ENVIRONMENTAL PUBLIC HEALTH ACT

(CHAPTER 95, SECTIONS 94 AND 113)

ENVIRONMENTAL PUBLIC HEALTH (SWIMMING POOLS)
REGULATIONS

[1st August 1992]

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CHEMICAL AND BACTERIOLOGICAL QUALITY OF POOL WATER

Actual Provisions

Citation
1. These Regulations may be cited as the Environmental Public Health (Swimming Pools) Regulations.
Definitions
2. In these Regulations, unless the context otherwise requires —

"chlorine residual" means a concentration of residual chlorine in the uncombined state, that is to say, in the form of hypochlorous acid or hypochlorite ion or both;

"licensee" means the holder of a licence granted under section 94 of the Act;

"pH" means the common logarithm of the reciprocal of the hydrogen ion concentration;

"pool" means a swimming pool as defined in section 2 of the Act.

Application for licence
3. —(1) Every application for a licence under section 94 of the Act shall be made to the Commissioner in such form as the Commissioner may determine.

(2) The fee for a licence shall be $120 per annum.

Water supplied to pool
4. A licensee shall ensure that —

(a) the source of water supply to a pool is approved by the Commissioner; and

(b) there is no direct connection between any domestic water supply system and the piping system of a pool.

Injured person not to use pool
5. No person who suffers from any cut, wound or sore shall be permitted to use a pool.

Display of notices
6. A licensee shall ensure that a sufficient number of notices directing every person to use a shower before entering the pool are displayed in conspicuous places.

Water in pool to be disinfected
7. —(1) A licensee shall ensure that the water in the pool is disinfected by calcium hypochlorite or sodium hypochlorite or any other chemicals approved by the Commissioner.

(2) Where calcium hypochlorite or sodium hypochlorite is used, the licensee shall ensure that the chlorine residual in the water in the pool shall not be less than 1.0 milligram per litre and not more than 3.0 milligrams per litre and the pH value of the water shall not be less than 7.2 and not more than 7.8 maintained at the outlet.

(3) Where other halogens or approved chemicals are used for disinfecting the water in the pool, the licensee shall ensure that the disinfectant residual and pH value of the water in the pool are maintained at a level approved by the Commissioner.

Conditions before pool is used
8. A licensee shall ensure that no pool is used or made available for use unless —

(a) the turbidity of the water as expressed in Nephelometric Turbidity Unit shall not exceed 5;

(b) the colour of the water as expressed in Hazen Unit shall not exceed 5;
(c) the disinfectant residual and pH value of the water are as stipulated in regulation 7 (2) or (3), as the case may be; and

(d) the bacteriological quality of the water is as follows:

(i) no sample of water shall contain any Escherichia coliform organism in 100 millilitres of water;

(ii) not more than one out of 5 consecutive samples of water shall contain any coliform organism in 100 millilitres of water, and in any case none of the 5 consecutive samples shall contain more than 10 coliform organisms in 100 millilitres of water; and

(iii) no sample of water shall contain more than 200 bacteria per millilitre as determined by the 24-hour plate count at 37º Celsius or by the membrane filter method.

Testing kit
9. A licensee shall ensure that a testing kit for measuring the concentration of the disinfectant pH value of the water in the pool is provided and maintained in good working condition.

Algicidal agent
10. A licensee shall ensure that if copper sulphate is used as an algicidal agent for the water in the pool, the concentration of copper sulphate determined as copper shall not exceed 0.2 milligram per litre.

Commissioner’s approval required to use chemicals
11. No chemical, other than those specified in these Regulations, shall be used for any purpose without the prior approval of the Commissioner.

Responsibilities of licensees
12. A licensee shall ensure that —

(a) all equipment and related parts of the water purification system of a pool are kept in good working condition whenever the pool is available for use and for such further periods as may be necessary to maintain the water in the pool in a clear and disinfected condition;

(b) the circulation and purification system is operated and maintained so as to keep the water in the pool clear and clean at all time;

(c) the water in the pool is free of scum, debris or any floating material;

(d) the entire pool area is kept clean, and free of litter and vermin;

(e) all the surfaces of the pool including the decks shall be kept free of slime, dirt and algae;

(f) the bottom and side walls of the pool shall be kept free of cracks and other defects;

(g) all parts of the pool, including all ancillary equipment and buildings, shall be maintained in good condition;

(h) all shower rooms, toilets and changing rooms are well ventilated;
(i) all toilets, urinals, showers, wash basins and other plumbing fixtures are maintained in a clean condition and in good repair;

(j) diagrammatic illustrations of artificial respiration procedure are posted such that they are clearly visible from any nearby deck; and

(k) an adequately equipped first-aid box and life buoys are installed in conspicuous places.

Tests
13. —(1) A licensee shall carry out tests on the pH value and the residual disinfectant concentration of the water in the pool at least once a day.

(2) The test results shall be kept in proper records and shall be made available for inspection by the Commissioner.

Tests for chemical and bacteriological quality
14. —(1) A licensee shall arrange for water in the pool to be sampled and analysed by a Government laboratory or any other laboratory approved by the Commissioner for chemical and bacteriological quality at least once a month or at such other intervals as may be stipulated by the Commissioner, and submit the test results to the Commissioner.

(2) The parameters for the chemical and bacteriological quality of water shall be as set out in the Schedule.

Closure of pool and access thereto
15. Where any person has been required by the Commissioner to close any pool under section 64 of the Act, the person shall ensure that all access to the pool is effectively closed up or barricaded.

Penalty
16. Any person who contravenes or fails to comply with any of the provisions of these Regulations shall be guilty of an offence and shall be liable on conviction to a fine not exceeding $2,000 and, in the case of a continuing offence, to a further fine not exceeding $100 for every day or part thereof during which the offence continues after conviction.

THE SCHEDULE

Regulation 14 (2)

CHEMICAL AND BACTERIOLOGICAL QUALITY OF POOL WATER

(1) Turbidity (in Nephelometric Turbidity Unit).

(2) Colour (in Hazen Unit).

(3) pH value.
(4) Residual chlorine (uncombined state) or residual disinfectant.

(5) Copper.

(6) Colony Count in agar (24 h) 37°C (per ml).

(7) Total Coliform Count (per 100 ml).

(8) Escherichia Coliform Count (per 100 ml).

This legislation was last amended on 31 Jan 2000