

COUNCIL CABINET 27 July 2010

Report of the Strategic Director of Neighbourhoods

# Strategic Decisions On The Future Of Markeaton Crematorium

#### SUMMARY

1.1 At the beginning of 2010 the proposed capital programme for the Environmental Services Department, now Neighbourhoods, included:

"The replacement of cremators at Markeaton Crematorium is required to meet new legislation on emissions by 2012. Total costs are expected at around £1.9m."

A number of concerns were raised during scrutiny of the proposals by the Community Commission in January and February 2010. The result was the making of the following recommendation to Council Cabinet:

"To recommend this capital scheme of £1.9m only be finalised by Cabinet following the report of the sub-group established by the Community Commission."

This was accepted.

1.2 The report considers three alternative options for Markeaton Crematorium in the context of the Community Commission's recommendations each of which will result in savings against the allocated £1.9 million budget. Two of the options were as set out by the Commission, the third being an officer proposal.

#### RECOMMENDATION

- 2.1 That option one is implemented to include the installation of two mercury abatement units, and the provision of improved reception and office facilities at Markeaton Crematorium.
- 2.2 That consideration also be given to Option 3 as an alternative, because of its potential environmental benefits and lower revenue costs.

## **REASONS FOR RECOMMENDATION**

3.1 Each of the options outlined in the report has its own advantages and disadvantages, although each represents a sustainable solution.

Option 1 closely matches the recommendations of the Community Commission Sub-Group's report and will result in effective mercury abatement, an improved service for the public and improved DDA compliant office and reception facilities. It should also result in minimum disruption to the service delivery whilst works are in progress. In developing this option consideration has been given to the configuration of the mercury abatement equipment. This concluded in a further recommendation that twin mercury abatement units be fitted. This solution presents both the best technical solution and also provides for a greater level of continuity in the event of equipment failure.

Option 2 similarly matches the Sub-Group's recommendations, but would require a larger extension to the building, no improvement to service provision, less suitable office accommodation, greater potential for loss of continuity in the event of equipment failure and a potential close-down time of several months whilst works were in progress. This would result in a substantial loss of income and inconvenience to the public, as cremations would need to be carried out at an alternative crematorium.

3.2 Option 3 has been presented as an alternative due to its potential environmental and revenue cost benefits, although it does not closely match the Sub-Group's recommendations. It would however, offer additional fuel savings and have a significant impact on the council's carbon emissions.

## SUPPORTING INFORMATION

- 4.1 The Environmental Protection Act 1990 and associated Secretary of State's guidance require all existing crematoria to fit abatement plant by 31 December 2012. The principal pollutant that will be abated by such plant is mercury, which originates from dental amalgam.
- 4.2 The normal serviceable life of a cremator is approximately 20 years. Those at Markeaton were installed in 1996/97 and are therefore 13/14 years old. The cremators have been well maintained and are of good quality and general opinion is that they should remain serviceable beyond the 20 year norm.
- 4.3 As far back as November 2005, the Planning and Environment Commission received reports on the ways in which the City Council might comply with the legal requirement to abate emissions. Its recommendations were that officers informed DEFRA that the Council would:
  - fit an abatement plant within the statutory deadline
  - delay compliance for as long as reasonable and practicable
  - introduce a levy on all cremations from 2006 onwards, ring-fenced to offset abatement costs
  - investigate the feasibility of retro-fitting abatement plant to the existing cremators
  - compare the outcomes with the cost and feasibility of alternatives.

DEFRA wrote to all Councils operating crematoria on 17 March 2010 urging them to ensure progress was being made towards compliance with the legislation, as national data showed that many Councils had not started the process and that those who had, were finding it was taking approximately two years from preparing tender documents to scheme completion. The letter also stated that local authority regulators would shortly be directed to add further conditions to operating permits reinforcing the requirement to report action being taken to secure compliance.

- 4.4 Capital funding for the scheme has been approved at £1.925 million, as part of the 2010/11 Capital Programme, comprising of:
  - £100k contribution in 2009/10, derived from the 'abatement levy';
  - £1.125 million, including £200k from the abatement levy reserve in 2010/11;
  - £700k in 2011/12 including £150k from the abatement reserve.

Several concerns were raised during scrutiny of the proposals by the Community Commission in January and February 2010. The Commission recommended that the capital costs of the scheme of £1.9m should only be finalised by Cabinet following the report of the Sub-Group established by the Community Commission. The Sub-Group's report was considered by Cabinet on 8 June 2010, and recommended a more detailed report on the options be presented at a future meeting.

- 4.5 This report expands on each of the recommendations of the Sub-Group's report in order to determine an appropriate way forward.
- 4.6 Recommendation 1 of the Sub-Group's report was that the paramount project driver should be the fitting of abatement equipment and any changes to office, visitor and Funeral Directors' facilities should be secondary considerations.
- 4.7 It is accepted that mercury abatement is the primary driver for this project. Between 2006 and 2010, the option of carrying out a full upgrade of all the buildings on the site was explored. A range of options was considered, costing from £1.2 to £1.9 million, which would have been in addition to the costs of mercury abatement. These schemes are no longer considered appropriate and are therefore not considered further in this report. Members should be aware however, that public areas of the crematorium do require urgent refurbishment. Concerns have recently been expressed by local clergy on the poor state of the grounds and buildings. Most of this work is cosmetic in nature, although the public toilets require a more thorough facelift to bring tem up to an appropriate standard. Total costs for this work are estimated to be between £100k and £200k.
- 4.8 Recommendation 2 was that the existing Evans 300/2 cremators be retained and retro-fitted with abatement plant, rather than replaced by an all new cremator and abatement system. The recommended option was to retain all four existing cremators and extend the existing building to accommodate the new abatement plant; install one triple abater connected to all four cremators and only use three of the cremators at any one time.

Recommendation 7 was that the option of using the vacant staff house (crematorium lodge) for office accommodation should be explored. As outlined below, this is an important consideration in deciding an appropriate way forward for the abatement plant installation.

4.9 In the context of these recommendations, there are two viable options for the crematorium:

## **Option 1**

Convert the crematorium lodge into office accommodation for existing staff and visitor reception facility. Benchmarking work with other crematoria has confirmed that approximately 60% had office accommodation in a separate building to the crematorium and have utilised space within the existing crematorium to house the new mercury abatement plant.

NB: This would require a relatively small single storey' vertical' extension but minimise costs by staying within the existing 'footprint' of the building.

Lodge conversion -'Vertical' extension -Total:

£230k (see appendix 2 for suggested floor plan) Mercury Abatement plant - £230k (see appendix 2 for sugges £250 - £300k £1.18 - £1.43 million

# Option 2

Extend the existing crematorium building laterally to accommodate the abatement plant. Retain existing offices and let house for residential use

## **Option 2 indicative cost:**

Mercury abatement plant -	£700 - £900k, see para 4.10 below
Lateral extension -	£410k
Total:	£1.11 - £1.31 million

Both options have advantages and disadvantages, although the costs are similar.

Officer recommendation would be option 1 for the following reasons:

- The existing offices/reception areas are cramped, immediately adjacent to the day-to-day operations and do not comply with DDA legislation. For example, a wheelchair user could not currently gain access to the reception area due to narrow doorways, lack of turning space and the small high level counter:
- Staff currently accommodated in dilapidated office accommodation at Nottingham Road Cemetery could also be accommodated within the converted lodge, thereby providing a fully integrated platform for the delivery of an enhanced and consistent level of service. It would also make savings on the operating and logistical costs of running two offices;
- If the lodge conversion was completed in the first phase of the project, the • existing offices at the crematorium could be vacated and then extended to provide the space for the installation of the mercury abatement plant with the minimum of downtime for the crematorium, minimising disruption. The only downtime for this option would be during the physical connection of the abatement plant to the cremators. Downtime for Option 2 is difficult to quantify, but could be for a period of several months. It should be noted that annual income from cremations is approximately £1.2 million, so an extended period of closure could result in a substantial loss of income. It should be noted that there might also be a long term impact on income, should cremations have to be temporarily transferred to another

crematorium, as bereaved families may choose to return there for future cremations.

With regard to the choice of mercury abatement plant, there are also 2 options. It should be noted that no manufacturer currently supplies a quadruple mercury abater i.e. plant that can deal with the emissions from four cremators simultaneously. The Community Commission therefore initially recommended the installation of a triple abatement system, which would be fitted to all four cremators on the basis that only three cremators were used at any one time (the fourth being shut off via a flue baffle system). The alternative option would be to install two twin abaters which would operate independently of each other. Although the purchase costs would be greater, this would represent a superior technical solution and ensure business continuity could be maintained at all times. For example, should the triple abater fail, all cremations would have to stop until it was repaired. Whereas, with a double twin-abater system, two cremators could be kept running in the event of failure of one abatement plant. It is highly unlikely that both twin abaters would fail at the same time.

# Indicative abatement cost:

 one triple abater
£750 - £800K, plus the cost of flue baffle system, (currently unknown)
two twin abaters
£900k

Officers have discussed these options with independent experts and their opinion is that whilst a triple abatement system service four cremators is technically feasible, it is very much an untested compromise that would involve a complex and potentially expensive redesign of the flue system to accommodate the necessary baffling. Officer recommendation is therefore that two twin-abaters should be installed.

4.11 Although not recommended by the Commission, in the interests of presenting a balanced case to Cabinet, an alternative solution (Option 3 below) to the issue is outlined below.

# 4.12 **Option 3**

This would involve the replacement of the existing Evans cremators with a new 3-cremator system, fitted with integral mercury abatement plant. (NB Industry and independent opinion is that a 3-cremator system would be more than sufficient to deal with annual demand at Markeaton. However, as above, the disadvantage of a triple abatement system would be that, in the event of its failure, the cremators would have to be shut down).

The advantage of an 'off the shelf' solution would be:

- Installation within the existing building without the need for expensive alterations;
- The new cremators will be more thermally efficient and therefore fuel efficient, which would permit reduced operating costs; (estimated savings of up to £50k per annum on fuel)
- Reduced cremation times and therefore reduced staff costs;

A positive impact on the Council's carbon footprint. (A reduction in CO<sub>2</sub> emissions of 400 tonnes pa - approximately 1% of the Council's total annual CO<sub>2</sub> emissions. (Figures supplied by the Head of Climate Change and Energy) Management).

## **Option 3 indicative costs:**

Total:		£1.595 million
Extension, dependent on which abatement option is chosen	-	£410k
Abatement plant	-	£525k triple, or £675 twin plus single
Three new cremators	-	£450k
Removal of four cremators	-	£60k

## Revenue and environmental benefits:

- 4.13 It should be noted that cremation and filtration is a complex process that must, by necessity, work as a single system. Control of the cremators is a largely automated process and it will be essential that, following installation of the mercury abatement plant, a single control unit operates both the mercury abatement and cremation processes.
- 4.14 Should the existing cremators be retained, this will mean in practice that only one company 'Facultatieve Technologies' ('FT') will be able to provide abatement plant that can be guaranteed to function properly with the Evans Cremators. Whilst other companies have stated that they may be able to adapt their systems to fit our cremators, they would rely on 'FT' providing them with technical data on their control system to enable harmonisation with their mercury abatement plant. It is suggested that due to the level of complexity, compromise and potential conflict, this would be an unrealistic and high risk solution in practice.
- 4.15 In addition, there would be no economies of scale in terms of repairs/servicing and therefore potentially longer or more frequent shutdown periods. None of the five major suppliers in this market have yet fitted abatement equipment to cremators other than their own.
- 4.16 Officers therefore recommend that a waiver to normal contract procedure rules be sought for the procurement of the abatement equipment from 'FT'.

# 4.17 Recommendation 3

Provide additional staff training to achieve more efficient use of the cremators.

Training is already ongoing in this area and the use of three cremators only on 'quiet' days has been introduced.

## 4.18 Recommendation 4

Introduce Saturday services as soon as practical to provide more choice for families.

A survey of crematoria revealed that the majority open on Saturdays. Officers are pursuing this option in consultation with the staff and unions. Consultation will also be required with local Funeral Directors to establish the feasibility of this recommendation.

## 4.19 Recommendation 5

Introduce Sunday services on the basis of specific requests.

This is feasible, but will again require detailed consultation. .

#### 4.17 **Recommendation 6**

Introduce service times during the lunch period.

This is agreed.

## 4.18 Recommendation 7

Explore the option of using the vacant lodge on the site for the provision of a consolidated and integrated Bereavement Services operation.

This was discussed earlier in the report and is seen as a viable option and sensible way forward. The Head of Planning has stated that obtaining planning consent for change of use would be feasible, particularly bearing in mind the use of the lodge has always been ancillary to the crematorium.

## 4.18 Recommendation 8

Attention should be given to the introduction of a one way system for cars entering and leaving the main car park and for Highways and Transport officers to given further consideration to improving the junction between Markeaton Lane and Ashbourne Road.

Due to recent vandalism of the car park fence adjoining Markeaton Lane, this matter has become more urgent and planning consent is being sought and quotes obtained for new fencing and a gateway.

Officers understand that priority cannot be given to improvements to the road junction as police statistics show a low rate of road traffic accidents.

#### 4.19 Recommendation 9

Explore the option of using an existing Framework Agreement as the procurement framework for the scheme.

An existing framework, known as the North West Framework Agreement, is the only known framework in existence. Further enquiries have revealed that the use of the framework may be legally restricted to the North West of England only and that, in any case, the document requires further refinement before it can be used. This is not therefore seen as a viable option for the Council.

## 4.20 **Recommendation 10**

Chris Edwards be invited to be personally involved in the Project Team.

Chris Edward's department has always been represented on the project team. Should it be felt appropriate that he be personally invited to join the group, an invitation will be sent from the project lead.

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Background papers: List of Appendices:	None Appendix 1 – Implications Appendix 2 – draft floor plans for lodge conversion

# Appendix 1

## IMPLICATIONS

## Financial

- 1. The capital costs of the new scheme will depend on the actual option adopted. All options can be contained within the current capital budget allocated to the scheme of £1.925m. Capital costs in the various options range from £1.1m to £1.6m.
- 2. The revenue implications of the works will be dependent on the option adopted but will definitely not exceed current costs.

#### Legal

2. As described in Supporting Information, a waiver from the Council's Contract Procedure Rules will need to be sought for the procurement of the abatement plant.

#### Personnel

3. The Community Commission's recommendations for extended working hours will require staff and union consultation before they can be implemented.

#### **Equalities Impact**

4.1 Certain parts of the existing site are not currently DDA compliant. Should Members recommend that the house be converted to office accommodation, many of the DDA issues can be resolved as part of the conversion process.

#### Corporate objectives and priorities for change

5.1 The proposals are consistent with Council's corporate objectives for a **Healthy City** and a **City for Stronger, Safer and Cleaner Communities**.



Appendix 2 – Lodge Conversion