

**Report of the Head of Culture**

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**PETERBOROUGH CREMATORIUM – MERCURY ABATEMENT**

**1. PURPOSE**

- 1.1 This report is submitted to the Community Development Scrutiny Panel at the request of its Chairman, Councillor David Over. The report is provided by way of an update following a decision taken by the Leader of the Council in relation to compliance with new legislation affecting the Crematorium that comes into force on 31 December 2012.

**2. LINKS TO CORPORATE PLAN, SUSTAINABLE COMMUNITY STRATEGY AND LOCAL AREA AGREEMENT**

- 2.1 The legislation requires the Council to introduce arrangements to filter mercury emissions created during the cremation process. Whilst this is part of a national initiative affecting all Crematoria, compliance with the legislation underpins the Council's commitment to protecting our environment and contributes towards achieving its aspiration of becoming an environmental capital.

**3. BACKGROUND**

- 3.1 Crematoria have been regulated under the terms of the Environmental Protection Act 1990, and the subsequent Pollution Prevention and Control (England and Wales) Regulations 2000, since 1991. Cremators were required to be upgraded or replaced by 1998 to ensure that they meet the environmental standards laid down in the Process Guidance Note, PG5/2 (95). Cremators in use at the Peterborough Crematorium already met this standard.
- 3.2 The UK has an obligation under the OSPAR Convention (formerly Oslo and Paris convention) to prevent, or reduce, the disposal into the environment of mercury from human remains. Consequently, DEFRA has stated that 50% of all cremations at existing crematoria must be subject to mercury abatement by 31 December 2012.
- 3.3 DEFRA required all Local Authorities operating crematoria to provide their regulator with the following information by 31 October 2008:
- (a) Whether it intends to fit equipment to abate mercury emissions from the crematorium by 31 December 2012; and
  - (b) If abatement equipment will be fitted, specify how many of the cremators it will be fitted to, and
    - (i) what proportion of cremations at the installation it is intended will be subject to 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 crematorium, and the evidence showing how those dates will be achieved; or
    - (iv) if those dates are not fixed by 31 October, 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 or has put in place to offset the cost of abatement at one or more other crematoria in accordance with statutory guidance note AQ1 (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 what arrangements were put in place; or
- (iv) if the arrangements have not been fixed by 31 October, the likely date when they will be fixed.

3.4 In response to this requirement and following consideration by the Leader of the Council it has been agreed that:

- The Council will install appropriate plant and equipment to abate Mercury by 31 December 2012.
- The project will be self funding using prudential borrowing under a “spend to save” scheme.
- The Regulator (Environmental Health) will be informed of these detailed arrangements by 31 October 2008 in accordance with the statutory directive.

#### 4. KEY ISSUES

- 4.1 The source of Mercury emitted in crematoria is produced from the cremation process and relates specifically to “silver” teeth fillings. It is estimated that some 15 million “silver” fillings are used in dental treatment each year and the National Health Service (NHS) use these routinely and will not pay for the more expensive white composite material. Private patients can however choose a range of different materials for their treatment. It is estimated that even if the use of mercury based fillings ceased these will still be present in people for many years.
- 4.2 It should be noted that there is a common misconception that exists with regard to mercury emissions from crematoria. The industry has clearly stated that mercury emissions **have no significant impact on environmental quality in the immediate vicinity of crematoria**. DEFRA’s view is that the environmental impact of mercury emitted from crematoria is a cumulative, national effect, via long range transportation (to the North Sea, for example), take up by fish, and subsequent consumption as food. It is for this reason that DEFRA has set a national target for 50% abatement, rather than setting local limits for individual crematoria.
- 4.3 The Government accepts that mercury abatement will be expensive, and considers burden sharing to be a flexible method of achieving the desired 50% reduction in emissions from crematoria. The Federation of Burial and Cremation Authorities (FBCA) has launched an optional burden sharing scheme, CAMEO (Crematoria Abatement of Mercury Emissions Organisation), which aims to provide an equitable and transparent system of sharing the cost of mercury abatement between its members. In essence, the CAMEO scheme proposes that all crematoria will add a levy to each cremation carried out. The proceeds of this which will be collected by CAMEO will then be distributed, in the form of subsidy currently proposed to be 200% of the original levy to its subscribing members who install abatement plant. This scheme has been developed and endorsed by DEFRA and incorporated into guidance notes issued (e.g. AQ24(05))

- 4.4 The Council is a subscribing member of this scheme and has levied an environmental surcharge for each cremation since 2006. A major change to CAMEO's proposal was subsequently announced in 2007. Initially, it was proposed that payments into CAMEO would commence on 1 January 2007, with subsidies for abated cremations becoming available from the date of installation onwards. The latest announcement states that burden sharing will not commence until 1 January 2013, i.e. when the deadline for installing abatement equipment has passed. This means that Cremation Authorities installing abatement equipment well ahead of the 2012 deadline will have to fund this from their own resources until subsidies from CAMEO become available in 2013. The scheme will operate on the basis that each crematorium will pay a fee for each cremation carried out and those crematoria that have installed abatement plant will receive a 200% return on their investment. Those crematoria that aren't abating will pay into the scheme and receive nothing in return. It should be noted however that abatement equipment manufacturers have limited capacity and waiting for the last possible moment to install ahead of the deadline will carry significant risk in terms of complying with the regulations and achieving a best value solution.
- 4.5 If crematoria cannot voluntarily secure the 50% reduction in mercury abatement as required, the alternative scenario is that DEFRA will issue a directive requiring all crematoria above a certain size to install abatement equipment. Under this scenario, it has been suggested that the threshold for abatement will be 2000 cremations per annum and Peterborough exceeds this number considerably (circa 2,300 p/a). Another alternative being considered is that the busiest 64 crematoria (which conduct the required level of cremations equating to 50% of the total nationally) be directed to abate. Peterborough Crematorium is the 34<sup>th</sup> busiest and would fall into this category.

#### **Peterborough Crematorium Mercury Abatement - Feasibility**

- 4.6 In response to the legislation the service undertook extensive research to inform the decision making process and feasibility of delivering a cost effective solution to comply with the legislative requirements. This has involved detailed discussions with equipment manufacturers, suppliers and property service and finance colleagues to assess the practicalities and costs associated with compliance. The main aim of the study has therefore been to:-
- i) assess the condition and life expectancy of the existing cremators, and associated plant and equipment, spatial issues in relation to location of new plant and monitoring equipment required to comply with the operating permit conditions;
  - ii) assess the practical feasibility of installing mercury abatement equipment, taking into account space limitations and modifications to existing plant that may be required;
  - iii) review the merits of either installing individual equipment to abate 50% emissions or installing a multi-cremator installation to achieve up to 100% abatement;
  - iv) assess the capital costs of installation and future operating costs.
- 4.7 A summary of the research findings are shown below which are provided to inform Panel Members:-
- i) The three existing cremators whilst in good operable condition will require extensive refurbishment within the next four years, which forms part of their cyclical maintenance schedule. The cost of this will be £60,000. The cremators which are over ten years old are by today's standards high energy users and inefficient. The marginal cost of replacement as part of the abatement plant installation will significantly reduce energy costs and achieve operational saving in the order of £30,000 per annum, compared to the cost of operating the existing cremators with abatement. Mercury abatement plant and associated monitoring equipment by its very nature is large and bulky and has to be located in the crematory. In order to achieve this, the existing crematory will require extending to accommodate the plant and equipment.

- ii) Replacing the existing cremators with new abated cremators will provide for 100% abatement and mitigate any possible future requirement to increase from the current 50%. By taking this additional step the Council is demonstrating a strong commitment to its objective of becoming an environment capital in terms of proactively reducing its carbon footprint whilst also benefiting from reduced revenue operating costs.
- iii) The project includes for replacement cremators, abatement plant, monitoring equipment, associated building works and professional fees. It was noted that retaining the existing cremators will not provide the energy efficiencies envisaged and it was decided to replace them with new energy efficient equipment that will deliver year on year revenue savings. The works will be programmed in such a way that it minimises any disruption to customers and allows for continuity of service during the construction period.

## **5. IMPLICATIONS**

- 5.1 All financial and legal implications in relation to this project have been considered as part of the decision making process and consequently are not detailed in this report. A full copy of the report detailing the implications have been placed in members rooms for reference.

## **6. CONSULTATION**

- 6.1 This project is service specific and consultation and discussion has been undertaken with officers from relevant Council departments, the Cabinet Member for Community Services, the Cabinet Member for Environment and relevant ward councillors.

## **7. EXPECTED OUTCOMES**

- 7.1 That the Community Development Scrutiny Panel note the content of this report and decision taken by the Leader of the Council. Officers will be in attendance at the meeting to clarify any points if required by Members.

## **8. NEXT STEPS**

- 8.1 The project will be implemented in order to ensure compliance with the legislation by 31 December 2012.

## **9. BACKGROUND DOCUMENTS**

Used to prepare this report, in accordance with the Local Government (Access to Information) Act 1985

- i) Environmental Protection Act 1990 and subsequent Pollution Prevention and Control (England & Wales) Regulations 2000.
- ii) DEFRA guidance notes
- iii) DEFRA Statutory direction – Crematoria Mercury Emissions Direction 2008
- iv) Guidance notes issued by Federation of Burial and Cremation Authorities (FBCA)
- v) Decision notice and public report – October 2008