

THE SITING AND PLANNING OF CREMATORIA

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Important Note:

Environmental Protection Act 1990, Part 1

This memorandum should be read in conjunction with the Secretary of State's Guidance - Crematoria PG5/2(12) and Revisions/Additions to existing Process and General Guidance Notes No. 1 (UG-1, May 1992) which may alter, amend or rescind some sections.

Issued in April 1978 by The Department of the Environment who have kindly consented to its reprinting in the form below, provided that it is clearly stated that since the date of issue of this memorandum circumstances may have changed making it necessary for some parts to be revised.

(Ref: LGI/232/36)

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INTRODUCTION

1. At the end of 2015 there were 277 crematoria in the United Kingdom. Over 74% of the total number of persons who died during 2015 were cremated. (*These figures were updated in 2016 by The Cremation Society.*)
2. The number of cremations rises each year. New crematoria are still being built or planned whilst others may need extension or alteration now or in the future. This bulletin has been prepared to assist local authorities and others contemplating the construction of crematoria. The booklets published by the Federation of British Cremation Authorities will also be found helpful.
3. Under Section 1 of the Cremation Act 1952, the sites and plans of all new crematoria, by whomsoever they are provided require the approval of the Secretary of State for the Environment*, in addition to any other approval which may be necessary+. (**The above requirement has now been rescinded. See explanatory note at foot of page 4.*)
4. The following are the main principles which should be observed:
 - (a) that the site is well suited for the building, and is accessible by public transport, and, normally, that all main services are available;
 - (b) that the crematorium is so sited that its use does not have any material effect on the immediate neighbourhood;
 - (c) that the layout of the site provides for the easy movement of vehicles to and from the building, and adequate parking space;
 - (d) that the building should be so planned as to allow convenient circulation;
 - (e) that proper amenities are provided for those attending or working at the crematorium;
 - (f) that the cremation room and its ancillary rooms and spaces comply with good practices and permit cremation to be carried out in a reverent and dignified manner.

THE SITE

5. Sufficient land is required to provide an appropriate setting for the crematorium, adequate internal access roads, car-parking space and space for the disposal of ashes. The larger the number

of cremations a year likely to be carried out when the crematorium is fully operational, the larger the amount of land required for the disposal of ashes (see paragraph 13). Some recently approved sites have ranged from 2 to 4 hectares (5 to 10 acres) and in some cases they were part of more extensive areas bought for crematorium purposes.

6. Care is needed in the selection of a suitable site for a crematorium and the local planning authority should be consulted at the outset. A well wooded piece of ground with natural undulations and good views is ideal, but this must go along with easy access by public transport and by private car. One or two authorities have found that the existing mature grounds of a derelict country house have provided a suitable and attractive site.
7. Efficiently operated modern cremators should not cause any nuisance or inconvenience to houses in the vicinity. But to allow for any possible emission of fumes, the direction of the prevailing wind should be taken into account in the selection of a site.
8. Main services should be available, water drainage electricity and gas. If main drainage is not available a simple treatment plant large enough to deal with soil drainage from the building may be acceptable.
9. Entrances and exits require careful planning; they should be from or to local distributor roads and appropriate sight lines should be provided. The highway authority, as well as the planning authority, should be consulted. It helps the circulation of traffic to have a separate entrance and exit. If the entrance and exit routes share the same roadway this should be about 5m wide.
10. The gateway at the entrance to the site should be set back enough to allow a full turn-in from the road for any vehicle before passing through the gates. A pedestrian gateway should be provided adjoining the vehicular gateway, as many visitors to the crematorium grounds and remembrance chapel may come at a time when the main building is closed.
11. The size of the car park is to some extent governed by the capacity of the chapel; space for at least one car should be provided for every two places in the chapel. The layout of spaces in the car park should allow cars to arrive, park and depart without noisy manoeuvring.

*The formal documentation which is generally required in connection with the approval of a local authority scheme is set out in the Department's note, L172

+ This includes planning permission and requirements under the Clean Air Acts 1956 and 1968

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12. A small garden, closely adjoining the building is usually provided as an enclosed retreat for quiet thought and contemplation.
13. The area for the disposal of ashes, by strewing or by burial, should form a pleasantly treated part of the grounds. There now appears to be an increasing preference for burying ashes. Where strewing is adopted the ground will sour from the continuing application of ash and the plans should include more than one plot, if space for them can be provided (as these plots would be subject to the statutory requirements mentioned in paragraph 17 and 18). The plots can be used in turn to give the others time to recover. After strewing, the ashes should be lightly covered with earth, this helps to maintain the fertility of lawns if correctly composted soil is used.
14. Landscape architects should be retained for the design of the grounds and gardens.
15. New planting should form the subject of a long-term plan from the very beginning. It is important to get quick growing trees and shrubs planted at once, with a long-term planting scheme for forest trees for the ultimate screening and maturing of the site.
16. It is important that the flow of traffic and visitors within the grounds should be smooth and uninterrupted. Visits should be made to selected crematoria which have been in operation for a few years to see how their plans have worked out in practice.

THE BUILDING

17. The Cremation Act 1902 (Section 5) provides that no crematorium shall be constructed nearer to any dwelling house than 200 yards (182.880m)*, except with the consent in writing of the owner, lessee and occupier of such house, nor within 50 yards (45.720m) of any public highway, nor in the consecrated part of a burial ground.+
18. By Section 2 of the Act 'crematorium' means+ 'any building fitted with appliances for the purpose of burning human remains, and shall include everything incidental or ancillary thereto'. The Department is advised that the crematorium buildings, chapels and parts of the grounds used for the disposal of ashes come within this definition, but not ornamental gardens, carriageways or houses for staff.
19. Crematoria have as much claim to special treatment as any public building, secular or religious, and the building should be designed by an architect, preferably one who specialises in this type of work. Promoters and local authorities are advised to select their architect with care and with consideration for the dignity and appropriateness of the building.

The provision made should include the following:

- (a) a *porte cochère* providing a covered setting-down space at the entrance to the chapel;
- (b) the entrance hall suite, connected with a waiting room and lavatories;
- (c) the chapel (or chapels - the possibility that a second chapel might be required should be kept in mind);

- (d) an independent exit from the chapel leading under cover to an arcade or cloister for flower displays;
- (e) a covered departure point and lavatories (note- it is sometimes possible to make one lavatory suite available from both entrance and exit points);
- (f) a vestry for the official clergy;
- (g) a committal room between the catafalque space in the chapel and the cremation room;
- (h) the cremation room suite (with separate access from the main entrance hall), including staff room and lavatories, pulverisation, fan and heating plants, ash repository and a workroom with bench;
- (i) a waiting room and lavatories for bearers is sometimes provided.

21. The detailed planning requirements of the various sections of the building are as follows:

The *porte cochère*

22. This must be long enough to give cover for the removal of the coffin from the hearse and taking it into the chapel, and at the same time for passengers in one car to alight. The minimum length necessary for these purposes is about 5.5m and there should be a clear height of at least 3m.
23. The road width between the kerb of the chapel entry and the outer wall or columns of the *porte cochère* should not be less than 2.7m. The outer wall or columns should always be based on a kerb wide enough to allow car doors to swing clear.
24. There should be a pavement at least 900 mm wide between the kerb and the main entrance. The kerb should not be more than 150 mm high and wherever possible this should be the *only step between the roadway and the interior of the chapel*.

Doorways and Gangways

25. All doorways and gangways through which the bearers have to pass with the coffin should be not less than 1.8m wide in the clear. Special care should be taken to use door furniture that has a minimum projection and operates silently. The height of doors should be 2.3m to allow adequate headroom for the bearers to carry the coffin shoulder high.

Entrance Hall

26. This should be of generous size and should have direct communication with the chapel and waiting room.

Waiting Room

27. This requires an area of about 18 square metres, capable of seating about twelve persons, and needs to be placed so that those waiting can see the arrival of the *cortège* through the window. (Alternatively, a waiting area might be provided in association with the entrance hall). Separate lavatory and w.c. accommodation for men and women should be planned adjacent to the waiting room and care should be taken to ensure that no plumbing noises are audible in the chapel or the entrance hall.

*Metric equivalents under Section 1 of the Weights and Measures Act 1963

+ These provisions have been modified by a number of local Acts, e.g. see Section 7 of the Greater London Council (General Powers) Act 1971.

The Vestry

28. The vestry should be placed so that officiating clergy can see the approach of the *cortège* along the approach road. It need not be larger in area than 9 square metres. A separate lavatory and w.c. will be provided.

The Chapel

29. *Seating* Normally, accommodation should be limited to a maximum of 80 persons. The area is calculated on the basis of a minimum of 0.450 square metres per person exclusive of gangways. Either fixed pews or moveable chairs may be provided. The latter have the practical advantage that they may be arranged for either large or small congregations, but they may give rise to some noise.

30. Provision must be made for a clergy desk and for the catafalque.

31. *Music* This may be provided either by an organ or by record or tape-playing equipment, which should be expertly planned and installed.

32. *Catafalque* The catafalque should be about 3 m long, and 1 m wide, the top should not be more than 1.200 m above the floor immediately surrounding it and will normally be at the same level as the cremator hearth. The catafalque must adjoin the committal room.

33. *Transfer* The method of moving the coffin to the committal room must be decided before this part of the building is planned.

34. The main methods of transfer involve:

- lowering the coffin through the floor to a committal room at a lower level;
- moving the coffin horizontally through an opening at the back or at the side of the chancel;
- placing the catafalque partly or wholly in a recess across which curtains may be drawn. The coffin is subsequently moved by one of the above methods.

35. Method (c) is now the most usual one in new crematoria. Method (a) necessitates a cremation room at a lower level than the chapel; this would normally lead to considerable extra expense in building and foundation work, but on a sloping site may be the most practicable. In Method (b) care is needed to avoid a disturbing view through to the committal room. Curtains operating on the committal room side of the opening provide one solution. But both Methods (a) and (b) can be screened by curtains between the catafalque and the congregation.

36. Care should be taken to ensure that the machinery for transferring the coffin to the committal room and for moving the curtains is silent in operation.

37. Steps between the chapel and the catafalque should be avoided; but if any are included none should rise more than 125 mm and the treads should not be less than 375 mm deep. The nosings should be clearly indicated by colour or some obvious contrast in material.

38. *Exit from the Chapel* The exit from the chapel should be at the opposite end from the entrance and should connect with a

covered way of sufficient length and depth for the display and inspection of wreaths by mourners on their way out. The covered way should face a quiet section of the grounds and could reasonably be terminated near the car park with a sheltered departure point and a lavatory suite adjoining.

39. *Room of Remembrance* It is usual to provide a Book of Remembrance which is generally placed in a special room or small chapel. This should be quite separately approached as it will be mainly used by persons paying individual visits to the crematorium.

40. *Committal Room* The committal room should measure at least 3.6 m between the chapel opening and the partition wall separating it from the crematory, and if automatic equipment for charging the cremators is likely to be installed the measurement should be at least 4.6 m. The room should be well but plainly furnished as committals sometimes have to be witnessed. Racks should be provided for any temporary storage of coffins awaiting cremation.

41. A warning signal (a buzzer or light) operated from the clergyman's desk will assist in indicating to staff the moment for the transfer of the coffin to the committal room. In case of failure of this signal, a duplicate warning signal might be provided for operation by the chapel attendant. It is also useful to install monitoring equipment so that at any time the staff in the committal room know what stage a service has reached.

The Crematory

42. Access from the main entrance hall to the crematory should be possible without going through the chapel or going outside the building.

43. The height, width and length of the crematory depends upon the type of cremator to be used. Early consultations with the combustion engineers and/or the cremator manufacturers should take place to settle the type of cremator and the arrangement of the crematory. It is generally necessary to have a clear space of at least 3.6 m from the cremator to the rear wall and a space of at least 900 mm between cremators or groups of cremators and flanking walls. Working conditions in the room will be improved if it is at least twice the height of the cremators and fitted with overhead ventilation and a heating system. The cremator manufacturers may recommend a similar height for the crematory to facilitate maintenance work on the cremators. It should not be possible for mourners to obtain an accidental view into either the committal room or the crematory.

44. The *Cremators* At least two independently operating cremators should be installed so as to allow for maintenance and periodic overhaul. Normally the second cremator in a twin cremator cannot be operated while the other is under repair. If the number of cremations is in time expected to exceed 2,000 a year, space should be left for a third cremator to be installed when necessary; and if two chapels are planned, space may be required for four cremators.

45. In deciding the type of cremator required regard should be had to proven efficiency, the services available and to other relevant factors. Gas is the most usual fuel used.

46. If combustion is incomplete there may be smoke and/or smell. The cremators should therefore be designed to secure as far as is practicable complete combustion, if necessary by providing means for the complete oxidation of combustion gases before discharge to the atmosphere. Even so the proper operation of the controls is essential if smoke and smell are to be avoided; gas and air should be supplied as appropriate during each cremation. It follows from this that the crematory should not normally be left unattended. The pre-heating of a cremator to operational temperature each day also helps to eliminate smoke and smell from the initial cremation.

47. *Instrumentation* Instruments should include a pyrometer and smoke density equipment arranged so as to assist the operator in achieving conditions for complete combustion. It may also be useful to provide a visual aid so that the operator can see the top of the stack from the crematory.

48. *Stack* The advice of the makers of the cremator on the dimensions of the stack should be obtained at an early stage. But, subject to local conditions, the stack should generally be at least 12 metres high and should not be less than 3 metres higher than the highest part of the associated building to reduce the likelihood of flue gases being caught in down-draughts. Where natural draught is used the horizontal lengths of flues between the cremator and the stack should be kept to a minimum, and should not be more than one-half of the height of the chimney (otherwise the chimney loses some of its pull and fumes are likely to enter the cremation room). The need for access to these flues for cleaning purposes should be kept in mind. Central heating boilers should be provided with a separate flue.

Ancillary space

49. Adjoining the crematory there should be a small staff room, a workroom, lavatory and w.c. accommodation, a fan room, suitable accommodation for the pulverising machinery and for the storage of ashes and space for the central heating plant. It is inevitable that there will be some vibration and noise from the machinery; none of it ought to be audible in the chapel, and it is important that these rooms should be sited away from the chapel. Acoustic insulation will reduce noises from the fan room. The air inlet into the fan room should be through an opening at least 3 m above ground level in an outside wall facing on to a yard so as to be as far as possible away from places used by mourners; the opening should be grilled or louvered to reduce noise. A cleaners' room should also be provided and at the larger crematoria an office may be desired for the senior operator. Information about the space required for meters should be obtained well in advance and their installation so arranged that

the meters can be read without entering the crematory.

Chapel of Rest

50. It is sometimes desirable to provide a small chapel of rest sited conveniently in relation to the main chapel and accessible to it under cover. This chapel should be well ventilated and have an outside door to enable the coffin to be delivered direct from the hearse. It should not be heated.

Service Yard

51. A service yard will be required outside the crematory suitably screened from view. The entrance to it, and through it to the crematory, should be large enough to allow the movement of bulky equipment. The yard can conveniently incorporate the gardeners' and maintenance stores.

Superintendent's House and Office

52. Where a house for the superintendent is not available locally it will usually be necessary to build one on the site. The house, which should be designed with due regard to the privacy and amenities which ought to be enjoyed by the occupants, and the main office should be placed at the main entrance to the site. Offices should not be incorporated in the crematorium building unless they have independent access and there is no possibility of staff using the same entrances and exits as mourners or private visitors to the buildings. The chief parts of the grounds visited by mourners should not be overlooked from office windows, neither should it be possible for mourners to hear the noise of typing or office machinery.

Flowers

53. There should be suitable arrangements for the display (and subsequent disposal) of flowers received on the day of the funeral and on memorial days. (See also paragraph 38).

CONVERSIONS

54. It is sometimes proposed that a cemetery chapel should be converted for use as a crematorium. Although not by any means impossible - there have been several successful conversions - there may be inherent disadvantages in existing buildings. Developers should satisfy themselves that the basic standards recommended above can be achieved.

COSTS

55. The costs of building crematoria vary very widely and it is impracticable to give a figure within which a crematorium should be built.

EXPLANATORY NOTE

Section 188 of the Local Government, Planning and Land Act 1980 and Part XV1 of Schedule 34 rescinded the requirement in section 1 of the Cremation Act 1952 that the sites and plans of proposed crematoria must be approved by the Secretary of State for the Environment, paragraph 3 (page 1) therefore of the above Memorandum is no longer relevant. We feel we must stress that the above Memorandum was only issued for guidance and certain aspects may well be out of date. However, prospective cremation authorities may find it informative which is why it has been decided to continue to publish it in this Directory.