

Title: Birtley Crematorium – Cremator Replacement		Ref:
Date:		Portfolio:
Group or Strategic Director: Paul Dowling	Lead member: Support member:	

Purpose of the report

1. To seek approval from Corporate Management Team (CMT) to commence procedure to replace cremator at Birtley Crematorium.

Background

2. Birtley Crematorium opened in 1957. The current cremator was installed in 1989. A cremators lifespan is around 20-25 years and the cremator at Birtley has now exceeded this having operated for 29 years.
3. The two cremators at Saltwell Crematorium were replaced in 2013 to comply with legislation and a mercury abatement system installed. Supporting cremation equipment was renewed to minimise health and safety risks to staff.

Update

4. Although the cremator at Birtley has been well maintained, maintenance costs are rising due to the increased difficulties in sourcing available parts and equipment which are obsolete due to the age of the cremator, and the increasing need to replace worn parts.
5. In December 2017 an urgent shut-down was required for a period of 3 weeks due to excessive smoke being emitted from the cremator which also created an unacceptable working environment for staff. Coffins had to be transferred to Saltwell Crematorium at short notice for services already booked at Birtley Crematorium with no new bookings taken. Although this was repaired by the contractor, in March 2018, smoke was again visible from the cremator and an urgent shut-down was implemented, diverting coffins to Saltwell Crematorium for services booked at Birtley. After further repairs the cremator became operational again but smoke became visible again on 4th April 2018. It was decided at this time to close Birtley Crematorium for cremations until a full repair could take place.
6. Work was programmed into Strategic Maintenance to replace a monitor at a cost of £14,000 and to replace gas valves at a cost of £6,000. These were ordered in March 2018, but due to their specialist nature aren't available until mid-late June. The impact of this is that Birtley will remain closed for cremations until mid-late June 2018.
7. The cremator at Birtley requires a fan to operate the system. There are two fans which are alternated every 6 months for even wear. In February 2018, one of these fans failed and a repair requested. Due to the size and complexity of

removal it is anticipated the repair could cost up to £15,000 but the final cost is at present unknown. As both fans have had even wear it is assumed that the fan currently operating may also require maintenance work in the future at a similar cost.

8. Since December 2017, £6,000 has been spent on repairs (not including costs detailed above for the fan, monitor and gas valves), with further expenditure required for repair to the current breakdown.
9. Cremation numbers at Birtley Crematorium are starting to increase with an additional 56 cremations carried out in 2017 (Jan-Dec) compared to the same period in 2016 creating further strain on the ageing cremator.
10. Office of National Statistics has projected that mortality rates are expected to fluctuate from 2018 to 2023 then rise yearly from 2024 to 2039.
11. The cremator at Birtley isn't as efficient and uses more gas than the ones at Saltwell Crematorium. It now takes longer to pre-heat the chamber which isn't economical.
12. Without investment, the crematorium will find it increasingly difficult to meet the needs of its environmental permit as the performance of the cremator deteriorates.
13. The cremation process naturally generates 'emissions' and these are subject to regulation. Current legislation requires 50% of all cremations to be 'abated' to remove mercury from the emissions. (Mercury emissions are as a result of amalgam fillings). These emissions are not controlled by the actual cremator, but through abatement equipment which is currently installed at Saltwell Crematorium but not at Birtley.
14. In addition to the rise in the number of cremations in 2017 compared to 2018, burial land at Birtley is expected to be full in the next 15 years (based on current burial rates). Although burial numbers are reducing yearly, burial land still needs to be provided. Investigations to find new burial land in Birtley has to date proved unsuccessful. If new burial land cannot be found in Birtley it is anticipated that the number of cremations will increase further at Birtley Crematorium.

Possible Options

15. Option One - The Council could decide not to replace the cremator once it is no longer serviceable, however this would mean that residents would need to go to Saltwell Crematorium or to crematoria outside the Borough such as Durham or Sunderland. The risks associated with continuing to support the existing cremator will potentially see a continued increase in operational costs as the equipment becomes gradually less efficient and requires more attention. Adverse publicity and risk of cancellation or diversion of funerals will be more likely due to delays caused by breakdowns, problems sourcing replacement parts and equipment. A private operator may see an opportunity to build a crematorium in the area if there is a demand that isn't being met due to the closure of Birtley Crematorium.

16. Option Two - Replace the cremator with one cremator with a mercury abatement system and supplementary cremation equipment. This would require an extension to be built to house the abatement system and improve staff welfare facilities. To procure supplementary cremation equipment. The cremators lifespan will be around 25 years. It is estimated that the cost to undertake this would be £2.1m.
17. Option Three - Replace with two cremators (if space allows), a mercury abatement system and supplementary cremation equipment, which will allow Gateshead to be self-sufficient for cremations ensuring at least one cremator can accept larger coffins (numbers of these are increasing) with no need for closure when servicing or relining is taking place. The cremators lifespan will be around 25 years. If Saltwell Crematorium was to have operational difficulties, Birtley could be used to carry out cremations rather than relying on neighbouring authorities. Gateshead would also be in an advantageous position to help other authorities experiencing cremation difficulties. The estimated cost for these works is £2.5m.
18. If it is decided to replace the cremators there will be an additional yearly revenue cost for reagent supply and recycling and for servicing of approximately £15,000.

Financial Requirements & Payback

19. To replace the cremators at Birtley Crematorium there will be a requirement for Capital investment of between £2.1m and £2.5m.
20. In previous years it was suggested that Birtley Crematorium could close as Saltwell Crematorium had the capacity to carry out all cremations. Recent statistics have shown that cremation numbers are increasing. Since November 2017 the amount of spare capacity at Saltwell Crematorium hasn't been sufficient to meet the number of cremations carried out at Birtley. In the first 3 months of 2018 there would have been a need to have 111 service times available at Saltwell to accommodate cremations from Birtley, however only 41 service times were available creating a shortfall of 70. This could have created c£30,000 displaced income from Birtley to Saltwell Crematorium. However, it would have resulted in further delays for families to hold cremation services for their loved ones (possibly of up to 4½ weeks) causing further upset and prolonged distress, or resulting in them having to go outside of the Borough to have their loved ones cremated. If the Chapel at Birtley remained open for burial services only, this would cost c£74,000 per annum compared with a net income of c£280,000 presently.
21. As can be seen from the following tables the numbers of cremations at both Saltwell Crematorium and Birtley Crematorium have started to increase. The years when there were shutdowns would have seen higher cremation numbers as some families will have used crematoriums outside the Borough.

Saltwell Crematorium

Year	Total Number of Cremations	Comments
2017	1353	Total shutdown of 6½ weeks throughout year due to fire, repairs and reline of cremator.
2016	1281	
2015	1269	
2014	1366	
2013	1345	

Birtley Crematorium

Year	Total Number of Cremations	Comments
2017	515	Closed from 15th December due to smoke from cremator.
2016	459	Closed for 3½ weeks for reline of cremator, fire alarm installation, electrical works and redecoration
2015	465	
2014	389	
2013	418	

22. As cremation numbers start to increase, the demand at Saltwell Crematorium will also increase and if the cremator at Birtley isn't replaced long delays for cremation services will be seen throughout the year, which could lead to reputational concerns for the Council.
23. Although Capital investment is required to replace the cremator at Birtley Crematorium, the income yield that the Council would receive will be over the 25-year lifespan of the cremator. Using the number of cremations in 2017(515) as a basis and the current cremation fee of £739 projected income over the 25-year period would be £9.9m – income from burials is estimated to be c£0.9m over this period. The current cost of running the Cremation and Chapel is c£140,000 per annum which, at current prices, would equate to a cost of £3.5m over 25 years.
24. If one cremator is installed at a cost of £2.1m then the capital financing cost over the 25-year period would be £4.2m. If two cremators are installed at a capital cost of £2.5m then the capital financing cost would be £5m. The revenue impact of replacing the cremator would realise a net income yield of between £2m and £2.8m over the 25-year period after capital financing costs and running costs. This does not take into account any increases in the number of cremations or in the fees.
25. Continuing to offer cremations at Birtley Crematorium will assist in providing sufficient flexibility of choice for Regent Funeral Services.

Recommendations

26. The recommendation is to replace the one cremator at Birtley with two cremators (if space allows), a mercury abatement system and supplementary equipment and to extend the current building. CMT is asked to give its views on the above.
27. Investment will be recovered through income received from cremations and if the number of cremations continue to increase in the future the investment will realise additional future income.

Consultees

The following officers have been consulted in the preparation of this report:

Councillor Linda Green, Portfolio Holder, Communities & Environment
Steven Ramshaw, Scientific Officer, Environmental Protection, Communities & Environment
Phil Howarth, Building Surveyor, Facilities Management, Corporate Resources
Officers in Corporate Finance.

Contact: Marc Morley

Ext: 7420