Tel: 0117 372 8726
Fax: 0117 372 6241

Email: environment.appeals@pins.gsi.gov.uk
Website: www.planning-inspectorate.gov.uk

Please note

An appeal brought under paragraph (1) of Regulation 31 in relation to the conditions in a permit will not suspend the effect of the conditions appealed against; the conditions must still be complied with.

-in determining an appeal against one or more conditions, the Act allows an Appropriate Authority in addition to quash any of the other conditions not subject to the appeal and to direct the Regulator either to vary any of these other conditions or to add new conditions.

End of introductory note

Permit

Permit Reference Number: DCC/PC56/10/V1

Durham County Council (the Regulator) in exercise of its powers under Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2010 (SI 675) hereby permits:

Central Durham Crematorium Joint Committee

Whose registered office is:

Central Durham Crematorium Joint Committee

Durham Crematorium

South Road

Durham

DH1 3TQ

To operate an installation at:

Durham Crematorium

South Road

Durham

DH1 3TQ

To the extent authorised by and subject to the conditions of this Permit and within the demarcated boundary identified on the plan of the installation site (Ref:DCC/PC56/10/V1/a).

Signed



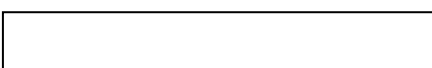
Denyse Holman

Pollution Control Manager

Authorised to sign on behalf of

Durham County Council

Dated



STATUTORY PERMIT CONDITIONS

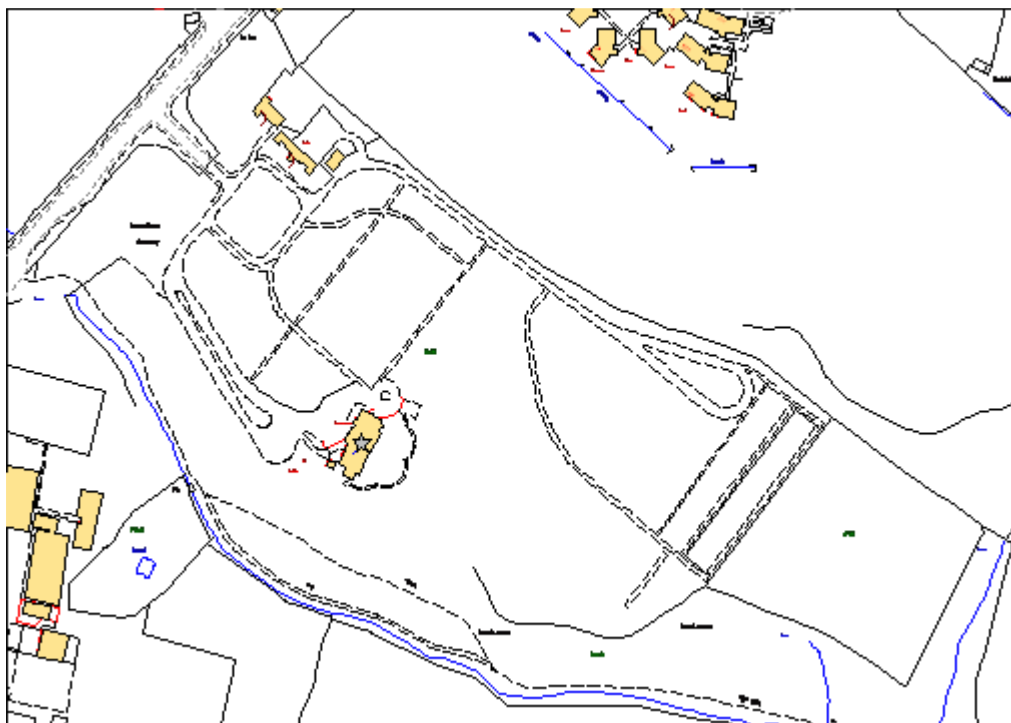
1.0 EXTENT AND LIMIT OF THE INSTALLATION

1.1: The operator is permitted to carry out the following activities at the installation within the demarcated boundary of the installation site as shown in the plan (Ref: DCC/PC56/10/V1/a) and as specified below:

Table 1:

Activity/Associated Activity Under Schedule 1 of the EP Regulations	Description of Specified Activity	Schedule 1 Activity Reference (if applicable)
Crematoria	The cremation of human remains.	Chapter 5 Waste Management; Section 5.1 Incineration and Co-incineration of waste; Part B (b)
Crematoria	The handling and disposal of ash and remains from the cremator.	Chapter 5 Waste Management; Section 5.1 Incineration and Co-incineration of waste; Part B (b)

Plan Ref: DCC/PC56/10/V1/a



1.2: The best available techniques shall be used to prevent, or where this is not practicable, reduce emissions from the crematoria activity, in relation to any aspect of the operation of the cremator and the cremulator which is not regulated by any other condition of this permit.

2.0 EMISSION LIMITS

2.1: Emissions from the crematorium flue shall be free from visible smoke and should not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742: 1969.

2.2: All emissions from the installation site, other than steam or water vapour, shall be colourless and free from persistent mist and fume. All emissions to air shall be free from offensive odour and free from droplets.

2.3: The emission concentration limits detailed in Table 2 below shall not be exceeded and shall be expressed at reference conditions 273K, 101.3kPa, 11% oxygen v/v, dry gas.

Table 2:

<u>Pollutant</u>	<u>Concentration</u>	<u>Time Period</u>
Hydrogen Chloride	200 mg/m ³	Averaged over an hour of the cremation.
Particulates (Emissions from the cremator)	80 mg/m ³	Averaged over an hour of the cremation and to be achieved for 95% of cremations.
	160 mg/m ³	Averaged over an hour of the cremation for all cremations.
Carbon Monoxide (CO)	100 mg/m ³	Averaged over the first hour of the cremation and to be achieved for 95% of cremations.
	200 mg/m ³	Averaged over the first hour of the cremation for all cremations.
Organic Compounds	20 mg/m ³	Averaged over an hour of the cremation.
Dioxins and Furans (PCDD/F)	1.0 nanogrammes/m ³ as ITEQ	Only applies to the commissioning of the cremator following the replacement of the primary or secondary combustion chamber
Mercury	50 microgrammes/m ³	To be complied with by 31 st December 2012

3.0 MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS

3.1: Monitoring of the pollutants listed in Table 2 in Condition 2.3 to demonstrate compliance with the emission concentration limits from cremations shall be carried out as follows and in accordance with the specified test methods:

Table 3

<u>Pollutant</u>	<u>Type of Monitoring</u>	<u>Test Method</u>
Hydrogen Chloride (HCl)	Annual Extractive Sampling Test.	BS EN 1911 Parts 1 and 3
Particulate	Continuous Indicative Monitoring with Activation of Visual and Audible Alarm. Annual Extractive Sampling Test.	BS ISO 9096:2003 or BS EN 13284 Part 1
Carbon Monoxide (CO)	Continuous Indicative Monitoring with Activation of Visual and Audible Alarm. Annual Extractive Sampling Test.	BS ISO 12039
Organic Compounds	Annual Extractive Sampling Test	BS EN 12619 or BS EN 13256
Oxygen	Continuous Monitoring	BS ISO 12039
Mercury	Annual Extractive Sampling Test (Applies from 31 st December 2012)	BS 13211

3.2: The temperature shall be continuously measured at the entrance and after the exit from the secondary combustion chamber to ensure compliance with the requirements of Condition 5.5. A continuous record of the temperature measured at these two points shall be made and where this falls below 1123 K (850 Degrees Centigrade) then this will activate a visual alarm

From 31st December 2012 a temperature of 1073 K (800 Degrees Centigrade) shall apply.

Incidents of activation of the alarm shall be recorded and the operator shall carry out an investigation to determine the reasons for non compliance with the combustion conditions. Details of the investigations and remedial actions to correct any identified defects shall be recorded within the site logbook.

3.3: The operator shall provide the Local Authority with at least seven days prior notice of intended monitoring of pollutants to be carried out. The notification provided shall include the date and time of the monitoring, which pollutants are to be tested and the test method to be used for the individual pollutants. If the test method to be used is different to the protocol previously submitted then a revised protocol for that test method shall be submitted

3.4: The operator shall submit a report of all non continuous monitoring of pollutants within eight weeks from when the emission testing was carried out. The report of the emission monitoring shall not be limited to but must include the following:

- (i) the process operations at the time of the monitoring;**
- (ii) a summary of the results in comparison to the emission concentration limits as detailed in Process Guidance Note 5/2 (04) that covers crematoria;**
- (iii) any deviations from the test method as detailed in Condition 3.1 and the protocol submitted as required by Condition 3.3, the specified standards for measuring pollutants; and**
- (iv) the raw data.**

3.5: Visual and olfactory assessments of emissions shall be undertaken at least once a day during a cremation. The time, location and result of these assessments shall be recorded in the site log book in accordance with Condition 4.4.

Where visual emissions are observed that do not comply with the requirements of Condition 2.1 then the operator shall carry out an investigation to determine the source of the emission and take remedial actions. Details of the outcome of the investigation and actions taken shall be recorded in the site log book in accordance with Condition 4.4.

3.6: If emissions occur that are not expected during the normal operation of the cremator these shall be regarded as 'abnormal' emissions. Where 'abnormal' emissions or a defect of the process and/or abatement plant is identified the operator shall carry out an investigation to determine the source and undertake remedial action and measures as necessary. A record of the investigation and the remedial actions shall be recorded in the site log book.

3.7: The continuous monitors installed for the measurement of particulate and carbon monoxide (CO) shall be set to an emission level that is ninety five percent of the emission concentration limits as listed in Table 2. The monitor shall be connected to an audible and visual alarm that will operate if this level is exceeded. Any instances of when the alarm operates shall be recorded in accordance with the requirements of Condition 4.2. Instances of when the alarm operates shall be investigated and remedial actions taken to correct any defect.

Details of the investigations together with the remedial measures shall be recorded in the site logbook.

3.8: The continuous monitors shall be calibrated annually in accordance with the outcome of the results of the emission test for particulates or carbon monoxide (CO) or in accordance with a method or instructions provided by the manufacturer.

3.9: The continuous monitors shall be maintained in accordance with instructions provided by the manufacturer.

3.10: Where the measured emission concentrations from the non-continuous sampling of pollutants exceed the emission concentration limits listed in Table 2 of Condition 2.3 the operator shall carry out the following:

- (i) An investigation to determine any defects/malfunctions to process and abatement plant;
- (ii) Remedial measures/actions necessary to correct any defects/malfunctions to process and abatement plant;
- (iii) A re-test on completion of the measures/actions to process and abatement plant; and
- (iv) Notify the Local Authority of the outcome of the investigations and a time-scale for the completion of identified measures/actions.

In the case of (iii) above the operator shall provide prior notification of the re-testing of the pollutants in accordance with the requirements of Condition No 3.3.

3.11: The operator shall inform the operator immediately in the event of the following circumstances:

- (i) The measured emission concentration by continuous and non-continuous monitoring is twice the emission limit in Table 2 in Condition 2.3; and
- (iii) An emission from the installation is likely to impact or have an effect on the local community.

4.0: THE RECORDING AND SUBMISSION OF INFORMATION

4.1: The operator shall submit to the Local Authority the following information covering emission and combustion requirements for the operation of the cremator. A report providing the information detailed below shall be submitted to the Local Authority every six months. The report shall cover either a monthly or four weekly period and in a format as agreed between the Local Authority and the operator. An example report is as detailed in Section 10 of Process Guidance Note 5/2 (04) for Crematoria but must be in a format that enables the Local Authority to check compliance with the limits detailed in Table 2 in Condition 2.3 above.

Combustion Provisions:

- (i) Four weekly/monthly maximum, minimum and average temperature at entry to the secondary combustion chamber.
- (ii) Four weekly/monthly maximum, minimum and average temperature at exit from the secondary combustion chamber.
- (iii) Four weekly/monthly minimum oxygen concentration.

Carbon Monoxide and Particulate Matter Emissions:

- (i) Four weekly/monthly average value from the first sixty minutes of the cremation.
- (ii) Four weekly/monthly values that exceed ninety five percent of the emission concentration limit as detailed in Table 2.
- (iii) Four weekly/monthly mean over sixty minutes that exceeds the emission concentration limit as detailed in Table 2.
- (iv) The maximum sixty-minute mean emission values over each four weekly/monthly period.
- (v) The ninety-five percentile value for each four weekly/monthly period.

4.2: Requirement for the submission of information covering mercury emissions.

The operator shall send the regulator, by no later than 1 June 2010 and 1 April in each year thereafter, 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:

- (i) The total number of cremations in the past 12 months;
- (ii) The number of cremations undertaken in cremators fitted with operational mercury abatement equipment in the previous 12 months; or
- (iii) The number of cremations undertaken in the previous 12 months and the proportion of those subject to burden sharing arrangements under which money is paid for the benefit of abated crematoria; or
- (iv) In cases where mercury abatement is fitted but fewer than 50% of cremations at the installation were undertaken in cremators fitted with it in the previous 12 months, the relevant information in both ii) and iii).

Notes:

Based on the Federation of British Cremation Authorities annual statistics for 2003, and taking account of AQ9(06) which specified that the number of cremations involving stillbirths, perinatal deaths, and deaths of infants under 5 years should be subtracted.

Additional Guidance from the Department for Environment, Food and Rural Affairs, and from the Welsh Assembly Government Control of Mercury Emissions from Crematoria, AQ1 (05) - makes amendments to the principal statutory guidance that is produced as PG5/02(04). Paragraph 3(d) AQ24(05) identifies three burden sharing options: a national burden sharing scheme, known as CAMEO: internal burden sharing between crematoria operated by the same cremation authority or company; and local sharing agreements reached with nearby crematoria.

4.3: Requirement for the submission of information to cover compliance with meeting the necessary targets for mercury emissions.

The operator shall, by no later than 31 October 2008, provide detailed written confirmation to its relevant regulator of the following matters:

a) whether it intends to fit equipment to abate mercury emissions from the crematorium by 31st December 2012 and

b) if abatement equipment will be fitted, specify how many of the cremators on the site it will be fitted to, and

(i) what proportion of cremations at the installation (*using as a baseline the number of cremations undertaken in 2003¹*) it is intended will be subject to the abatement measures.

(ii) what steps have been taken to arrange:

- financing of the purchase and installation of the abatement equipment
- procurement of the abatement equipment, and

(iii) the dates when the equipment will be installed and commissioned, at each cremator, and the evidence showing how those dates will be achieved, or

(iv) if those dates are not fixed by 31 October 2008, the likely date when they will be fixed, or

c) if abatement will not be fitted or will be fitted in relation to less than 50% of cremations (based on 2003 figures):

(i) specify what burden sharing arrangements it intends to or has put in place to offset the cost of abatement at one or more other crematoria in accordance with the statutory guidance on burden sharing issued in guidance note AQI (05)² including the name of the burden sharing scheme or the name of the crematoria with which arrangements have been made.

(ii) provide written evidence of any such arrangements, and

(iii) specify when those arrangements were put in place, or

(iv) if the arrangements have not been fixed by 31 October 2008, the likely date when they will be fixed.

(2). Where no date has been fixed in accordance with sub-paragraphs (b)(iv) and (c)(iv), the operator shall notify its relevant regulator

(a) as soon as the date or dates has been fixed, and supply at the same time the information in (b)(ii) and (iii) and (c) (i)-(iii), and

(b) until such time as the dates remain to be fixed, notify the relevant regulator at least once before the expiry of each six-month period following 31 October 2008 of the progress made in fixing a date for compliance with the mercury emission requirements.

Notes:

¹ Based on the Federation of British Cremation Authorities annual statistics for 2003, and taking account of AQ9(06) which specified that the number of cremations involving stillbirths, perinatal deaths, and deaths of infants under 5 years should be subtracted

² Additional Guidance from the Department for Environment, Food and Rural Affairs, and from the Welsh Assembly Government Control of Mercury Emissions from Crematoria, AQ1 (05) - makes amendments to the principal statutory guidance that is produced as PG5/02(04). Paragraph 3(d) AQ24(05) identifies three burden sharing options: a national burden sharing scheme, known as CAMEO: internal burden sharing between crematoria operated by the same cremation authority or company; and local sharing agreements reached with nearby crematoria.

4.4: The results of all assessments, inspections, non-continuous monitoring, investigations carried out and remedial actions shall be recorded in a site logbook. This shall be retained by the operator for a minimum of two years and made available for examination by the Local Authority inspector if requested. All entries made in the logbook shall be legible and signed by the designated personnel within the company.

5.0: MATERIALS HANDLING AND EMISSION CONTROLS

5.1: To minimise the potential for pollutants to occur from cremations careful consideration shall be given to materials used for the construction of coffins. The use of polyvinyl chloride and melamine shall not be used for the construction of coffins.

5.2: The use of chlorine based resins used in the construction of cardboard coffins shall not be permitted.

5.3: The packaging used for stillbirths, neonatal or foetal remains shall not contain chlorine-based plastics.

5.4: Coffins that contain either lead or zinc shall not be cremated.

5.5: A minimum temperature of 1123 K (850 Degrees Centigrade) shall be maintained within the secondary combustion chamber for the duration of cremations carried out.
From 31st December 2012 a minimum temperature of 1073 K (800 Degrees Centigrade) shall apply.

5.6: The operation of the cremator shall ensure that the charging system for access to the primary combustion chamber will not operate unless the temperature in the secondary combustion chamber is at least 1123 K (850 Degrees Centigrade). From 31st December 2012 a minimum temperature of 1073 K (800 Degrees Centigrade) shall apply.

5.7: A maintenance inspection of the cremator and the attached ductwork shall be carried out at six monthly intervals. The inspection shall ensure there is no damage to the brickwork construction and refractory lining of the combustion chambers and the integrity of the flue to prevent the escape of gases.

The details of the inspection together with any remedial measures necessary to ensure compliance with this condition shall be recorded in the site log book.

5.8: If it becomes necessary to replace the secondary combustion chamber then the design and volume of the replacement chamber shall be of a design specification and volume that will ensure compliance with a two second residence time.

On commissioning of the replacement secondary chamber the operator shall be required to demonstrate that a two second residence time can be achieved within the secondary combustion chamber. The method of measuring the residence time within the secondary combustion chamber shall be as detailed in paragraph 6.13 of Process Guidance Note 5/2 (04) Secretary of State's Guidance for Crematoria.

5.9: The operator shall ensure the calcination process is complete before the remains are removed from the cremator.

5.10: The cremated remains shall be stored and transferred from one location to another on the installation site in a lidded container.

5.11: In the event of a failure of the flue gas abatement plant the operator shall notify the Local Authority. This notification may be provided by either email or fax, details of these are provided in Section 1.0 Introductory Note. The following information shall be recorded in the site logbook:

- (i) Details of the cause of the failure; and
- (ii) Actions or measures taken to rectify the defect identified on the gas abatement plant

Provision of spares for the gas abatement plant shall be readily available on the installation site or from a local supplier to enable repairs to be carried out within a period of between 24 to 48 hrs from when the failure occurs.

5.12: The removal of ash and non combustible residues remaining from the cremation shall be carried out in a manner to prevent dust emissions.

5.13: The handling of ash and non combustible residues shall be within the air extraction cabinet with the air extraction operating to remove emissions through bag filtration plant.

6.0: CHIMNEY FLUES, VENTS AND PROCESS EXHAUSTS

- 6.1: The operator shall submit, for the approval by the Local Authority, the calculations to determine the height of the flue from the cremators in accordance with the method detailed in Technical Guidance Note D1: Guidelines on Discharge Stack Heights for Polluting. From 31st December 2012 the height of the flue shall be kept at the minimum height agreed by the Local Authority.
- 6.2: The integrity of the flue from the cremator shall be maintained to prevent the escape of gaseous emissions
- 6.3: To ensure effective dispersion of gaseous emissions a velocity of 15 m/sec shall be achieved at the exit of the flue during peak operating conditions.
- 6.4: A plate, cap or cowl shall not be fitted at the outlet of the flue.

7.0: MANAGEMENT

- 7.1: The operator shall provide training for all process personnel. The training provided must ensure personnel involved in the process have knowledge of and fully understand their responsibility for carrying out any of the requirements detailed in this Permit. This shall include but not restricted to the following:
- (i) the procedure for the start up and shut down of the process plant;
 - (iii) the procedure established in the event of a plant breakdown;
 - (iv) the procedure required when visual emissions occur that contravene the requirements of Conditions 2.1 and 2.2 of this Permit; and
 - (v) the procedures required for the carrying out of inspections, the carrying out of investigations, remedial actions and the recording of information in accordance with the requirements of Section 4.0 above.

The operator shall establish and keep a training specification for each process operator and a written record kept of training received for process operatives. The process operators shall sign a declaration of having received the training.

- 7.2: All operating staff shall hold certification from a suitable organisation of their proficiency in operating cremators or, in the case of unqualified staff, shall be under the direct supervision of an experienced certified technician. For the purposes of this condition a suitable organisation shall be deemed to be the Institute of Burial and Cremation Administration and the Federation of British Crematorium Authorities.
- 7.3: A list of qualified operating staff shall be kept that identifies all operators who hold such certification. This list shall include the dates on which the training was provided, the certificate issued and the identity of the instructor.
- 7.4: No person other than those identified on the list of qualified operating staff as required by Condition 7.3, their instructors or qualified representatives of the plant manufacturer shall operate the cremator.
- 7.5: A written preventative maintenance programme for process and abatement plant shall be established. A record of preventative maintenance carried out shall be kept and made available to the Local Authority inspector if requested.

7.6: Replacement parts, that are essential in ensuring that there are no abnormal emissions to atmosphere, for both process and abatement plant shall be kept on site or are readily available from a local supplier.

A list of the identified replacement parts for both process and abatement plant shall be kept on site and made available to the Authority inspector if requested. It shall be documented whether the replacement parts are kept on site or can be obtained from a named local supplier.

7.7: If the operator proposes to make a change in operation of the installation, he must, at least, 14 days before making the change, notify the regulator in writing. The notification must contain a description of the proposed change in operation. It is not necessary to make such a notification if an application to vary this permit has been made and the application contains a description of the proposed change. In this condition 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

End of Statutory Permit Conditions

Appendix 1: Guidance Covering the Non Continuous Testing of Emissions from

Exhaust Points

There are conditions attached to the Permit that require the carrying out of monitoring of emissions of pollutants from the installation process. It is important that operators of these processes fully appreciate and understand their responsibilities for the carrying out of sampling and the requirements of the conditions contained within the Permit. The requirements covering the carrying out of continuous and non-continuous monitoring of emissions of pollutants from the process are detailed in the Statutory Permit Conditions of this installation Permit. Further guidance regarding emission testing from exhaust stacks that operators are recommended to take into consideration when making arrangements for testing to be carried out is as detailed below:

- (i) An accreditation scheme has now been established to cover all companies that carry out emission testing of pollutants. The accreditation scheme known as MCERTS provides formal certification of personnel that carry out emission testing and that organisations are accredited in carrying out emission testing to established British Standard and International methods of testing referred to in the conditions of the Permit. By using a company with MCERTS accreditation the operator has assurance regarding the reliability of the testing carried out. It is therefore recommended and highly desirable that operators of Part B and A2 processes select companies for the undertaking of stack emissions testing who have acquired MCERTS accreditation. Further information on this scheme can be obtained from the following Environment Agency web-page:

www.mcerts.net;

- (ii) Before the sampling is carried out the operator will be required to submit a protocol to the Local Authority. The protocol needs to confirm that the standard test method as referred to within the conditions of the Permit is to be used for the sampling of an individual pollutant. Where an alternative method is to be adopted or it is intended to deviate from the standard test method then it is necessary to provide full details of what the alternative method is or the deviations from the standard method. The operator must then ensure the Local Authority is notified, prior to any further non-continuous sampling being carried out, of subsequent alterations to the test method to be used.

Appendix 2: Guidance Covering Environmental Management Systems (EMS)

Increasingly environmental issues for industry are becoming more complex and important. The establishment and implementation of an Environmental Management System such as ISO 14001 is seen as an effective tool for management to ensure that procedures and arrangements are in place to comply with the conditions of the permit. The use of such systems also enables management to focus on particular aspects of the permit and to target resources where they are needed to improve overall environmental performance. For these reasons, although the permit may not require the company to have in place an environmental management system it is desirable that companies covered by the legislation are encouraged to establish and have in place such a system. The process guidance notes provide additional information covering Environmental Management Systems including details of websites to enable access to details covering particular international standards including ISO 14001 and the EU Eco Management and Audit Scheme (EMAS).

END OF PERMIT