

**Environmental Protection Department's Requirements and Regulations
(Applications for Licence/Exemption in Respect of
Private Columbaria)**

(1) Information to be submitted in relation to Air Pollution Control

(a) *(Please tick the appropriate box)*

Will burning activities (such as burning of incense or paper offerings) be carried out in the columbarium?

☐ Yes (Please submit information set out in Part B)

☐ No

(b) Information to be submitted

Layout plans

	Item	Details/Requirements
1.	Block plan	The scale should not be less than 1:500, so that the locations of the columbarium and flue gas outlet, as well as the neighbouring environment of the columbarium can be clearly shown.
2.	Schematic diagram(s) of equipment to be installed for burning of incense and/or paper offerings (such as paper offering or incense furnaces), and its ventilation system (including air pollution control equipment)	The scale should not be less than 1:100. The emission route and treatment arrangements for flue gas, as well as the design and specifications of air pollution control equipment and equipment for burning incense and/or paper offerings should be clearly shown in one or more schematic diagrams.

3.	Elevation plan(s) showing the location of the exhaust outlet for flue gas (including flue gas generated during the burning of paper offerings and incense)	The scale should not be less than 1:100. At least two perpendicular elevation plans should be provided to clearly show the relative location and distance between the exhaust outlet and the neighbouring environment (such as nearby windows and air intakes), as well as the design of the exhaust outlet (such as its size, height from ground and direction of emission).
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Other information

- (i) Operation hours and arrangements of equipment for burning of incense or/and paper offerings
- (ii) Specifications of air pollution control equipment
- (iii) Operation and maintenance plan of air pollution control equipment

(c) Points to Note

1. The layout plans should be prepared and signed by an authorized person or a registered professional engineer. Authorized person means a person whose name is on the authorized persons' register kept under Section 3(1) of the Buildings Ordinance as an architect, an engineer or a surveyor. Registered professional engineer means a registered professional engineer under the Engineers Registration Ordinance.
2. If burning of paper offerings and/or incense is inevitable, the flue gas generated should be thoroughly collected and properly treated by effective air pollution control equipment to achieve no visible emissions and no environmental nuisance to nearby air sensitive receivers, such as residential premises, schools, hospitals, etc.
3. Exhaust outlet for discharge of treated flue gas should be located at a place where ventilation is good and any emissions can be adequately dispersed to the atmosphere without hindrance. Sufficient separation distance from any air sensitive receivers in the vicinity should be provided to avoid causing any nuisance to the public.

(2) Information to be submitted in relation to Water Quality Control

The Applicant should submit the following documents

- (a) A detailed drainage layout plan of the columbarium which clearly shows the following:
- Location of the premises;
 - Main facilities which produce effluent (e.g. toilets, wash basins, air pollution control equipment);
 - Effluent discharge routes;
 - Wastewater treatment facilities;
 - Location of the discharge points;
 - Places where samples of the effluent may be taken.
- (b) If air pollution control equipment will be provided at the columbarium, documents to be submitted should include:
- Specifications of the air pollution control equipment and the associated wastewater treatment facilities.
- (c) If the effluent produced by the columbarium will not be discharged into the public sewer (e.g. discharge into a septic tank and soakaway system, a storm water drain or a river), documents to be submitted should include:
- Specifications of the septic tank and soakaway system; or
 - Specifications of the relevant wastewater treatment facilities, including the particulars of the person or company operating such treatment facilities.
- (d) If the columbarium has other ancillary facilities, such as an open car park or a restaurant or canteen for visitors, etc., documents to be submitted should include:
- Information on the area of the open car park and the relevant petrol interceptor (if applicable);
 - Information on the maximum daily flow rate of the restaurant or canteen, etc. and the relevant wastewater treatment facilities (if applicable).

- (e) The operation plan to cope with the effluent discharge during peak period, which should include the estimated visitor flow, effluent flow rate, maximum treatment capacity of septic tank and soakaway system or wastewater treatment facilities, other temporary arrangements (e.g. provision of additional portable chemical toilets or suggesting visitors to use nearby public toilets), etc., during the peak period.

Remarks:

- (i) If there is no public sewer near the columbarium, the discharge arrangements involved will be more complicated; operators are advised to hire professionals to assist in designing and submitting suitable plans for handling effluent discharge.
- (ii) The columbarium should obtain a licence under the Water Pollution Control Ordinance before operation (except that the premises does not have effluent discharge, or only has domestic sewage that discharges to the public sewerage system). For details of licence application, please call the Environmental Protection Department (EPD) at 2838 3111 or visit the following EPD webpage:
http://www.epd.gov.hk/epd/english/application_for_licences/guidance/aw_331.html

(3) Information to be submitted in related to Noise Control

(a) Detailed layout plan of the columbarium:

- The layout plan (in a scale of not less than 1:500) should clearly show the location of the columbarium and the vicinity within its 300m radius (including the locations of the nearby noise sensitive receivers (NSRs), such as residential buildings, libraries, schools, nursery schools / kindergartens, clinics, etc.);
- The layout plan (in a scale of not less than 1:100) should clearly show the major noise generating facilities in the columbarium (e.g. smoke extract system and exhaust outlet of the air pollution control equipment installed at the joss paper furnaces, as well as the installation locations, directions and height of the sound amplification and ventilation systems in the columbarium) and the relevant noise abatement measures (if applicable). The relative locations, orientation, height from ground and separation of the above equipment and measures, from the nearby NSRs should also be clearly marked.

(b) A noise assessment report prepared by a qualified engineer or consultant.

(i) For columbarium which is already in existence and in operation:

- The noise assessment report should confirm that the noise generated from the operating columbarium does not exceed the noise standards for day time and evening period (i.e. 0700-2300 hours) as well as night time period (i.e. 2300-0700 hours on the next day) set out in the Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites when noise assessment is conducted in neighbouring NSRs (such as residential buildings) in accordance with the procedures laid down in the above Technical Memorandum. A detailed design and plan of the relevant noise abatement measures should also be submitted with an assessment of their effectiveness (if applicable).

(ii) For columbarium which is still under planning:

- The noise assessment report should confirm that the noise generated from the columbarium when it is operating in future will be at least 5dB(A) lower than the noise standards for day time and evening period (i.e. 0700-2300 hours) as well as night time period (i.e. 2300-0700 hours on the next day) set out in the Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites when noise assessment is conducted in neighbouring NSRs (such as residential buildings) in accordance with the procedures laid down in the above Technical Memorandum. A detailed design and plan of the relevant noise abatement measures should also be submitted with an assessment of their effectiveness (if applicable).

References:

Technical Memorandum for the Assessment of Noise from Places Other Than Domestic Premises, Public Places or Construction Sites

Website:

http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide_ref/tm_nondomestic.html

Good Practices on Ventilation System Noise Control

Website:

http://www.epd.gov.hk/epd/sites/default/files/epd/english/environmentinhk/noise/guide_ref/files/Vent_sys_E-06_0.pdf

(4) Specific Environmental Protection Requirements

(a) Air Pollution Control

- Burning of joss papers and/or incense should be avoided within columbarium, in particular if it is situated in densely populated area. This may be accomplished by exploration and promotion of alternative forms of worshipping without pollution effect (e.g. offering flower, electronic offering, smokeless incense, electric candle and so on);
- If burning of joss papers and/or incense is inevitable, their emissions must be thoroughly collected and properly treated by effective air pollution control equipment to achieve no visible emissions and no environmental nuisance to nearby air sensitive receivers such as residential premises;
- Exhaust outlet for final discharge of treated flue gas should be located at a place where ventilation is good and any emissions can be adequately dispersed to the atmosphere without hindrance. Sufficient separation distance from any air sensitive receivers in the vicinity should be provided such that any emissions will not cause nuisance to the public;
- Before burning joss papers, it should make sure that the air pollution control equipment connected to the joss paper furnace has been turned on and running normally. It should also ensure that only offerings made with paper materials are burnt in the furnace. Other wrapping materials, in particular plastic materials, should be removed. In addition, a trained operator should be employed to control the feeding rate of joss papers to the furnace so as to avoid overloading the air pollution control equipment and emitting visible flue gas;
- Air pollution control equipment should be maintained regularly and by competent personnel to ensure optimum performance. All components should also be inspected, cleaned and serviced regularly; and
- The “*Guidelines on Air Pollution Control for Joss Paper Burning at Chinese Temples, Crematoria and Similar Places*”, which is available

from the website of Environmental Protection Department should be observed:

(http://www.epd.gov.hk/epd/english/environmentinhk/air/guide_ref/air_guidelines.html)

(b) Noise Pollution Control

- Noise from the columbarium operations as if the noise from any other industrial/commercial premises is subject to the legislative control;
- The funeral activities to be conducted on site should be restricted to within the period from 10 a.m. and 5 p.m. as far as practicable to avoid causing any noise nuisances to the public nearby;
- Amplified sound from funeral activities including the amplified music, instrument playing within the columbarium, should be kept to a minimum, and should not cause noise annoyance to nearby residents;
- Air ventilation systems, in particular, those associated with the air pollution control equipment should be properly sited and designed with suitable noise control measures to avoid in close proximity and/or facing direct to nearby noise sensitive receivers such as residential premises. They should comply with the “*Good Practices on Ventilation System Noise Control*” available from the EPD’s website;
- Noise generated from machinery and equipment (e.g. chiller units, ventilation plants and water pumping systems) of existing and operating private columbaria should comply with the noise control criteria stipulated in the “*Technical Memorandum for the Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites*”;
- Noise generated from machinery and equipment (e.g. chiller units, ventilation plants and water pumping systems) of private columbaria still under planning should be at least 5 dB(A) below the noise control criteria stipulated in the “*Technical Memorandum for the*

Assessment of Noise from Places other than Domestic Premises, Public Places or Construction Sites”; and

- The above Guidelines and Technical Memorandum are available from the EPD’s website:
(http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide_ref/noise_guidelines.html)

(c) Drainage Arrangement/Sewerage Treatment

- All wastewater generated in the columbarium should be connected and discharged to public sewers. Apart from domestic sewage, which can be discharged directly to public sewers, all other wastewater should be properly treated prior to discharge. For example, wastewater generated from air pollution control equipment needs to be filtered before discharge;
- If there is no public sewer in the vicinity of the columbarium, the operator should comprehensively review the various discharges from the columbarium, and provide adequate treatment facilities such as septic tank and soakaway system or small wastewater treatment plant to treat the wastewater. All wastewater should be properly treated prior to discharge to storm drains, river courses or other water bodies;
- The operator should regularly maintain and repair all wastewater discharge and treatment facilities. Septic tank should be regularly inspected and desludged, in particular, desludging should be carried out before the festive seasons;
- The operator should consider whether the wastewater treatment facilities can cope with the increased discharge volume due to the increased visitors during peak seasons. If necessary, mobile chemical toilets should be provided or other alternative arrangements should be adopted so as to relieve the loading to the treatment facilities;
- If there are other ancillary facilities such as open car parks or restaurants/canteens for use by visitors, all wastewater from these facilities should also be properly treated before discharge;

- Details of the drainage plans for the columbarium should make reference to the EPD Practice Note for Professional Persons ProPECC PN 5/93 “*Drainage Plans Subject to Comment by the Environmental Protection Department*” available from the EPD’s website:
(http://www.epd.gov.hk/epd/sites/default/files/epd/gn_pdf/GN2014P241-1993c-e.pdf) (English version only)

Remarks:

If there is no public sewer near the columbarium, the drainage arrangements involved would be more complicated. Operators are advised to hire professionals to assist in designing and submitting suitable plans for handling effluent discharge, and to seek advice from the Lands Department, Planning Department, and other relevant government departments so as to ensure compliance with all relevant legislation of the Hong Kong Special Administrative Region.