Cremation

CREMATORIUM (OPERATING STANDARDS) REGULATIONS, 1999

Authority: These Regulations were made on 13th September, 1999 by the Minister under section 14 of the *Cremation Act*.

Commencement: 23rd September, 1999.

1. These Regulations may be cited as the *Crematorium* short title. (*Operating Standards*) Regulations, 1999.

2. In these Regulations,

"operator" means the operator of a crematorium;

"particulate matter" means particles of any matter including dust and soot;

"Regulatory Authority" means the Environmental Engineering Division of the Ministry of Health;

"resistance time" is the one second holding time at 1 800°F in the secondary chamber.

3. (1) Every crematorium shall have an incinerator, which shall Incinerator. comprise a primary and secondary chamber.

(2) Every operator shall ensure that in cremating a body each body passing through the incinerator shall remain in the secondary chamber for at least one second at a temperature of 1 800°F.

(3) The time that a body spends in the primary chamber shall not be included in the calculation of the resistance time.

Interpretation.

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(4) The operating temperature of the secondary chamber combustion zone shall not be less than 1 600°F during the combustion process.

(5) The primary chamber shall not be charged unless the secondary chamber combustion zone temperature is equal to or greater than $1 600^{\circ}$ F.

4. (1) Every crematorium shall be equipped with, and every operator shall use, a continuous monitoring system which would prevent the primary burners in the incinerator from igniting when the secondary combustion chamber temperature is below 1 600°F.

(2) Every incinerator shall be equipped with an interlocking switch which would prevent the primary burners in the incinerator from igniting when the secondary combustion chamber temperature is below 1 600°F.

Particulate matter and carbon monoxide.

- 5. Every operator of a crematorium shall ensure that
- (*a*) the particulate matter emitted from the stack attached to the incinerator shall not exceed 0.08 grams Dry Standard Cubic Feet (DSCF) corrected to 7 per cent oxygen; and
- (b) carbon monoxide emitted from the stack attached to the incinerator shall not exceed 100 Parts Per Million corrected to 7 per cent oxygen.

Visible emissions.

- **6.** (1) The operator shall ensure
- (a) that the visible emissions from the stack attached to the incinerator shall not exceed 5 per cent average opacity; and
- (b) that, where an incinerator is in operation for 60 consecutive minutes, the visible emissions from the stack shall not exceed 20 per cent opacity for any period longer than 3 minutes.

(2) The operator shall ensure that the incinerator shall not emit any objectionable odours.

Monitoring system and interlocking

system.

(3) The operator shall ensure that while the incinerator is in operation the air pollution control equipment and the continuous emission monitoring equipment at the crematorium are also in operation.

7. The heat produced in an incinerator at a crematorium shall be Fuel. provided by the combustion of

- (*a*) natural gas;
- (b) liquid petroleum gas;
- (c) number 2 fuel oil with less than 0.3 per cent sulphur by weight;
- (d) electric power; or
- (e) any other heat-producing source approved by the Minister.

8. The following information shall be clearly displayed on the face Information to be to be displayed on the face Information to be

- (*a*) the model number:
- (b) the design operating temperature for the primary chamber and the secondary chamber; and
- (c) the maximum design feed rate.

9. (1) No person shall operate an incinerator unless that person is Certificate the holder of a certificate of training from an institution approved by ^{of training.} the Minister.

(2) Every person who holds a certificate of training referred to in paragraph (1) shall be re-certified every 3 years.

10. (1) Every operator shall on operating the incinerator for the Testing. first time conduct visual emissions tests, and shall conduct these tests annually to ensure that the incinerator is being operated in compliance with these Regulations and any other requirements stipulated by the Regulatory Authority.

to be displayed on incinerator.

- (2) Every operator
- (a) shall comply with any testing requirements given by the Regulatory Authority; and
- (b) shall give the Regulatory Authority at least 30 days notice of any proposed emissions tests.

(3) On receiving such notification, the Regulatory Authority shall send an officer from its Division to the crematorium to hold a pre-test conference with the operator, and the officer shall observe the emissions tests executed by the operator.

(4) Where an operator fails to provide the Regulatory Authority with the required notification, the Regulatory Authority may invalidate the results of any emissions tests done by the operator.

11. (1) Every crematorium shall have a holding facility, a cremation unit and a processor.

(2) The holding facility at a crematorium shall be of a size which is large enough to accomodate the remains of 3 persons awaiting cremation.

12. (1) Every crematorium shall have a commerciallymanufactured cremation unit made specifically for the cremation of human remains.

- (2) The cremation unit shall comprise
- (a) an ash-collection pan to minimize commingling of cremated remains;
- (b) a hearth or floor which does not have any depressions and which would also minimize commingling of cremated remains;
- (c) a safety switch which would prevent the incinerator from functioning once the front charging door is open; and

Holding facility.

Cremation unit.

(d) a pollution-monitoring system to monitor and detect smoke when the density of the smoke exceeds the standards set by the Regulatory Authority.

(3) Where the density of the smoke in the cremation unit exceeds the standards set by the Regulatory Authority, the pollution-monitoring system should automatically stop the incineration process on a time setting of not less than 3 minutes.

(4) The cremation unit shall also meet any other requirements specified by the Regulatory Authority.

13. (1) Every crematorium shall have a commercially- Processor. manufactured processor which is made specifically for the pulverisation of cremated remains.

- (2) The processor
- (a) shall have a dust-resistant processing chamber;
- (b) shall have an exterior surface which is made of an easily cleaned non-corrosive material; and
- (c) shall be capable of consistently processing cremated remains to unidentifiable dimensions.

14. (1) An operator who has possession of un-embalmed human Refrigeraremains for a period of more than 24 hours prior to the time of ^{tion unit.} cremation shall keep those remains in a refrigeration unit.

(2) The refrigeration unit shall be part of the holding facility at the crematorium, and shall have the capacity to store 3 adult human bodies at a time.

- (3) The refrigeration unit
- (*a*) shall be the walk-in type and shall be made of sealed concrete and stainless steel with galvanised, aluminium or other easily cleaned floors;

- (b) shall have an interior made of stainless steel, aluminium or other non-corrosive and easily-cleaned material; and
- (c) shall operate at a constant temperature of 40° F when holding 3 adult bodies.
- Urns. **15.** After remains are pulverised in the processor, they shall immediately be placed in urns or in temporary or permanently closed containers.
- Labels. **16.** (1) The operator of a crematorium shall label all urns and containers used to hold the remains.
 - (2) Every label shall contain the following information:
 - (a) the name of the deceased;
 - (b) the date of cremation; and
 - (c) the name of the crematorium.

Sanitary condition.

17. Every area of a crematorium used to receive, store, cremate, pulverise and deliver human remains and every piece of equipment located therein

- (a) shall be kept in sanitary condition and in good repair; and
- (b) is subject to inspection at any time by officers of the Regulatory Authority.

Offence. **18.** An operator who contravenes any provision of these Regulations is liable

- (a) on summary conviction to a fine of \$50 000 or to imprisonment for 2 years or to both; and
- (b) to have his licence revoked.